

TECHNICAL ANALYSIS



PENNSYLVANIA SYSTEM OF SCHOOL ASSESSMENT

2001 READING AND MATHEMATICS PSSA

DATA RECOGNITION CORPORATION

RONALD MEAD, PH. D.
SENIOR PSYCHOMETRICIAN
Vince Maurelli, M.S.
Lead Psychometrician
Kirsten Melby, M.A.
Statistical Analyst

APRIL 2002

THE PENNSYLVANIA SYSTEM OF SCHOOL ASSESSMENT 2001

TABLE OF CONTENTS

Chapter 1: Introduction	
PSSA: The Pennsylvania System of School Assessment:	1
Types of Assessment Measures	2
Matrix Sampling Assessment Design	4
Chapter 2: Form Analysis and Item Calibration	
Test Form Statistics	21
Traditional Item Statistics	22
Rasch Item Statistics And Equating	24
2001 PSSA Omitted Items	27
Chapter 3: Linking and Equating	
Grade 5: Mathematics	28
Grade 5: Reading	29
Grade 8: Mathematics	31
Grade 8: Reading	33
Grade 11: Mathematics	35
Grade 11: Reading	37
Chapter 4: Item Bias Review	
Limitations of Statistical Detection	39
Mantel-Haenszel Procedure for Differential Item Functioning	39
Chapter 5: Student and School Level Scaling	
Overview of PSSA Design	45
Common Items and Matrix-Sampled Items	46
Scaled Scores for Content Standards	47
Chapter 6: Interpreting Scaled Scores on the PSSA	
Definition of <i>Scaled Score</i>	50
School-Level Scales Scores	50
Student Level Scaled Scores	54
Chapter 7: Reliability of Performance Standards	55

Appendix A: PSSA 2000 Mathematics and Reading — Distribution Summaries by Form

Appendix B: PSSA Grade Five Item Analysis — Multiple Choice for Mathematics

Appendix C: PSSA Grade Eight Item Analysis — Multiple Choice for Mathematics

Appendix D: PSSA Grade Eleven Item Analysis — Multiple Choice for Mathematics

Appendix E: PSSA Grade Five Task Analysis — Open Ended Tasks for Mathematics

Appendix F: PSSA Grade Eight Task Analysis — Open Ended Tasks for Mathematics

Appendix O: PSSA Grade Eleven Task Analysis - Open Ended Tasks for Mathematics

Appendix H: PSSA Grade Five Item Analysis — Multiple Choice for Reading

Appendix I: PSSA Grade Eight Item Analysis — Multiple Choice for Reading

Appendix J: PSSA Grade Eleven Item Analysis — Multiple Choice for Reading

Appendix K: PSSA Grade Five Task Analysis - Open Ended Tasks for Reading

Appendix L: PSSA Grade Eight Task Analysis - Open Ended Tasks for Reading

Appendix M: PSSA Grade Eleven Task Analysis — Open Ended Tasks for Reading

Appendix N: PSSA Grade Five - Across Year Linking

Appendix O: PSSA Grade Eight - Across Year Linking

Appendix P: PSSA Grade Eleven — Across Year Linking

Appendix Q: PSSA Grade Five Mathematics — Between Group

Appendix R: PSSA Grade Five Reading — Between Group

Appendix 5: PSSA Grade Eight Mathematics - Between Group

Appendix T: PSSA Grade Eight Reading— Between Group

Appendix U: PSSA Grade Eleven Mathematics - Between Group

Appendix V: PSSA Grade Eleven Reading - Between Group

Appendix W: PSSA 2000 School Level Percentile Ranks

Appendix X: Percentile Rank Conversion Tables for Scaled Scores

The Pennsylvania System of School Assessment

Chapter 1: Introduction

PSSA: The Pennsylvania System of School Assessment

The purposes of the 2001 statewide assessment component of the Pennsylvania System of School Assessment, as specified in the new Chapter 4 Regulations, include providing:

(1) an understanding of the students' and schools' achievement of the academic standards to students, parents, educators and community citizens, (2) a measure of the degree to which school programs enable students to attain the academic standards, (3) results to school districts, charter schools and AVTSs, Intermediate Units, Private Residential Rehabilitative Institutions, Approved Private Schools, Non-public and private schools for use in their strategic plans, (4) information to the general public and state policymakers regarding school achievement of the academic standards, and (5) aggregated results for all students as well as for Individualized Education Plan (IEP) and non-IEP students.

The broad purpose of the State Assessments is to provide information to teachers and schools to guide the redesign of curricula and instructional strategies to enable students to achieve the academic standards. The areas assessed in 2001 are mathematics and reading at grades 5, 8 and 11. *The Department strongly discourages the use of this testing information for the purpose of "ranking" schools.*

Types of Assessment Measures

The PSSA mathematics assessment employs two types of test items: multiple-choice and open-ended. These provide differing types of information about mathematics achievement.

Multiple-Choice Items

The majority of the mathematics items included in the PSSA are multiple-choice items. Multiple-choice questions are also termed “selected-response” since students choose their answers from among those provided. Such items are an efficient means of assessing a broad range of curriculum. They are relatively easy to develop and can be administered in a short amount of time.

In the PSSA mathematics assessment, all multiple-choice items have only one correct response choice, and the student is awarded one point for choosing it. For all items, students are provided with four response choices.

Multiple-choice questions can be used to assess a variety of skill levels, from short-term recall of facts to problem solving. The great majority of the PSSA multiple-choice mathematics questions require students to carry out some process to find their answers, rather than simply recalling information from memory.

Open-Ended Tasks

Open-ended tasks require students to read a problem or task description and to write out their answers. Major components of such answers are both students’ clear presentations of their computations and their explanations of the steps they followed in solving the problem. The types of tasks utilized do not always require solving a problem involving computations. Students may also be asked to perform such tasks as drawing a graph, shading some portion of a figure or listing object combinations that meet specified criteria.

Open-ended tasks are especially useful for measuring students’ problem-solving skills in mathematics. In most of these tasks students are asked to show how they arrived at an answer or what thinking was behind the answer they gave. The tasks present real-life situations that require students to solve problems using math abilities learned in the classroom. There are no response choices on the page as with multiple-choice items. Students must read the task carefully, select the necessary information, devise a method of solution, perform the calculations, enter the response directly on the page on which the task is presented and explain the procedure to support the given response. This provides insight into the students’ knowledge, mathematical abilities and reasoning processes.

Open-ended tasks are scored in terms of a continuum of correctness. This continuum is defined by a “rubric,” which outlines what the general requirements are at each scale point. Then, scoring guidelines based upon the general rubric are developed to score individual items. The rubric approach to scoring has made it possible to include open-ended tasks in large-scale assessments, such as the PSSA. Large numbers of student papers can be scored in a highly reliable way by persons who have received training in applying the rubric.

TYPES OF ASSESSMENT MEASURES

The PSSA reading assessment employs two types of test items: multiple-choice and performance tasks. They are designed to measure students’ comprehension of the information contained in the reading passages and their ability to respond to them.

Multiple—Choice Items

Multiple-choice/selected-response items measure such concepts as how well students comprehend the overall meaning of a passage or make basic inferences about it. At times, asking students to choose a preferred answer is the best way to determine whether they have gleaned certain important information from a story. Such information may include setting, central idea or main events and their chronology.

Single-response multiple-choice items are the familiar four response choices with one correct answer type. The student is awarded one score point for choosing the correct response. All multiple-choice items at grades 5 and 8 and the multiple-choice items in the grade 11 matrix sections are of this type. Distracters (incorrect responses) appeal to some kind of misinterpretation, predisposition, unsound reasoning or casual reading.

Performance Tasks

Performance tasks are designed to address comprehension of text in ways that multiple-choice items cannot. A written response allows students to reflect on what they have read, integrate prior/background knowledge with text-based information, extend meaning and express their ideas.

These tasks are scored using the **Pennsylvania Reading Assessment Rubric**. This four-point scoring rubric clearly describes a range of performance requirements at each level from minimal to very accomplished. Each task is carefully constructed to reflect the scoring rubric and to be text-dependent. Students may have the Pennsylvania Reading Assessment Rubric, a thesaurus and a dictionary when responding to a performance task.

The rubric approach to scoring has made it possible to include performance tasks in large-scale reading assessments, such as the PSSA. The rubric approach also provides a highly reliable way to score a large number of student papers by persons who have received training in applying the rubric.

The rubric describes a hierarchy of responses containing each of the following three elements:

- *Understanding of the text* is demonstrated through a response that is both text-based and factual.
- *Level of comprehension of the text* is demonstrated through levels of thinking, from literal to personal, critical or evaluative responses.
- *Connection to the text* is demonstrated through responses that make connections to and go beyond the text.

Matrix Sampling Assessment Design

The PSSA was originally designed as a complex matrix-sampling scheme, which was very efficient for measuring *school-level* performance but less efficient for providing *student-level* assessments and diagnostics. In this design, there is a *common* core of items that all students respond to and blocks of *matrix* items that are form specific. The matrix forms are *spiraled* within classrooms so that all forms are distributed uniformly within each classroom. This ensures that each matrix form is administered to an unbiased and effectively random sample of students in each school.

Since multiple forms are administered within each classroom, every student potentially could take a different set of items. This allows the assessment to cover a wide range of topics at the classroom level. Comparisons between students are more problematic because they not only took different items, but they may have been tested on different topics.

Both the common and matrix sections of the PSSA use traditional multiple-choice items and more innovative open-ended performance tasks. Psychometrically, multiple-choice items are very useful and efficient tools for collecting information about a student's academic status. Open-ended performance tasks are less efficient in the sense that they generate fewer scoreable points in the same amount of testing time. They do, however, provide tasks that are more realistic and better sample the higher-level skills. The design of the PSSA attempts to achieve a reasonable balance between the two formats.

The design changes that began to take effect with the spring 2000 administration have shifted the focus of the measurement toward the student and away from the school. Beginning in 2000, student-level results were reported on the **Individual Student Report (ISR)** with diagnostic results at the *academic content standard* level. All student-level results are based on the common items only and presented in the raw-score percent-correct metric only¹. In order to accommodate this change in focus, the common section

¹ While the student-level scaled scores are not reported on the ISR, they are used for many of the underlying calculations.

has been expanded to better reflect the curriculum. Unfortunately, to administer the tests in a reasonable length of time, enhancing the common sections came at the expense of the matrix sections.

The PSSA design is an attempt to have the best of both worlds:

- All student-level results are based on the common core of all items that all students in a grade were administered. This ensures that all students are treated equally.
- All school-level results are based on the greater breadth of the matrix-sampling design. This enables the school-level results to better sample the entire curriculum.

Unfortunately, these dual objectives require some compromises:

- Many of the content standards are assessed with a minimal number of items. Consequently, scores reported at this level in any metric would have large standard errors and are at risk of over-interpretation.
- The mean of the student level scores will not necessarily equal the school-level score because they rely on different sets of items. They will be *statistically* equal since both are estimates of the same school-level status but there is no reason to expect that they will be numerically equal.

The following tables show how the two types of items and the content standards are distributed across forms. Form W refers to the common sections and was the given to all students. Forms A through J for reading and mathematics are the matrix sections and each student took one of these forms in reading and one in math.

Chapter 2: Form Analysis and Item Calibration

TEST FORM STATISTICS

The table below contains an overview of the form-level data. Test length (L), mean percent correct (P), typical test-retest reliability (R) and typical standard error of measurement (SE) are shown for each form by grade and content area. These statistics are based on the total test using both multiple-choice and open-ended tasks and both common and matrix sections for each form. The test lengths pertain to the data used for school-level estimates and not for student-level results.

The test-retest reliability can be thought of as the correlation between scores if the students could be tested twice with the same instrument without the second testing being affected by the first. It is computed as the ratio of the variance associated with true scores divided by the total variance. The total variance contains a component due to the variance in true scores and a component due to the imperfections in the measurement process.

The *standard error of measurement* is another indicator of precision. If everyone being tested had the same *true score*¹, there would still be some variation in observed scores due to imperfections in the measurement process. These may be random differences in attention during instruction or concentration during testing. Or perhaps differences could arise because of problems with the wording of the items or layout of the answer sheet. The standard error is the *standard deviation*² of the distribution of observed scores for students with identical true scores.

Both reliability and the standard error increase with test length; although, it is not the sole determinant in either case. Comparing the information in tables 2.1 and 2.2 should give some insight into the complexities and tendencies of these statistics.

Table 2.1: Summary of Matrix Form Performances

Grade	Mathematics				Reading			
	L	P	R	SE	L	P	R	SE
05	105	63	95	5.0	89-90	64	92	4.2
08	105	57	94	5.3	120	61	94	4.9
11	105	54	94	5.1	123-132	62	94	5.3

The Student-Level Scaled Scores were estimated using the common items only. This resulted in shorter test lengths and therefore slightly lower form reliabilities. The following table pertains to the common-item measures.

¹ True score is the score the person deserves and would actually receive if the measurement process were perfect.

² The standard deviation of a distribution is a measure of the dispersion of the observations. For the normal distribution about 16% of the observations are more than one standard deviation above the mean and the same percentage are more than one standard deviation below the mean. To illustrate, using the data in table 2.1, about 68% of students with true scores of 70 will have observed scores between 65 and 75.

Table 2.2: Summary of Common Item Performances

Grade	Mathematics				Reading			
	L	P	R	SE	L	P	R	SE
05	85	64	92	4.4	60	64	89	3.5
08	85	58	92	4.7	80	62	90	4.1
11	85	56	92	4.5	88	61	91	4.4

Appendix A presents detailed descriptions of the performance of each form by grade and content area.

The standard deviation shown in the table is the standard deviation of observed scores. Assuming normally distributed scores, one would expect about two-thirds of the observations to be within one standard deviation of the mean. An estimate of the standard deviation of the true scores can be computed as the $\sqrt{(SD*SD) - (SE*SE)}$. For grade 5 math, this would be $\sqrt{(15.5*15.5)-(4.5*4.5)} = 14.8$.

The reliability can also be computed from these data. Again for grade 5 math common, $R = \frac{(15.5*15.5)-(4.5*4.5)}{(15.5*15.5)} = 0.92$.

TRADITIONAL ITEM STATISTICS

Although all items had been reviewed several times, a thorough item analysis was conducted to ensure that the items and forms performed as expected. With any psychometric model, an item analysis is a search for unexpected results. In general, *more able*³ students are expected to pass easy items and *less able* students are expected to fail difficult items. If either of these situations do not occur, the item should be reviewed once more to determine the nature of the problem and the characteristics of the students affected.

The most familiar indices of item performance are *proportion correct* (p-value) and item reliability. Reliability for dichotomous items is typically represented by the *point biserial correlation* coefficient. This statistic will be positive if the total test mean score is higher for the students who respond correctly to the item than for the students who respond incorrectly. Hence, the correlation will be low if there is a *more able* way to fail the item or a *less able* way to pass it.

The p-value is a subtler indicator of item quality but the value should be appropriate for the item. If there is a *more able* way to miss an item, the item will appear more difficult than the underlying problem. Conversely, if there is a *less able* way to pass the item, it may appear surprisingly easy.

Table 2.3 gives the mean p-value and point biserial correlation (PtBis) for the multiple-choice items in each grade and content area as a frame of reference of evaluating items. The p-value is the proportion of the students who responded correctly to an item. The

³ Following the Rasch literature, *ability* is used in this discussion as a generic term for the construct that is being measured by the exam. *Competence, achievement, learning* and *status* are among the alternatives that are sometimes used but are all subject to some degree of misinterpretation.

point biserial correlation is the correlation between the student's score on the item (zero or one) and the score on the total test. This can be computed as the familiar Pearson product-moment correlation but because the item score is a dichotomous variable, the formula can be written in a simpler form.

The point biserial correlation is also called the item reliability. The correlation will have a positive value when the mean score of the students answering correctly is higher than the mean score of the students answering incorrectly. This is a very reasonable requirement since it indicates that students who did well on the total test tended to do well on this item. The index will take its maximum theoretical value of 1.0 if *every* student who answered the item correctly scored better on the test than *any* student who answered incorrectly⁴.

In general, with the mean p-values in the low 0.6 range, the PSSA was quite challenging to most students. With the average point biserial correlations near 0.4, the overall item quality was quite good.

Grade	Mathematics		Reading	
	P-value	PtBis	P-value	PtBis
05	.66	.46	.68	.44
08	.61	.47	.65	.43
11	.55	.45	.62	.43

The item level analyses done for the PSSA also included the percent of students selecting each incorrect response (foil) and the correlation between selecting a response and total test score. This information is useful to help item writers and editors understand the item's behavior. The percent selecting each response is an indicator of which foils are particularly attractive.

The correlations by response are a further refinement on this idea. They indicate which responses are attractive to high scoring students and which to low scoring students. The ideal pattern would be a *strong* positive correlation for the correct response and *strong* negative correlations for the incorrect responses. This pattern would indicate that the incorrect responses tend to attract students who tended to do less well on the total test. Consequently, one could conclude that the item is measuring the same construct as is the test as a whole.

⁴ It is legitimate to view the point biserial correlations as standardized means. A positive value means students who chose that response had a higher mean score than the average student; a negative value means students who chose that response had a lower than average mean score.

RASCH ITEM STATISTICS AND EQUATING

Software implementing the Rasch model was used to obtain estimates of logit difficulties for both dichotomously- and polychotomously-scored items. The parameters estimated for polychotomous items are the *step difficulties* associated with the Masters Partial Credit model. This software has been adapted to handle all the item types currently in use with the PSSA.

Rather than percent correct, the Rasch model expresses item difficulty (and student ability) in units typically referred to as *logits*. In the simplest case, a logit is a transformed p-value with the average p-value becoming a logit of zero. In this form, logits resemble z-scores or standard normal deviates; a very difficult item might have a logit of +4 and a very easy item might have a logit of -4. They actually have no formal relationship to the normal distribution.

The logit metric has several mathematical advantages over p-values. It is an interval scale meaning two items with logits of zero and one are the same distance apart as items with logits of +3 and +4. Logits are not dependent on the ability level of the students. A specific form will have a mean logit of zero whether the average p-value of the sample is 0.8 or 0.3.

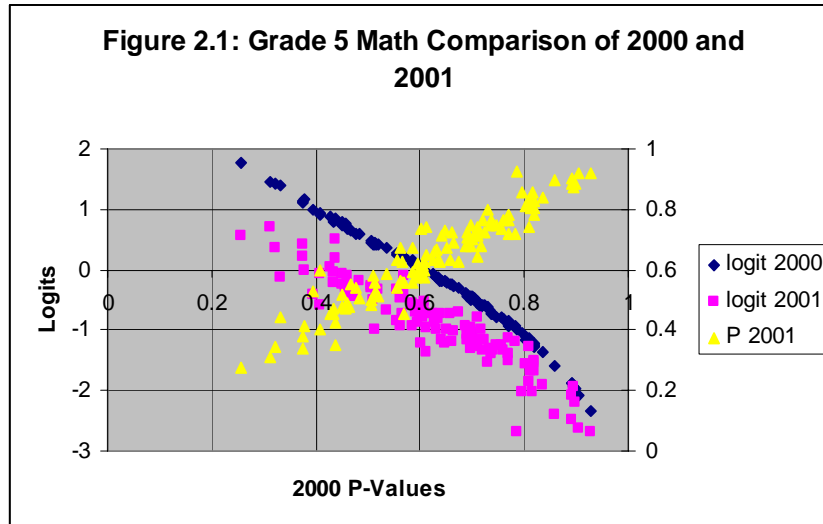
The standard Rasch calibration procedure arbitrarily sets the mean difficulty of the items on any form at zero. Any item with a p-value lower than the average item on the form receives a positive logit difficulty and any item with a p-value higher than the average receives a negative logit. Consequently, the logits for any calibration, whether it is a third grade reading test or a high school science test, relate to an arbitrary origin defined by the center of items on that form. The average third grade reading item will have a logit of zero; the average high school science item will have a logit of zero. This applies to logits for both item difficulties and student abilities.

There are any number of other arbitrary choices that could be made for centering the item difficulties. Rather than using all the items, the origin could be defined by a subset. For the PSSA, all test forms in a particular grade and content area share a common block of items. The items on all forms can then be easily adjusted to a single (but still arbitrary) origin by defining the origin as the mean of the **common** items. With this done, the origins for all ten forms will be statistically equal. Items on forms A and J that are equally difficult should now have equal logit difficulties.

Since the test forms were spiraled within classrooms, there are some cross checks that are made to ensure the calibrations and links are reasonable. First, because of the spiraling, each form will be administered to a *statistically equivalent* sample of students and so any differences in performances observed among the groups should be due only to differences in form difficulty. After linking, the mean and standard deviation of the logit abilities should be statistically equal for each sample of students.

Second, because of the equivalent samples, the common items should have the same p-values regardless of which form and sample is being considered. And finally, for all items, both common and matrix, a plot of the relationship between the p-value and the logit should fall along a single, curved line.

The curve using the diamond plotting symbol for Logit 2000 in Figure 2.1 below for Grade 5 Mathematics illustrates a situation in which these conditions were met quite well. This curve shows the transformation from p-values (x-axis) to logits (y-axis) for the year 2000. The curve is nearly linear in the center but curves towards asymptotes of zero (on the left) and one (on the right).



In theory, with the Rasch model, linking the exam for the current year to the exam for previous years is just as straightforward as linking forms within year. However, the student samples can not be assumed equivalent across years and identical items can have different properties in different years because of changes in the item's context or changes in the students' experiences. Consequently, between-year linking is somewhat less certain than within-year linking.

The link between years must be from items that are used in both years in approximately the same context. The *same context* in this situation means the items are not altered in any way, they appear in about the same position in the booklet, and they are administered at about the same time of day. PDE provides a code for each item as part of the answer key file that indicates the item's appropriateness for linking. Codes between 1 and 6 represent the gradation of the item's suitability. A code of '1' means the item text is identical and its sequence number has not changed by more than 2 or 3. A code of '5' means the item has been significantly revised. A code of '6' indicates a completely new item.

For *within-year* linking, the procedure is to link forms through the common section. The result is a bank of items with comparable logit difficulties. For *between-year* linking, the procedure is to link the current year's bank to the previous year's banks. Theoretically, the process is identical to within-year.

- (1) Overlapping items are identified.
- (2) Adjusting the logit difficulties (of all items) in the current year's bank so that the mean logit difficulty for the overlapping items is equal to the mean logit difficulty for the same items in previous year's bank.

- (3) Assess the validity of the link by identifying any items that do not maintain their relative position across years.

Plotting p-values against logit difficulties across year is not as reliable as it is within year but it is still informative. Within year, a given p-value will translate to a given logit regardless of the form it is used on, within the limits of statistical precision. Within year, the p-value-to-logit plot should be a single curved line; between years, the plot could have separate lines for each year. The difference between the two lines is a reflection of the adjustment (positive or negative) that is required to equate the two item banks. This is the situation shown in Figure 2.1 with the curves using the square and the triangle plotting symbols.

The plot of the p-values for overlapping items from the two years can also be informative. If the p-values for the current year are systematically higher than for the same items last year, the scale scores should also show a systematic improvement after the two item banks have been properly linked. This is shown in Figure 2.1 with the diamond-plotting symbol.

There are some checks on the reasonableness of the linking process that can be performed. Item calibration should be invariant across years, except for an arbitrary location constant. When the logit difficulties of the overlapping items for the current year are plotted against their logit difficulties for a previous year, the result should be a straight line, whose width reflects the standard errors of estimation for the item difficulties. Identifying any outliers and recomputing the adjustment based on an edited set of overlapping items should improve the link.

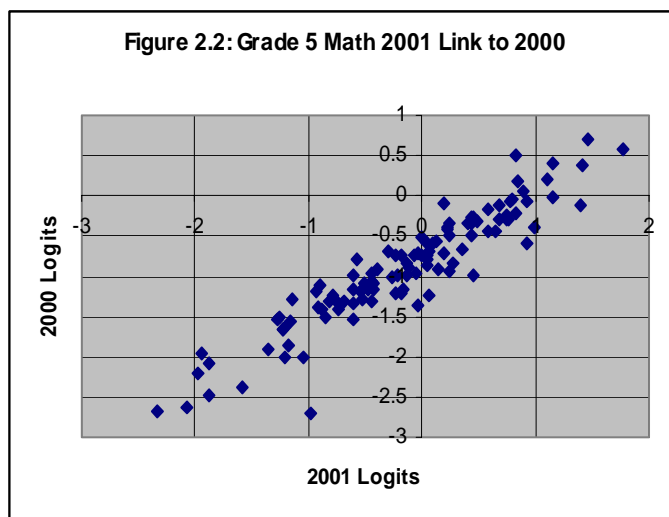


Figure 2.2 above uses the same data as Figure 2.1 but focuses entirely on logit difficulties. It shows more clearly the relationship between 2000 logits and 2001 logits. There is a well-defined line with a few outliers. From the intercepts which are (0, -0.5) and (0.5, 0) approximately, it can be seen that the required translation constant is slightly less than 0.5 logits. Subtracting 0.5 from the 2001 logits (or adding 0.5 to 2000 logits) would shift the line to pass through the origin.

2001 PSSA OMITTED ITEMS

Numerous items from Grades 5, 8, and 11 were omitted from scoring due to poor statistical performance. Items with low p-values or negative point biserial correlations indicate that another answer option is a plausible alternative to the correct answer option. The following items were flagged during item analysis and were omitted from final scoring. All omitted items were Reading items.

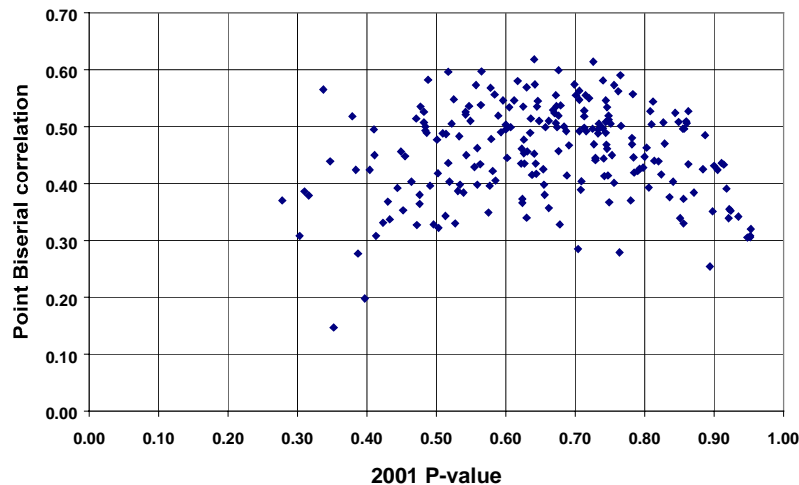
Table 2.4 PSSA 2001 Omitted Items				
Grade 5	Grade 8	Grade 8 <i>Continued</i>	Grade 11	Grade 11 <i>Continued</i>
A165	A205	G190	A189	E222
B164	A208	G191	A190	F192
B177	A211	G196	A205	F216
C176	A213	G200	A208	F202
C183	B182	G208	A211	F226
D171	B190	G211	B214	H191
E168	B193	H189	C198	H196
F164	B197	H196	C224	H197
F179	B203	H200	D192	H202
G163	B208	H212	D205	H203
G179	C182	I187	D208	H207
I178	C194	I190	D212	H210
J164	C210	I193	D222	H206
J177	D195	I195	D227	I191
	E181	I213	D228	I209
	E206	J179	E190	I210
	F185	J185	E198	I225
	F191	J190	E205	I228
		J199	E207	J194
			E214	
			E215	
			E216	

Chapter 3: Linking and Equating

Grade 5: Mathematics

The traditional item statistics, percent correct and point biserial correlations, displayed typical and reasonable distributions for Grade 5 Mathematics, as shown in Figure 3.1 below. These statistics were computed for each test form so, in this plot, clusters of points represent a single common item that occurred on all ten forms. The points near percent correct of 0.85 and correlation of 0.17 illustrate this.

Figure 3.1: Grade 5 Mathematics
Traditional Statistics



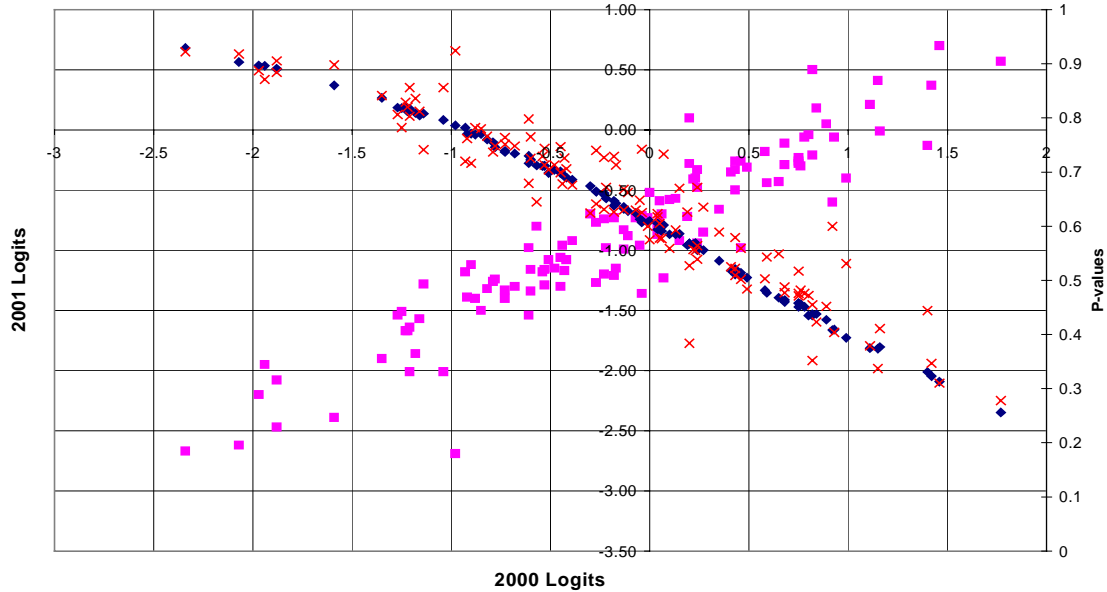
The percent correct scores range from about 0.25 to about 0.96 with the majority of the items in the range 0.5 to 0.82. Most of the item reliabilities are between 0.3 and 0.5 with only two items below 0.2, both of which are matrix items. It might also be useful to investigate the items with reliabilities near 0.6. They may be exemplars for what items should be or they might be tapping some extracurricular experience primarily available to the better math students.

Figure 3.2 entitled *Grade 5 Mathematics Link 2001 to 2000* contains several pieces of information for the items that were used to link the 2001 exam to the 2000 exam. The diagonal line, rising from left to right, shows the item logit difficulties in the two years. One would expect the relationship to form a straight line with slope one. The extent to which the line does not pass through the origin indicates a shift in the form difficulty. The intercepts are in fact an estimate of the between year equating constant. For grade five mathematics, the logit shift is close to one logit.

The two lines sloping downward toward the right relate item p-values for the two years to the 2000 logits. The line using the *diamond* plotting symbol shows the relationship between p-value and logit difficulty for the 2000 data. It shows the curvilinear relationship required by the model with low p-values being translated into high logit difficulties and high p-values into low difficulties. The smoothness of this line indicates

good agreement among the ten forms. Because the ten forms were spiraled within classroom, the samples generated are randomly equivalent and one would expect the

**Figure 3.2: Grade 5 Mathematics
Link 2001 to 2000**



same p-value to translate into the same logit. This is the case with these data.

The line with the *cross* plotting symbol shows the relationship between the p-values from 2001 and the logits from 2000 for the linking items. It also shows the curvilinear relationship but the line is not as smooth. This is expected because the p-values and logits were produced by completely different samples. With the exception of a few items, this line indicates reasonable agreement between the two years.

The degree to which these two lines do not coincide indicates a change in the p-value between the two years. Most of the item p-values are slightly higher in 2001 than they were in 2000. Note this chart is based on the overlapping items that were administered in identical form in both years. The change in p-value indicates improvement and is consistent with the change in the state level mean scale score.

Grade 5: Reading

The traditional item statistics, percent correct and point biserial correlations, displayed typical and reasonable distributions for Grade 5 Reading, as shown in Figure 3.3 below. These statistics were computed for each test form so, in this plot, clusters of points represent a single common item that occurred on all ten forms.

The percent correct scores range from about 0.3 to about 0.9 but the majority of the item difficulties are greater than 0.5. Most of the item reliabilities are between 0.3 and 0.6 with only a few items below 0.2. The three lowest are matrix items. It might also be useful to investigate the items with reliability near 0.6. They may be exemplars for what items should be or might be tapping some extracurricular experience primarily available to the better students. There is also a consistent pattern of the lowest reliabilities being

associated with the lowest p-values. Most, but not all, items in this region are matrix items. These items are too difficult for these students to contribute to the measurement.

**Figure 3.3: Grade 5 Reading
Traditional Statistics**

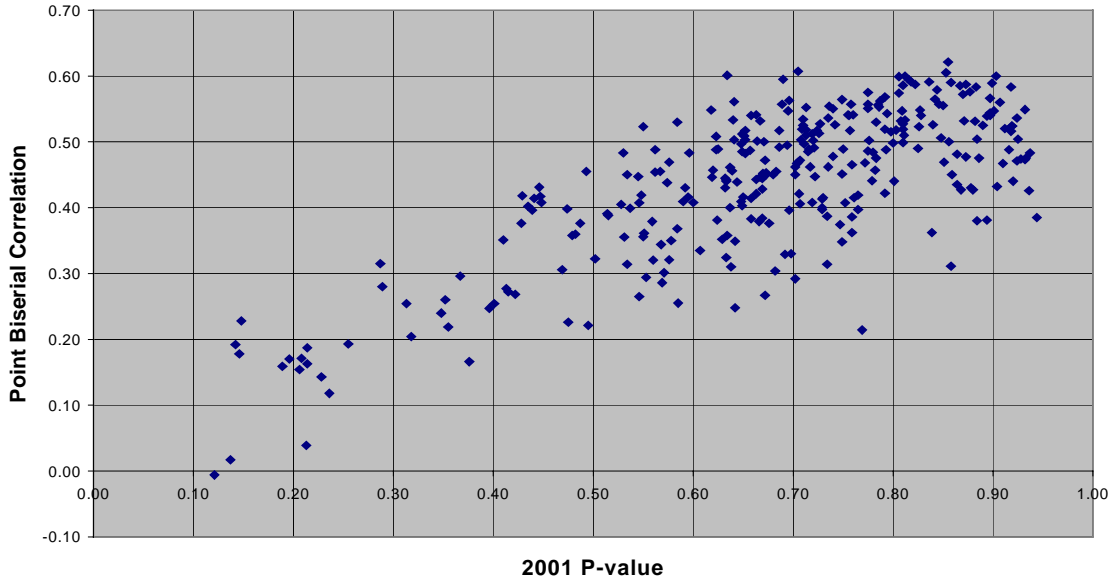
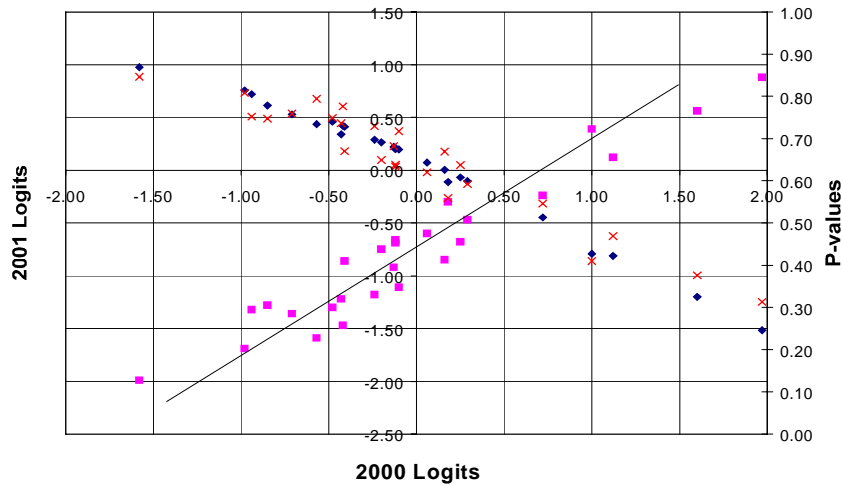


Figure 3.4, entitled *Grade Five Reading Link 2001 to 2000*, contains several pieces of diagonal line, rising from left to right, shows the item logit difficulties in the two years.

**Figure 3.4: Grade 5 Reading
Link 2001 to 2000**



One would expect the relationship to form a straight line with slope one. The extent to which the line does not pass through the origin indicates a shift in the form difficulty. The intercepts are in fact an estimate of the between year equating constant. For grade five reading, the logit shift is approximately 0.7 logit.

The line using the *diamond* plotting symbol (top line with downward slope) shows the relationship between p-value and logit difficulty for the 2000 data. It suggests the curvilinear relationship imposed by the model with low p-values being translated into high logit difficulties and high p-values into low difficulties. The smoothness of this line indicates very good agreement among the ten forms. Because the ten forms were spiraled within classroom, the samples generated are randomly equivalent and one would expect the same p-value to translate into the same logit. This is the case with these data.

The line with the *cross* plotting symbol shows the relationship between the p-values from 2001 and the logits from 2000 for the linking items. It also shows the curvilinear relationship but the line is not as smooth. This is expected because the p-values and logits were produced by completely different samples. With the exception of a few items, this line indicates reasonable agreement between the two years.

The degree to which these two lines do not coincide indicates a change in the p-value between the two years. Most of the item p-values are very slightly higher in 2001 than they were in 2000. Note this chart is based on the overlapping items that were administered in identical form in both years. The change in p-value indicates some improvement and is consistent with the change in the state level mean scale score.

Grade 8: Mathematics

The traditional item statistics, percent correct and point biserial correlations, displayed typical and reasonable distributions for Grade 8 Mathematics, as shown in Figure 3.5. These statistics were computed for each test form so, in this plot, clusters of points represent a single common item that occurred on all ten forms.

The percent correct scores range from about 0.35 to about 0.85. Most of the item reliabilities are between 0.3 and 0.6 with only a few items below 0.2. It might also be useful to investigate the items with reliability near 0.6. They may be exemplars for what items should be or might be tapping some extracurricular experience primarily available to the better students.

Figure 3.5: Grade 8 Mathematics
Traditional Statistics

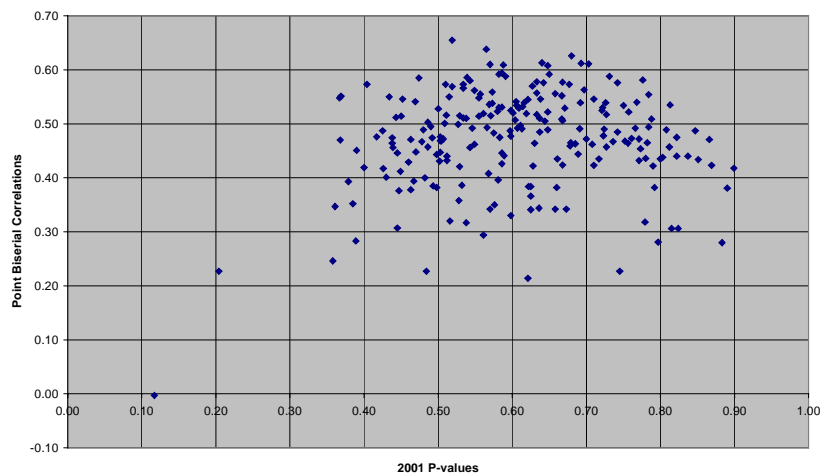
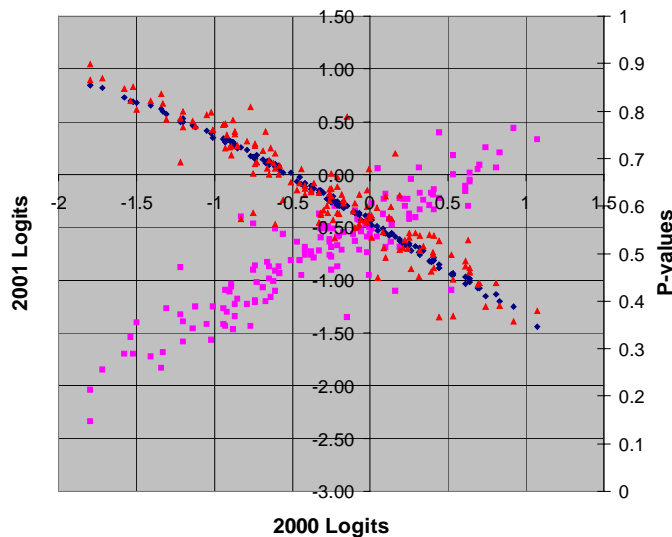


Figure 3.6, entitled *Grade 8 Mathematics Link 2001 to 2000*, contains several pieces of information for the items that were used to link the 2001 exam to the 2000 exam. The diagonal line, rising from left to right, shows the item logit difficulties in the two years. One would expect the relationship to form a straight line with slope one. The extent to which the line does not pass through the origin indicates a shift in the form difficulty. The intercepts are in fact an estimate of the between year equating constant. For grade five mathematics, the logit shift is close to one half logit.

The two lines sloping downward toward the right relate item p-values for the two years to the 2000 logits. The line using the *diamond* plotting symbol shows the relationship between p-value and logit difficulty for the 2000 data. It shows the curvilinear relationship required by the model with low p-values being translated into high logit difficulties and high p-values into low difficulties. The smoothness of this line indicates good agreement among the ten forms. Because the ten forms were spiraled within classroom, the samples generated are randomly equivalent and one would expect the same p-value to translate into the same logit. This is the case with these data.

**Figure 3.6: Grade 8 Mathematics
Link 2001 to 2000**



The line with the *cross*-plotting symbol shows the relationship between the p-values from 2001 and the logits from 2000 for the linking items. It also shows the curvilinear relationship but the line is not as smooth. This is expected because the p-values and logits were produced by completely different samples. With the exception of a few items, this line indicates reasonable agreement between the two years.

The degree to which these two lines do not coincide indicates a change in the p-value between the two years. Most of the item p-values are very slightly higher in 2001 than they were in 2000. Note this chart is based on the overlapping items that were administered in identical forms in both years. The change in p-value indicates some improvement and is consistent with the change in the state level mean scale score.

Grade 8: Reading

The traditional item statistics, percent correct and point biserial correlations, displayed a somewhat unusual distribution for Grade 8 Reading, as shown in Figure 3.7. There is an unusually strong relationship between difficulty and reliability. These statistics were computed for each test form so, in this plot, clusters of points represent a single common item that occurred on all ten forms.

The percent correct scores range from about 0.3 to about 0.9. Most of the item reliabilities are between 0.2 and 0.6 but there is a substantial number below 0.2. The very low reliabilities are all associated with item with low p-values. These items are not contributing to the measurement and should be reviewed to determine if they are defective or simply too difficult for these students. It might also be useful to investigate the items with reliability near 0.6. They may be exemplars for what items should be or might be tapping some extracurricular experience primarily available to the better students.

**Figure 3.7: Grade 8 Reading
Traditional Statistics**

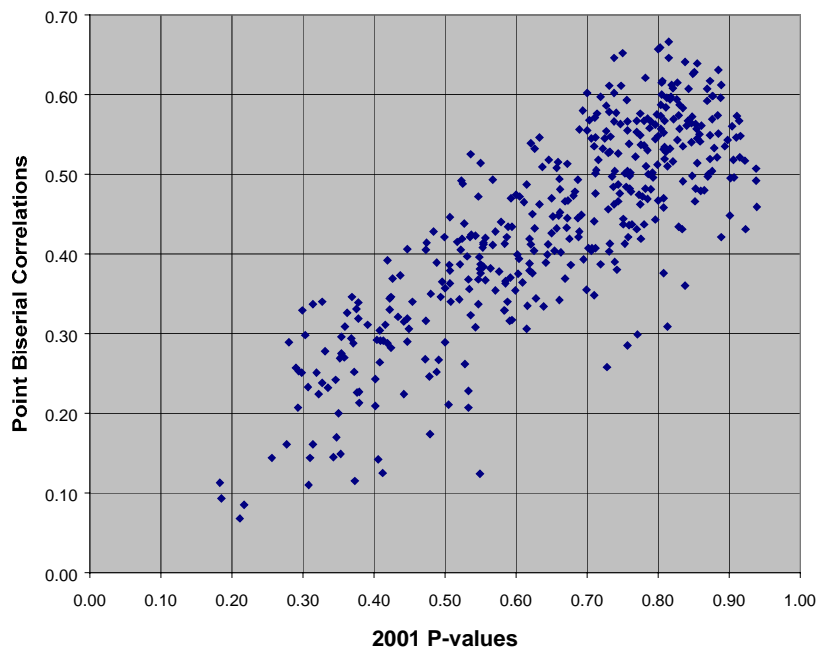
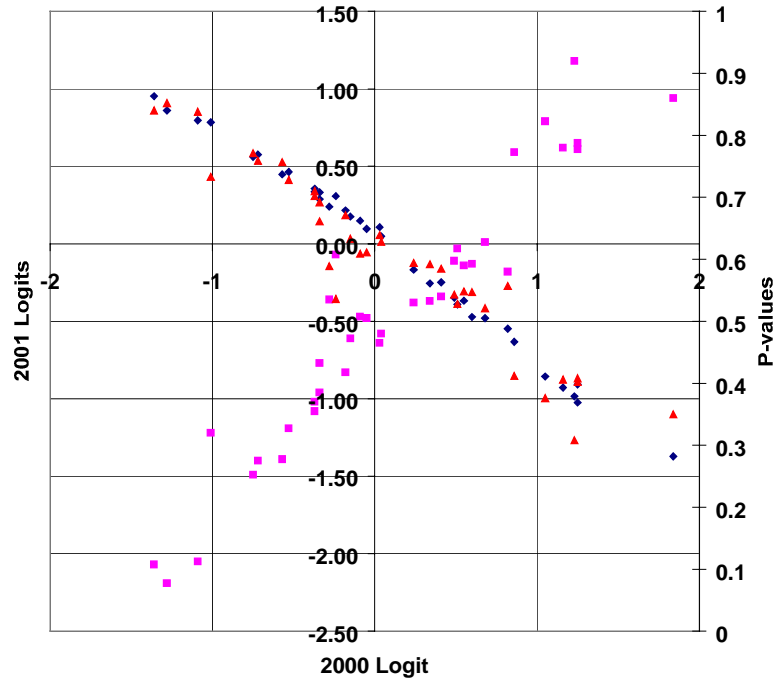


Figure 3.8, entitled *Grade 8 Reading Link 2001 to 2000*, contains several pieces of information for the items that were used to link the 2001 exam to the 2000 exam. The diagonal line, rising from left to right, shows the item logit difficulties in the two years. One would expect the relationship to form a straight line with slope one. The extent to which the line does not pass through the origin indicates a shift in the form difficulty. The intercepts are in fact an estimate of the between year equating constant. For grade five mathematics, the logit shift is close to one half logit.

Figure 3.8: Grade 8 Reading
Link 2001 to 2000



The line using the *diamond*-plotting symbol (top line with downward slope) shows the relationship between p-value and logit difficulty for the 2001 data. It suggests the curvilinear relationship required by the model with low p-values being translated into high logit difficulties and high p-values into low difficulties. The smoothness of this line indicates very good agreement among the ten forms. Because the ten forms were spiraled within classroom, the samples generated are randomly equivalent and one would expect the same p-value to translate into the same logit. This is the case with these data.

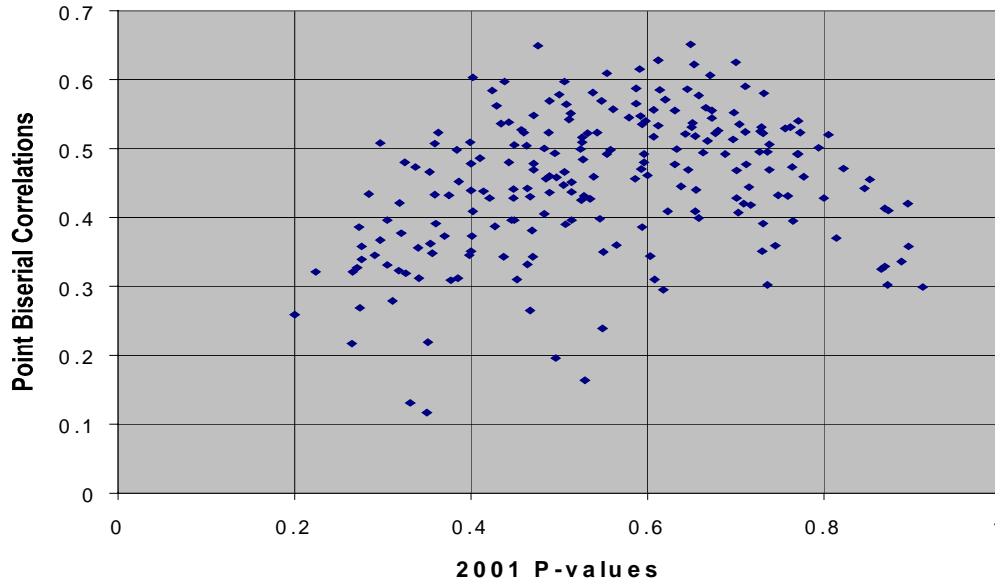
The line with the *triangle*-plotting symbol shows the relationship between the p-values from 2001 and the logits from 2000 for the linking items. It also shows the curvilinear relationship but the line is not as smooth. This is expected because the p-values and logits were produced by completely different samples. With the exception of a few items, this line indicates reasonable agreement between the two years.

The degree to which these two lines do not coincide indicates a change in the p-value between the two years. Most of the item p-values are very slightly higher in 2001 than they were in 2000. Note this chart is based on the overlapping items that were administered in identical form in both years. The change in p-value indicates some improvement and is consistent with the change in the state level mean scale score.

Grade 11: Mathematics

The traditional item statistics, percent correct and point biserial correlations, displayed substantial curvilinear relationship for Grade 11 Mathematics, as shown in Figure 3.9. These statistics were computed for each test form so, in this plot, clusters of points represent a single common item that occurred on all ten forms.

Figure 3.9: Grade 11 Mathematics
Traditional Statistics

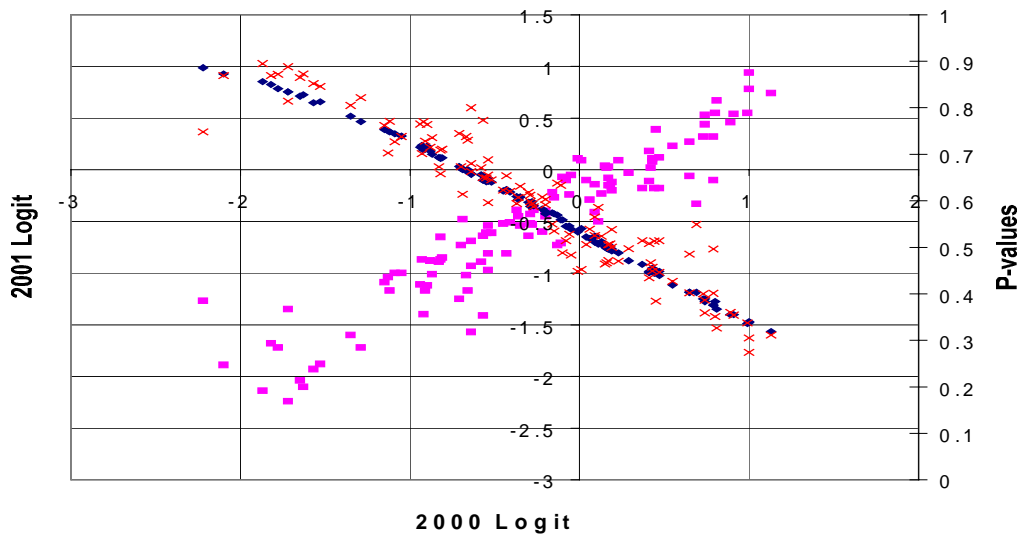


The percent correct scores range from about 0.2 to about 0.9. Most of the item reliabilities are between 0.3 and 0.6 but there is a significant number below 0.2. With few exceptions, the very low reliabilities are all associated with items with low p-values. It might also be useful to investigate the items with reliability near 0.6. They may be exemplars for what items should be or might be tapping some extracurricular experience primarily available to the better students.

Figure 3.10, entitled *Grade 11 Mathematics Link 2001 to 2000*, contains several pieces of information for the items that were used to link the 2001 exam to the 2000 exam. The diagonal line, rising from left to right, shows the item logit difficulties in the two years. One would expect the relationship to form a straight line with slope one. The extent to which the line does not pass through the origin indicates a shift in the form difficulty. The intercepts are in fact an estimate of the between year equating constant. For grade five mathematics, the logit shift is about 0.2 logits.

The line using the diamond-plotting symbol shows the relationship between p-value and logit difficulty for the 2001 data. It suggests the curvilinear relationship imposed by the model with low p-values being translated into high logit difficulties and high p-values into low difficulties. The smoothness of this line indicates very good agreement among the ten forms. Because the ten forms were spiraled within classroom, the samples generated are randomly equivalent and one would expect the same p-value to translate into the same logit. This is the case with these data.

**Figure 3.10: Grade 11 Mathematics
Link 2001 to 2000**



The line with the cross-plotting symbol shows the relationship between the p-values from 2001 and the logits from 2000 for the linking items. It also shows the curvilinear relationship but the line is not as smooth. This is expected because the p-values and logits were produced by completely different samples. With the exception of a few items, this line indicates reasonable agreement between the two years.

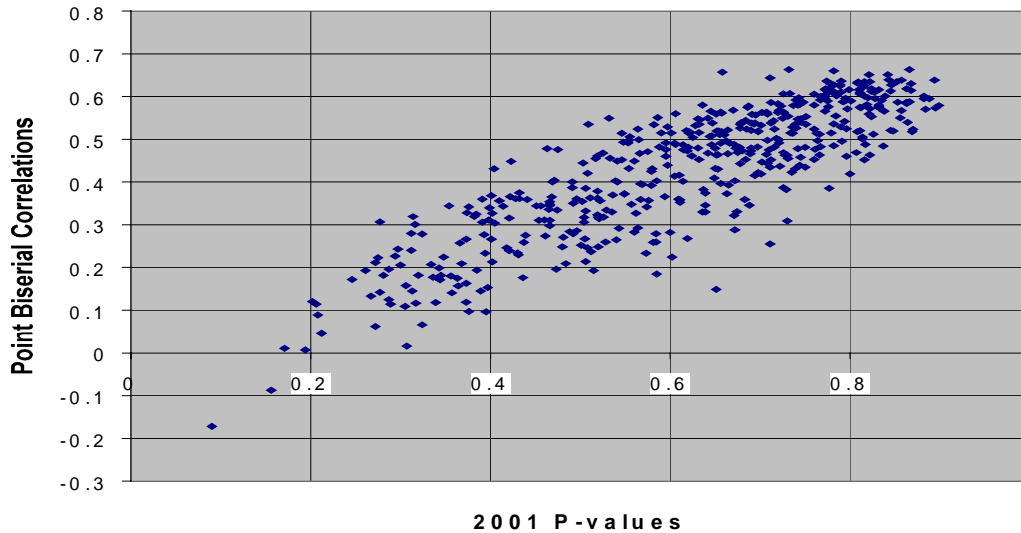
The degree to which these two lines do not coincide indicates a change in the p-value between the two years. Most of the item p-values are very slightly higher in 2001 than they were in 2000. Note this chart is based on the overlapping items that were administered in identical form in both years. The change in p-value indicates some improvement and is consistent with the change in the state level mean scale score.

It is unusual for the lines to have different slopes. The plot suggests more growth on the easy items than on the hard items. This probably is an artifact of the modifications in design of the test.

Grade 11: Reading

The traditional item statistics, percent correct and point biserial correlations, displayed typical and reasonable distributions, as shown in Figure 3.11. These statistics were computed for each test form so, in this plot, clusters of points represent a single common item that occurred on all ten forms.

Figure 3.11: Grade 11 Reading
Traditional Statistics



The percent correct scores range from about 0.2 to about 0.9. Most of the item reliabilities are between 0.3 and 0.6 but there is a significant number below 0.2 and a few below zero. The very low reliabilities tend to be associated with items with low p-values. It might also be useful to investigate the items with reliability near 0.6. They may be exemplars for what items should be or might be tapping some extracurricular experience primarily available to the better students.

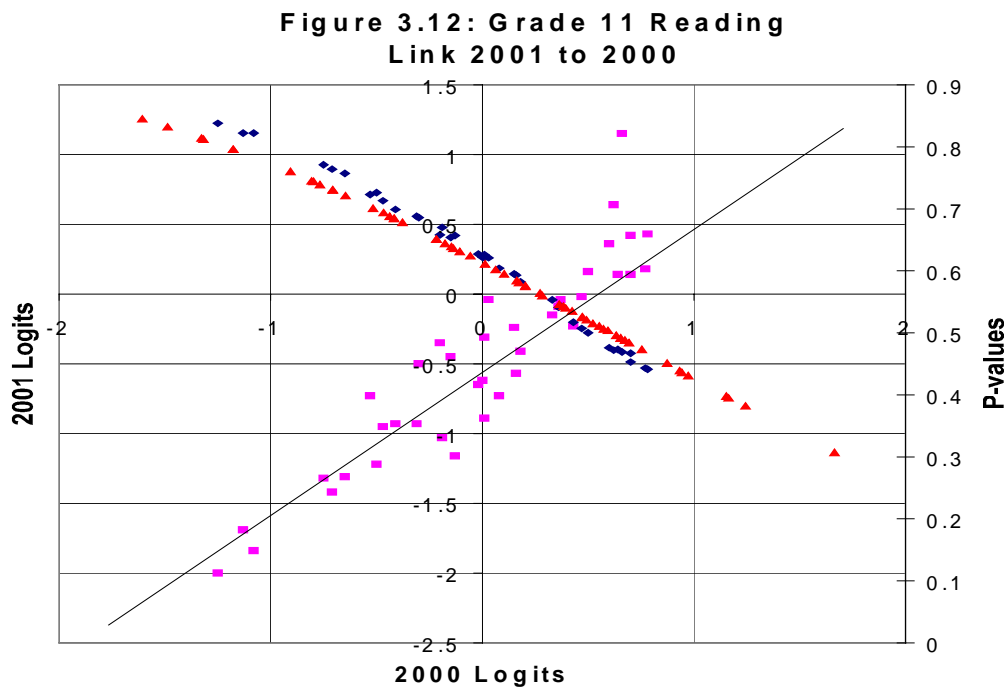
Figure 3.12, entitled *Grade 11 Reading Link 2001 to 2000* contains several pieces of information for the items that were used to link the 2001 exam to the 2000 exam. The diagonal line, rising from left to right, shows the item logit difficulties in the two years. One would expect the relationship to form a straight line with slope one. The extent to which the line does not pass through the origin indicates a shift in the form difficulty. The intercepts are in fact an estimate of the between year equating constant. For grade five mathematics, the logit shift is about one-half logit.

The line using the triangle-plotting symbol shows the relationship between p-value and logit difficulty for the 2001 data. It suggests the curvilinear relationship imposed by the model with low p-values being translated into high logit difficulties and high p-values into low difficulties. The smoothness of this line indicates very good agreement among the ten forms. Because the ten forms were spiraled within classroom, the samples generated are randomly equivalent and one would expect the same p-value to translate into the same logit. This is the case with these data.

The line with the diamond-plotting symbol shows the relationship between the p-values from 2001 and the logits from 2000 for the linking items. It also shows the curvilinear relationship but the line is not as smooth. This is expected to some extent because the p-values and logits were produced by completely different samples. Even with the disturbances in these data, it is still possible to define a set of points that are in reasonable agreement between the two years.

The degree to which these two lines do not coincide indicates a change in the p-value between the two years. Most of the item p-values are very slightly higher in 2001 than they were in 2000. Note this chart is based on the overlapping items that were administered in identical form in both years. The change in p-value indicates some improvement and is consistent with the change in the state level mean scale score.

It is unusual for the lines to have different slopes. The plot suggests more growth on the easy items than on the hard items. This probably is an artifact of the modifications in design of the test.



Chapter 4: Item Bias Review

Test item bias can present itself in a variety of ways in items: through the language, the format, the content, or the behaviors required. It can result from membership in a specific subpopulation or from factors correlated to the subpopulation. It can affect all members of the subpopulation or it may affect only those in specific ranges of ability. How bias arises and how it presents itself clearly will affect how best to detect and correct it.

Limitations of Statistical Detection

No statistical procedure should be used as a substitute for rigorous, hands-on reviews by content and bias specialists. The statistical results can help to organize the review so the effort is concentrated on the most problematic cases; however, no items should be automatically rejected simply because some statistical method flagged them or accepted because they were not flagged.

Statistical detection of item bias is at best an inexact science. There has been a variety of methods proposed for detecting bias but no one statistic to date can be considered either necessary or sufficient. Different methods are more or less successful depending on the situation and circumstances. No analysis can guarantee that a test is free of bias and almost any thoughtful analysis will uncover the most flagrant problems.

A fundamental shortcoming of all of the statistical methods is that all are intrinsic to the test being evaluated. If a test overall is unbiased but with one or two biased items, most methods will locate the problems. If however the test itself is biased against one or more subpopulations, a statistical analysis of the items will not be able to separate bias effects from true differences in achievement.

Mantel-Haenszel Procedure for Differential Item Functioning

The *Mantel-Haenszel* procedure for detecting differential item functioning is the most commonly used technique in educational testing. It does not depend on the application or the fit of any specific measurement model. It does have some philosophical overlap with the Rasch model since it uses total score to organize the analysis.

Differential item functioning is present when examinees of equal ability do not have the same chance of passing the item. If this inequity is associated with gender or ethnic groups, the item could be described as biased. The Mantel-Haenszel procedure looks for items that meet this idea of differential functioning.

The procedure as implemented by DRC contrasts a focal group with a reference group. While it makes no practical difference in the analysis which group is defined as the focal group, the protected class or the group most apt to be disadvantaged by a biased measurement is typically defined as the focal group. The Mantel-Haenszel statistic (MH) for each item is computed from a two-by-two-by-eight contingency table. It has two groups (focal and reference), two outcomes (right or wrong) and eight ability groupings. The ability groups are defined by the octiles of the score distribution for the total examinee populations.

The basic MH statistic is a single degree of freedom chi-square that compares the observed number in each cell to the expected number. The expected counts are computed to ensure that the analysis is not confounded with differences in the achievement level of the two groups.

For constructed response items, a comparable statistic is computed based on the standardized mean difference computed as the differences in mean scores for the focal and reference groups if both groups had the same score distribution.

To assist the review committees in interpreting the analyses, the items are assigned a severity code based on the magnitude of the MH statistic. Items classified as A+ or A- have no statistical indication of differential item functioning. Items classified as B+ or B- have some indication and may not require revision. Items classified as C+ or C- have strong evidence of a problem and should be reviewed and revised if they are to be used again. The plus sign indicates the item favors the focal group and a minus sign indicates the item disfavors the focal group.

Displays such as the following are produced for all items given the C classification and are shown in Appendices S and V. This display identifies the item by form and sequence number and provides all the descriptive statistics. For each score grouping, the display gives the number in each group and the percentage of the group who answered the item correctly. For example, for the item shown, there were 901 students from the focal group in the lowest group and 45% of them answered the item correctly.

Selected	Response	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
		B	135	2	1	8	447.43	55.93	2.13	-1.8	C-
0	1	2	3	4	5	6	7	8	9	0	
FOCAL											-REFERENCE-
										*)	761
										*)	870
										*)	814
										*)	920
										*)	882
										*)	923
										*)	896
										*)	787
0	1	2	3	4	5	6	7	8	9	0	Right Total
Right Total											Right Total

The following tables provide counts of the number of items from each grade and content area that were assigned to each severity code. Overall, there were relatively few items that showed strong evidence of differential item functioning. In most cases, these were matrix items and the majority of the problems were associated with ethnic group.

Table 4.1: Counts of Item Severity Codes by Grade for Mathematics

Form	Code	Five	Eight	Eleven	Total
A	A-	8	8	8	24
	A+	7	6	7	20
	B-		1		1
	B+				
	C-				
	C+				
B	A-	11	8	3	22
	A+	2	6	11	19
	B-				
	B+	1			1
	C-	1			1
	C+		1	1	2
C	A-	8	6	8	22
	A+	6	8	5	19
	B-	1		1	2
	B+		1		1
	C-				
	C+			1	1
D	A-	7	9	8	24
	A+	7	4	5	16
	B-		1	1	2
	B+	1	1	1	3
	C-				
	C+				
E	A-	8	8	7	23
	A+	7	6	8	21
	B-				
	B+				
	C-				
	C+		1		1
F	A-	6	6	7	19
	A+	9	7	8	24
	B-		1		1
	B+		1		1
	C-				
	C+				
G	A-	6	8	10	24
	A+	8	7	5	20
	B-				
	B+	1			1
	C-				
	C+				

Table 4.1 continued: Counts of Item Severity Codes by Grade for Mathematics

Form	Code	Five	Eight	Eleven	Total
H	A-	6	7	3	16
	A+	6	8	12	26
	B-				
	B+	2			2
	C-				
	C+	1			1
I	A-	8	6	8	22
	A+	6	9	5	20
	B-			1	1
	B+	1		1	2
	C-				
	C+				
J	A-	8	9	4	21
	A+	6	6	10	22
	B-	1		1	2
	B+				
	C-				
	C+				
W	A-	34	32	35	101
	A+	36	37	31	104
	B-			1	1
	B+		1	2	3
	C-				
	C+			1	1

Table 4.2: Counts of Item Severity Codes by Grade for Reading

Form	Code	Five	Eight	Eleven	Total
A	A-	8	17	20	45
	A+	15	15	13	43
	B-	1	1		2
	B+	1	3	1	5
	C-				
	C+			1	1
B	A-	10	14	17	41
	A+	14	17	18	49
	B-		2	3	5
	B+		3	1	4
	C-				
	C+				

Table 4.2 continued: Counts of Item Severity Codes by Grade for Reading

Form	Code	Five	Eight	Eleven	Total
C	A-	9	18	22	49
	A+	13	15	16	44
	B-				
	B+	1	3		4
	C-				
	C+	1			1
D	A-	14	16	17	47
	A+	9	16	15	40
	B-		1	1	2
	B+		2		2
	C-				
	C+	1	1		2
E	A-	13	9	18	40
	A+	10	25	13	48
	B-	1			1
	B+		1		1
	C-				
	C+	1	1		2
F	A-	12	16	20	48
	A+	11	18	14	43
	B-		1		1
	B+	1	1	1	3
	C-				
	C+			1	1
G	A-	13	15	23	51
	A+	10	18	13	41
	B-			1	1
	B+		2	3	5
	C-				
	C+	1	1		2
H	A-	12	18	14	44
	A+	12	15	12	39
	B-			3	3
	B+		1	3	4
	C-				
	C+	2	2		4

Table 4.2 continued: Counts of Item Severity Codes by Grade for Reading

Form	Code	Five	Eight	Eleven	Total
I	A-	11	18	20	49
	A+	12	15	14	41
	B-	1			1
	B+	1	3		4
	C-				
	C+			1	1
J	A-	10	10	19	39
	A+	14	22	17	53
	B-		1	3	4
	B+		2		2
	C-				
	C+		1		1
W	A-	29	41	32	102
	A+	22	30	45	97
	B-			2	2
	B+	1	1	1	3
	C-				
	C+				

Chapter 5: Student and School Level Scaling

Prior to 2000 testing, when the PSSA design was more heavily matrix sampling, estimating school-level scale scores presented some statistical and psychometric challenges. For example, the statistically efficient method to compute the school-level scale score often gave an answer different for what would be obtained by averaging student ability estimates. To avoid this source of misunderstanding, the school level scores were forced to equal the average of the appropriate students. The matrix sampling component of the design was used at the standard level to estimate relative strengths and weaknesses for the school.

In 2000, with the new reporting design, more emphasis was placed on the common sections. It became necessary to compute reliable estimates of student-level abilities, as indicated by the standard errors, at the level of the content standards. It is then possible to aggregate all scale scores to the school, district and state levels without resorting to any complex algorithms. The results should be simpler to explain and interpret.

Because the original design of the PSSA was intended to produce school-level estimates only, the reporting metric was defined at the school level. For the base year, the mean of all schools in the norming sample was set at 1300 and the standard deviation at 100. The distribution to which these apply is the content area scale score with all schools weighted equally. Consequently, the expectation now is for state-level means near 1300 and standard deviations near 100. The state mean of student level scale scores will in general be somewhat different. This difference occurs because the mean of the school-level scores counts schools equally regardless of size while the mean of the student-level scores counts students equally.

For the eleventh grade, the PSSA also requires computing school-level estimates separately for vocational/technical students and non-vocational/technical students. Because student-level scale scores are now available for every student, this step requires a different aggregation of the students but doesn't require recomputing the student scale scores.

One would not expect large changes from year to year at the state level. Any change would typically be in the same direction and proportional to changes in the p-values for the linking items. One would also expect that schools that put more resources into effecting changes to show relatively more progress than those that do not. This type of information is not available in a systematic way and any evaluation of this type would depend on anecdotal information.

Table 5.1 gives the transformations that were used to convert 2001 logits into the Scaled Scores. These translation constants included the adjustments to equate 2001 to prior years as well as the rescaling needed to convert to the (1300, 100) metric. These transformations are used for all scale score calculations.

Table 5.1: Transformation to Scaled Scores		
Grade	Math	Reading
Five	$175x + 1243$	$185X + 1202$
Eight	$160X + 1302$	$208X + 1297$
Eleven	$200X + 1268$	$400X + 1252$

Common Items and Matrix Sampled Items

With the new design for the 2000 PSSA, school-level scale scores are based on all items on all forms. This ensures that the scale scores used for school accountability are based on the widest possible sampling of the curriculum. Student-level scores are based on the common items only. This ensures that any decision made about students will be done in the most equitable manner.

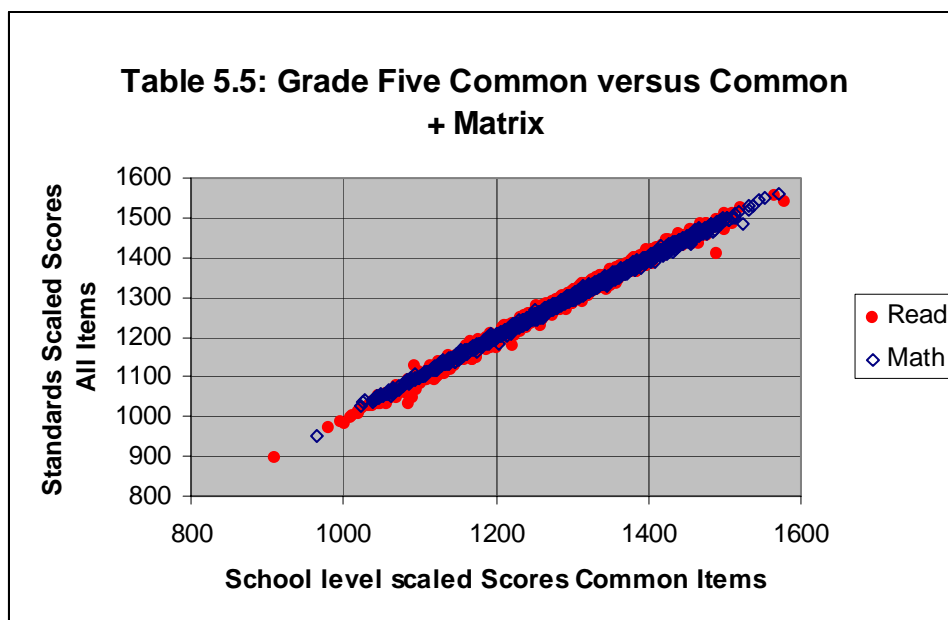
This double system is intended to provide the best information possible for both types of decisions. The process requires computing two sets of student scores. The first set is based on the common items and is used for calculations involving the students. The second set is based on the common and matrix items and is used to aggregate up to the school, district, and state levels.

In addition to adding complexity to the processing, this approach also introduces some potential confusion. The mean of the student-level scale scores for a school will not equal the school-level scale score. While this is an obvious consequence of basing the scores on different sets of items, it is less obvious to the users of the reports.

Theoretically, it does not matter if a school is evaluated using the common items only or the common plus matrix items. Both approaches to computing the school-level scale scores should estimate the same location on the underlying construct. As shown in figure 5.1, for grade five, the correlation between the two school-level estimates is very near 1.0 for both reading and math. This result is typical of those seen for the other grades as well. Correlations at the student level will be lower, closer to the range of the typical form reliabilities. While the two measures are both estimates of the same construct, they are not equally good estimates. The measure using both common and matrix items relies on more items and so it has:

- Better coverage of the curriculum, and
- Smaller standard errors of measurement.

Because the correlations between the two measures are not perfect, some schools and some students will appear to do better on one measure or the other.



Scaled Scores for Content Standards

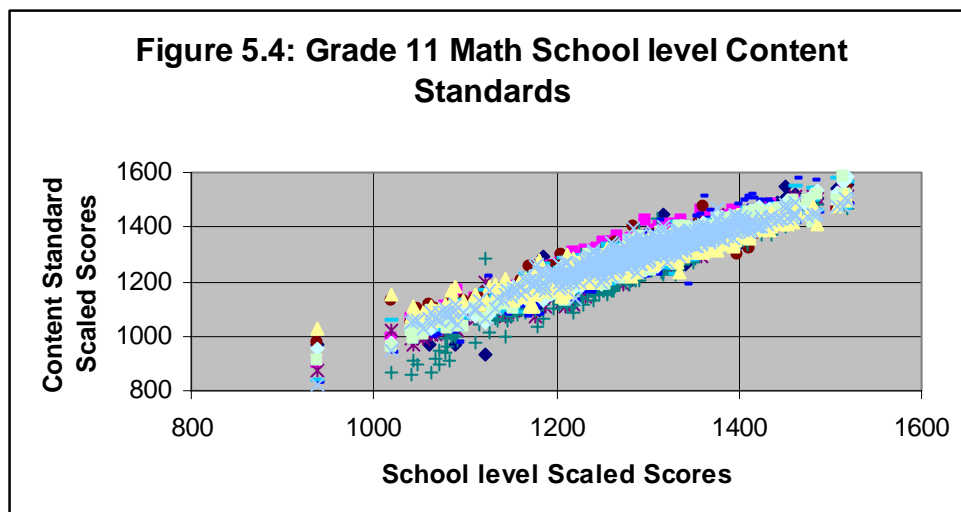
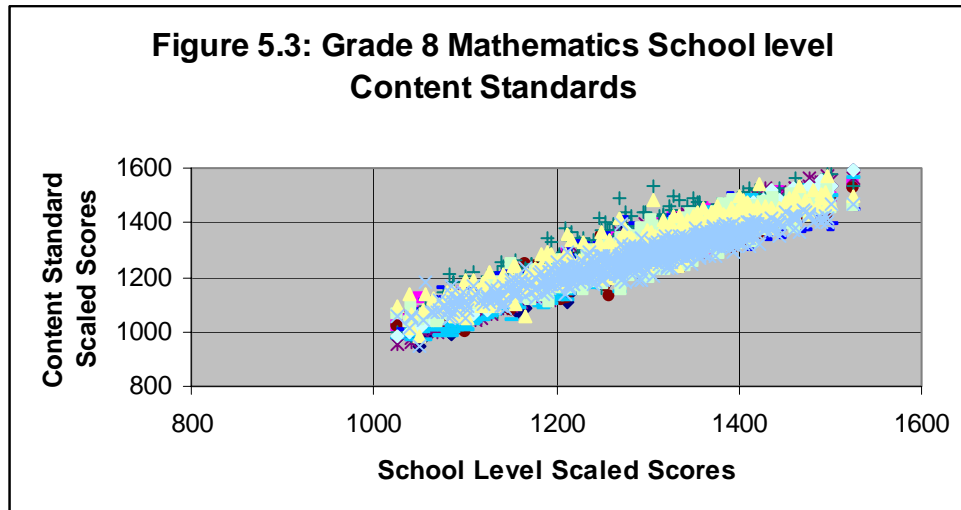
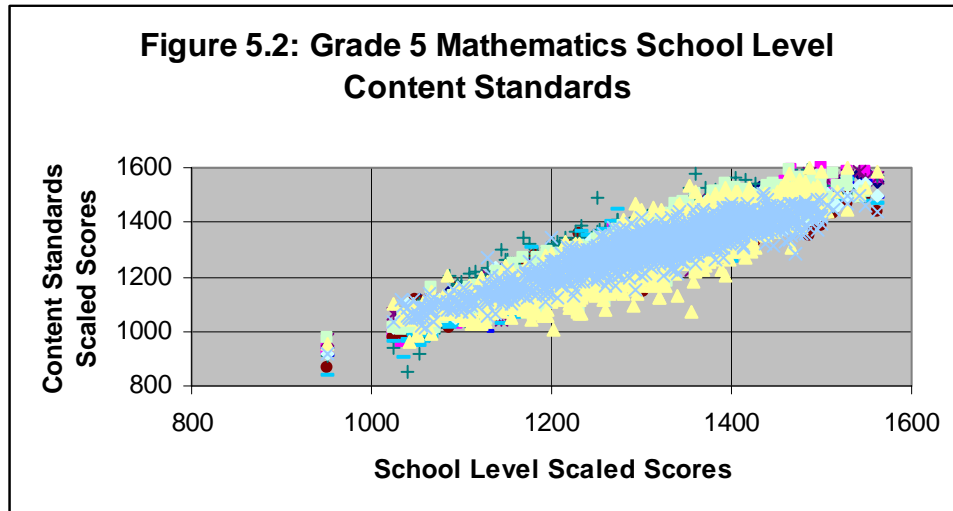
From the point of view of curriculum and instruction, content standards make eminent sense. For the point of view of test development, there is no problem writing item specifications and test items themselves that align with the content standards. For reporting to educators and parents, performance by content standard is valued and is carefully scrutinized. From the point of view of measurement, content standards are a logical problem.

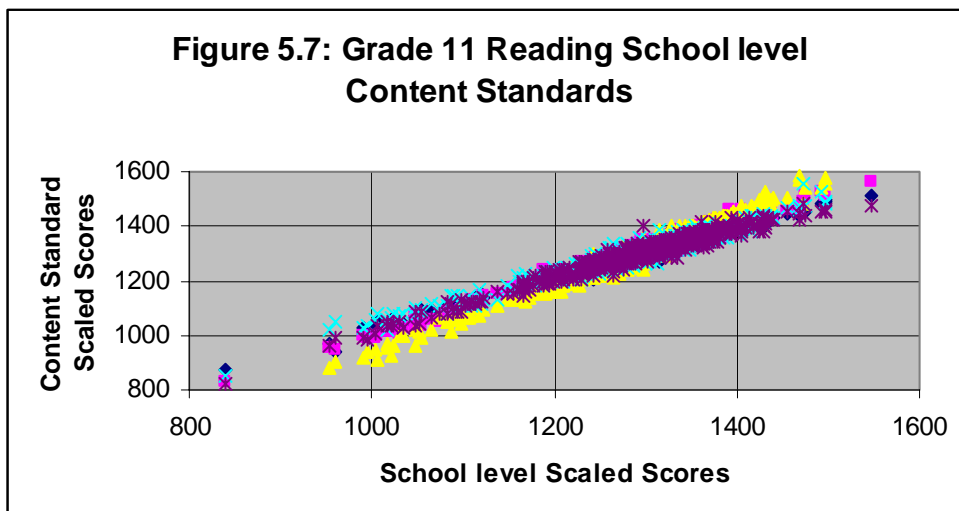
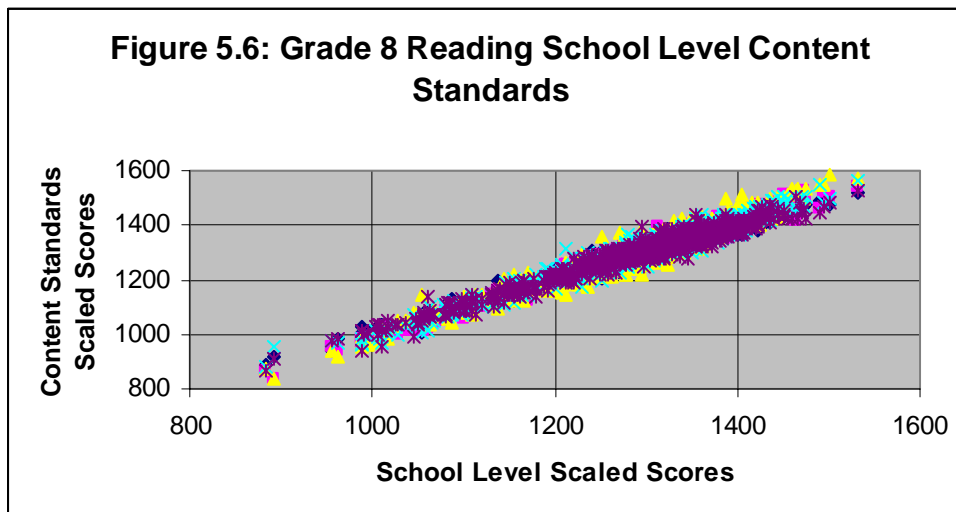
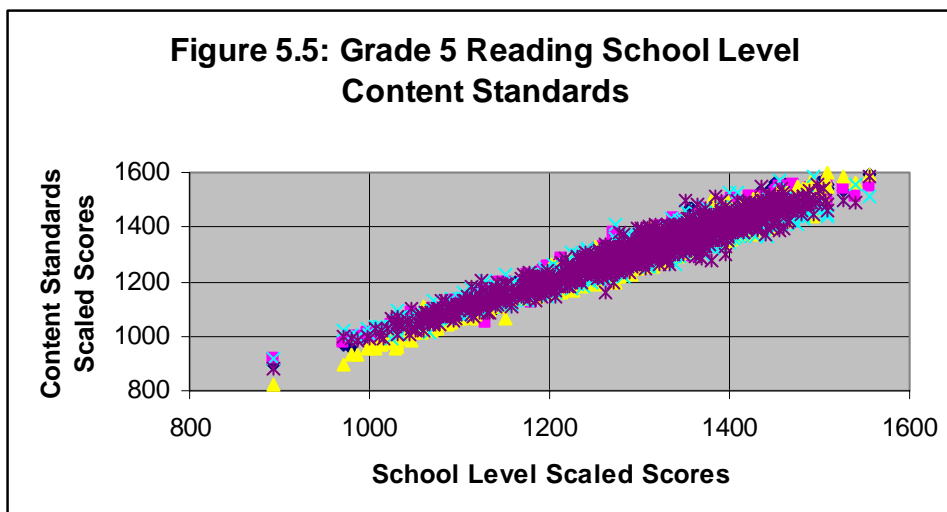
If all items on the math or the reading assessment are to be aggregated into a single measure, then all items must be measuring a single construct. This does not seem to leave room for content standards within the general content area. If the content standards are truly different, then they should not be aggregated into a single score; if they are not different, there is no point in reporting them separately.

The PSSA turns out to be typical of most assessments. Empirically, the content standards are different but not very different. In any content area, one strong general factor contains all the content standards. It is also possible to find some schools and some students for which the content standards are distinctly different.

The plots below illustrate the strong relationship among the content standards when computed at the school level. The correlations among content standard tend to be about 0.90 across all grades and contents. Correlations at the student level would be lower.

There is a tendency for the content standard scaled scores to have slightly different slopes. This tends to be associated with the different weighting given to constructed response tasks in the different areas. In prior years, this effect was much more pronounced in grade 11 reading which used another item type. Without the multiple response multiple choice items, this plot is very similar to the others.





Chapter 6: Interpreting Scaled Scores on the PSSA

A *Scaled Score*, in the simplest sense, is a transformed number correct score¹. When all students take the same items, as in the common sections of the PSSA, the more points the student earns, the higher the scaled score received will be. The value of switching to the more abstract scaled score metric is to produce a more general result.

A raw score of, say, 30 is almost meaningless unless the reader is also told how many points were possible. The same score has quite different meanings if it is based on a thirty-item test or on a sixty-item test. *Number correct scores are transformed to percent correct scores to remove the effect of test length.* In the same way, a score based on sixty difficult items is quite different from the same score based on sixty easy items. *Number correct scores are transformed to scaled scores to remove the effects of test length and item difficulty.*

On the surface, a scaled score of, say, 1300 does not appear to have any more meaning than a raw score of 30. A temperature of 37 degrees does not provide useful information unless the scale is anchored to some known points. Useful anchors might be the freezing point of water or perhaps the normal body temperature for humans.² To be meaningful, the new metric must be related to known objects and situations, in other words, to some sort of *measurement standard*.

School-Level Scales Scores

The PSSA scaled score metric has been anchored to the *mean school level scaled score* for a base year and that point has been arbitrarily labeled 1300. The point on the scale that is one standard deviation above the mean was labeled 1400. These labels are completely arbitrary; they could have been called zero and one or any other ordered pair without affecting any of the relationships among schools, years, students or items. It would simply be changing the labels on the axis of a graph without moving any of the points.

The 1300-metric was chosen so that negative or fractional scale scores are not needed and so that the PSSA scaled scores are not easily confused with the results from any other testing program. Like the temperature scales of Fahrenheit and Celsius, the new scale will acquire meaning only with experience.

A scaled score of 1300, or any other value, should have the same absolute meaning in the current year as it had in previous years, when properly equated across years. A school with a scaled score above 1300 performed better than did the average school in the base year.

More importantly, an increase in the scaled score from last year to the current year means the students' performance has improved; it does not say anything about whether the exam is easier or harder. To make these interpretations requires no information about the length or the difficulty of the test in either year, although all of those are essential information for deriving the scaled scores.

¹ This is done in two steps. First, there is a nonlinear transformation that converts number correct scores to logits and then a linear transformation to convert logits to scaled scores.

² Most adults have enough experience with temperature scales that being told the temperature is on the Fahrenheit scale or on the Celsius scale is enough information to render the measure useful.

In the base year, the standard deviation of the school-level scaled scores was set to a value of 100. If school scores are approximately normally distributed, a scaled score of 1400, one standard deviation above the base year mean, means the school did better than about 5/6 of the schools in the base year. About two thirds of the schools will have scaled scores between 1200 and 1400. Conversely, about 16% of the schools will be below 1200. Scaled scores of 1000 and 1600 are three standard deviations from the mean and so are extreme scores.

The best guide for giving meaning to the scaled scores is experience. Knowing the typical school had a scaled score of 1300 in the base year provides a beginning for understanding the metric. Noting the performance of other known schools, such as those classified as *similar schools*, will also help define the school-level scores. Most importantly, comparing a school's score to its scores in previous years should be a good indicator of progress.

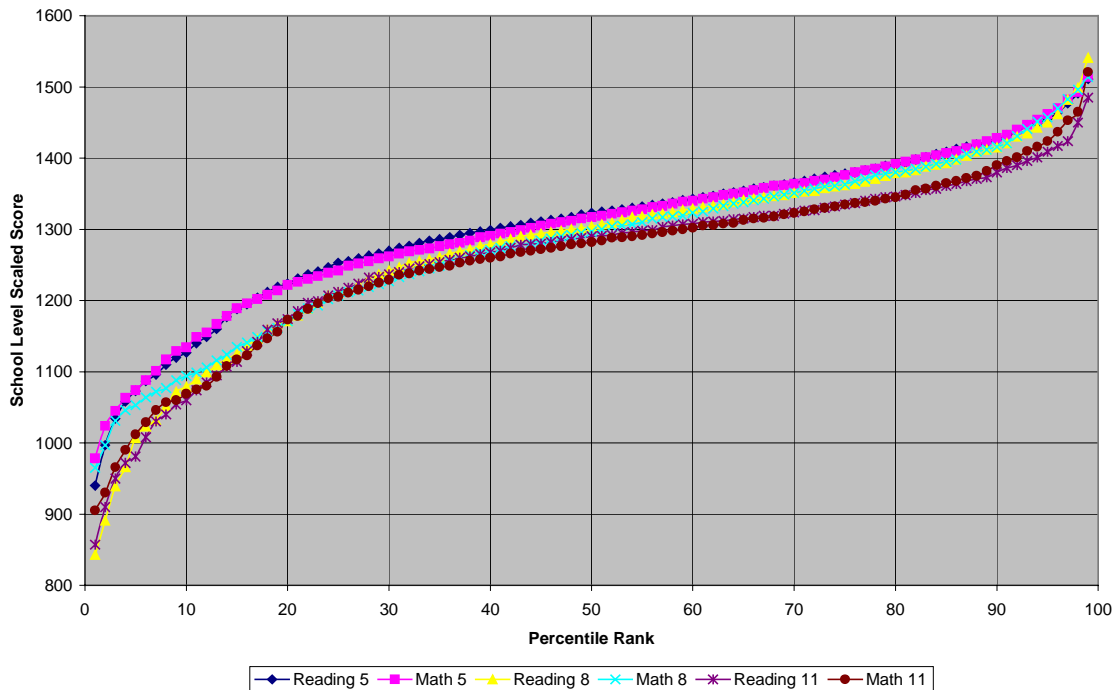
Table 6.1: Grade Five StateWide Means of School Level Scaled Scores

	Common Items Only				Common and Matrix Items			
	Mean		Std. Dev		Mean		Std. Dev	
	Norm	NonNorm	Norm	NonNorm	Norm	NonNorm	Norm	NonNorm
Read	1311.4	1209.0	98.4	202.7	1310.2	1198.9	100.0	210.3
Std 01	1333.0	1225.2	112.5	216.6	1330.6	1213.2	111.9	226.9
Std 02	1330.9	1208.4	109.9	229.1	1325.5	1205.5	106.9	218.4
Std 03	1313.3	1183.6	113.3	231.2	1311.6	1170.1	111.0	236.6
Std 07	1315.2	1253.1	92.7	203.2	1317.9	1237.5	102.1	217.4
Std 08	1319.2	1214.8	103.2	239.4	1322.6	1211.7	107.7	240.6
Std MCQ	1312.8	1219.6	97.5	198.9	1311.1	1210.2	98.8	205.8
Std OE	1300.3	1069.4	156.9	336.2	1304.9	1060.8	146.4	334.5
Math	1314.4	1194.0	96.9	147.3	1313.4	1192.3	95.2	147.9
Std 01	1326.3	1192.1	102.7	179.3	1326.2	1191.3	101.7	180.8
Std 02	1327.5	1192.9	111.7	187.4	1325.0	1190.4	109.6	183.6
Calc	1321.3	1171.9	111.2	194.5	1320.1	1172.3	108.8	190.7
NonCalc	1330.2	1221.6	111.9	202.4	1330.2	1221.6	111.9	202.4
Std 03	1312.0	1211.4	106.7	152.8	1312.4	1206.1	106.9	151.1
Std 04	1306.8	1208.7	94.8	178.5	1311.1	1204.7	97.4	178.9
Std 05	1330.8	1156.0	103.6	194.2	1328.4	1158.0	99.2	193.5
Std 06	1318.2	1198.2	105.1	194.0	1321.9	1199.2	105.9	191.5
Std 07	1306.3	1182.4	101.2	190.4	1318.3	1185.7	105.7	194.1
Std 08	1310.2	1182.7	95.3	148.2	1312.2	1183.8	95.5	151.4
Std 09	1318.2	1172.0	114.1	152.4	1319.1	1176.4	108.8	148.9
Std 10	1303.5	1177.8	112.7	154.2	1304.3	1181.4	113.1	150.7
Std 11	1303.0	1210.1	86.8	148.0	1309.1	1209.5	89.4	148.9
Std MCQ	1314.2	1200.0	102.2	150.8	1313.0	1197.2	101.0	151.2
Std OE	1330.8	1156.0	103.6	194.2	1328.4	1158.0	99.2	193.5

	Common Items Only				Common and Matrix Items			
	Mean		Std. Dev		Mean		Std. Dev	
	Norm	NonNorm	Norm	NonNorm	Norm	NonNorm	Norm	NonNorm
Math	1293.2	1109.9	85.0	146.4	1291.8	1112.4	83.6	144.5
Std 01	1294.0	1107.3	98.5	168.5	1295.6	1100.4	100.2	169.0
Std 02	1316.6	1124.7	85.8	166.2	1315.8	1121.6	87.7	169.0
Calc	1301.3	1083.1	95.7	175.5	1308.6	1089.0	98.3	183.9
NonCalc	1299.5	1155.3	71.2	166.2	1299.5	1155.3	71.2	166.2
Std 03	1279.0	1105.1	98.0	147.0	1280.6	1103.6	96.3	151.2
Std 04	1290.9	1148.1	78.7	148.9	1292.4	1140.1	80.5	155.1
Std 05	1264.3	999.1	105.8	217.4	1259.7	985.8	107.1	225.6
Std 06	1277.3	1060.4	108.4	184.8	1280.6	1067.7	104.7	180.1
Std 07	1295.6	1112.0	93.3	183.8	1296.4	1113.1	92.6	182.2
Std 08	1298.2	1067.6	99.6	187.8	1293.0	1078.9	94.0	178.8
Std 09	1295.6	1088.1	95.1	175.8	1291.7	1089.7	93.5	168.0
Std 10	1290.2	1170.1	72.4	122.3	1290.7	1167.5	75.7	121.3
Std 11	1299.3	1113.5	82.4	174.5	1302.0	1112.7	85.4	177.5
Std MCQ	1298.7	1120.3	86.7	148.2	1296.6	1123.2	85.0	146.7
Std OE	1264.3	999.1	105.8	217.4	1259.7	985.8	107.1	225.6

Another approach to benchmarks is the percentile rank as shown in Figure 6.1 below. This chart converts the School level scaled score into a percentile rank that describes the distribution of scores for all schools in the norming sample for the current year. This chart applies only to School-level scaled scores computed from the common sections of the exam and can not be used for student-level scores. A complete table of school level percentile ranks is given in the appendix.

2001 School Level Percentiles



Student Level Scaled Scores

This discussion has been focused on the meaning of the metric at the school level. For the students, the mean scaled score will also be close to 1300 but the standard deviation will about twice as large.

In interpreting a student-level scale score, the student's measure can be compared to the mean of the school or to other students in the state. Another approach is the percentile rank table (Table 6.4). This table converts the student level scaled score into a percentile rank that describes the distribution of score for all students in the norming sample for the current year. This table applies only to student-level scaled scores computed from the common sections of the exam and cannot be used for school-level scores.

A complete percentile rank table that includes conversions for points received as well as scaled scores is included in the appendices.

Percentile	Grade Five		Grade Eight		Grade Eleven		Percentile
	Math	Reading	Math	Reading	Math	Reading	
1	906	852	923	788	889	790	1
5	997	954	1005	914	969	890	5
10	1065	1025	1053	1008	1026	978	10
15	1108	1091	1097	1081	1066	1046	15
20	1149	1140	1129	1124	1104	1110	20
25	1180	1172	1161	1167	1141	1161	25
30	1210	1220	1191	1210	1178	1200	30
35	1241	1254	1222	1240	1202	1238	35
40	1262	1271	1253	1269	1238	1265	40
45	1283	1306	1274	1300	1261	1292	45
50	1316	1325	1306	1331	1297	1319	50
55	1338	1363	1339	1363	1332	1347	55
60	1362	1383	1361	1380	1356	1376	60
65	1386	1404	1395	1414	1392	1406	65
70	1411	1426	1418	1432	1417	1437	70
75	1437	1449	1453	1450	1455	1454	75
80	1481	1473	1490	1489	1497	1488	80
85	1512	1527	1528	1509	1542	1524	85
90	1547	1557	1570	1552	1594	1563	90
95	1633	1627	1637	1599	1678	1606	95
99	1769	1774	1778	1713	1835	1707	99

Chapter 7: PSSA Reliability of Performance Standards

With the advent of Criterion Referenced Testing (CRT), it became clear that the traditional indicators of test reliability were not appropriate for the new situation. The traditional indicators depend on the variance of the trait in the population. However, with CRT, it is possible for the test to perfectly place the examinees with respect to the criterion although there is little or no variance in the scores.

Livingston¹ proposed a natural extension of the KR-20 coefficient that incorporates both the measurement error and the errors of classification. The formula proposed for this statistic is:

$$K^2 = (\sigma_T^2 + (\mu - \lambda)^2) / (\sigma_T^2 + (\mu - \lambda)^2 + \sigma_\epsilon^2)$$

In this notation, μ is the population mean and λ is the performance standard. With multiple choice items, this expression reduces to KR20 when the performance standard is numerically equal to the mean. Inspection of the formula also indicates that K^2 will never be less than the KR20.

Conversely unlike the KR20, this expression will yield a large positive value, even if everyone has the same ability ($\sigma_T^2 = 0.0$), if the distance from the ability to the standard is large compared to the size of the standard error.

The following table reports the value if for each performance standard of the 2001 PSSA. Because the standard for the proficient category is very near the state mean, the reliability is very near the value of the total test reliability. These statistics are computed in the scale score metric, which will typically yield slightly higher values than the raw scores. This reflects the nonlinear rescaling from raw score to logit score.

Table 1: Reliability and Standard Error of Performance Standards for the PSSA

Grade	Content Area	Test Length	Total Test Reliability	Reliability of Performance Standards			Standard Error at Performance Standards		
				Basic	Proficient	Advanced	Basic	Proficient	Advanced
5	Math	85	0.93	0.96	0.93	0.96	44	46	53
8	Math	85	0.94	0.96	0.94	0.97	53	57	68
11	Math	85	0.94	0.96	0.94	0.97	43	43	48
5	Read	60	0.89	0.94	0.9	0.94	59	61	68
8	Read	80	0.91	0.95	0.92	0.95	50	50	52
11	Read	88	0.92	0.95	0.93	0.96	59	59	66

¹ Livingston, S.A. 1972. Criterion Referenced Applications of Classical Test Theory. *Journal of Educational Measurement* 9: 13-26.

It is also informative to consider the standard error of measurement at Performance standards. For the PSSA, these typically range from about 45 scale score points to about 70 scale score points depending on how near the standard is to the center of the items. The standard errors can be used to create confidence intervals around the standards.

Ideally, these intervals would be small. However, the width is largely determined by the total number of items and the difficulty of the items with respect to the standard. It is reassuring to note that the intervals do not overlap. In all cases, the *high* value for one category is well below the *low* value for the next category.

Appendix A: 2001 PSSA Distribution Summaries by Form
Mathematics and Reading

Grade	Content	Form	Number of Points Received			Test Retest Reliability	Percent of Points Received						
			Number of Examinees	Number of Score Points	Mean		Std Dev	Std Error of Meas	Min Score	25th %tile	Median	75th %tile	Max Score
5	Math	Common	142,671	85	54.0	15.5	4.4	0.92	7.7	50.4	65.4	78.0	100
		A	14306	105	65.6	19.0	5.0	0.93	4.8	49.2	64.6	77.0	99
		B	14407	105	66.1	19.0	4.9	0.93	12.4	49.9	64.8	77.5	99
		C	14449	105	66.1	19.5	5.0	0.93	4.8	49.5	64.9	77.9	100
		D	14360	105	66.4	19.3	5.1	0.93	11.4	49.9	65.2	78.0	100
		E	14339	105	64.7	18.8	5.0	0.93	5.7	48.8	62.9	79.5	100
		F	14314	105	65.8	19.0	4.9	0.93	6.7	49.4	64.3	77.1	100
		G	14380	105	65.7	19.0	4.9	0.93	5.7	49.6	64.6	76.9	100
		H	14442	105	65.4	18.8	4.9	0.93	5.7	49.2	64.0	76.8	99
		I	14302	105	66.5	19.1	5.0	0.93	6.7	50.3	65.5	77.8	100
		J	13372	105	66.0	19.0	4.9	0.93	10.5	50.1	64.8	77.2	100
8	Math	Common	139,322	85	49.4	17.0	4.7	0.92	6.6	42.2	58.6	74.1	100
		A	14074	105	59.5	20.9	5.2	0.94	4.8	40.7	57.3	72.7	100
		B	13879	105	60.0	21.2	5.2	0.94	5.7	40.8	57.5	73.8	100
		C	13893	105	60.2	20.8	5.3	0.94	11.4	41.4	57.8	73.2	100
		D	13814	105	60.8	21.1	5.3	0.94	9.5	42.0	58.8	74.0	100
		E	14030	105	59.7	21.0	5.3	0.94	6.7	41.0	56.7	72.9	100
		F	13863	105	60.2	21.1	5.2	0.94	1.0	41.4	57.7	73.8	100
		G	13947	105	61.1	21.3	5.3	0.94	6.7	42.0	59.1	74.5	100
		H	13936	105	59.9	21.1	5.2	0.94	7.6	40.9	57.2	73.4	100
		I	13975	105	59.4	20.7	5.2	0.94	6.7	40.9	57.1	72.3	100
		J	13911	105	60.9	21.3	5.3	0.94	10.5	41.7	58.5	74.5	100
11	Math	Common	116,137	85	47.9	16.3	4.5	0.92	4.5	40.9	56.2	71.6	99.28
		A	11955	105	57.7	20.4	5.1	0.94	3.8	39.0	54.5	70.5	99
		B	11750	105	57.4	20.8	5.2	0.94	0.0	38.2	54.2	71.0	98.1
		C	11262	105	56.3	19.5	5.0	0.93	8.6	38.6	52.8	67.9	100
		D	11690	105	57.5	20.5	5.1	0.94	0.0	38.8	54.1	70.5	99
		E	11697	105	56.6	20.1	5.0	0.94	2.9	38.2	53.3	69.3	99
		F	11671	105	57.6	20.0	5.2	0.93	8.6	39.5	54.6	70.2	97.1
		G	11725	105	56.9	19.9	5.1	0.93	0.0	39.0	53.3	68.9	100
		H	11476	105	56.6	19.6	5.0	0.94	4.8	39.0	53.5	68.7	99
		I	11559	105	56.6	19.0	5.0	0.93	8.6	39.5	53.5	67.6	98.1
		J	11352	105	56.8	20.1	5.1	0.93	5.7	38.5	53.6	68.9	100

Appendix A: 2001 PSSA Distribution Summaries by Form
Mathematics and Reading

Grade	Content	Form	Number of Points Received			Test Retest Reliability	Percent of Points Received						
			Number of Examinees	Number of Score Points	Mean		Std Dev	Std Error of Meas	Min Score	25th %tile	Median	75th %tile	Max Score
5	Read	Common	142,810	60	38.1	10.4	3.5	0.89	7.8	52.2	66.9	77.1	98.5
		A	14332	89	57.1	15.3	4.2	0.92	5.6	53.3	68.2	77.5	97.8
		B	14407	90	57.2	14.8	4.1	0.92	6.7	53.3	67.2	76.3	93.3
		C	14475	90	56.9	14.7	4.1	0.92	6.7	53.4	66.8	75.9	94.4
		D	14373	90	58.2	14.9	4.2	0.92	11.1	54.9	68.4	77.4	97.8
		E	14336	90	57.7	15.1	4.2	0.92	5.6	53.9	67.9	77.1	94.4
		F	14342	90	56.3	14.6	4.1	0.92	4.4	52.1	66.0	75.2	93.3
		G	14404	90	57.5	14.8	4.1	0.92	6.7	54.0	67.5	76.7	94.4
		H	14459	90	58.9	15.4	4.2	0.93	7.8	55.4	69.2	78.7	96.7
		I	14304	90	57.8	14.9	4.2	0.92	2.2	54.3	67.8	76.8	95.6
		J	13378	90	57.4	15.0	4.1	0.93	10.0	53.7	67.7	76.7	95.6
8	Read	Common	139,073	80	49.4	12.9	4.1	0.90	7.5	51.7	64.9	74.2	94.77
		A	14039	120	73.2	19.1	4.9	0.93	6.7	51.5	64.7	73.2	91.7
		B	13847	120	71.4	18.8	4.8	0.93	9.2	49.8	62.8	71.6	90.8
		C	13880	120	74.0	19.4	4.9	0.94	0.0	52.1	65.5	74.2	92.5
		D	13770	120	75.6	20.2	4.9	0.94	5.0	52.8	67.1	76.1	92.5
		E	13976	120	73.2	19.7	5.0	0.94	6.7	50.5	64.4	73.8	93.3
		F	13844	120	75.6	19.5	4.9	0.94	1.7	53.6	66.7	75.4	92.5
		G	13936	120	72.3	19.2	4.8	0.94	5.0	50.6	63.9	72.6	89.2
		H	13919	120	72.6	18.6	4.9	0.93	6.7	51.2	63.8	72.4	91.7
		I	13972	120	72.7	19.0	4.8	0.94	7.5	51.4	64.3	72.7	90.8
		J	13890	120	72.0	19.1	4.9	0.93	5.8	50.0	63.3	72.3	94.2
11	Read	Common	115,566	88	53.4	15.0	4.4	0.91	3.0	49.3	64.1	74.1	94.91
		A	11913	127	78.3	22.5	5.3	0.94	2.4	49.8	65.5	75.7	94.5
		B	11679	131	82.3	23.1	5.4	0.95	0.0	51.0	67.0	76.6	93.9
		C	11215	130	79.1	22.9	5.4	0.94	0.0	49.0	64.5	74.7	93.8
		D	11651	125	75.7	21.5	5.3	0.94	0.0	48.9	64.1	74.2	95.2
		E	11638	123	75.5	21.5	5.2	0.94	8.9	50.0	65.2	75.2	93.5
		F	11621	128	77.2	22.2	5.3	0.94	4.7	48.1	63.7	74.2	92.2
		G	11654	132	82.1	23.4	5.4	0.95	3.0	50.6	65.9	76.4	95.5
		H	11418	124	74.9	21.5	5.3	0.94	0.0	48.8	64.0	74.2	94.4
		I	11488	127	78.6	22.1	5.3	0.94	6.3	50.4	65.8	75.6	94.5
		J	11289	131	82.7	22.7	5.3	0.95	11.5	52.3	67.4	76.7	94.7

Appendix B: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Math

Form Sequence	Key	Logit	SEC	P-value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
A	128	-2.95	0.00	0.95	0.32	0.01	0.95 *	0.03	0.01	0.00	0.00	-0.10	0.32 *	-0.24	-0.08
A	129	-2.20	0.00	0.89	0.25	0.07	0.02	0.01	0.89 *	0.00	0.00	-0.11	-0.16	-0.15	0.25 *
A	130	-0.67	0.00	0.60	0.45	0.06	0.10	0.24	0.60 *	0.00	0.00	-0.25	-0.15	-0.24	0.45 *
A	131	-0.98	0.00	0.68	0.54	0.09	0.10	0.68 *	0.13	0.01	0.00	-0.24	-0.22	0.54 *	-0.30
A	132	-0.71	0.00	0.61	0.55	0.06	0.61 *	0.18	0.14	0.01	0.00	-0.15	0.55 *	-0.28	-0.31
A	133	-0.22	0.00	0.48	0.49	0.13	0.48 *	0.20	0.19	0.01	0.00	-0.24	0.49 *	-0.10	-0.30
A	134	-0.64	0.00	0.60	0.55	0.13	0.13	0.14	0.60 *	0.01	0.00	-0.18	-0.28	-0.29	0.55 *
A	135	-0.40	0.00	0.53	0.39	0.11	0.15	0.21	0.53 *	0.01	0.00	-0.12	-0.18	-0.20	0.39 *
A	136	-2.25	0.00	0.90	0.43	0.09 *	0.02	0.06	0.01	0.01	0.00	0.43 *	-0.20	-0.28	-0.16
A	137	-0.02	0.00	0.43	0.37	0.09	0.12	0.43 *	0.35	0.01	0.00	-0.17	-0.16	0.37 *	-0.15
A	138	-1.32	0.00	0.76	0.57	0.09	0.07	0.09	0.76 *	0.01	0.00	-0.31	-0.26	-0.29	0.57 *
A	139	0.11	0.00	0.40	0.20	0.17	0.40 *	0.29	0.14	0.01	0.00	-0.07	0.20 *	-0.03	-0.12
A	140	-0.96	0.00	0.68	0.60	0.68 *	0.07	0.11	0.14	0.01	0.00	0.60 *	-0.20	-0.25	-0.40
A	141	-1.25	0.00	0.74	0.58	0.07	0.15	0.04	0.74 *	0.01	0.00	-0.22	-0.41	-0.21	0.58 *
A	142	-0.44	0.00	0.54	0.45	0.17	0.54 *	0.15	0.13	0.01	0.00	-0.18	0.45 *	-0.19	-0.22
B	128	-1.55	0.00	0.78	0.56	0.06	0.10	0.78 *	0.04	0.01	0.00	-0.32	-0.33	0.56 *	-0.18
B	129	-2.69	0.00	0.94	0.34	0.94 *	0.02	0.03	0.02	0.00	0.00	0.34 *	-0.17	-0.16	-0.18
B	130	-1.42	0.00	0.76	0.40	0.15	0.05	0.04	0.76 *	0.01	0.00	-0.22	-0.16	-0.23	0.40 *
B	131	-1.36	0.00	0.74	0.41	0.74 *	0.03	0.03	0.20	0.00	0.00	0.41 *	-0.19	-0.19	-0.26
B	132	-1.12	0.00	0.69	0.49	0.13	0.07	0.69 *	0.11	0.01	0.00	-0.27	-0.20	0.49 *	-0.24
B	133	-0.87	0.00	0.62	0.46	0.18	0.62 *	0.06	0.14	0.00	0.00	-0.20	0.46 *	-0.16	-0.28
B	134	-0.96	0.00	0.65	0.51	0.15	0.12	0.65 *	0.08	0.01	0.00	-0.24	-0.30	0.51 *	-0.18
B	135	-2.20	0.00	0.89	0.49	0.02	0.05	0.04	0.89 *	0.01	0.00	-0.21	-0.27	-0.27	0.49 *
B	136	-0.23	0.00	0.45	0.46	0.13	0.45 *	0.14	0.28	0.00	0.00	-0.29	0.46 *	-0.10	-0.18
B	137	-0.37	0.00	0.49	0.49	0.04	0.38	0.49 *	0.09	0.01	0.00	-0.23	-0.20	0.49 *	-0.32
B	138	-2.44	0.00	0.91	0.43	0.91 *	0.02	0.03	0.03	0.00	0.00	0.43 *	-0.20	-0.24	-0.22
B	139	-1.98	0.00	0.86	0.50	0.04	0.04	0.06	0.86 *	0.00	0.00	-0.25	-0.25	-0.27	0.50 *
B	140	-0.06	0.00	0.40	0.42	0.35	0.08	0.40 *	0.16	0.01	0.00	-0.26	-0.16	0.42 *	-0.07
B	141	-0.70	0.00	0.58	0.40	0.06	0.29	0.58 *	0.07	0.01	0.00	-0.15	-0.19	0.40 *	-0.23
B	142	-1.18	0.00	0.70	0.56	0.13	0.11	0.06	0.70 *	0.01	0.00	-0.33	-0.26	-0.21	0.56 *

Appendix B: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Math

Form Sequence	Key	Logit	SEC	P-value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
C	128	-1.82	0.00	0.85	0.51	0.03	0.04	0.85 *	0.08	0.00	0.00	-0.21	-0.19	0.51 *	-0.37
C	129	-0.86	0.00	0.64	0.42	0.27	0.64 *	0.02	0.06	0.00	0.00	-0.22	0.42 *	-0.21	-0.24
C	130	-1.29	0.00	0.74	0.49	0.04	0.09	0.13	0.74 *	0.01	0.00	-0.12	-0.29	-0.29	0.49 *
C	131	-1.59	0.00	0.81	0.53	0.03	0.13	0.81 *	0.03	0.00	0.00	-0.23	-0.38	0.53 *	-0.18
C	132	-1.15	0.00	0.71	0.52	0.15	0.71 *	0.05	0.08	0.00	0.00	-0.30	0.52 *	-0.25	-0.23
C	133	-1.30	0.00	0.75	0.53	0.10	0.06	0.09	0.75 *	0.00	0.00	-0.29	-0.28	-0.24	0.53 *
C	134	-0.87	0.00	0.64	0.62	0.64 *	0.16	0.04	0.16	0.01	0.00	0.62 *	-0.39	-0.19	-0.29
C	135	-0.28	0.00	0.48	0.38	0.08	0.48 *	0.36	0.08	0.01	0.00	-0.22	0.38 *	-0.14	-0.20
C	136	-0.30	0.00	0.48	0.53	0.48 *	0.14	0.24	0.14	0.01	0.00	0.53 *	-0.13	-0.31	-0.22
C	137	-0.99	0.00	0.67	0.54	0.15	0.11	0.67 *	0.06	0.00	0.00	-0.33	-0.23	0.54 *	-0.21
C	138	-0.30	0.00	0.48	0.51	0.07	0.11	0.48 *	0.34	0.00	0.00	-0.20	-0.30	0.51 *	-0.22
C	139	-0.79	0.00	0.62	0.58	0.12	0.11	0.62 *	0.15	0.00	0.00	-0.26	-0.24	0.58 *	-0.32
C	140	-1.86	0.00	0.86	0.50	0.04	0.06	0.86 *	0.05	0.00	0.00	-0.22	-0.30	0.50 *	-0.26
C	141	-0.95	0.00	0.66	0.51	0.20	0.66 *	0.06	0.07	0.01	0.00	-0.36	0.51 *	-0.22	-0.12
C	142	-0.26	0.00	0.47	0.51	0.24	0.18	0.11	0.47 *	0.01	0.00	-0.29	-0.16	-0.19	0.51 *
D	128	-1.57	0.00	0.81	0.54	0.03	0.02	0.13	0.81 *	0.00	0.00	-0.16	-0.19	-0.44	0.54 *
D	129	-0.73	0.00	0.63	0.48	0.05	0.63 *	0.08	0.24	0.00	0.00	-0.18	0.48 *	-0.21	-0.30
D	130	-1.54	0.00	0.81	0.39	0.08	0.81 *	0.06	0.05	0.00	0.00	-0.19	0.39 *	-0.17	-0.25
D	131	-1.24	0.00	0.75	0.52	0.75 *	0.05	0.11	0.09	0.01	0.00	0.52 *	-0.24	-0.28	-0.27
D	132	-0.84	0.00	0.66	0.40	0.66 *	0.09	0.07	0.19	0.00	0.00	0.40 *	-0.11	-0.14	-0.29
D	133	-1.23	0.00	0.75	0.47	0.07	0.05	0.13	0.75 *	0.00	0.00	-0.25	-0.19	-0.26	0.47 *
D	134	-1.06	0.00	0.71	0.39	0.71 *	0.17	0.09	0.04	0.00	0.00	0.39 *	-0.18	-0.21	-0.22
D	135	-0.35	0.00	0.53	0.55	0.13	0.11	0.23	0.53 *	0.01	0.00	-0.28	-0.20	-0.25	0.55 *
D	136	-0.79	0.00	0.64	0.57	0.12	0.17	0.07	0.64 *	0.00	0.00	-0.28	-0.34	-0.20	0.57 *
D	137	-0.38	0.00	0.53	0.40	0.09	0.22	0.53 *	0.15	0.00	0.00	-0.24	-0.17	0.40 *	-0.14
D	138	0.21	0.00	0.38	0.52	0.12	0.38 *	0.41	0.09	0.00	0.00	-0.14	0.52 *	-0.34	-0.11
D	139	-1.66	0.00	0.83	0.51	0.08	0.05	0.04	0.83 *	0.00	0.00	-0.28	-0.27	-0.24	0.51 *
D	140	-0.30	0.00	0.51	0.34	0.06	0.51 *	0.37	0.05	0.01	0.00	-0.15	0.34 *	-0.16	-0.23
D	141	-0.43	0.00	0.55	0.51	0.06	0.10	0.55 *	0.28	0.00	0.00	-0.25	-0.23	0.51 *	-0.25
D	142	-0.26	0.00	0.50	0.42	0.05	0.12	0.50 *	0.32	0.01	0.00	-0.17	-0.18	0.42 *	-0.22

Appendix B: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Math

Form Sequence	Key	Logit	SEC	P-value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
E	128	-0.52	0.00	0.58	0.35	0.05	0.07	0.30	0.58 *	0.00	0.00	-0.19	-0.16	-0.18	0.35 *
E	129	-0.73	0.00	0.63	0.34	0.07	0.23	0.63 *	0.06	0.01	0.00	-0.19	-0.13	0.34 *	-0.21
E	130	-1.40	0.00	0.78	0.47	0.04	0.10	0.07	0.78 *	0.00	0.00	-0.20	-0.26	-0.25	0.47 *
E	131	-1.32	0.00	0.77	0.50	0.77 *	0.07	0.09	0.08	0.00	0.00	0.50 *	-0.24	-0.23	-0.30
E	132	-1.67	0.00	0.83	0.47	0.83 *	0.08	0.05	0.04	0.00	0.00	0.47 *	-0.26	-0.24	-0.23
E	133	-0.48	0.00	0.56	0.54	0.10	0.11	0.22	0.56 *	0.01	0.00	-0.23	-0.23	-0.29	0.54 *
E	134	-0.92	0.00	0.68	0.46	0.12	0.68 *	0.17	0.03	0.00	0.00	-0.22	0.46 *	-0.27	-0.19
E	135	0.41	0.00	0.34	0.57	0.34 *	0.14	0.48	0.04	0.00	0.00	0.57 *	-0.07	-0.41	-0.15
E	136	-0.77	0.00	0.64	0.45	0.14	0.16	0.64 *	0.06	0.00	0.00	-0.22	-0.23	0.45 *	-0.21
E	137	-0.98	0.00	0.69	0.47	0.08	0.07	0.15	0.69 *	0.00	0.00	-0.27	-0.24	-0.20	0.47 *
E	138	0.37	0.00	0.35	0.44	0.19	0.35 *	0.22	0.24	0.00	0.00	-0.17	0.44 *	-0.24	-0.08
E	139	-1.42	0.00	0.79	0.42	0.79 *	0.09	0.06	0.06	0.01	0.00	0.42 *	-0.17	-0.25	-0.23
E	140	-1.17	0.00	0.73	0.51	0.06	0.14	0.73 *	0.06	0.00	0.00	-0.22	-0.31	0.51 *	-0.22
E	141	0.10	0.00	0.41	0.31	0.41 *	0.09	0.38	0.12	0.00	0.00	0.31 *	-0.22	-0.04	-0.19
E	142	-1.04	0.00	0.71	0.49	0.08	0.71 *	0.13	0.08	0.01	0.00	-0.23	0.49 *	-0.25	-0.25
F	128	-2.84	0.00	0.95	0.31	0.95 *	0.01	0.02	0.01	0.00	0.00	0.31 *	-0.14	-0.19	-0.15
F	129	-0.67	0.00	0.58	0.42	0.12	0.58 *	0.17	0.12	0.00	0.00	-0.14	0.42 *	-0.22	-0.23
F	130	-0.99	0.00	0.67	0.53	0.14	0.67 *	0.09	0.10	0.00	0.00	-0.25	0.53 *	-0.27	-0.26
F	131	-1.26	0.00	0.73	0.50	0.16	0.73 *	0.06	0.05	0.00	0.00	-0.34	0.50 *	-0.22	-0.17
F	132	-2.44	0.00	0.92	0.34	0.92 *	0.03	0.01	0.04	0.00	0.00	0.34 *	-0.20	-0.16	-0.18
F	133	-0.29	0.00	0.48	0.54	0.12	0.14	0.48 *	0.26	0.00	0.00	-0.30	-0.23	0.54 *	-0.19
F	134	-1.02	0.00	0.67	0.50	0.14	0.67 *	0.15	0.04	0.00	0.00	-0.30	0.50 *	-0.25	-0.19
F	135	-1.31	0.00	0.74	0.51	0.09	0.11	0.06	0.74 *	0.00	0.00	-0.19	-0.36	-0.21	0.51 *
F	136	-0.31	0.00	0.48	0.50	0.11	0.09	0.32	0.48 *	0.00	0.00	-0.26	-0.15	-0.26	0.50 *
F	137	-1.19	0.00	0.72	0.56	0.72 *	0.08	0.07	0.13	0.00	0.00	0.56 *	-0.26	-0.23	-0.33
F	138	-0.58	0.00	0.56	0.46	0.07	0.56 *	0.12	0.25	0.00	0.00	-0.16	0.46 *	-0.19	-0.28
F	139	-0.21	0.00	0.46	0.45	0.31	0.13	0.10	0.46 *	0.01	0.00	-0.21	-0.22	-0.14	0.45 *
F	140	-0.68	0.00	0.58	0.56	0.09	0.58 *	0.12	0.21	0.00	0.00	-0.29	0.56 *	-0.25	-0.25
F	141	-1.32	0.00	0.75	0.46	0.11	0.08	0.75 *	0.06	0.00	0.00	-0.26	-0.24	0.46 *	-0.19
F	142	-0.73	0.00	0.60	0.50	0.16	0.13	0.60 *	0.11	0.01	0.00	-0.21	-0.32	0.50 *	-0.17

Appendix B: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Math

Form Sequence	Key	Logit	SEC	P-value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
G	128	-1.18	0.00	0.73	0.45	0.09	0.04	0.13	0.73 *	0.00	0.00	-0.33	-0.17	-0.17	0.45 *
G	129	-1.08	0.00	0.71	0.55	0.10	0.07	0.12	0.71 *	0.01	0.00	-0.27	-0.28	-0.27	0.55 *
G	130	-1.34	0.00	0.77	0.59	0.06	0.11	0.77 *	0.06	0.00	0.00	-0.19	-0.44	0.59 *	-0.25
G	131	-1.16	0.00	0.73	0.50	0.10	0.73 *	0.11	0.07	0.01	0.00	-0.23	0.50 *	-0.28	-0.22
G	132	-1.17	0.00	0.73	0.61	0.73 *	0.06	0.13	0.08	0.01	0.00	0.61 *	-0.22	-0.46	-0.21
G	133	-0.33	0.00	0.51	0.49	0.09	0.27	0.51 *	0.13	0.01	0.00	-0.15	-0.17	0.49 *	-0.34
G	134	-1.95	0.00	0.87	0.38	0.02	0.05	0.06	0.87 *	0.00	0.00	-0.17	-0.24	-0.20	0.38 *
G	135	-1.12	0.00	0.72	0.49	0.08	0.72 *	0.07	0.13	0.01	0.00	-0.24	0.49 *	-0.22	-0.27
G	136	-0.59	0.00	0.58	0.57	0.29	0.07	0.06	0.58 *	0.00	0.00	-0.45	-0.17	-0.10	0.57 *
G	137	-0.45	0.00	0.54	0.52	0.16	0.16	0.54 *	0.14	0.01	0.00	-0.28	-0.18	0.52 *	-0.23
G	138	-1.27	0.00	0.75	0.37	0.03	0.75 *	0.21	0.02	0.00	0.00	-0.20	0.37 *	-0.24	-0.16
G	139	0.45	0.00	0.30	0.31	0.30 *	0.15	0.32	0.22	0.01	0.00	0.31 *	-0.13	-0.11	-0.07
G	140	-0.94	0.00	0.67	0.51	0.09	0.15	0.67 *	0.09	0.01	0.00	-0.30	-0.20	0.51 *	-0.26
G	141	0.57	0.00	0.28	0.37	0.18	0.28 *	0.44	0.10	0.01	0.00	-0.16	0.37 *	-0.12	-0.12
G	142	-1.52	0.00	0.80	0.45	0.03	0.80 *	0.12	0.05	0.01	0.00	-0.21	0.45 *	-0.24	-0.25
H	128	-1.30	0.00	0.75	0.41	0.04	0.18	0.04	0.75 *	0.00	0.00	-0.18	-0.26	-0.19	0.41 *
H	129	-1.93	0.00	0.86	0.53	0.02	0.11	0.86 *	0.01	0.00	0.00	-0.16	-0.44	0.53 *	-0.14
H	130	-1.67	0.00	0.82	0.44	0.03	0.11	0.04	0.82 *	0.00	0.00	-0.23	-0.26	-0.20	0.44 *
H	131	-0.73	0.00	0.61	0.53	0.10	0.61 *	0.20	0.09	0.01	0.00	-0.24	0.53 *	-0.28	-0.24
H	132	-1.16	0.00	0.71	0.50	0.06	0.71 *	0.11	0.11	0.00	0.00	-0.19	0.50 *	-0.23	-0.31
H	133	0.07	0.00	0.39	0.28	0.39 *	0.19	0.28	0.14	0.01	0.00	0.28 *	-0.21	-0.12	0.03 ?
H	134	-2.83	0.00	0.95	0.31	0.03	0.95 *	0.01	0.01	0.00	0.00	-0.18	0.31 *	-0.13	-0.15
H	135	-0.50	0.00	0.54	0.53	0.25	0.54 *	0.16	0.05	0.00	0.00	-0.21	0.53 *	-0.31	-0.23
H	136	-0.02	0.00	0.41	0.50	0.41 *	0.21	0.32	0.06	0.00	0.00	0.50 *	-0.14	-0.23	-0.30
H	137	-1.33	0.00	0.75	0.45	0.03	0.03	0.19	0.75 *	0.00	0.00	-0.17	-0.20	-0.31	0.45 *
H	138	-0.85	0.00	0.64	0.49	0.64 *	0.12	0.14	0.10	0.00	0.00	0.49 *	-0.21	-0.25	-0.23
H	139	-0.41	0.00	0.52	0.60	0.05	0.40	0.52 *	0.03	0.00	0.00	-0.20	-0.45	0.60 *	-0.13
H	140	-1.26	0.00	0.74	0.50	0.74 *	0.13	0.06	0.07	0.00	0.00	0.50 *	-0.25	-0.28	-0.24
H	141	-0.35	0.00	0.50	0.48	0.11	0.30	0.50 *	0.09	0.00	0.00	-0.26	-0.21	0.48 *	-0.18
H	142	-0.83	0.00	0.63	0.57	0.12	0.63 *	0.07	0.17	0.01	0.00	-0.30	0.57 *	-0.24	-0.27

Appendix B: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Math

Form Sequence	Key	Logit	SEC	P-value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
I	128	-2.08	0.00	0.88	0.43	0.43	0.88 *	0.04	0.02	0.05	0.00	0.00	0.43 *	-0.20	-0.18	-0.28
I	129	-1.15	0.00	0.71	0.53	0.53	0.13	0.71 *	0.11	0.05	0.00	0.00	-0.25	0.53 *	-0.32	-0.21
I	130	-0.98	0.00	0.67	0.56	0.56	0.67 *	0.13	0.11	0.09	0.00	0.00	0.56 *	-0.35	-0.28	-0.16
I	131	-1.92	0.00	0.86	0.51	0.51	0.07	0.03	0.86 *	0.04	0.00	0.00	-0.34	-0.21	0.51 *	-0.22
I	132	-0.73	0.00	0.61	0.50	0.50	0.25	0.08	0.06	0.61 *	0.00	0.00	-0.39	-0.22	0.00 ?	0.50 *
I	133	-1.51	0.00	0.79	0.43	0.43	0.07	0.79 *	0.08	0.05	0.00	0.00	-0.20	0.43 *	-0.26	-0.19
I	134	-0.66	0.00	0.59	0.52	0.52	0.21	0.59 *	0.08	0.12	0.01	0.00	-0.31	0.52 *	-0.12	-0.26
I	135	0.10	0.00	0.38	0.42	0.42	0.31	0.38 *	0.14	0.17	0.01	0.00	-0.14	0.42 *	-0.15	-0.21
I	136	-0.87	0.00	0.65	0.55	0.55	0.65 *	0.08	0.06	0.21	0.00	0.00	0.55 *	-0.24	-0.24	-0.31
I	137	-1.13	0.00	0.71	0.40	0.40	0.71 *	0.07	0.14	0.07	0.01	0.00	0.40 *	-0.19	-0.18	-0.24
I	138	-0.50	0.00	0.55	0.54	0.54	0.15	0.55 *	0.05	0.25	0.00	0.00	-0.23	0.54 *	-0.22	-0.29
I	139	-1.47	0.00	0.78	0.45	0.45	0.05	0.09	0.07	0.78 *	0.00	0.00	-0.20	-0.26	-0.20	0.45 *
I	140	-0.45	0.00	0.53	0.48	0.48	0.24	0.09	0.53 *	0.13	0.01	0.00	-0.28	-0.23	0.48 *	-0.12
I	141	-0.40	0.00	0.52	0.40	0.40	0.11	0.28	0.52 *	0.08	0.01	0.00	-0.21	-0.15	0.40 *	-0.21
I	142	-0.99	0.00	0.68	0.52	0.52	0.68 *	0.10	0.05	0.17	0.01	0.00	0.52 *	-0.19	-0.24	-0.33
J	128	-1.63	0.00	0.81	0.44	0.44	0.03	0.11	0.81 *	0.04	0.00	0.00	-0.23	-0.26	0.44 *	-0.20
J	129	-1.03	0.00	0.68	0.50	0.50	0.16	0.05	0.11	0.68 *	0.00	0.00	-0.29	-0.20	-0.23	0.50 *
J	130	-2.33	0.00	0.91	0.44	0.44	0.03	0.91 *	0.03	0.04	0.00	0.00	-0.20	0.44 *	-0.21	-0.27
J	131	-0.86	0.00	0.64	0.44	0.44	0.13	0.06	0.17	0.64 *	0.00	0.00	-0.26	-0.24	-0.15	0.44 *
J	132	-1.30	0.00	0.75	0.51	0.51	0.05	0.75 *	0.04	0.16	0.00	0.00	-0.22	0.51 *	-0.23	-0.33
J	133	-0.57	0.00	0.57	0.60	0.60	0.14	0.08	0.22	0.57 *	0.00	0.00	-0.32	-0.27	-0.25	0.60 *
J	134	-1.54	0.00	0.80	0.43	0.43	0.80 *	0.08	0.06	0.07	0.00	0.00	0.43 *	-0.22	-0.25	-0.19
J	135	-0.91	0.00	0.65	0.43	0.43	0.09	0.65 *	0.17	0.09	0.01	0.00	-0.22	0.43 *	-0.22	-0.17
J	136	-0.01	0.00	0.41	0.45	0.45	0.41 *	0.06	0.23	0.30	0.01	0.00	0.45 *	-0.20	-0.19	-0.18
J	137	-1.23	0.00	0.73	0.49	0.49	0.73 *	0.11	0.10	0.05	0.00	0.00	0.49 *	-0.23	-0.26	-0.24
J	138	-1.18	0.00	0.72	0.55	0.55	0.09	0.07	0.12	0.72 *	0.00	0.00	-0.23	-0.27	-0.32	0.55 *
J	139	0.37	0.00	0.32	0.38	0.38	0.15	0.36	0.32 *	0.17	0.00	0.00	-0.20	-0.07	0.38 *	-0.16
J	140	-1.92	0.00	0.86	0.51	0.51	0.04	0.05	0.05	0.86 *	0.00	0.00	-0.27	-0.24	-0.29	0.51 *
J	141	-0.92	0.00	0.66	0.50	0.50	0.11	0.12	0.66 *	0.10	0.00	0.00	-0.28	-0.30	0.50 *	-0.13
J	142	-0.13	0.00	0.44	0.39	0.39	0.44 *	0.13	0.31	0.11	0.01	0.00	0.39 *	-0.14	-0.11	-0.27

Appendix B: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Math

Form Sequence	Key	Logit	SEC	P-value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
W	1	-1.97	0.00	0.85	0.34	0.07	0.85 *	0.05	0.03	0.00	0.00	-0.13	0.34 *	-0.30	-0.14
W	2	-1.51	0.00	0.78	0.48	0.78 *	0.11	0.08	0.03	0.00	0.00	0.48 *	-0.29	-0.24	-0.26
W	3	-1.09	0.00	0.71	0.56	0.06	0.71 *	0.12	0.12	0.00	0.00	-0.22	0.56 *	-0.29	-0.35
W	4	-1.78	0.00	0.82	0.42	0.08	0.07	0.82 *	0.03	0.00	0.00	-0.28	-0.20	0.42 *	-0.19
W	5	-0.71	0.00	0.63	0.54	0.08	0.26	0.63 *	0.04	0.00	0.00	-0.34	-0.30	0.54 *	-0.17
W	6	-1.56	0.00	0.79	0.42	0.11	0.79 *	0.06	0.05	0.00	0.00	-0.27	0.42 *	-0.17	-0.23
W	7	-0.70	0.00	0.62	0.44	0.11	0.19	0.62 *	0.08	0.00	0.00	-0.32	-0.19	0.44 *	-0.12
W	8	-1.01	0.00	0.69	0.41	0.05	0.18	0.08	0.69 *	0.00	0.00	-0.24	-0.22	-0.20	0.41 *
W	9	-0.71	0.00	0.62	0.37	0.17	0.09	0.62 *	0.12	0.00	0.00	-0.05	-0.13	0.37 *	-0.37
W	10	-2.01	0.00	0.86	0.37	0.86 *	0.03	0.03	0.08	0.00	0.00	0.37 *	-0.14	-0.17	-0.28
W	11	-2.69	0.00	0.92	0.35	0.02	0.03	0.03	0.92 *	0.00	0.00	-0.20	-0.20	-0.19	0.35 *
W	12	-0.96	0.00	0.68	0.33	0.04	0.12	0.17	0.68 *	0.00	0.00	-0.17	-0.22	-0.13	0.33 *
W	13	-2.01	0.00	0.86	0.33	0.86 *	0.05	0.01	0.08	0.00	0.00	0.33 *	-0.19	-0.14	-0.21
W	14	-1.40	0.00	0.76	0.28	0.04	0.12	0.76 *	0.08	0.00	0.00	-0.14	-0.06	0.28 *	-0.26
W	15	-0.72	0.00	0.63	0.45	0.14	0.17	0.07	0.63 *	0.00	0.00	-0.36	-0.17	-0.12	0.45 *
W	16	-2.62	0.00	0.92	0.39	0.92 *	0.03	0.03	0.02	0.00	0.00	0.39 *	-0.23	-0.22	-0.20
W	17	-0.60	0.00	0.60	0.50	0.60 *	0.16	0.19	0.04	0.00	0.00	0.50 *	-0.23	-0.31	-0.18
W	18	-1.68	0.00	0.81	0.50	0.03	0.81 *	0.06	0.10	0.00	0.00	-0.22	0.50 *	-0.25	-0.33
W	19	-1.86	0.00	0.84	0.38	0.06	0.03	0.08	0.84 *	0.00	0.00	-0.18	-0.21	-0.23	0.38 *
W	20	-0.76	0.00	0.64	0.51	0.08	0.14	0.64 *	0.14	0.00	0.00	-0.26	-0.29	0.51 *	-0.22
W	21	-0.06	0.00	0.48	0.36	0.12	0.28	0.13	0.48 *	0.00	0.00	-0.27	-0.03	-0.24	0.36 *
W	22	-0.41	0.00	0.56	0.57	0.11	0.56 *	0.20	0.13	0.00	0.00	-0.13	0.57 *	-0.30	-0.35
W	23	0.05	0.00	0.45	0.35	0.20	0.23	0.45 *	0.11	0.01	0.00	-0.18	-0.09	0.35 *	-0.19
W	24	-1.33	0.00	0.75	0.51	0.04	0.10	0.75 *	0.11	0.00	0.00	-0.19	-0.29	0.51 *	-0.29
W	26	-3.06	0.00	0.95	0.31	0.95 *	0.01	0.01	0.04	0.00	0.00	0.31 *	-0.12	-0.11	-0.25
W	27	-1.92	0.00	0.84	0.52	0.07	0.84 *	0.03	0.06	0.00	0.00	-0.31	0.52 *	-0.20	-0.33
W	28	-1.28	0.00	0.74	0.44	0.03	0.18	0.05	0.74 *	0.00	0.00	-0.18	-0.34	-0.17	0.44 *
W	29	-0.72	0.00	0.63	0.44	0.19	0.09	0.63 *	0.09	0.00	0.00	-0.23	-0.21	0.44 *	-0.21
W	30	-0.50	0.00	0.58	0.48	0.11	0.58 *	0.18	0.13	0.00	0.00	-0.15	0.48 *	-0.30	-0.21
W	31	-2.39	0.00	0.90	0.35	0.03	0.90 *	0.03	0.05	0.00	0.00	-0.22	0.35 *	-0.18	-0.19
W	32	-0.11	0.00	0.49	0.58	0.49 *	0.21	0.04	0.27	0.00	0.00	0.58 *	-0.24	-0.21	-0.35
W	33	-1.90	0.00	0.84	0.40	0.04	0.02	0.10	0.84 *	0.00	0.00	-0.16	-0.15	-0.31	0.40 *
W	34	-0.92	0.00	0.67	0.52	0.11	0.11	0.11	0.67 *	0.00	0.00	-0.23	-0.31	-0.25	0.52 *
W	35	-0.53	0.00	0.59	0.41	0.59 *	0.24	0.10	0.08	0.00	0.00	0.41 *	-0.24	-0.16	-0.19
W	36	-0.22	0.00	0.51	0.49	0.26	0.09	0.13	0.51 *	0.00	0.00	-0.44	-0.13	-0.04	0.49 *
W	37	-2.47	0.00	0.91	0.42	0.91 *	0.04	0.03	0.03	0.00	0.00	0.42 *	-0.27	-0.21	-0.23

Appendix B: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Math

Form Sequence	Key	Logit	SEC	P-value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
W 38	D	-1.39	0.00	0.76	0.56	0.07	0.11	0.06	0.76 *	0.00	0.00	-0.20	-0.44	-0.22	0.56 *
W 39	B	0.50	0.00	0.35	0.15	0.37	0.35 *	0.09	0.19	0.00	0.00	0.09 ?	0.15 *	-0.23	-0.12
W 40	D	-1.20	0.00	0.73	0.47	0.05	0.14	0.08	0.73 *	0.00	0.00	-0.26	-0.21	-0.29	0.47 *
W 41	B	-0.80	0.00	0.65	0.54	0.28	0.65 *	0.05	0.03	0.00	0.00	-0.48	0.54 *	-0.11	-0.10
W 42	C	-0.01	0.00	0.46	0.40	0.18	0.08	0.46 *	0.28	0.00	0.00	-0.13	-0.20	0.40 *	-0.22
W 43	C	-0.85	0.00	0.66	0.38	0.08	0.18	0.66 *	0.08	0.00	0.00	-0.09	-0.23	0.38 *	-0.24
W 44	C	0.13	0.00	0.43	0.34	0.48	0.07	0.43 *	0.02	0.00	0.00	-0.16	-0.27	0.34 *	-0.13
W 45	B	-0.40	0.00	0.56	0.43	0.18	0.56 *	0.20	0.06	0.00	0.00	-0.22	0.43 *	-0.21	-0.17
W 46	A	0.18	0.00	0.42	0.33	0.42 *	0.20	0.11	0.27	0.00	0.00	0.33 *	-0.29	-0.20	0.04 ?
W 47	B	-1.06	0.00	0.70	0.57	0.03	0.70 *	0.09	0.19	0.00	0.00	-0.23	0.57 *	-0.25	-0.39
W 48	D	-1.64	0.00	0.80	0.46	0.05	0.03	0.12	0.80 *	0.00	0.00	-0.26	-0.22	-0.28	0.46 *
W 49	C	-0.28	0.00	0.53	0.33	0.21	0.12	0.53 *	0.14	0.00	0.00	-0.11	-0.20	0.33 *	-0.16
W 51	C	-1.08	0.00	0.70	0.29	0.06	0.08	0.70 *	0.15	0.00	0.00	-0.14	-0.17	0.29 *	-0.14
W 52	C	-2.67	0.00	0.92	0.36	0.01	0.01	0.92 *	0.06	0.00	0.00	-0.13	-0.15	0.36 *	-0.28
W 53	D	-0.88	0.00	0.66	0.36	0.26	0.05	0.02	0.66 *	0.00	0.00	-0.20	-0.23	-0.17	0.36 *
W 54	B	-2.07	0.00	0.86	0.43	0.05	0.86 *	0.06	0.03	0.00	0.00	-0.33	0.43 *	-0.19	-0.19
W 55	B	-0.04	0.00	0.47	0.33	0.19	0.47 *	0.27	0.06	0.00	0.00	-0.15	0.33 *	-0.10	-0.25
W 56	B	-0.23	0.00	0.52	0.44	0.13	0.52 *	0.21	0.15	0.00	0.00	-0.20	0.44 *	-0.26	-0.13
W 57	D	-0.26	0.00	0.52	0.51	0.04	0.03	0.40	0.52 *	0.00	0.00	-0.18	-0.19	-0.37	0.51 *
W 58	C	-0.80	0.00	0.64	0.42	0.16	0.12	0.64 *	0.08	0.00	0.00	-0.12	-0.29	0.42 *	-0.23
W 59	B	-1.21	0.00	0.73	0.44	0.12	0.73 *	0.11	0.05	0.00	0.00	-0.27	0.44 *	-0.23	-0.18
W 60	A	-0.43	0.00	0.56	0.43	0.56 *	0.20	0.11	0.13	0.00	0.00	0.43 *	-0.23	-0.18	-0.20
W 61	D	-1.29	0.00	0.74	0.55	0.03	0.09	0.13	0.74 *	0.00	0.00	-0.26	-0.32	-0.29	0.55 *
W 62	C	0.70	0.00	0.31	0.39	0.31	0.15	0.31 *	0.22	0.00	0.00	-0.04	-0.21	0.39 *	-0.20
W 63	C	-0.57	0.00	0.59	0.49	0.12	0.13	0.59 *	0.16	0.00	0.00	-0.25	-0.32	0.49 *	-0.15
W 64	C	-0.98	0.00	0.56	0.40	0.10	0.21	0.56 *	0.12	0.00	0.00	-0.29	-0.11	0.40 *	-0.19
W 65	A	-0.14	0.00	0.50	0.33	0.50 *	0.36	0.07	0.07	0.00	0.00	0.33 *	-0.09	-0.24	-0.24
W 66	B	-1.27	0.00	0.74	0.50	0.12	0.74 *	0.11	0.03	0.00	0.00	-0.34	0.50 *	-0.22	-0.21
W 67	A	-0.12	0.00	0.49	0.40	0.49 *	0.14	0.03	0.34	0.00	0.00	0.40 *	-0.29	-0.13	-0.16
W 68	D	-0.18	0.00	0.50	0.32	0.12	0.05	0.32	0.50 *	0.00	0.00	-0.17	-0.15	-0.15	0.32 *
W 69	C	-1.50	0.00	0.78	0.37	0.06	0.07	0.78 *	0.09	0.00	0.00	-0.24	-0.16	0.37 *	-0.19
W 70	A	-0.33	0.00	0.54	0.38	0.54 *	0.14	0.12	0.19	0.00	0.00	0.38 *	-0.19	-0.28	-0.08
W 71	A	-0.70	0.00	0.62	0.37	0.62 *	0.08	0.19	0.10	0.00	0.00	0.37 *	-0.27	-0.11	-0.22
W 72	C	-0.74	0.00	0.63	0.46	0.08	0.06	0.63 *	0.22	0.00	0.00	-0.26	-0.25	0.46 *	-0.21

Appendix C: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Mathematics

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
A	148	B	-0.17	0.00	0.51	0.47	0.26	0.51 *	0.12	0.10	0.01	0.00	0.00	-0.13	0.47 *	-0.28	-0.24
A	149	D	-0.64	0.00	0.63	0.58	0.09	0.13	0.15	0.63 *	0.01	0.00	0.00	-0.23	-0.31	-0.27	0.58 *
A	150	A	-0.67	0.00	0.64	0.61	0.64 *	0.09	0.14	0.12	0.01	0.00	0.00	0.61 *	-0.26	-0.36	-0.24
A	151	C	-0.46	0.00	0.59	0.45	0.23	0.12	0.59 *	0.06	0.01	0.00	0.00	-0.25	-0.17	0.45 *	-0.19
A	152	C	-0.27	0.00	0.53	0.57	0.20	0.21	0.53 *	0.06	0.01	0.00	0.00	-0.29	-0.25	0.57 *	-0.25
A	153	D	-0.42	0.00	0.58	0.35	0.05	0.23	0.14	0.58 *	0.01	0.00	0.00	-0.25	-0.12	-0.16	0.35 *
A	154	A	-0.29	0.00	0.54	0.59	0.54 *	0.35	0.03	0.07	0.01	0.00	0.00	0.59 *	-0.39	-0.23	-0.20
A	155	B	0.05	0.00	0.45	0.38	0.24	0.45 *	0.18	0.12	0.01	0.00	0.00	-0.04	0.38 *	-0.26	-0.16
A	156	D	-0.88	0.00	0.69	0.61	0.14	0.04	0.11	0.69 *	0.01	0.00	0.00	-0.39	-0.22	-0.26	0.61 *
A	157	B	-1.43	0.00	0.81	0.49	0.08	0.81 *	0.07	0.03	0.01	0.00	0.00	-0.24	0.49 *	-0.28	-0.22
A	158	D	-0.09	0.00	0.49	0.50	0.03	0.19	0.28	0.49 *	0.01	0.00	0.00	-0.21	-0.34	-0.15	0.50 *
A	159	C	-1.40	0.00	0.80	0.44	0.09	0.05	0.80 *	0.06	0.01	0.00	0.00	-0.22	-0.24	0.44 *	-0.20
A	160	A	0.11	0.00	0.43	0.40	0.43 *	0.16	0.19	0.21	0.01	0.00	0.00	0.40 *	-0.15	-0.15	-0.18
A	161	B	-0.35	0.00	0.56	0.51	0.22	0.56 *	0.13	0.09	0.01	0.00	0.00	-0.27	0.51 *	-0.20	-0.21
A	162	D	0.29	0.00	0.39	0.35	0.07	0.09	0.45	0.39 *	0.01	0.00	0.00	-0.17	-0.20	-0.11	0.35 *
B	148	D	-1.27	0.00	0.78	0.47	0.11	0.06	0.04	0.78 *	0.01	0.00	0.00	-0.27	-0.24	-0.18	0.47 *
B	149	D	0.05	0.00	0.43	0.55	0.21	0.15	0.20	0.43 *	0.01	0.00	0.00	-0.16	-0.27	-0.24	0.55 *
B	150	A	-0.23	0.00	0.51	0.57	0.51 *	0.05	0.07	0.36	0.01	0.00	0.00	0.57 *	-0.22	-0.23	-0.34
B	151	D	-0.22	0.00	0.51	0.50	0.23	0.16	0.09	0.51 *	0.01	0.00	0.00	-0.18	-0.30	-0.17	0.50 *
B	152	B	0.00	0.00	0.45	0.45	0.26	0.45 *	0.18	0.11	0.01	0.00	0.00	-0.22	0.45 *	-0.18	-0.13
B	153	D	-0.64	0.00	0.63	0.57	0.10	0.14	0.13	0.63 *	0.01	0.00	0.00	-0.20	-0.30	-0.28	0.57 *
B	154	A	-0.60	0.00	0.62	0.54	0.62	0.11	0.20	0.07	0.01	0.00	0.00	0.54 *	-0.31	-0.25	-0.19
B	155	B	-1.31	0.00	0.79	0.42	0.13	0.79 *	0.05	0.02	0.01	0.00	0.00	-0.26	0.42 *	-0.19	-0.17
B	156	A	-0.50	0.00	0.59	0.61	0.59	0.12	0.08	0.20	0.01	0.00	0.00	0.61 *	-0.25	-0.26	-0.33
B	157	D	-1.09	0.00	0.74	0.58	0.09	0.07	0.09	0.74 *	0.01	0.00	0.00	-0.29	-0.28	-0.28	0.58 *
B	158	C	-0.30	0.00	0.53	0.39	0.15	0.15	0.53 *	0.15	0.02	0.00	0.00	-0.18	-0.17	0.39 *	-0.14
B	159	D	-0.26	0.00	0.52	0.66	0.06	0.20	0.21	0.52 *	0.01	0.00	0.00	-0.22	-0.29	-0.35	0.66 *
B	160	C	-0.26	0.00	0.52	0.57	0.17	0.21	0.52 *	0.09	0.01	0.00	0.00	-0.37	-0.23	0.57 *	-0.12
B	161	A	0.21	0.00	0.39	0.45	0.39 *	0.24	0.28	0.08	0.01	0.00	0.00	0.45 *	-0.10	-0.26	-0.17
B	162	A	-0.49	0.00	0.59	0.43	0.59 *	0.16	0.18	0.07	0.01	0.00	0.00	0.43 *	-0.22	-0.15	-0.21

Appendix C: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Mathematics

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
C	148	D	-0.25	0.00	0.53	0.51	0.51	0.08	0.09	0.28	0.53	0.01	0.00	-0.21	-0.23	-0.26	0.51
C	149	B	-0.74	0.00	0.66	0.34	0.34	0.21	0.66	0.09	0.03	0.01	0.00	-0.09	0.34	-0.27	-0.19
C	150	D	0.07	0.00	0.45	0.55	0.55	0.07	0.29	0.19	0.45	0.01	0.00	-0.20	-0.31	-0.18	0.55
C	151	A	-0.31	0.00	0.55	0.46	0.46	0.55	0.10	0.13	0.22	0.01	0.00	0.46	-0.18	-0.13	-0.29
C	152	D	-0.40	0.00	0.57	0.56	0.56	0.20	0.13	0.09	0.57	0.01	0.00	-0.24	-0.26	-0.27	0.56
C	153	B	-0.80	0.00	0.67	0.34	0.34	0.24	0.67	0.05	0.03	0.01	0.00	-0.15	0.34	-0.22	-0.20
C	154	C	-0.50	0.00	0.60	0.53	0.53	0.07	0.30	0.60	0.03	0.01	0.00	-0.25	-0.33	0.53	-0.16
C	155	B	1.18	0.00	0.20	0.23	0.23	0.09	0.20	0.64	0.06	0.01	0.00	-0.14	0.23	0.02	0.18
C	156	C	-1.13	0.00	0.75	0.23	0.23	0.12	0.10	0.75	0.02	0.01	0.00	-0.10	-0.10	0.23	-0.15
C	157	C	-0.47	0.00	0.59	0.59	0.59	0.12	0.13	0.59	0.16	0.01	0.00	-0.24	-0.25	0.59	-0.32
C	158	B	-1.33	0.00	0.78	0.49	0.49	0.09	0.78	0.05	0.07	0.01	0.00	-0.25	0.49	-0.27	-0.24
C	159	D	-0.22	0.00	0.53	0.50	0.50	0.11	0.18	0.17	0.53	0.01	0.00	-0.19	-0.27	-0.19	0.50
C	160	C	0.02	0.00	0.46	0.38	0.38	0.17	0.20	0.46	0.16	0.01	0.00	-0.11	-0.20	0.38	-0.15
C	161	A	-0.54	0.00	0.61	0.49	0.49	0.61	0.14	0.12	0.13	0.01	0.00	0.49	-0.24	-0.22	-0.21
C	162	A	-0.83	0.00	0.68	0.63	0.63	0.68	0.07	0.16	0.08	0.01	0.00	0.63	-0.28	-0.38	-0.24
D	148	A	0.03	0.00	0.43	0.42	0.42	0.43	0.11	0.24	0.22	0.01	0.00	0.42	-0.27	-0.17	-0.07
D	149	B	-1.38	0.00	0.78	0.55	0.55	0.05	0.78	0.12	0.04	0.01	0.00	-0.26	0.55	-0.34	-0.21
D	150	C	-0.99	0.00	0.70	0.56	0.56	0.12	0.10	0.70	0.08	0.01	0.00	-0.28	-0.26	0.56	-0.26
D	151	A	-0.91	0.00	0.68	0.47	0.47	0.68	0.05	0.06	0.20	0.01	0.00	0.47	-0.22	-0.23	-0.23
D	152	C	-0.26	0.00	0.50	0.47	0.47	0.21	0.19	0.50	0.09	0.01	0.00	-0.12	-0.26	0.47	-0.22
D	153	B	-0.69	0.00	0.62	0.38	0.38	0.20	0.62	0.15	0.02	0.01	0.00	-0.16	0.38	-0.23	-0.16
D	154	B	-0.79	0.00	0.65	0.49	0.49	0.19	0.65	0.09	0.06	0.01	0.00	-0.23	0.49	-0.28	-0.18
D	155	C	-1.07	0.00	0.72	0.44	0.44	0.12	0.08	0.72	0.08	0.01	0.00	-0.17	-0.26	0.44	-0.20
D	156	A	-1.23	0.00	0.75	0.47	0.47	0.75	0.06	0.15	0.03	0.01	0.00	0.47	-0.25	-0.23	-0.23
D	157	B	-0.16	0.00	0.48	0.47	0.47	0.20	0.48	0.20	0.12	0.01	0.00	-0.22	0.47	-0.17	-0.17
D	158	D	-0.63	0.00	0.61	0.54	0.54	0.14	0.08	0.16	0.61	0.01	0.00	-0.17	-0.31	-0.28	0.54
D	159	A	-1.09	0.00	0.72	0.53	0.53	0.72	0.11	0.07	0.09	0.01	0.00	0.53	-0.29	-0.23	-0.23
D	160	A	-0.56	0.00	0.59	0.44	0.44	0.59	0.17	0.19	0.05	0.01	0.00	0.44	-0.14	-0.26	-0.20
D	161	D	-0.75	0.00	0.64	0.55	0.55	0.10	0.07	0.19	0.64	0.01	0.00	-0.21	-0.21	-0.33	0.55
D	162	B	-0.25	0.00	0.50	0.47	0.47	0.09	0.50	0.20	0.20	0.01	0.00	-0.06	0.47	-0.25	-0.24

Appendix C: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Mathematics

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
E	148	D	-0.51	0.00	0.60	0.52	0.52	0.14	0.16	0.10	0.60	0.01	0.00	-0.21	-0.27	-0.24	0.52
E	149	A	-0.52	0.00	0.60	0.51	0.51	0.60	0.26	0.10	0.02	0.01	0.00	0.51	-0.28	-0.27	-0.17
E	150	A	-1.70	0.00	0.85	0.43	0.43	0.85	0.02	0.04	0.08	0.01	0.00	0.43	-0.17	-0.22	-0.26
E	151	D	-0.86	0.00	0.69	0.44	0.44	0.09	0.10	0.12	0.69	0.01	0.00	-0.24	-0.21	-0.18	0.44
E	152	D	-0.37	0.00	0.57	0.64	0.64	0.15	0.17	0.11	0.57	0.01	0.00	-0.37	-0.29	-0.20	0.64
E	153	A	-0.08	0.00	0.49	0.46	0.46	0.49	0.11	0.34	0.06	0.01	0.00	0.46	-0.21	-0.22	-0.18
E	154	D	-0.34	0.00	0.56	0.55	0.55	0.12	0.13	0.19	0.56	0.01	0.00	-0.32	-0.26	-0.17	0.55
E	155	C	0.08	0.00	0.45	0.31	0.31	0.12	0.28	0.45	0.14	0.01	0.00	-0.21	0.00	0.31	-0.20
E	156	A	0.10	0.00	0.44	0.46	0.46	0.44	0.36	0.07	0.12	0.01	0.00	0.46	-0.24	-0.23	-0.11
E	157	B	0.06	0.00	0.45	0.41	0.41	0.21	0.45	0.18	0.15	0.01	0.00	-0.20	0.41	-0.20	-0.08
E	158	C	-0.10	0.00	0.49	0.39	0.39	0.12	0.26	0.49	0.11	0.01	0.00	-0.14	-0.20	0.39	-0.13
E	159	B	-0.55	0.00	0.61	0.49	0.49	0.12	0.61	0.13	0.13	0.01	0.00	-0.23	0.49	-0.24	-0.21
E	160	D	0.33	0.00	0.38	0.39	0.39	0.19	0.19	0.23	0.38	0.01	0.00	-0.12	-0.16	-0.16	0.39
E	161	C	-0.56	0.00	0.61	0.53	0.53	0.16	0.13	0.61	0.09	0.01	0.00	-0.28	-0.26	0.53	-0.18
E	162	B	-1.01	0.00	0.72	0.48	0.48	0.12	0.72	0.10	0.05	0.01	0.00	-0.26	0.48	-0.24	-0.19
F	148	D	-0.51	0.00	0.56	0.52	0.52	0.13	0.13	0.17	0.56	0.01	0.00	-0.23	-0.21	-0.25	0.52
F	149	B	-0.56	0.00	0.58	0.48	0.48	0.15	0.58	0.24	0.04	0.01	0.00	-0.27	0.48	-0.24	-0.13
F	150	A	-0.42	0.00	0.53	0.57	0.57	0.53	0.13	0.17	0.16	0.01	0.00	0.57	-0.17	-0.26	-0.31
F	151	C	-0.60	0.00	0.59	0.59	0.59	0.17	0.22	0.59	0.02	0.01	0.00	-0.38	-0.28	0.59	-0.13
F	152	C	-1.85	0.00	0.87	0.42	0.42	0.02	0.07	0.87	0.03	0.01	0.00	-0.19	-0.24	0.42	-0.22
F	153	B	-0.59	0.00	0.58	0.53	0.53	0.26	0.58	0.09	0.07	0.01	0.00	-0.25	0.53	-0.28	-0.23
F	154	A	0.18	0.00	0.37	0.47	0.47	0.37	0.23	0.19	0.21	0.01	0.00	0.47	-0.15	-0.21	-0.17
F	155	C	-0.23	0.00	0.48	0.49	0.49	0.32	0.06	0.48	0.13	0.01	0.00	-0.28	-0.24	0.49	-0.12
F	156	C	-1.42	0.00	0.79	0.38	0.38	0.05	0.06	0.79	0.09	0.01	0.00	-0.22	-0.24	0.38	-0.13
F	157	D	-0.47	0.00	0.55	0.56	0.56	0.13	0.14	0.18	0.55	0.01	0.00	-0.19	-0.28	-0.27	0.56
F	158	B	-1.19	0.00	0.74	0.49	0.49	0.09	0.74	0.06	0.09	0.01	0.00	-0.27	0.49	-0.25	-0.20
F	159	D	-0.78	0.00	0.64	0.49	0.49	0.05	0.18	0.13	0.64	0.01	0.00	-0.18	-0.34	-0.15	0.49
F	160	D	0.04	0.00	0.40	0.57	0.57	0.27	0.14	0.18	0.40	0.01	0.00	-0.20	-0.21	-0.26	0.57
F	161	A	-0.64	0.00	0.60	0.48	0.48	0.60	0.26	0.08	0.06	0.01	0.00	0.48	-0.21	-0.29	-0.21
F	162	B	-2.00	0.00	0.89	0.38	0.38	0.03	0.89	0.04	0.03	0.01	0.00	-0.17	0.38	-0.22	-0.17

Appendix C: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Mathematics

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
G	148	B	-0.50	0.00	0.58	0.40	0.19	0.58 *	0.19	0.03	0.03	0.01	0.00	-0.13	0.40 *	-0.28	-0.14
G	149	D	-0.60	0.00	0.61	0.53	0.08	0.09	0.22	0.61 *	0.01	0.00	0.00	-0.27	-0.32	-0.19	0.53 *
G	150	D	-0.51	0.00	0.58	0.59	0.10	0.25	0.07	0.58 *	0.01	0.00	0.00	-0.30	-0.35	-0.15	0.59 *
G	151	C	-0.37	0.00	0.54	0.58	0.09	0.30	0.54 *	0.06	0.01	0.00	0.00	-0.27	-0.33	0.58 *	-0.19
G	152	A	-1.27	0.00	0.77	0.43	0.77	0.04	0.16	0.03	0.01	0.00	0.00	0.43	-0.21	-0.27	-0.18
G	153	C	0.09	0.00	0.42	0.48	0.31	0.14	0.42 *	0.13	0.01	0.00	0.00	-0.20	-0.21	0.48 *	-0.16
G	154	D	-1.06	0.00	0.73	0.54	0.09	0.11	0.07	0.73 *	0.01	0.00	0.00	-0.27	-0.26	-0.27	0.54 *
G	155	A	-0.22	0.00	0.50	0.43	0.50	0.17	0.23	0.10	0.01	0.00	0.00	0.43	-0.14	-0.24	-0.17
G	156	B	-0.95	0.00	0.70	0.47	0.09	0.70 *	0.17	0.04	0.01	0.00	0.00	-0.18	0.47 *	-0.30	-0.20
G	157	A	-0.18	0.00	0.49	0.47	0.49	0.17	0.15	0.18	0.01	0.00	0.00	0.47	-0.19	-0.21	-0.20
G	158	B	-0.07	0.00	0.46	0.43	0.03	0.46 *	0.44	0.06	0.01	0.00	0.00	-0.20	0.43 *	-0.23	-0.20
G	159	D	-0.46	0.00	0.57	0.61	0.03	0.26	0.13	0.57 *	0.01	0.00	0.00	-0.19	-0.41	-0.22	0.61 *
G	160	C	-0.47	0.00	0.57	0.54	0.09	0.24	0.57 *	0.10	0.01	0.00	0.00	-0.29	-0.31	0.54 *	-0.13
G	161	C	-0.61	0.00	0.61	0.50	0.15	0.14	0.61 *	0.09	0.01	0.00	0.00	-0.18	-0.30	0.50 *	-0.21
G	162	B	-1.35	0.00	0.79	0.51	0.14	0.79 *	0.05	0.02	0.01	0.00	0.00	-0.36	0.51 *	-0.22	-0.17
H	148	A	-0.76	0.00	0.63	0.56	0.63	0.07	0.15	0.14	0.01	0.00	0.00	0.56 *	-0.18	-0.23	-0.35
H	149	A	-1.54	0.00	0.82	0.48	0.82	0.06	0.05	0.06	0.01	0.00	0.00	0.48 *	-0.23	-0.23	-0.25
H	150	A	-1.04	0.00	0.71	0.46	0.71	0.15	0.07	0.07	0.01	0.00	0.00	0.46 *	-0.19	-0.21	-0.30
H	151	D	0.18	0.00	0.37	0.55	0.09	0.42	0.12	0.37 *	0.01	0.00	0.00	-0.17	-0.31	-0.15	0.55 *
H	152	A	-0.58	0.00	0.58	0.48	0.58	0.11	0.07	0.23	0.01	0.00	0.00	0.48 *	-0.32	-0.18	-0.16
H	153	B	-0.17	0.00	0.46	0.47	0.18	0.46 *	0.19	0.15	0.01	0.00	0.00	-0.18	0.47 *	-0.18	-0.22
H	154	C	-1.25	0.00	0.76	0.47	0.07	0.10	0.76 *	0.06	0.01	0.00	0.00	-0.26	-0.28	0.47 *	-0.15
H	155	A	-0.59	0.00	0.59	0.53	0.59	0.20	0.12	0.09	0.01	0.00	0.00	0.53	-0.23	-0.23	-0.27
H	156	C	-0.88	0.00	0.67	0.58	0.14	0.09	0.67 *	0.10	0.01	0.00	0.00	-0.35	-0.20	0.58 *	-0.25
H	157	C	-0.80	0.00	0.64	0.51	0.04	0.18	0.64 *	0.13	0.01	0.00	0.00	-0.24	-0.33	0.51 *	-0.14
H	158	B	-0.90	0.00	0.67	0.53	0.12	0.67 *	0.11	0.09	0.01	0.00	0.00	-0.25	0.53 *	-0.27	-0.23
H	159	B	-0.54	0.00	0.57	0.52	0.07	0.57 *	0.28	0.08	0.01	0.00	0.00	-0.26	0.52 *	-0.28	-0.17
H	160	A	-0.85	0.00	0.66	0.56	0.66	0.21	0.07	0.06	0.01	0.00	0.00	0.56 *	-0.32	-0.25	-0.23
H	161	D	-0.12	0.00	0.45	0.51	0.13	0.23	0.17	0.45 *	0.01	0.00	0.00	-0.17	-0.17	-0.29	0.51 *
H	162	C	-0.29	0.00	0.50	0.53	0.08	0.12	0.50 *	0.29	0.01	0.00	0.00	-0.22	-0.15	0.53 *	-0.30

Appendix C: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Mathematics

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
I	148	B	-0.55	0.00	0.61	0.53	0.17	0.61	* 0.06	0.16	0.16	0.01	0.00	-0.24	0.53	* -0.22	-0.28
I	149	D	-0.41	0.00	0.57	0.41	0.26	0.06	0.11	0.57	* 0.16	0.01	0.00	-0.04	-0.30	-0.32	0.41
I	150	C	-1.70	0.00	0.85	0.49	0.03	0.05	0.85	* 0.07	0.07	0.01	0.00	-0.21	-0.24	0.49	* -0.28
I	151	A	-0.69	0.00	0.64	0.58	0.64	* 0.19	0.06	0.10	0.10	0.01	0.00	0.58	-0.37	-0.27	-0.16
I	152	C	0.12	0.00	0.43	0.49	0.13	0.31	0.43	* 0.13	0.13	0.01	0.00	-0.25	-0.31	0.49	* 0.00
I	153	D	0.05	0.00	0.44	0.51	0.40	0.04	0.10	0.44	* 0.13	0.01	0.00	-0.23	-0.23	-0.25	0.51
I	154	B	0.07	0.00	0.44	0.47	0.08	0.44	* 0.23	0.25	0.25	0.01	0.00	-0.14	0.47	* -0.26	-0.17
I	155	C	-1.25	0.00	0.77	0.54	0.06	0.08	0.77	* 0.09	0.09	0.01	0.00	-0.25	-0.30	0.54	* -0.25
I	156	C	-0.09	0.00	0.48	0.40	0.14	0.27	0.48	* 0.10	0.10	0.01	0.00	-0.21	-0.19	0.40	* -0.09
I	157	A	0.37	0.00	0.36	0.35	0.36	* 0.36	0.15	0.12	0.12	0.01	0.00	0.35	-0.16	-0.13	-0.08
I	158	C	-1.49	0.00	0.81	0.54	0.03	0.12	0.81	* 0.02	0.02	0.01	0.00	-0.23	-0.38	0.54	* -0.18
I	159	A	-1.20	0.00	0.76	0.52	0.76	* 0.08	0.14	0.02	0.02	0.01	0.00	0.52	-0.27	-0.31	-0.19
I	160	B	-1.49	0.00	0.81	0.46	0.08	0.81	* 0.07	0.03	0.03	0.01	0.00	-0.30	0.46	* -0.18	-0.20
I	161	D	-0.17	0.00	0.50	0.48	0.11	0.12	0.26	0.50	* 0.10	0.01	0.00	-0.25	-0.29	-0.11	0.48
I	162	B	0.26	0.00	0.39	0.28	0.10	0.39	* 0.40	0.10	0.10	0.01	0.00	-0.13	0.28	* -0.04	-0.21
J	148	B	-0.81	0.00	0.65	0.59	0.11	0.65	* 0.16	0.07	0.07	0.01	0.00	-0.34	0.59	* -0.29	-0.21
J	149	B	-0.14	0.00	0.47	0.54	0.08	0.47	* 0.23	0.21	0.21	0.01	0.00	-0.17	0.54	* -0.23	-0.28
J	150	D	-0.16	0.00	0.47	0.59	0.16	0.19	0.17	0.47	* 0.16	0.01	0.00	-0.21	-0.25	-0.27	0.59
J	151	B	-1.11	0.00	0.72	0.49	0.06	0.72	* 0.15	0.06	0.06	0.01	0.00	-0.25	0.49	* -0.26	-0.23
J	152	D	-0.51	0.00	0.57	0.34	0.14	0.13	0.16	0.57	* 0.16	0.01	0.00	-0.05	-0.17	-0.23	0.34
J	153	A	-0.87	0.00	0.67	0.55	0.67	* 0.12	0.10	0.11	0.11	0.01	0.00	0.55	-0.25	-0.29	-0.25
J	154	C	-0.87	0.00	0.67	0.51	0.18	0.07	0.67	* 0.08	0.08	0.01	0.00	-0.23	-0.26	0.51	* -0.26
J	155	D	-0.36	0.00	0.53	0.52	0.17	0.12	0.18	0.53	* 0.16	0.01	0.00	-0.10	-0.26	-0.32	0.52
J	156	C	-1.34	0.00	0.78	0.58	0.03	0.14	0.78	* 0.05	0.05	0.01	0.00	-0.23	-0.37	0.58	* -0.28
J	157	A	-0.94	0.00	0.69	0.46	0.69	* 0.15	0.11	0.04	0.04	0.01	0.00	0.46	-0.25	-0.22	-0.20
J	158	A	-1.02	0.00	0.70	0.61	0.70	* 0.09	0.09	0.11	0.11	0.01	0.00	0.61	-0.32	-0.29	-0.28
J	159	A	-0.29	0.00	0.51	0.52	0.51	* 0.28	0.13	0.08	0.08	0.01	0.00	0.52	-0.24	-0.24	-0.20
J	160	D	-0.80	0.00	0.65	0.52	0.10	0.14	0.11	0.65	* 0.16	0.01	0.00	-0.16	-0.34	-0.23	0.52
J	161	B	-0.41	0.00	0.54	0.46	0.09	0.54	* 0.27	0.09	0.09	0.01	0.00	-0.22	0.46	* -0.18	-0.24
J	162	B	-0.85	0.00	0.12	0.00	0.21	0.12	* 0.54	? 0.13	0.13	0.01	0.00	-0.18	0.00	* 0.26	? -0.13

Appendix C: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Mathematics

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
W	1	B	-2.18	0.00	0.88	0.28	0.28	0.02	0.88	0.03	0.07	0.00	0.00	-0.10	0.28	-0.07	-0.25
W	2	A	-0.24	0.00	0.52	0.55	0.52	0.52	0.05	0.14	0.29	0.00	0.00	0.55	-0.16	-0.17	-0.39
W	3	B	-0.86	0.00	0.66	0.38	0.38	0.04	0.66	0.10	0.20	0.00	0.00	-0.13	0.38	-0.25	-0.20
W	4	C	0.26	0.00	0.40	0.42	0.42	0.51	?	0.06	0.02	0.00	0.00	-0.34	-0.12	0.42	-0.03
W	5	D	-0.68	0.00	0.62	0.52	0.52	0.09	0.19	0.10	0.62	0.00	0.00	-0.12	-0.40	-0.20	0.52
W	6	C	-1.74	0.00	0.82	0.31	0.31	0.13	0.03	0.82	0.02	0.00	0.00	-0.26	-0.09	0.31	-0.09
W	7	D	-0.13	0.00	0.49	0.50	0.50	0.30	0.08	0.13	0.49	0.00	0.00	-0.31	-0.16	-0.17	0.50
W	8	C	-0.73	0.00	0.63	0.46	0.46	0.21	0.10	0.63	0.06	0.00	0.00	-0.17	-0.30	0.46	-0.26
W	9	D	-1.58	0.00	0.80	0.44	0.44	0.14	0.04	0.02	0.80	0.00	0.00	-0.32	-0.21	-0.15	0.44
W	10	B	-1.21	0.00	0.73	0.59	0.59	0.03	0.73	0.11	0.13	0.00	0.00	-0.15	0.59	-0.41	-0.32
W	11	C	-1.83	0.00	0.84	0.44	0.44	0.04	0.07	0.84	0.06	0.00	0.00	-0.23	-0.22	0.44	-0.27
W	12	A	-0.87	0.00	0.66	0.44	0.44	0.66	0.09	0.21	0.05	0.00	0.00	0.44	-0.24	-0.25	-0.17
W	13	D	-0.47	0.00	0.57	0.54	0.54	0.12	0.08	0.23	0.57	0.00	0.00	-0.27	-0.23	-0.27	0.54
W	14	A	-1.46	0.00	0.78	0.32	0.32	0.78	0.14	0.05	0.04	0.00	0.00	0.32	-0.12	-0.19	-0.26
W	15	C	-0.23	0.00	0.51	0.44	0.44	0.05	0.21	0.51	0.23	0.00	0.00	-0.19	-0.14	0.44	-0.29
W	16	B	-0.71	0.00	0.63	0.37	0.37	0.14	0.63	0.18	0.05	0.01	0.00	-0.21	0.37	-0.16	-0.19
W	17	B	-1.34	0.00	0.76	0.46	0.46	0.16	0.76	0.06	0.02	0.00	0.00	-0.34	0.46	-0.23	-0.14
W	18	D	-0.37	0.00	0.55	0.49	0.49	0.12	0.18	0.15	0.55	0.01	0.00	-0.17	-0.27	-0.23	0.49
W	19	D	-0.43	0.00	0.56	0.29	0.29	0.04	0.07	0.33	0.56	0.00	0.00	-0.23	-0.18	-0.11	0.29
W	20	B	-0.71	0.00	0.63	0.38	0.38	0.23	0.63	0.07	0.07	0.00	0.00	-0.21	0.38	-0.18	-0.19
W	21	A	-0.11	0.00	0.48	0.23	0.23	0.48	0.28	0.12	0.12	0.00	0.00	0.23	-0.05	-0.19	-0.08
W	22	A	-1.18	0.00	0.73	0.46	0.46	0.73	0.04	0.05	0.19	0.00	0.00	0.46	-0.25	-0.26	-0.25
W	23	C	-0.72	0.00	0.63	0.42	0.42	0.09	0.21	0.63	0.08	0.00	0.00	-0.23	-0.26	0.42	-0.12
W	24	D	-1.68	0.00	0.82	0.31	0.31	0.08	0.06	0.05	0.82	0.00	0.00	-0.12	-0.18	-0.20	0.31
W	26	A	-1.57	0.00	0.80	0.28	0.28	0.80	0.07	0.08	0.06	0.00	0.00	0.28	-0.20	-0.10	-0.15
W	27	D	-1.39	0.00	0.77	0.49	0.49	0.09	0.09	0.05	0.77	0.00	0.00	-0.30	-0.20	-0.29	0.49
W	28	A	0.44	0.00	0.36	0.25	0.25	0.36	0.44	0.03	0.17	0.00	0.00	0.25	-0.03	-0.22	-0.17
W	29	D	-0.05	0.00	0.47	0.45	0.45	0.14	0.16	0.23	0.47	0.00	0.00	-0.22	-0.11	-0.25	0.45
W	30	A	-2.34	0.00	0.90	0.42	0.42	0.90	0.04	0.04	0.02	0.00	0.00	0.42	-0.24	-0.25	-0.21
W	31	B	-1.10	0.00	0.71	0.42	0.42	0.15	0.71	0.06	0.07	0.00	0.00	-0.18	0.42	-0.25	-0.26
W	32	A	-0.74	0.00	0.63	0.52	0.52	0.63	0.16	0.14	0.07	0.01	0.00	0.52	-0.30	-0.24	-0.22
W	33	D	-1.30	0.00	0.75	0.53	0.53	0.17	0.03	0.04	0.75	0.00	0.00	-0.41	-0.21	-0.19	0.53
W	34	B	-0.33	0.00	0.54	0.32	0.32	0.10	0.54	0.32	0.04	0.00	0.00	-0.04	0.32	-0.21	-0.23
W	35	D	-0.95	0.00	0.68	0.46	0.46	0.08	0.12	0.13	0.68	0.00	0.00	-0.18	-0.24	-0.27	0.46
W	36	A	-1.47	0.00	0.78	0.44	0.44	0.78	0.07	0.08	0.07	0.00	0.00	0.44	-0.19	-0.26	-0.23
W	37	C	-0.59	0.00	0.60	0.49	0.49	0.18	0.14	0.60	0.09	0.00	0.00	-0.12	-0.30	0.49	-0.32

Appendix C: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Mathematics

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
W	38	B	-0.33	0.00	0.54	0.51	0.09	0.09	0.54	0.19	0.18	0.00	0.00	-0.13	0.51	-0.19	-0.36
W	39	D	0.09	0.00	0.44	0.46	0.26	0.26	0.19	0.12	0.44	0.00	0.00	-0.12	-0.28	-0.20	0.46
W	40	C	-0.24	0.00	0.52	0.32	0.11	0.11	0.12	0.52	0.25	0.00	0.00	-0.05	-0.25	0.32	-0.14
W	41	A	-0.51	0.00	0.58	0.52	0.58	0.58	0.11	0.22	0.08	0.00	0.00	0.52	-0.19	-0.27	-0.31
W	42	B	-0.59	0.00	0.60	0.33	0.11	0.11	0.60	0.21	0.08	0.00	0.00	-0.20	0.33	-0.15	-0.13
W	43	A	-1.16	0.00	0.72	0.53	0.72	0.72	0.14	0.10	0.03	0.00	0.00	0.53	-0.32	-0.29	-0.21
W	44	D	-0.90	0.00	0.67	0.51	0.13	0.13	0.09	0.12	0.67	0.00	0.00	-0.20	-0.29	-0.28	0.51
W	45	B	-0.42	0.00	0.56	0.56	0.18	0.18	0.56	0.18	0.09	0.00	0.00	-0.31	0.56	-0.21	-0.26
W	46	C	-2.04	0.00	0.87	0.47	0.02	0.02	0.07	0.87	0.04	0.00	0.00	-0.21	-0.32	0.47	-0.23
W	47	B	-1.02	0.00	0.69	0.54	0.08	0.08	0.69	0.09	0.13	0.00	0.00	-0.27	0.54	-0.31	-0.24
W	48	C	-1.19	0.00	0.73	0.52	0.07	0.07	0.17	0.73	0.04	0.00	0.00	-0.26	-0.34	0.52	-0.18
W	49	C	-0.81	0.00	0.65	0.61	0.15	0.15	0.12	0.65	0.07	0.00	0.00	-0.38	-0.27	0.61	-0.24
W	51	C	-1.72	0.00	0.82	0.44	0.04	0.04	0.05	0.82	0.09	0.00	0.00	-0.21	-0.20	0.44	-0.30
W	52	D	-0.69	0.00	0.62	0.21	0.12	0.12	0.12	0.13	0.62	0.00	0.00	0.01	-0.14	-0.18	0.21
W	53	A	-1.42	0.00	0.77	0.47	0.77	0.77	0.07	0.13	0.03	0.00	0.00	0.47	-0.30	-0.25	-0.22
W	54	A	-1.43	0.00	0.77	0.45	0.77	0.77	0.11	0.08	0.03	0.00	0.00	0.45	-0.27	-0.26	-0.19
W	55	D	-0.45	0.00	0.57	0.49	0.11	0.11	0.19	0.13	0.57	0.00	0.00	-0.37	-0.23	-0.11	0.49
W	56	C	-0.95	0.00	0.68	0.57	0.09	0.09	0.11	0.68	0.12	0.00	0.00	-0.29	-0.30	0.57	-0.27
W	57	D	0.40	0.00	0.37	0.55	0.16	0.16	0.30	0.17	0.37	0.01	0.00	-0.33	-0.18	-0.15	0.55
W	58	C	-0.76	0.00	0.64	0.34	0.07	0.07	0.21	0.64	0.09	0.00	0.00	-0.16	-0.21	0.34	-0.14
W	59	B	-1.09	0.00	0.50	0.44	0.21	0.21	0.50	0.14	0.15	0.00	0.00	-0.21	0.44	-0.14	-0.23
W	60	C	-0.69	0.00	0.62	0.55	0.10	0.10	0.16	0.62	0.12	0.00	0.00	-0.30	-0.27	0.55	-0.24
W	61	D	-0.19	0.00	0.50	0.45	0.36	0.36	0.05	0.08	0.50	0.00	0.00	-0.24	-0.22	-0.21	0.45
W	62	A	-1.01	0.00	0.69	0.49	0.69	0.69	0.16	0.11	0.04	0.00	0.00	0.49	-0.32	-0.24	-0.17
W	63	C	-0.30	0.00	0.53	0.36	0.14	0.14	0.14	0.53	0.19	0.00	0.00	-0.14	-0.30	0.36	-0.06
W	64	C	-0.30	0.00	0.53	0.42	0.16	0.16	0.26	0.53	0.05	0.00	0.00	-0.27	-0.21	0.42	-0.08
W	65	C	-1.10	0.00	0.71	0.55	0.06	0.06	0.09	0.71	0.14	0.00	0.00	-0.25	-0.30	0.55	-0.29
W	66	A	-0.90	0.00	0.67	0.42	0.67	0.67	0.13	0.13	0.07	0.00	0.00	0.42	-0.21	-0.25	-0.17
W	67	B	-0.04	0.00	0.47	0.39	0.08	0.08	0.47	0.31	0.14	0.00	0.00	-0.23	0.39	-0.08	-0.27
W	68	B	-1.23	0.00	0.74	0.47	0.12	0.12	0.74	0.09	0.05	0.00	0.00	-0.32	0.47	-0.22	-0.17
W	69	C	-0.23	0.00	0.51	0.43	0.06	0.06	0.10	0.51	0.32	0.00	0.00	-0.23	-0.29	0.43	-0.16
W	70	B	-0.76	0.00	0.64	0.51	0.10	0.10	0.64	0.14	0.12	0.00	0.00	-0.18	0.51	-0.36	-0.20
W	71	B	-0.17	0.00	0.50	0.38	0.20	0.20	0.50	0.17	0.13	0.00	0.00	-0.23	0.38	-0.18	-0.09
W	72	A	-0.71	0.00	0.63	0.34	0.63	0.63	0.11	0.14	0.13	0.00	0.00	0.34	-0.18	-0.19	-0.12

Appendix D: 2001 PSSA Grade Eleven Item Analysis Multiple Choice Items for Mathematics

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
A	156	-1.68	0.00	0.87	0.33	0.02	0.87 *	0.02	0.08	0.01	0.00	-0.15	0.33 *	-0.14	-0.17
A	157	-1.12	0.00	0.77	0.54	0.12	0.07	0.77 *	0.04	0.01	0.00	-0.35	-0.25	0.54 *	-0.15
A	158	-0.65	0.00	0.66	0.58	0.19	0.11	0.66 *	0.04	0.01	0.00	-0.39	-0.23	0.58 *	-0.14
A	159	-0.01	0.00	0.48	0.41	0.11	0.25	0.48 *	0.13	0.02	0.00	-0.12	-0.20	0.41 *	-0.15
A	160	0.28	0.00	0.40	0.44	0.40 *	0.25	0.23	0.09	0.02	0.00	0.44 *	-0.25	-0.06	-0.19
A	161	-0.94	0.00	0.73	0.58	0.03	0.73 *	0.21	0.02	0.01	0.00	-0.15	0.58 *	-0.46	-0.16
A	162	-0.45	0.00	0.61	0.56	0.12	0.18	0.61 *	0.09	0.01	0.00	-0.30	-0.27	0.56 *	-0.18
A	163	0.08	0.00	0.46	0.53	0.46 *	0.12	0.23	0.18	0.01	0.00	0.53 *	-0.20	-0.23	-0.20
A	164	0.21	0.00	0.42	0.43	0.10	0.42	0.05	0.42 *	0.01	0.00	-0.27	-0.15	-0.14	0.43 *
A	165	1.03	0.00	0.22	0.32	0.22 *	0.23	0.36	0.15	0.03	0.00	0.32 *	0.05 ?	-0.19	-0.11
A	166	0.69	0.00	0.30	0.51	0.38	0.19	0.12	0.30 *	0.01	0.00	-0.13	-0.25	-0.15	0.51 *
A	167	0.11	0.00	0.45	0.51	0.28	0.21	0.45 *	0.05	0.01	0.00	-0.30	-0.18	0.51 *	-0.10
A	168	-0.29	0.00	0.56	0.56	0.09	0.26	0.08	0.56 *	0.01	0.00	-0.21	-0.32	-0.20	0.56 *
A	169	0.51	0.00	0.34	0.36	0.31	0.34 *	0.22	0.11	0.02	0.00	-0.14	0.36 *	-0.10	-0.12
A	170	-0.40	0.00	0.59	0.55	0.14	0.59 *	0.16	0.09	0.02	0.00	-0.24	0.55 *	-0.30	-0.17
B	156	0.46	0.00	0.36	0.39	0.16	0.19	0.36 *	0.25	0.03	0.00	-0.17	-0.21	0.39 *	-0.07
B	157	0.18	0.00	0.43	0.54	0.44	0.43 *	0.08	0.03	0.01	0.00	-0.33	0.54 *	-0.23	-0.10
B	158	-0.48	0.00	0.61	0.59	0.17	0.15	0.06	0.61 *	0.01	0.00	-0.34	-0.25	-0.20	0.59 *
B	159	-0.45	0.00	0.61	0.52	0.18	0.61 *	0.12	0.08	0.01	0.00	-0.26	0.52 *	-0.24	-0.20
B	160	-0.20	0.00	0.54	0.58	0.38	0.54 *	0.04	0.04	0.01	0.00	-0.43	0.58 *	-0.18	-0.13
B	161	0.55	0.00	0.34	0.47	0.12	0.34 *	0.29	0.24	0.01	0.00	-0.20	0.47 *	-0.03	-0.30
B	162	-0.08	0.00	0.51	0.45	0.03	0.27	0.51 *	0.18	0.01	0.00	-0.13	-0.10	0.45 *	-0.35
B	163	-1.16	0.00	0.78	0.46	0.11	0.05	0.78 *	0.05	0.01	0.00	-0.30	-0.18	0.46 *	-0.17
B	164	0.30	0.00	0.40	0.51	0.21	0.18	0.20	0.40 *	0.01	0.00	-0.17	-0.23	-0.18	0.51 *
B	165	-0.62	0.00	0.65	0.54	0.65 *	0.16	0.05	0.13	0.01	0.00	0.54 *	-0.20	-0.22	-0.34
B	166	-0.23	0.00	0.55	0.40	0.08	0.55 *	0.26	0.10	0.01	0.00	-0.10	0.40 *	-0.27	-0.10
B	167	-0.22	0.00	0.54	0.52	0.14	0.12	0.54 *	0.19	0.01	0.00	-0.23	-0.24	0.52 *	-0.21
B	168	0.39	0.00	0.38	0.31	0.38 *	0.18	0.21	0.22	0.02	0.00	0.31 *	-0.06	-0.12	-0.13
B	169	-0.95	0.00	0.73	0.52	0.06	0.15	0.73 *	0.04	0.01	0.00	-0.25	-0.32	0.52 *	-0.18
B	170	0.44	0.00	0.36	0.52	0.28	0.36 *	0.22	0.13	0.02	0.00	-0.21	0.52 *	-0.18	-0.18

Appendix D: 2001 PSSA Grade Eleven Item Analysis Multiple Choice Items for Mathematics

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
C	156	-0.41	0.00	0.60	0.46	0.13	0.10	0.16	0.60	0.01	0.00	-0.29	-0.16	-0.15	0.46*
C	157	-1.00	0.00	0.74	0.51	0.12	0.74*	0.09	0.03	0.02	0.00	-0.31	0.51*	-0.24	-0.12
C	158	-0.53	0.00	0.63	0.48	0.05	0.26	0.63*	0.05	0.01	0.00	-0.23	-0.26	0.48*	-0.17
C	159	-0.33	0.00	0.58	0.55	0.35	0.03	0.58*	0.03	0.01	0.00	-0.40	-0.16	0.55*	-0.15
C	160	-0.39	0.00	0.59	0.54	0.16	0.06	0.17	0.59*	0.02	0.00	-0.21	-0.22	-0.27	0.54*
C	161	-0.25	0.00	0.56	0.50	0.16	0.07	0.19	0.56*	0.02	0.00	-0.22	-0.18	-0.23	0.50*
C	162	-0.21	0.00	0.55	0.57	0.15	0.23	0.55*	0.06	0.01	0.00	-0.22	-0.29	0.57*	-0.21
C	163	-0.23	0.00	0.55	0.49	0.03	0.55*	0.36	0.05	0.01	0.00	-0.17	0.49*	-0.33	-0.16
C	164	0.36	0.00	0.40	0.35	0.40*	0.16	0.29	0.13	0.02	0.00	0.35*	-0.10	-0.10	-0.20
C	165	0.54	0.00	0.36	0.35	0.23	0.36*	0.19	0.19	0.03	0.00	-0.02	0.35*	-0.16	-0.16
C	166	-0.22	0.00	0.55	0.35	0.08	0.20	0.55*	0.15	0.02	0.00	-0.14	-0.08	0.35*	-0.20
C	167	0.09	0.00	0.47	0.34	0.15	0.24	0.47*	0.11	0.03	0.00	-0.15	-0.14	0.34*	-0.09
C	168	0.46	0.00	0.38	0.43	0.08	0.38*	0.45	0.08	0.01	0.00	-0.23	0.43*	-0.15	-0.16
C	169	0.53	0.00	0.36	0.43	0.14	0.38	0.36*	0.10	0.02	0.00	-0.21	-0.14	0.43*	-0.13
C	170	0.70	0.00	0.32	0.42	0.32*	0.38	0.12	0.16	0.02	0.00	0.42*	-0.13	-0.20	-0.10
D	156	-1.72	0.00	0.87	0.30	0.02	0.08	0.87*	0.02	0.01	0.00	-0.15	-0.15	0.30*	-0.14
D	157	-1.12	0.00	0.76	0.47	0.06	0.76*	0.13	0.04	0.01	0.00	-0.25	0.47*	-0.24	-0.21
D	158	-0.72	0.00	0.67	0.56	0.10	0.67*	0.07	0.15	0.01	0.00	-0.19	0.56*	-0.24	-0.34
D	159	-0.32	0.00	0.55	0.61	0.21	0.11	0.12	0.55*	0.01	0.00	-0.24	-0.33	-0.26	0.61*
D	160	-0.09	0.00	0.49	0.57	0.49*	0.07	0.33	0.10	0.02	0.00	0.57*	-0.19	-0.34	-0.17
D	161	-0.68	0.00	0.65	0.52	0.65*	0.25	0.04	0.05	0.01	0.00	0.52*	-0.34	-0.19	-0.20
D	162	-0.90	0.00	0.71	0.59	0.07	0.71*	0.15	0.06	0.01	0.00	-0.28	0.59*	-0.34	-0.23
D	163	-0.03	0.00	0.47	0.55	0.21	0.47*	0.08	0.23	0.01	0.00	-0.16	0.55*	-0.23	-0.30
D	164	0.41	0.00	0.35	0.47	0.20	0.27	0.16	0.35*	0.01	0.00	-0.19	-0.20	-0.10	0.47*
D	165	-0.04	0.00	0.48	0.65	0.39	0.08	0.48*	0.05	0.01	0.00	-0.43	-0.20	0.65*	-0.19
D	166	-0.52	0.00	0.61	0.63	0.12	0.12	0.14	0.61*	0.01	0.00	-0.28	-0.33	-0.25	0.63*
D	167	0.00	0.00	0.46	0.50	0.46*	0.27	0.18	0.08	0.02	0.00	0.50*	-0.18	-0.23	-0.24
D	168	0.49	0.00	0.33	0.13	0.33*	0.29	0.22	0.13	0.03	0.00	0.13*	-0.12	-0.03	0.08?
D	169	0.63	0.00	0.30	0.37	0.15	0.12	0.30*	0.42	0.01	0.00	-0.09	-0.14	0.37*	-0.13
D	170	0.09	0.00	0.44	0.60	0.22	0.18	0.16	0.44*	0.02	0.00	-0.30	-0.16	-0.24	0.60*

Appendix D: 2001 PSSA Grade Eleven Item Analysis Multiple Choice Items for Mathematics

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)	
E	156	A	-1.09	0.00	0.76	0.53	0.76 *	0.05	0.06	0.12	0.01	0.00	0.53 *	-0.23	-0.24	-0.28
E	157	D	-1.35	0.00	0.81	0.37	0.13	0.02	0.02	0.81 *	0.01	0.00	-0.20	-0.18	-0.17	0.37 *
E	158	B	-0.51	0.00	0.62	0.57	0.22	0.62 *	0.10	0.04	0.02	0.00	-0.31	0.57 *	-0.28	-0.18
E	159	A	-0.88	0.00	0.72	0.44	0.72 *	0.13	0.04	0.11	0.01	0.00	0.44 *	-0.20	-0.19	-0.23
E	160	B	-0.43	0.00	0.60	0.54	0.14	0.60 *	0.16	0.09	0.02	0.00	-0.26	0.54 *	-0.31	-0.12
E	161	B	-0.61	0.00	0.65	0.59	0.04	0.65 *	0.07	0.23	0.01	0.00	-0.23	0.59 *	-0.20	-0.37
E	162	D	-0.40	0.00	0.59	0.62	0.08	0.11	0.20	0.59 *	0.02	0.00	-0.21	-0.29	-0.31	0.62 *
E	163	D	-0.11	0.00	0.51	0.56	0.10	0.09	0.29	0.51 *	0.01	0.00	-0.29	-0.27	-0.20	0.56 *
E	164	C	-0.52	0.00	0.62	0.41	0.09	0.14	0.62 *	0.12	0.02	0.00	-0.21	-0.20	0.41 *	-0.13
E	165	A	0.17	0.00	0.43	0.56	0.43 *	0.12	0.35	0.09	0.02	0.00	0.56 *	-0.25	-0.24	-0.19
E	166	D	0.57	0.00	0.33	0.48	0.10	0.23	0.32	0.33 *	0.03	0.00	-0.17	-0.24	-0.10	0.48 *
E	167	C	0.27	0.00	0.40	0.60	0.26	0.15	0.40 *	0.18	0.02	0.00	-0.32	-0.15	0.60 *	-0.20
E	168	C	0.39	0.00	0.37	0.37	0.12	0.18	0.37 *	0.31	0.01	0.00	-0.18	-0.26	0.37 *	0.02 ?
E	169	B	0.80	0.00	0.27	0.33	0.20	0.27 *	0.16	0.36	0.02	0.00	0.01 ?	0.33 *	-0.24	-0.07
E	170	A	0.60	0.00	0.32	0.32	0.32 *	0.28	0.19	0.20	0.02	0.00	0.32 *	-0.14	-0.08	-0.06
F	156	A	-0.10	0.00	0.51	0.60	0.51 *	0.10	0.15	0.24	0.01	0.00	0.60 *	-0.26	-0.21	-0.29
F	157	A	-0.73	0.00	0.67	0.54	0.67 *	0.04	0.05	0.23	0.01	0.00	0.54 *	-0.21	-0.24	-0.33
F	158	B	-1.01	0.00	0.74	0.50	0.11	0.74 *	0.06	0.09	0.01	0.00	-0.25	0.50 *	-0.21	-0.24
F	159	A	-0.64	0.00	0.65	0.53	0.65 *	0.20	0.08	0.06	0.01	0.00	0.53 *	-0.25	-0.28	-0.23
F	160	D	0.03	0.00	0.47	0.48	0.11	0.20	0.20	0.47 *	0.01	0.00	-0.20	-0.26	-0.11	0.48 *
F	161	A	-0.69	0.00	0.66	0.49	0.66 *	0.15	0.14	0.04	0.01	0.00	0.49 *	-0.24	-0.25	-0.19
F	162	C	-1.02	0.00	0.74	0.47	0.04	0.16	0.74 *	0.05	0.01	0.00	-0.22	-0.27	0.47 *	-0.18
F	163	B	-0.90	0.00	0.71	0.48	0.21	0.71 *	0.03	0.04	0.01	0.00	-0.29	0.48 *	-0.21	-0.19
F	164	C	-0.61	0.00	0.64	0.52	0.04	0.22	0.64 *	0.09	0.01	0.00	-0.21	-0.37	0.52 *	-0.11
F	165	C	0.06	0.00	0.46	0.44	0.14	0.16	0.46 *	0.22	0.02	0.00	-0.25	-0.18	0.44 *	-0.11
F	166	C	0.31	0.00	0.40	0.35	0.11	0.12	0.40 *	0.36	0.01	0.00	-0.20	-0.21	0.35 *	-0.03
F	167	A	-0.03	0.00	0.49	0.46	0.49 *	0.21	0.24	0.05	0.02	0.00	0.46 *	-0.23	-0.20	-0.13
F	168	D	0.14	0.00	0.44	0.48	0.15	0.21	0.19	0.44 *	0.01	0.00	-0.28	-0.10	-0.19	0.48 *
F	169	A	0.61	0.00	0.32	0.38	0.32 *	0.31	0.23	0.12	0.02	0.00	0.38 *	-0.03	-0.20	-0.18
F	170	D	1.20	0.00	0.20	0.26	0.28	0.23	0.27	0.20 *	0.02	0.00	-0.04	-0.15	-0.01	0.26 *

Appendix D: 2001 PSSA Grade Eleven Item Analysis Multiple Choice Items for Mathematics

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
G	156	-1.17	0.00	0.77	0.49	0.77 *	0.10	0.07	0.04	0.01	0.00	0.49 *	-0.28	-0.24	-0.17
G	157	-0.98	0.00	0.73	0.39	0.07	0.14	0.05	0.73 *	0.01	0.00	-0.20	-0.17	-0.18	0.39 *
G	158	-0.75	0.00	0.68	0.52	0.04	0.68 *	0.15	0.12	0.01	0.00	-0.19	0.52 *	-0.31	-0.21
G	159	-0.45	0.00	0.60	0.34	0.05	0.29	0.60 *	0.04	0.01	0.00	-0.19	-0.16	0.34 *	-0.15
G	160	-0.71	0.00	0.67	0.51	0.67 *	0.23	0.04	0.06	0.01	0.00	0.51 *	-0.31	-0.19	-0.22
G	161	-0.03	0.00	0.49	0.44	0.49 *	0.09	0.11	0.30	0.01	0.00	0.44 *	-0.21	-0.20	-0.15
G	162	-0.39	0.00	0.59	0.59	0.09	0.14	0.17	0.59 *	0.02	0.00	-0.24	-0.29	-0.25	0.59 *
G	163	-0.39	0.00	0.59	0.57	0.23	0.59 *	0.14	0.03	0.01	0.00	-0.28	0.57 *	-0.31	-0.16
G	164	-0.43	0.00	0.60	0.49	0.11	0.60 *	0.16	0.13	0.01	0.00	-0.14	0.49 *	-0.28	-0.21
G	165	0.27	0.00	0.41	0.49	0.21	0.19	0.18	0.41 *	0.01	0.00	-0.17	-0.12	-0.24	0.49 *
G	166	0.17	0.00	0.44	0.34	0.13	0.44 *	0.20	0.21	0.03	0.00	-0.13	0.34 *	-0.18	-0.07
G	167	-0.16	0.00	0.53	0.52	0.10	0.13	0.53 *	0.23	0.02	0.00	-0.16	-0.17	0.52 *	-0.30
G	168	0.84	0.00	0.28	0.34	0.08	0.50 ?	0.28 *	0.13	0.01	0.00	-0.18	-0.20	0.34 *	0.07 ?
G	169	0.71	0.00	0.31	0.40	0.31 *	0.41	0.12	0.15	0.01	0.00	0.40 *	-0.15	-0.13	-0.11
G	170	0.77	0.00	0.29	0.35	0.29 *	0.21	0.30	0.17	0.03	0.00	0.35 *	-0.11	-0.13	-0.07
H	156	-0.93	0.00	0.73	0.53	0.07	0.14	0.73 *	0.05	0.01	0.00	-0.25	-0.27	0.53 *	-0.24
H	157	-1.11	0.00	0.77	0.40	0.05	0.77 *	0.05	0.12	0.01	0.00	-0.22	0.40 *	-0.23	-0.13
H	158	-1.07	0.00	0.76	0.53	0.13	0.76 *	0.08	0.03	0.01	0.00	-0.32	0.53 *	-0.26	-0.16
H	159	-0.44	0.00	0.61	0.53	0.13	0.09	0.16	0.61 *	0.01	0.00	-0.28	-0.19	-0.24	0.53 *
H	160	-0.85	0.00	0.71	0.52	0.71 *	0.10	0.12	0.05	0.01	0.00	0.52 *	-0.28	-0.26	-0.18
H	161	0.10	0.00	0.47	0.38	0.47 *	0.11	0.39	0.02	0.01	0.00	0.38 *	-0.23	-0.16	-0.10
H	162	0.19	0.00	0.44	0.54	0.11	0.44 *	0.30	0.13	0.01	0.00	-0.11	0.54 *	-0.30	-0.21
H	163	0.31	0.00	0.41	0.44	0.18	0.35	0.41 *	0.04	0.01	0.00	-0.29	-0.12	0.44 *	-0.10
H	164	0.09	0.00	0.47	0.47	0.47 *	0.17	0.26	0.09	0.01	0.00	0.47 *	0.04 ?	-0.37	-0.20
H	165	0.88	0.00	0.28	0.36	0.14	0.26	0.30	0.28 *	0.02	0.00	-0.07	-0.06	-0.18	0.36 *
H	166	0.54	0.00	0.35	0.36	0.07	0.35 *	0.29	0.26	0.02	0.00	-0.11	0.36 *	-0.12	-0.15
H	167	0.27	0.00	0.42	0.58	0.39	0.09	0.42 *	0.08	0.01	0.00	-0.32	-0.21	0.58 *	-0.16
H	168	-0.14	0.00	0.53	0.52	0.11	0.53 *	0.16	0.18	0.02	0.00	-0.20	0.52 *	-0.25	-0.20
H	169	0.89	0.00	0.27	0.39	0.11	0.38	0.22	0.27 *	0.02	0.00	-0.20	-0.04	-0.16	0.39 *
H	170	0.17	0.00	0.45	0.40	0.23	0.16	0.45 *	0.15	0.02	0.00	-0.15	-0.17	0.40 *	-0.13

Appendix D: 2001 PSSA Grade Eleven Item Analysis Multiple Choice Items for Mathematics

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)	
I	156	C	-2.14	0.00	0.90	0.42	0.02	0.04	0.90 *	0.04	0.01	0.00	-0.19	-0.20	0.42 *	-0.19
I	157	A	-1.89	0.00	0.87	0.41	0.87 *	0.06	0.04	0.01	0.01	0.00	0.41 *	-0.21	-0.21	-0.14
I	158	A	-0.01	0.00	0.50	0.49	0.50 *	0.29	0.12	0.09	0.01	0.00	0.49 *	-0.22	-0.22	-0.19
I	159	C	0.18	0.00	0.45	0.44	0.18	0.25	0.45 *	0.10	0.02	0.00	-0.20	-0.15	0.44 *	-0.16
I	160	B	0.59	0.00	0.35	0.12	0.05	0.35 *	0.09	0.50	0.01	0.00	-0.18	0.12 *	-0.13	0.10 ?
I	161	A	-1.00	0.00	0.73	0.50	0.73 *	0.12	0.08	0.06	0.01	0.00	0.50 *	-0.26	-0.22	-0.20
I	162	B	-0.87	0.00	0.70	0.43	0.05	0.70 *	0.19	0.05	0.01	0.00	-0.20	0.43 *	-0.21	-0.20
I	163	C	-0.62	0.00	0.65	0.47	0.06	0.07	0.65 *	0.22	0.01	0.00	-0.19	-0.19	0.47 *	-0.26
I	164	A	-0.40	0.00	0.59	0.39	0.59 *	0.07	0.21	0.11	0.01	0.00	0.39 *	-0.19	-0.19	-0.12
I	165	D	0.13	0.00	0.46	0.52	0.09	0.27	0.17	0.46 *	0.01	0.00	-0.14	-0.26	-0.21	0.52 *
I	166	B	0.99	0.00	0.27	0.22	0.07	0.27 *	0.54 ?	0.11	0.01	0.00	-0.19	0.22 *	0.06 ?	-0.16
I	167	B	0.44	0.00	0.39	0.45	0.32	0.39 *	0.15	0.13	0.02	0.00	-0.19	0.45 *	-0.13	-0.18
I	168	D	0.98	0.00	0.27	0.32	0.15	0.32	0.24	0.27 *	0.03	0.00	-0.06	-0.06	-0.15	0.32 *
I	169	A	0.55	0.00	0.36	0.51	0.36 *	0.25	0.28	0.10	0.02	0.00	0.51 *	-0.14	-0.21	-0.19
I	170	B	0.37	0.00	0.40	0.41	0.08	0.40 *	0.36	0.15	0.01	0.00	-0.20	0.41 *	-0.12	-0.17
J	156	B	-0.10	0.00	0.51	0.45	0.08	0.51 *	0.19	0.20	0.02	0.00	-0.14	0.45 *	-0.26	-0.15
J	157	C	-0.14	0.00	0.53	0.43	0.09	0.22	0.53 *	0.16	0.01	0.00	-0.11	-0.18	0.43 *	-0.23
J	158	C	-0.03	0.00	0.50	0.46	0.16	0.15	0.50 *	0.17	0.02	0.00	-0.18	-0.20	0.46 *	-0.17
J	159	D	-0.61	0.00	0.65	0.65	0.12	0.11	0.11	0.65 *	0.01	0.00	-0.31	-0.33	-0.26	0.65 *
J	160	B	0.23	0.00	0.43	0.39	0.16	0.43 *	0.19	0.20	0.03	0.00	-0.12	0.39 *	-0.21	-0.09
J	161	A	-0.87	0.00	0.71	0.42	0.71 *	0.10	0.04	0.14	0.01	0.00	0.42 *	-0.27	-0.22	-0.13
J	162	B	-0.65	0.00	0.66	0.40	0.08	0.66 *	0.08	0.17	0.01	0.00	-0.14	0.40 *	-0.23	-0.17
J	163	B	-0.54	0.00	0.63	0.56	0.18	0.63 *	0.13	0.05	0.01	0.00	-0.28	0.56 *	-0.27	-0.20
J	164	D	-0.63	0.00	0.65	0.62	0.12	0.09	0.13	0.65 *	0.01	0.00	-0.32	-0.21	-0.31	0.62 *
J	165	C	-0.14	0.00	0.53	0.48	0.22	0.11	0.53 *	0.13	0.01	0.00	-0.15	-0.25	0.48 *	-0.22
J	166	B	-0.08	0.00	0.51	0.54	0.25	0.51 *	0.17	0.06	0.02	0.00	-0.27	0.54 *	-0.24	-0.16
J	167	A	0.39	0.00	0.39	0.31	0.39 *	0.22	0.20	0.18	0.02	0.00	0.31 *	-0.03	-0.15	-0.13
J	168	D	0.82	0.00	0.28	0.43	0.21	0.24	0.25	0.28 *	0.02	0.00	-0.12	-0.13	-0.14	0.43 *
J	169	C	0.57	0.00	0.34	0.31	0.26	0.28	0.34 *	0.09	0.03	0.00	-0.12	-0.06	0.31 *	-0.15
J	170	A	-0.14	0.00	0.53	0.51	0.53 *	0.12	0.23	0.10	0.02	0.00	0.51 *	-0.20	-0.25	-0.17

Appendix D: 2001 PSSA Grade Eleven Item Analysis Multiple Choice Items for Mathematics

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
W	1	-1.11	0.00	0.72	0.42	0.08	0.20	0.72	0.01	0.00	0.00	-0.21	-0.30	0.42	-0.12
W	2	-1.27	0.00	0.75	0.43	0.04	0.75	0.11	0.10	0.00	0.00	-0.13	0.43	-0.28	-0.24
W	3	-0.25	0.00	0.53	0.16	0.37	0.06	0.53	0.04	0.00	0.00	-0.13	-0.05	0.16	-0.02
W	4	-0.50	0.00	0.59	0.46	0.59	0.22	0.06	0.13	0.00	0.00	0.46	-0.25	-0.15	-0.24
W	5	-2.50	0.00	0.91	0.30	0.05	0.91	0.02	0.01	0.00	0.00	-0.20	0.30	-0.17	-0.14
W	6	-2.04	0.00	0.87	0.33	0.05	0.87	0.03	0.06	0.00	0.00	-0.20	0.33	-0.19	-0.15
W	7	-2.24	0.00	0.89	0.34	0.89	0.01	0.03	0.07	0.00	0.00	0.34	-0.14	-0.19	-0.23
W	8	-1.72	0.00	0.82	0.47	0.03	0.05	0.82	0.09	0.00	0.00	-0.16	-0.23	0.47	-0.34
W	9	-1.17	0.00	0.73	0.35	0.04	0.15	0.73	0.08	0.00	0.00	-0.18	-0.19	0.35	-0.19
W	10	-0.81	0.00	0.65	0.41	0.07	0.65	0.14	0.14	0.00	0.00	-0.20	0.41	-0.19	-0.23
W	11	-1.41	0.00	0.77	0.52	0.06	0.10	0.77	0.07	0.00	0.00	-0.28	-0.30	0.52	-0.25
W	12	-0.89	0.00	0.67	0.61	0.05	0.13	0.15	0.67	0.00	0.00	-0.23	-0.35	-0.33	0.61
W	13	-0.64	0.00	0.62	0.30	0.12	0.62	0.18	0.08	0.00	0.00	-0.13	0.30	-0.14	-0.17
W	14	-0.24	0.00	0.53	0.43	0.53	0.11	0.10	0.26	0.01	0.00	0.43	-0.18	-0.22	-0.20
W	15	-1.25	0.00	0.75	0.36	0.07	0.11	0.75	0.07	0.00	0.00	-0.13	-0.23	0.36	-0.19
W	16	0.02	0.00	0.47	0.43	0.30	0.10	0.47	0.13	0.01	0.00	-0.14	-0.29	0.43	-0.18
W	17	-0.15	0.00	0.51	0.39	0.33	0.13	0.03	0.51	0.00	0.00	-0.21	-0.18	-0.19	0.39
W	18	-0.12	0.00	0.50	0.58	0.50	0.18	0.18	0.13	0.01	0.00	0.58	-0.23	-0.33	-0.21
W	19	-0.71	0.00	0.63	0.50	0.10	0.63	0.15	0.12	0.00	0.00	-0.25	0.50	-0.32	-0.15
W	20	-0.07	0.00	0.49	0.52	0.14	0.10	0.27	0.49	0.00	0.00	-0.35	-0.24	-0.15	0.52
W	21	-0.54	0.00	0.60	0.48	0.22	0.13	0.06	0.60	0.00	0.00	-0.27	-0.21	-0.23	0.48
W	22	0.94	0.00	0.27	0.27	0.32	0.14	0.27	0.26	0.01	0.00	-0.02	-0.08	0.27	-0.19
W	23	-0.10	0.00	0.50	0.20	0.50	0.19	0.15	0.15	0.01	0.00	0.20	-0.01	-0.11	-0.16
W	24	0.09	0.00	0.45	0.31	0.13	0.15	0.26	0.45	0.01	0.00	-0.10	-0.18	-0.13	0.31
W	26	-2.31	0.00	0.90	0.36	0.90	0.04	0.02	0.04	0.00	0.00	0.36	-0.20	-0.20	-0.21
W	27	-1.17	0.00	0.73	0.53	0.09	0.13	0.73	0.05	0.00	0.00	-0.25	-0.32	0.53	-0.26
W	28	-1.40	0.00	0.77	0.49	0.77	0.13	0.07	0.03	0.00	0.00	0.49	-0.29	-0.29	-0.21
W	29	-1.57	0.00	0.80	0.43	0.07	0.08	0.80	0.06	0.00	0.00	-0.29	-0.23	0.43	-0.17
W	30	-0.89	0.00	0.67	0.56	0.18	0.67	0.09	0.06	0.00	0.00	-0.41	0.56	-0.23	-0.16
W	31	-0.60	0.00	0.61	0.31	0.61	0.31	0.03	0.05	0.00	0.00	0.31	-0.23	-0.18	-0.05
W	32	-0.18	0.00	0.51	0.55	0.16	0.10	0.22	0.51	0.00	0.00	-0.08	-0.32	-0.35	0.55
W	33	-0.05	0.00	0.48	0.50	0.05	0.09	0.38	0.48	0.00	0.00	-0.18	-0.25	-0.29	0.50
W	34	-1.04	0.00	0.70	0.41	0.04	0.08	0.70	0.18	0.00	0.00	-0.24	-0.26	0.41	-0.17
W	35	-0.93	0.00	0.68	0.53	0.68	0.09	0.11	0.11	0.00	0.00	0.53	-0.26	-0.28	-0.26
W	36	-1.54	0.00	0.79	0.50	0.09	0.79	0.08	0.03	0.00	0.00	-0.32	0.50	-0.26	-0.20
W	37	-1.03	0.00	0.70	0.47	0.16	0.70	0.09	0.04	0.01	0.00	-0.24	0.47	-0.31	-0.18

Appendix D: 2001 PSSA Grade Eleven Item Analysis Multiple Choice Items for Mathematics

Form Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)		
W	38	-0.23	0.00	0.52	0.50	0.05	0.52	0.23	0.19	0.00	0.00	0.00	-0.13	0.50	*	-0.15	-0.40	
W	39	-1.01	0.00	0.70	0.51	0.70	0.09	0.13	0.08	0.00	0.00	0.00	0.51	*	-0.27	-0.25	-0.27	
W	40	-0.41	0.00	0.57	0.36	0.21	0.57	0.13	0.09	0.01	0.00	0.00	-0.18	0.36	*	-0.18	-0.16	
W	41	-0.33	0.00	0.55	0.24	0.23	0.55	0.14	0.07	0.02	0.00	0.00	0.00	0.24	*	-0.24	-0.15	
W	42	-1.01	0.00	0.70	0.55	0.70	0.10	0.08	0.12	0.00	0.00	0.00	0.55	*	-0.35	-0.32	-0.17	
W	43	-1.02	0.00	0.70	0.63	0.06	0.12	0.12	0.70	0.00	0.00	0.00	-0.28	-0.35	-0.32	0.63	*	
W	44	-0.81	0.00	0.66	0.44	0.10	0.66	0.11	0.14	0.00	0.00	0.00	-0.30	0.44	*	-0.26	-0.11	
W	45	0.39	0.00	0.38	0.50	0.42	0.10	0.10	0.38	0.00	0.00	0.00	-0.22	-0.29	-0.16	0.50	*	
W	46	0.32	0.00	0.40	0.48	0.22	0.20	0.17	0.40	0.01	0.00	0.00	-0.17	-0.23	-0.19	0.48	*	
W	47	0.02	0.00	0.47	0.27	0.06	0.07	0.47	0.39	0.00	0.00	0.00	-0.21	-0.23	0.27	*	-0.04	
W	48	0.67	0.00	0.33	0.32	0.21	0.30	0.33	0.16	0.01	0.00	0.00	-0.02	-0.12	0.32	*	-0.23	
W	49	0.12	0.00	0.45	0.40	0.22	0.15	0.17	0.45	0.01	0.00	0.00	0.04	?	-0.26	-0.30	0.40	*
W	51	-2.10	0.00	0.87	0.41	0.05	0.87	0.04	0.04	0.00	0.00	0.00	-0.20	0.41	*	-0.25	-0.23	
W	52	-1.93	0.00	0.85	0.46	0.03	0.06	0.06	0.85	0.00	0.00	0.00	-0.23	-0.28	-0.24	0.46	*	
W	53	-1.88	0.00	0.85	0.44	0.05	0.09	0.85	0.01	0.00	0.00	0.00	-0.24	-0.31	0.44	*	-0.15	
W	54	-1.05	0.00	0.70	0.54	0.01	0.03	0.25	0.70	0.00	0.00	0.00	-0.15	-0.22	-0.43	0.54	*	
W	55	-1.21	0.00	0.74	0.30	0.05	0.05	0.16	0.74	0.00	0.00	0.00	-0.21	-0.22	-0.10	0.30	*	
W	56	-1.33	0.00	0.76	0.43	0.76	0.06	0.15	0.02	0.00	0.00	0.00	0.43	*	-0.27	-0.26	-0.17	
W	57	-0.97	0.00	0.69	0.49	0.04	0.23	0.04	0.69	0.00	0.00	0.00	-0.24	-0.32	-0.23	0.49	*	
W	58	-0.15	0.00	0.51	0.47	0.22	0.51	0.16	0.11	0.00	0.00	0.00	-0.39	0.47	*	-0.02	-0.19	
W	59	-0.73	0.00	0.64	0.45	0.15	0.64	0.14	0.06	0.00	0.00	0.00	-0.15	0.45	*	-0.32	-0.20	
W	60	-1.60	0.00	0.81	0.52	0.06	0.81	0.09	0.05	0.00	0.00	0.00	-0.29	0.52	*	-0.30	-0.24	
W	61	-0.29	0.00	0.54	0.46	0.54	0.19	0.17	0.10	0.01	0.00	0.00	0.46	*	-0.17	-0.19	-0.30	
W	62	-0.18	0.00	0.51	0.40	0.05	0.32	0.11	0.51	0.00	0.00	0.00	-0.19	-0.23	-0.15	0.40	*	
W	63	-0.06	0.00	0.49	0.46	0.49	0.18	0.22	0.10	0.01	0.00	0.00	0.46	*	-0.22	-0.25	-0.13	
W	64	0.04	0.00	0.46	0.33	0.17	0.24	0.46	0.11	0.01	0.00	0.00	-0.15	-0.12	0.33	*	-0.18	
W	65	-0.27	0.00	0.54	0.43	0.06	0.54	0.35	0.06	0.00	0.00	0.00	-0.09	0.43	*	-0.25	-0.31	
W	66	-0.53	0.00	0.59	0.47	0.12	0.59	0.21	0.07	0.00	0.00	0.00	-0.28	0.47	*	-0.20	-0.20	
W	67	-0.18	0.00	0.51	0.44	0.13	0.18	0.51	0.17	0.01	0.00	0.00	-0.17	-0.26	0.44	*	-0.16	
W	68	0.74	0.00	0.31	0.28	0.31	0.46	0.15	0.08	0.01	0.00	0.00	0.28	*	-0.03	-0.22	-0.14	
W	69	0.55	0.00	0.35	0.22	0.10	0.13	0.35	0.41	0.00	0.00	0.00	-0.09	-0.15	0.22	*	-0.05	
W	70	0.78	0.00	0.31	0.33	0.20	0.19	0.31	0.31	0.00	0.00	0.00	-0.01	-0.18	0.33	*	-0.16	
W	71	0.32	0.00	0.40	0.37	0.20	0.40	0.24	0.15	0.01	0.00	0.00	-0.19	0.37	*	-0.12	-0.15	
W	72	0.11	0.00	0.45	0.43	0.45	0.19	0.17	0.18	0.01	0.00	0.00	0.43	*	-0.20	-0.18	-0.16	

Appendix E: 2001 PSSA Grade Five Task Analysis
Open Ended Tasks for Mathematics

Position	Step	Logit	Task Mean	Correlation	% Zero	% One	% Two	% Three	% Four	% Five	R(0)	R(1)	R(2)	R(3)	R(4)	R(5)
A150	1	-0.88	2.27	0.65	0.17	0.14	0.23	0.23	0.18	0.05	-0.45	-0.22	-0.09	0.21	0.38	0.25
	2	-0.70														
	3	0.00														
	4	0.73														
	5	2.22														
B150	1	-0.80	1.95	0.64	0.21	0.22	0.20	0.18	0.11	0.07	-0.52	-0.16	0.07	0.27	0.26	0.26
	2	-0.09														
	3	0.32														
	4	1.13														
	5	1.57														
C150	1	-1.38	2.26	0.68	0.14	0.20	0.24	0.16	0.17	0.08	-0.46	-0.25	-0.04	0.16	0.35	0.33
	2	-0.48														
	3	0.41														
	4	0.45														
	5	1.61														
D150	1	-0.69	2.66	0.68	0.19	0.13	0.11	0.14	0.23	0.20	-0.49	-0.22	-0.10	0.03	0.28	0.44
	2	-0.27														
	3	-0.31														
	4	-0.24														
	5	0.83														
E150	1	0.63	1.26	0.58	0.47	0.17	0.15	0.11	0.05	0.05	-0.53	0.04	0.20	0.23	0.22	0.28
	2	0.28														
	3	0.90														
	4	1.68														
	5	1.33														
F150	1	-1.73	2.00	0.66	0.12	0.34	0.19	0.20	0.07	0.08	-0.42	-0.34	0.08	0.30	0.24	0.32
	2	0.23														
	3	0.24														
	4	1.61														
	5	1.06														
G150	1	-0.25	1.87	0.68	0.25	0.12	0.32	0.15	0.15	0.02	-0.59	-0.06	0.08	0.22	0.39	0.19
	2	-0.93														
	3	0.91														
	4	0.75														
	5	3.32														

Appendix E: 2001 PSSA Grade Five Task Analysis
Open Ended Tasks for Mathematics

Position	Step	Logit	Task Mean	Correlation	% Zero	% One	% Two	% Three	% Four	% Five	R(0)	R(1)	R(2)	R(3)	R(4)	R(5)
H150	1	-1.53	1.52	0.58	0.16	0.43	0.21	0.15	0.04	0.01	-0.46	-0.15	0.21	0.30	0.22	0.11
	2	0.61														
	3	0.85														
	4	2.18														
	5	3.09														
I150	1	-0.86	2.29	0.61	0.18	0.20	0.06	0.28	0.24	0.03	-0.41	-0.26	-0.06	0.20	0.37	0.21
	2	0.40														
	3	-1.11														
	4	0.59														
	5	2.83														
J150	1	-0.89	2.11	0.55	0.15	0.12	0.40	0.18	0.11	0.04	-0.41	-0.18	0.05	0.12	0.26	0.26
	2	-1.33														
	3	0.88														
	4	1.12														
	5	2.00														
W25	1	-1.25	2.17	0.69	0.13	0.18	0.30	0.26	0.04	0.09	-0.45	-0.29	-0.06	0.34	0.19	0.37
	2	-0.82														
	3	0.25														
	4	2.30														
	5	0.48														
W50	1	-2.62	2.48	0.65	0.05	0.18	0.30	0.22	0.19	0.05	-0.35	-0.37	-0.11	0.17	0.35	0.27
	2	-1.02														
	3	0.24														
	4	0.64														
	5	2.24														
W73	1	-1.53	2.59	0.64	0.09	0.09	0.28	0.28	0.19	0.07	-0.39	-0.27	-0.17	0.13	0.34	0.29
	2	-1.34														
	3	-0.16														
	4	0.77														
	5	1.94														

Appendix F: 2001 PSSA Grade Eight Task Analysis
Open Ended Tasks for Mathematics

Position	Step	Logit	Task Mean	Correlation	% Zero	% One	% Two	% Three	% Four	% Five	R(0)	R(1)	R(2)	R(3)	R(4)	R(5)
A170	1	-0.76	1.73	0.63	0.22	0.22	0.27	0.21	0.06	0.02	-0.49	-0.13	0.09	0.30	0.28	0.22
	2	-0.29														
	3	0.61														
	4	2.03														
	5	2.45														
B170	1	-1.37	2.44	0.64	0.10	0.12	0.26	0.23	0.27	0.01	-0.35	-0.33	-0.11	0.10	0.49	0.11
	2	-1.07														
	3	0.03														
	4	0.32														
	5	4.77														
C170	1	-0.48	2.16	0.72	0.23	0.14	0.24	0.09	0.24	0.07	-0.56	-0.16	0.00	0.13	0.41	0.34
	2	-0.60														
	3	0.88														
	4	-0.34														
	5	2.27														
D170	1	-1.02	2.23	0.69	0.19	0.22	0.17	0.10	0.20	0.11	-0.51	-0.21	0.02	0.10	0.35	0.38
	2	-0.10														
	3	0.45														
	4	-0.03														
	5	1.47														
E170	1	-1.35	1.84	0.73	0.17	0.39	0.15	0.06	0.13	0.09	-0.48	-0.25	0.10	0.15	0.34	0.45
	2	0.73														
	3	0.97														
	4	0.15														
	5	1.39														
F170	1	-0.14	1.59	0.69	0.35	0.21	0.16	0.11	0.15	0.03	-0.61	-0.03	0.14	0.25	0.39	0.23
	2	0.24														
	3	0.65														
	4	0.54														
	5	2.85														
G170	1	-0.37	2.62	0.79	0.19	0.08	0.19	0.12	0.30	0.12	-0.56	-0.22	-0.15	0.01	0.40	0.47
	2	-0.27														
	3	0.53														
	4	0.21														
	5	1.66														

Appendix F: 2001 PSSA Grade Eight Task Analysis
Open Ended Tasks for Mathematics

Position	Step	Logit	Task Mean	Correlation	% Zero	% One	% Two	% Three	% Four	% Five	R(0)	R(1)	R(2)	R(3)	R(4)	R(5)
H170	1	0.29	1.33	0.70	0.41	0.16	0.21	0.12	0.06	0.03	-0.62	0.00	0.24	0.32	0.29	0.25
	2	-0.09														
	3	1.03														
	4	1.57														
	5	2.18														
I170	1	0.16	1.36	0.70	0.41	0.21	0.13	0.12	0.10	0.03	-0.61	0.00	0.17	0.30	0.38	0.23
	2	0.56														
	3	0.59														
	4	1.11														
	5	2.65														
J170	1	-0.55	2.19	0.74	0.23	0.16	0.15	0.17	0.21	0.08	-0.57	-0.22	0.02	0.20	0.39	0.33
	2	-0.23														
	3	-0.07														
	4	0.30														
	5	1.89														
W25	1	0.09	1.39	0.64	0.38	0.21	0.23	0.03	0.08	0.06	-0.54	-0.03	0.20	0.16	0.29	0.35
	2	0.06														
	3	2.19														
	4	0.30														
	5	1.53														
W50	1	-0.87	1.41	0.64	0.25	0.37	0.21	0.08	0.06	0.03	-0.46	-0.18	0.26	0.27	0.28	0.24
	2	0.60														
	3	1.40														
	4	1.36														
	5	2.14														
W73	1	-0.29	1.77	0.69	0.32	0.24	0.16	0.02	0.16	0.11	-0.58	-0.08	0.14	0.05	0.33	0.42
	2	0.36														
	3	1.86														
	4	-0.87														
	5	1.38														

Appendix G: 2001 PSSA Grade Eleven Task Analysis
Open Ended Tasks for Mathematics

Position	Step	Logit	Task Mean	Correlation	% Zero	% One	% Two	% Three	% Four	% Five	R(0)	R(1)	R(2)	R(3)	R(4)	R(5)
A180	1	-1.39	1.98	0.78	0.15	0.37	0.09	0.16	0.16	0.06	-0.47	-0.37	0.07	0.28	0.43	0.33
	2	0.85														
	3	-0.14														
	4	0.59														
	5	2.05														
B180	1	0.48	1.89	0.79	0.38	0.11	0.08	0.12	0.24	0.06	-0.68	-0.10	0.04	0.20	0.51	0.32
	2	0.22														
	3	-0.16														
	4	-0.12														
	5	2.29														
C180	1	-1.43	1.16	0.66	0.20	0.62	0.06	0.05	0.05	0.02	-0.49	0.01	0.15	0.28	0.34	0.25
	2	2.50														
	3	0.96														
	4	1.32														
	5	2.65														
D180	1	-0.03	1.38	0.75	0.39	0.26	0.14	0.06	0.10	0.06	-0.65	0.00	0.26	0.22	0.37	0.33
	2	0.66														
	3	1.27														
	4	0.53														
	5	1.77														
E180	1	1.01	0.85	0.69	0.57	0.15	0.16	0.06	0.03	0.02	-0.67	0.19	0.38	0.31	0.24	0.19
	2	0.35														
	3	1.78														
	4	2.06														
	5	2.32														
F180	1	0.39	1.78	0.67	0.34	0.10	0.18	0.19	0.13	0.05	-0.56	-0.11	0.14	0.22	0.34	0.27
	2	-0.49														
	3	0.19														
	4	1.12														
	5	2.18														
G180	1	0.56	0.93	0.70	0.54	0.24	0.05	0.08	0.05	0.03	-0.64	0.20	0.20	0.32	0.30	0.31
	2	1.75														
	3	0.42														
	4	1.72														
	5	1.98														

Appendix G: 2001 PSSA Grade Eleven Task Analysis
Open Ended Tasks for Mathematics

Position	Step	Logit	Task Mean	Correlation	% Zero	% One	% Two	% Three	% Four	% Five	R(0)	R(1)	R(2)	R(3)	R(4)	R(5)
H180	1	-0.18	0.81	0.59	0.43	0.43	0.07	0.03	0.03	0.01	-0.48	0.16	0.31	0.21	0.25	0.17
	2	2.16														
	3	2.01														
	4	1.42														
	5	2.91														
I180	1	-0.07	0.90	0.63	0.42	0.35	0.16	0.02	0.03	0.01	-0.52	0.09	0.37	0.19	0.25	0.20
	2	1.17														
	3	2.85														
	4	1.39														
	5	2.60														
J180	1	1.10	0.91	0.71	0.61	0.16	0.05	0.06	0.08	0.03	-0.65	0.18	0.18	0.28	0.39	0.30
	2	1.42														
	3	0.63														
	4	0.89														
	5	2.28														
W25	1	0.60	1.37	0.75	0.48	0.16	0.08	0.11	0.16	0.02	-0.67	-0.01	0.16	0.30	0.48	0.21
	2	0.70														
	3	0.16														
	4	0.61														
	5	3.27														
W50	1	-1.50	1.50	0.70	0.17	0.48	0.15	0.11	0.08	0.02	-0.49	-0.22	0.20	0.32	0.35	0.20
	2	1.01														
	3	0.86														
	4	1.35														
	5	2.99														
W73	1	-0.74	2.13	0.68	0.15	0.10	0.42	0.17	0.13	0.04	-0.47	-0.18	-0.09	0.22	0.38	0.29
	2	-1.47														
	3	0.91														
	4	0.98														
	5	2.40														

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(RC)	(RD)
A	159	C	-2.16	0.00	0.88	0.43	0.03	0.06	0.88 *	0.03	0.004	0.00	-0.27	-0.19	0.43 *	-0.21
A	160	D	-0.50	0.00	0.58	0.32	0.20	0.04	0.17	0.58 *	0.005	0.00	-0.23	-0.24	-0.01	0.32 *
A	161	C	-1.91	0.00	0.85	0.56	0.05	0.08	0.85 *	0.02	0.004	0.00	-0.36	-0.28	0.56 *	-0.23
A	162	D	-1.10	0.00	0.71	0.55	0.07	0.12	0.09	0.71 *	0.005	0.00	-0.27	-0.31	-0.22	0.55 *
A	163	D	-1.75	0.00	0.83	0.54	0.08	0.06	0.03	0.83 *	0.005	0.00	-0.30	-0.27	-0.27	0.54 *
A	164	D	0.12	0.00	0.42	0.27	0.07	0.42	0.08	0.42 *	0.005	0.00	-0.20	0.02 ?	-0.27	0.27 *
A	165	C	0.85	0.00	0.26	0.19	0.13	0.17	0.26 *	0.43	0.007	0.00	-0.08	-0.13	0.19 *	0.02 ?
A	166	D	-2.67	0.00	0.93	0.50	0.03	0.02	0.02	0.93 *	0.004	0.00	-0.25	-0.27	-0.26	0.50 *
A	167	D	-1.45	0.00	0.78	0.48	0.03	0.05	0.13	0.78 *	0.005	0.00	-0.28	-0.31	-0.21	0.48 *
A	168	B	-0.80	0.00	0.65	0.50	0.19	0.65 *	0.13	0.03	0.005	0.00	-0.31	0.50 *	-0.19	-0.23
A	169	A	-1.12	0.00	0.72	0.49	0.72 *	0.03	0.09	0.16	0.005	0.00	0.49 *	-0.29	-0.23	-0.25
A	170	B	-1.32	0.00	0.76	0.54	0.08	0.76 *	0.10	0.06	0.005	0.00	-0.24	0.54 *	-0.27	-0.30
A	171	D	-1.59	0.00	0.80	0.52	0.06	0.05	0.08	0.80 *	0.005	0.00	-0.27	-0.30	-0.22	0.52 *
A	172	B	-0.31	0.00	0.53	0.36	0.41	0.53 *	0.03	0.03	0.005	0.00	-0.20	0.36 *	-0.19	-0.20
A	173	A	-2.50	0.00	0.91	0.52	0.91 *	0.03	0.03	0.03	0.005	0.00	0.52 *	-0.29	-0.27	-0.24
A	174	A	-0.39	0.00	0.55	0.52	0.55 *	0.27	0.12	0.05	0.006	0.00	0.52 *	-0.28	-0.28	-0.13
A	175	C	-0.12	0.00	0.48	0.36	0.08	0.37	0.48 *	0.07	0.005	0.00	-0.23	-0.07	0.36 *	-0.27
A	176	A	-1.47	0.00	0.78	0.48	0.78 *	0.08	0.07	0.06	0.006	0.00	0.48 *	-0.24	-0.29	-0.17
A	177	A	-2.18	0.00	0.88	0.53	0.88 *	0.04	0.03	0.04	0.006	0.00	0.53 *	-0.28	-0.31	-0.23
A	178	D	0.43	0.00	0.35	0.24	0.07	0.37	0.20	0.35 *	0.006	0.00	-0.22	0.02 ?	-0.13	0.24 *
A	179	B	-1.47	0.00	0.78	0.53	0.03	0.78 *	0.07	0.11	0.006	0.00	-0.26	0.53 *	-0.21	-0.32
A	180	A	-1.07	0.00	0.71	0.42	0.71 *	0.21	0.05	0.03	0.006	0.00	0.42 *	-0.19	-0.30	-0.19
A	181	B	-1.06	0.00	0.71	0.47	0.06	0.71 *	0.09	0.15	0.007	0.00	-0.24	0.47 *	-0.31	-0.15
A	182	D	-0.68	0.00	0.62	0.45	0.30	0.03	0.04	0.62 *	0.006	0.00	-0.22	-0.28	-0.25	0.45 *
A	183	C	-0.84	0.00	0.66	0.41	0.13	0.07	0.66 *	0.14	0.006	0.00	-0.16	-0.30	0.41 *	-0.15
A	184	B	-0.25	0.00	0.51	0.39	0.29	0.51 *	0.13	0.05	0.007	0.00	-0.20	0.39 *	-0.10	-0.25

Appendix H: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(R(C)	(R(D)
B	159	C	-2.33	0.00	0.90	0.54	0.06	0.03	0.90 *	0.02	0.003	0.00	0.00	-0.37	-0.28	0.54 *	-0.18
B	160	C	-1.22	0.00	0.73	0.31	0.17	0.05	0.73 *	0.04	0.004	0.00	0.00	-0.12	-0.21	0.31 *	-0.18
B	161	B	-0.76	0.00	0.63	0.32	0.03	0.63 *	0.05	0.29	0.004	0.00	0.00	-0.26	0.32 *	-0.25	-0.10
B	162	A	-0.35	0.00	0.53	0.31	0.53 *	0.13	0.26	0.07	0.006	0.00	0.00	0.31 *	-0.20	-0.10	-0.13
B	163	C	-2.08	0.00	0.87	0.57	0.02	0.03	0.87 *	0.08	0.004	0.00	0.00	-0.28	-0.28	0.57 *	-0.36
B	164	C	1.48	0.00	0.14	0.19	0.27	0.34	0.14 *	0.24	0.005	0.00	0.00	-0.13	0.02 ?	0.19 *	-0.02
B	165	D	-0.41	0.00	0.55	0.42	0.06	0.31	0.08	0.55 *	0.004	0.00	0.00	-0.24	-0.12	-0.31	0.42 *
B	166	D	-1.85	0.00	0.84	0.53	0.04	0.09	0.03	0.84 *	0.004	0.00	0.00	-0.31	-0.25	-0.30	0.53 *
B	167	D	-2.76	0.00	0.93	0.55	0.02	0.02	0.93 *	0.08	0.004	0.00	0.00	-0.30	-0.28	-0.29	0.55 *
B	168	A	-1.64	0.00	0.81	0.55	0.81 *	0.07	0.04	0.08	0.005	0.00	0.00	0.55 *	-0.29	-0.27	-0.29
B	169	B	0.13	0.00	0.41	0.28	0.25	0.41 *	0.20	0.14	0.004	0.00	0.00	-0.09	0.28 *	-0.11	-0.12
B	170	B	-1.36	0.00	0.76	0.54	0.08	0.76 *	0.08	0.08	0.004	0.00	0.00	-0.27	0.54 *	-0.26	-0.28
B	171	D	-2.37	0.00	0.90	0.55	0.03	0.03	0.90 *	0.08	0.004	0.00	0.00	-0.28	-0.30	-0.29	0.55 *
B	172	D	-1.50	0.00	0.79	0.55	0.09	0.06	0.06	0.79 *	0.005	0.00	0.00	-0.40	-0.23	-0.19	0.55 *
B	173	D	-2.70	0.00	0.93	0.47	0.01	0.02	0.03	0.93 *	0.005	0.00	0.00	-0.24	-0.27	-0.24	0.47 *
B	174	C	-0.86	0.00	0.66	0.54	0.13	0.13	0.66 *	0.07	0.006	0.00	0.00	-0.25	-0.28	0.54 *	-0.25
B	175	A	-1.19	0.00	0.73	0.41	0.73 *	0.22	0.03	0.03	0.005	0.00	0.00	0.41 *	-0.23	-0.24	-0.23
B	176	B	-1.15	0.00	0.72	0.41	0.17	0.72 *	0.06	0.04	0.005	0.00	0.00	-0.18	0.41 *	-0.24	-0.21
B	177	B	1.06	0.00	0.21	0.17	0.51 ?	0.21 *	0.22	0.06	0.005	0.00	0.00	0.11 ?	0.17 *	-0.11	-0.27
B	178	D	-1.12	0.00	0.71	0.52	0.04	0.18	0.06	0.71 *	0.005	0.00	0.00	-0.30	-0.24	-0.29	0.52 *
B	179	B	-0.98	0.00	0.68	0.46	0.09	0.68 *	0.05	0.17	0.005	0.00	0.00	-0.26	0.46 *	-0.25	-0.17
B	180	A	-2.57	0.00	0.92	0.52	0.92 *	0.03	0.02	0.02	0.005	0.00	0.00	0.52 *	-0.30	-0.27	-0.25
B	181	C	-0.72	0.00	0.63	0.49	0.19	0.05	0.63 *	0.13	0.006	0.00	0.00	-0.27	-0.24	0.49 *	-0.19
B	182	C	-0.01	0.00	0.45	0.42	0.13	0.10	0.45 *	0.32	0.005	0.00	0.00	-0.14	-0.30	0.42 *	-0.12
B	183	D	-0.60	0.00	0.60	0.48	0.34	0.03	0.03	0.60 *	0.005	0.00	0.00	-0.28	-0.27	-0.26	0.48 *
B	184	A	-0.58	0.00	0.59	0.41	0.59 *	0.08	0.25	0.07	0.006	0.00	0.00	0.41 *	-0.22	-0.16	-0.23

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(RC)	(RD)	
C	159	C	-0.71	0.00	0.63	0.45	0.06	0.03	0.63	*	0.27	0.005	0.00	-0.29	-0.22	0.45	* -0.20	
C	160	B	-1.27	0.00	0.75	0.56	0.15	0.75	*	0.05	0.04	0.005	0.00	-0.37	0.56	*	-0.18	
C	161	A	-2.41	0.00	0.90	0.43	0.90	*	0.03	0.02	0.04	0.005	0.00	0.43	-0.26	-0.28	-0.13	
C	162	C	0.13	0.00	0.43	0.42	0.12	0.22	0.43	*	0.23	0.005	0.00	-0.18	-0.10	0.42	* -0.22	
C	163	A	-0.88	0.00	0.67	0.50	0.67	*	0.08	0.11	0.14	0.006	0.00	0.50	-0.21	-0.16	-0.32	
C	164	A	-0.76	0.00	0.64	0.44	0.64	*	0.08	0.11	0.17	0.005	0.00	0.44	-0.17	-0.35	-0.11	
C	165	B	-2.55	0.00	0.92	0.49	0.03	0.92	*	0.03	0.02	0.005	0.00	-0.25	0.49	*	-0.23	
C	166	A	-0.90	0.00	0.68	0.38	0.68	*	0.02	0.28	0.02	0.005	0.00	0.38	-0.26	-0.21	-0.22	
C	167	C	-0.46	0.00	0.58	0.47	0.32	0.04	0.58	*	0.07	0.006	0.00	-0.23	-0.25	0.47	* -0.24	
C	168	B	-1.96	0.00	0.86	0.50	0.03	0.86	*	0.04	0.08	0.005	0.00	-0.26	0.50	*	-0.28	
C	169	A	-1.68	0.00	0.82	0.59	0.82	*	0.06	0.05	0.07	0.006	0.00	0.59	-0.31	-0.31	-0.28	
C	170	C	0.19	0.00	0.42	0.27	0.08	0.39	0.42	*	0.12	0.006	0.00	-0.20	-0.06	0.27	* -0.10	
C	171	C	-0.37	0.00	0.55	0.29	0.08	0.07	0.55	*	0.30	0.005	0.00	-0.26	-0.20	0.29	* -0.02	
C	172	C	-2.10	0.00	0.87	0.48	0.06	0.04	0.87	*	0.02	0.005	0.00	-0.30	-0.23	0.48	* -0.16	
C	173	C	-1.31	0.00	0.76	0.52	0.04	0.05	0.76	*	0.14	0.006	0.00	-0.26	-0.28	0.52	* -0.25	
C	174	B	-0.69	0.00	0.63	0.35	0.20	0.63	*	0.10	0.07	0.006	0.00	-0.02	0.35	*	-0.33	
C	175	A	-1.95	0.00	0.86	0.62	0.86	*	0.08	0.04	0.02	0.006	0.00	0.62	-0.41	-0.28	-0.25	
C	176	B	1.11	0.00	0.21	0.19	0.49	0.21	*	0.23	0.06	0.006	0.00	0.07	0.19	*	-0.25	
C	177	C	-2.08	0.00	0.87	0.53	0.04	0.04	0.87	*	0.04	0.006	0.00	-0.28	-0.26	0.53	* -0.26	
C	178	B	1.04	0.00	0.23	0.14	0.32	0.23	*	0.22	0.23	0.008	0.00	-0.08	0.14	*	0.01	
C	179	D	-2.30	0.00	0.89	0.54	0.04	0.03	0.03	0.89	*	0.006	0.00	-0.27	-0.27	-0.27	0.54	*
C	180	C	-1.45	0.00	0.78	0.46	0.13	0.06	0.78	*	0.02	0.007	0.00	-0.21	-0.30	0.46	* -0.20	
C	181	A	-1.32	0.00	0.76	0.39	0.76	*	0.04	0.09	0.11	0.007	0.00	0.39	-0.28	-0.22	-0.09	
C	182	D	-1.74	0.00	0.83	0.55	0.06	0.04	0.06	0.83	*	0.007	0.00	-0.26	-0.29	-0.28	0.55	*
C	183	C	0.60	0.00	0.32	0.20	0.05	0.04	0.32	*	0.59	0.007	0.00	-0.22	-0.29	0.20	* 0.06	
C	184	A	-0.41	0.00	0.56	0.49	0.56	*	0.09	0.25	0.09	0.008	0.00	0.49	-0.18	-0.27	-0.19	

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(R(C)	(R(D)
D	159	B	1.52	0.00	0.14	0.02	0.44	0.14 *	0.29	0.12	0.004	0.00	0.04 ?	0.02 *	-0.06	0.03 ?	
D	160	A	-0.91	0.00	0.67	0.44	0.67 *	0.12	0.16	0.05	0.005	0.00	0.44 *	-0.19	-0.23	-0.23	
D	161	D	-1.11	0.00	0.71	0.53	0.22	0.03	0.04	0.71 *	0.004	0.00	-0.29	-0.28	-0.33	0.53 *	
D	162	C	-1.09	0.00	0.71	0.41	0.07	0.07	0.71 *	0.15	0.005	0.00	-0.28	-0.19	0.41 *	-0.14	
D	163	B	-0.86	0.00	0.66	0.49	0.14	0.66 *	0.15	0.05	0.004	0.00	-0.19	0.49 *	-0.29	-0.23	
D	164	A	-1.77	0.00	0.83	0.52	0.83 *	0.07	0.05	0.05	0.004	0.00	0.52 *	-0.22	-0.26	-0.35	
D	165	C	-1.45	0.00	0.78	0.58	0.13	0.07	0.78 *	0.03	0.004	0.00	-0.42	-0.19	0.58 *	-0.23	
D	166	B	-0.93	0.00	0.67	0.27	0.04	0.67 *	0.26	0.03	0.004	0.00	-0.29	0.27 *	-0.03	-0.28	
D	167	B	-2.63	0.00	0.92	0.44	0.02	0.92 *	0.03	0.03	0.004	0.00	-0.23	0.44 *	-0.26	-0.20	
D	168	D	-2.38	0.00	0.90	0.59	0.05	0.02	0.03	0.90 *	0.004	0.00	-0.36	-0.29	-0.28	0.59 *	
D	169	D	-0.69	0.00	0.62	0.55	0.22	0.05	0.12	0.62 *	0.005	0.00	-0.31	-0.28	-0.22	0.55 *	
D	170	C	-1.13	0.00	0.72	0.49	0.07	0.14	0.72 *	0.07	0.005	0.00	-0.23	-0.23	0.49 *	-0.25	
D	171	A	0.32	0.00	0.37	0.30	0.37 *	0.46	0.05	0.12	0.004	0.00	0.30 *	-0.08	-0.20	-0.14	
D	172	A	-2.01	0.00	0.86	0.45	0.86 *	0.02	0.04	0.08	0.004	0.00	0.45 *	-0.21	-0.31	-0.21	
D	173	D	-2.23	0.00	0.88	0.50	0.04	0.03	0.04	0.88 *	0.005	0.00	-0.26	-0.29	-0.23	0.50 *	
D	174	D	-1.64	0.00	0.81	0.60	0.07	0.09	0.04	0.81 *	0.005	0.00	-0.37	-0.25	-0.31	0.60 *	
D	175	B	-1.70	0.00	0.82	0.59	0.07	0.82 *	0.07	0.05	0.005	0.00	-0.37	0.59 *	-0.23	-0.32	
D	176	A	-0.55	0.00	0.59	0.26	0.59 *	0.31	0.08	0.03	0.005	0.00	0.26 *	0.02 ?	-0.29	-0.26	
D	177	D	-1.03	0.00	0.70	0.55	0.16	0.09	0.05	0.70 *	0.005	0.00	-0.21	-0.33	-0.29	0.55 *	
D	178	D	-0.11	0.00	0.48	0.23	0.07	0.17	0.27	0.48 *	0.006	0.00	-0.20	-0.09	-0.03	0.23 *	
D	179	D	-0.93	0.00	0.67	0.45	0.11	0.07	0.14	0.67 *	0.005	0.00	-0.18	-0.31	-0.18	0.45 *	
D	180	C	-1.59	0.00	0.80	0.52	0.06	0.08	0.80 *	0.06	0.005	0.00	-0.30	-0.21	0.52 *	-0.27	
D	181	D	0.03	0.00	0.44	0.40	0.15	0.30	0.10	0.44 *	0.007	0.00	-0.12	-0.15	-0.22	0.40 *	
D	182	A	-2.43	0.00	0.90	0.60	0.90 *	0.04	0.03	0.02	0.006	0.00	0.60 *	-0.37	-0.32	-0.24	
D	183	B	-1.76	0.00	0.83	0.49	0.10	0.83 *	0.04	0.03	0.006	0.00	-0.21	0.49 *	-0.32	-0.26	
D	184	D	-0.99	0.00	0.69	0.49	0.07	0.12	0.12	0.69 *	0.007	0.00	-0.25	-0.21	-0.24	0.49 *	

Appendix H: 2001 PSSA Grade Five Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(R(C)	(R(D)
E	159	A	-2.00	0.00	0.86	0.59	0.86 *	0.02	0.02	0.09	0.04	0.00	0.59 *	-0.28	-0.24	-0.40	
E	160	A	-2.32	0.00	0.89	0.38	0.89 *	0.03	0.02	0.05	0.04	0.00	0.38 *	-0.24	-0.29	-0.10	
E	161	C	-0.76	0.00	0.63	0.43	0.05	0.03	0.63 *	0.29	0.005	0.00	-0.28	-0.22	0.43 *	-0.21	
E	162	C	0.03	0.00	0.44	0.40	0.12	0.22	0.44 *	0.23	0.005	0.00	-0.20	-0.10	0.40 *	-0.19	
E	163	A	-0.90	0.00	0.66	0.50	0.66 *	0.08	0.11	0.14	0.005	0.00	0.50 *	-0.20	-0.17	-0.33	
E	164	A	-1.08	0.00	0.70	0.46	0.70 *	0.06	0.10	0.14	0.004	0.00	0.46 *	-0.19	-0.38	-0.12	
E	165	C	-1.99	0.00	0.86	0.31	0.10	0.03	0.86 *	0.01	0.004	0.00	-0.16	-0.18	0.31 *	-0.17	
E	166	A	-2.34	0.00	0.90	0.57	0.90 *	0.04	0.03	0.03	0.004	0.00	0.57 *	-0.30	-0.29	-0.29	
E	167	C	-0.49	0.00	0.57	0.46	0.32	0.04	0.57 *	0.07	0.005	0.00	-0.20	-0.27	0.46 *	-0.26	
E	168	C	1.03	0.00	0.21	0.04	0.54 ?	0.03	0.21 *	0.22	0.004	0.00	0.07 ?	-0.24	0.04 *	0.00	
E	169	A	-1.01	0.00	0.69	0.56	0.69 *	0.11	0.13	0.07	0.004	0.00	0.56 *	-0.24	-0.27	-0.30	
E	170	D	-1.47	0.00	0.78	0.44	0.05	0.07	0.10	0.78 *	0.004	0.00	-0.27	-0.26	-0.16	0.44 *	
E	171	D	-1.45	0.00	0.78	0.49	0.03	0.04	0.15	0.78 *	0.004	0.00	-0.24	-0.28	-0.26	0.49 *	
E	172	C	-1.27	0.00	0.74	0.53	0.09	0.06	0.74 *	0.11	0.005	0.00	-0.26	-0.27	0.53 *	-0.27	
E	173	A	-2.57	0.00	0.92	0.52	0.92 *	0.03	0.03	0.02	0.004	0.00	0.52 *	-0.32	-0.26	-0.22	
E	174	C	-1.16	0.00	0.72	0.50	0.10	0.06	0.72 *	0.12	0.005	0.00	-0.24	-0.31	0.50 *	-0.22	
E	175	A	-0.78	0.00	0.64	0.40	0.64 *	0.04	0.21	0.11	0.005	0.00	0.40 *	-0.23	-0.11	-0.28	
E	176	C	-0.79	0.00	0.64	0.46	0.18	0.11	0.64 *	0.07	0.005	0.00	-0.30	-0.07	0.46 *	-0.26	
E	177	A	-0.72	0.00	0.62	0.38	0.62 *	0.19	0.07	0.11	0.005	0.00	0.38 *	-0.12	-0.27	-0.18	
E	178	B	0.91	0.00	0.24	0.12	0.28	0.24 *	0.26	0.22	0.006	0.00	-0.09	0.12 *	0.00	0.02 ?	
E	179	D	-1.11	0.00	0.71	0.52	0.04	0.18	0.06	0.71 *	0.005	0.00	-0.31	-0.23	-0.30	0.52 *	
E	180	C	-1.45	0.00	0.78	0.55	0.06	0.11	0.78 *	0.05	0.005	0.00	-0.29	-0.34	0.55 *	-0.19	
E	181	B	-2.05	0.00	0.86	0.48	0.07	0.86 *	0.04	0.03	0.005	0.00	-0.28	0.48 *	-0.26	-0.19	
E	182	B	-1.67	0.00	0.81	0.53	0.07	0.81 *	0.08	0.04	0.006	0.00	-0.26	0.53 *	-0.26	-0.30	
E	183	A	-0.89	0.00	0.66	0.44	0.66 *	0.06	0.08	0.19	0.006	0.00	0.44 *	-0.25	-0.28	-0.15	
E	184	C	-0.80	0.00	0.64	0.56	0.23	0.04	0.64 *	0.08	0.007	0.00	-0.31	-0.21	0.56 *	-0.30	

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(RC)	(RD)
F	159	A	0.78	0.00	0.29	0.32	0.29	0.21	0.22	0.27	0.27	0.007	0.00	0.32	0.00	0.15	-0.15
F	160	D	-2.93	0.00	0.94	0.39	0.01	0.01	0.03	0.94	0.94	0.004	0.00	-0.21	-0.20	-0.18	0.39
F	161	C	-1.45	0.00	0.79	0.56	0.12	0.06	0.79	0.04	0.04	0.005	0.00	-0.31	-0.28	0.56	-0.27
F	162	B	-0.24	0.00	0.53	0.41	0.38	0.53	0.03	0.06	0.06	0.005	0.00	-0.20	0.41	-0.25	-0.22
F	163	C	-1.16	0.00	0.74	0.54	0.16	0.06	0.74	0.04	0.04	0.005	0.00	-0.30	-0.27	0.54	-0.25
F	164	B	0.77	0.00	0.29	0.28	0.43	0.29	0.21	0.06	0.06	0.005	0.00	-0.03	0.28	-0.10	-0.24
F	165	D	0.48	0.00	0.35	0.26	0.07	0.39	0.18	0.35	0.35	0.005	0.00	-0.20	-0.02	-0.13	0.26
F	166	A	-2.74	0.00	0.93	0.48	0.93	0.02	0.03	0.02	0.02	0.004	0.00	0.48	-0.23	-0.28	-0.23
F	167	A	-2.82	0.00	0.94	0.48	0.94	0.02	0.02	0.02	0.02	0.004	0.00	0.48	-0.26	-0.24	-0.24
F	168	D	-0.75	0.00	0.65	0.49	0.25	0.08	0.02	0.65	0.65	0.005	0.00	-0.28	-0.23	-0.24	0.49
F	169	B	-1.29	0.00	0.76	0.47	0.15	0.76	0.06	0.03	0.03	0.005	0.00	-0.20	0.47	-0.31	-0.24
F	170	B	-1.09	0.00	0.72	0.49	0.08	0.72	0.15	0.04	0.04	0.005	0.00	-0.20	0.49	-0.29	-0.24
F	171	B	-1.61	0.00	0.81	0.60	0.06	0.81	0.04	0.09	0.09	0.005	0.00	-0.31	0.60	-0.24	-0.37
F	172	C	-0.95	0.00	0.69	0.33	0.20	0.06	0.69	0.04	0.04	0.005	0.00	-0.15	-0.20	0.33	-0.16
F	173	C	-1.89	0.00	0.85	0.47	0.03	0.08	0.85	0.04	0.04	0.005	0.00	-0.27	-0.22	0.47	-0.24
F	174	D	-0.57	0.00	0.61	0.34	0.17	0.05	0.17	0.61	0.61	0.005	0.00	-0.24	-0.23	-0.03	0.34
F	175	A	-0.47	0.00	0.58	0.37	0.58	0.14	0.20	0.07	0.07	0.006	0.00	0.37	-0.19	-0.14	-0.17
F	176	B	0.30	0.00	0.40	0.25	0.23	0.40	0.22	0.15	0.15	0.006	0.00	-0.07	0.25	-0.12	-0.07
F	177	D	-0.13	0.00	0.50	0.32	0.07	0.34	0.09	0.50	0.50	0.006	0.00	-0.20	-0.04	-0.26	0.32
F	178	C	-0.92	0.00	0.69	0.52	0.24	0.04	0.69	0.03	0.03	0.006	0.00	-0.35	-0.20	0.52	-0.20
F	179	C	1.58	0.00	0.15	0.23	0.24	0.41	0.15	0.20	0.20	0.007	0.00	-0.22	0.01	0.23	0.06
F	180	D	-0.38	0.00	0.56	0.45	0.08	0.28	0.07	0.56	0.56	0.006	0.00	-0.23	-0.15	-0.30	0.45
F	181	B	-0.77	0.00	0.65	0.52	0.18	0.65	0.12	0.04	0.04	0.006	0.00	-0.31	0.52	-0.20	-0.23
F	182	A	-1.02	0.00	0.71	0.47	0.71	0.04	0.08	0.17	0.17	0.006	0.00	0.47	-0.28	-0.23	-0.22
F	183	D	-1.01	0.00	0.70	0.47	0.13	0.08	0.08	0.70	0.70	0.006	0.00	-0.21	-0.21	-0.25	0.47
F	184	C	-1.01	0.00	0.71	0.61	0.15	0.08	0.71	0.06	0.06	0.007	0.00	-0.33	-0.26	0.61	-0.31

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(RC)	(RD)
G	159	B	-2.12	0.00	0.88	0.43	0.03	0.88*	0.05	0.03	0.03	0.006	0.00	-0.22	0.43*	-0.18	-0.25
G	160	C	-2.19	0.00	0.89	0.48	0.05	0.04	0.89*	0.02	0.02	0.005	0.00	-0.28	-0.23	0.48*	-0.19
G	161	A	-2.73	0.00	0.93	0.47	0.93*	0.02	0.02	0.03	0.03	0.005	0.00	0.47*	-0.23	-0.24	-0.24
G	162	C	-0.24	0.00	0.52	0.39	0.07	0.36	0.52*	0.06	0.06	0.006	0.00	-0.19	-0.14	0.39*	-0.27
G	163	B	1.16	0.00	0.20	0.17	0.56?	0.20*	0.19	0.06	0.06	0.006	0.00	0.07?	0.17*	-0.09	-0.22
G	164	A	-1.00	0.00	0.70	0.40	0.70*	0.24	0.03	0.03	0.03	0.006	0.00	0.40*	-0.21	-0.22	-0.23
G	165	D	-0.80	0.00	0.65	0.42	0.06	0.12	0.17	0.65*	0.06	0.006	0.00	-0.22	-0.20	-0.17	0.42*
G	166	A	-2.45	0.00	0.91	0.47	0.91*	0.03	0.02	0.03	0.03	0.005	0.00	0.47*	-0.25	-0.25	-0.21
G	167	C	-1.62	0.00	0.81	0.51	0.05	0.09	0.81*	0.05	0.05	0.005	0.00	-0.28	-0.30	0.51*	-0.18
G	168	D	0.10	0.00	0.43	0.38	0.18	0.28	0.11	0.43*	0.05	0.006	0.00	-0.10	-0.17	-0.18	0.38*
G	169	C	-0.80	0.00	0.65	0.51	0.05	0.18	0.65*	0.12	0.12	0.006	0.00	-0.19	-0.23	0.51*	-0.30
G	170	D	-0.93	0.00	0.68	0.45	0.10	0.16	0.06	0.68*	0.06	0.005	0.00	-0.22	-0.22	-0.20	0.45*
G	171	D	-0.81	0.00	0.65	0.50	0.29	0.03	0.03	0.65*	0.06	0.005	0.00	-0.33	-0.23	-0.24	0.50*
G	172	A	-0.90	0.00	0.67	0.45	0.67*	0.11	0.16	0.05	0.05	0.006	0.00	0.45*	-0.19	-0.25	-0.19
G	173	B	1.68	0.00	0.12	-0.01	0.46	0.12*	0.29	0.13	0.13	0.006	0.00	0.09?	-0.01*	-0.07	0.03?
G	174	D	-1.00	0.00	0.70	0.56	0.22	0.04	0.04	0.70*	0.06	0.006	0.00	-0.30	-0.27	-0.33	0.56*
G	175	C	-0.88	0.00	0.67	0.38	0.09	0.08	0.67*	0.15	0.15	0.006	0.00	-0.23	-0.19	0.38*	-0.12
G	176	B	-0.68	0.00	0.62	0.49	0.16	0.62*	0.16	0.05	0.05	0.007	0.00	-0.18	0.49*	-0.29	-0.21
G	177	C	-1.85	0.00	0.84	0.58	0.02	0.03	0.84*	0.10	0.10	0.006	0.00	-0.27	-0.28	0.58*	-0.35
G	178	D	-1.62	0.00	0.81	0.50	0.03	0.05	0.10	0.81*	0.06	0.006	0.00	-0.29	-0.29	-0.20	0.50*
G	179	C	1.11	0.00	0.21	0.15	0.13	0.17	0.21*	0.49	0.06	0.007	0.00	-0.10	-0.14	0.15*	0.09?
G	180	A	-0.87	0.00	0.67	0.38	0.67*	0.03	0.28	0.02	0.02	0.006	0.00	0.38*	-0.26	-0.18	-0.23
G	181	D	-1.41	0.00	0.78	0.56	0.07	0.07	0.08	0.78*	0.06	0.007	0.00	-0.27	-0.29	-0.26	0.56*
G	182	A	-0.98	0.00	0.69	0.60	0.69*	0.10	0.10	0.11	0.06	0.007	0.00	0.60*	-0.30	-0.28	-0.27
G	183	A	-2.55	0.00	0.92	0.52	0.92*	0.03	0.03	0.02	0.02	0.007	0.00	0.52*	-0.29	-0.28	-0.21
G	184	B	-0.86	0.00	0.66	0.42	0.21	0.66*	0.07	0.06	0.06	0.007	0.00	-0.11	0.42*	-0.27	-0.30

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(RC)	(RD)
H	159	C	-1.66	0.00	0.80	0.44	0.44	0.04	0.04	0.80 *	0.12	0.004	0.00	-0.24	-0.25	0.44 *	-0.22
H	160	A	-0.93	0.00	0.65	0.41	0.41	0.65 *	0.15	0.07	0.13	0.006	0.00	0.41 *	-0.16	-0.24	-0.19
H	161	C	-1.03	0.00	0.67	0.47	0.47	0.08	0.15	0.67 *	0.09	0.006	0.00	-0.17	-0.28	0.47 *	-0.21
H	162	A	-0.97	0.00	0.66	0.38	0.38	0.66 *	0.03	0.20	0.11	0.004	0.00	0.38 *	-0.21	-0.11	-0.29
H	163	B	-1.46	0.00	0.77	0.40	0.40	0.15	0.77 *	0.05	0.03	0.005	0.00	-0.18	0.40 *	-0.25	-0.20
H	164	D	-1.24	0.00	0.72	0.51	0.51	0.13	0.10	0.05	0.72 *	0.004	0.00	-0.19	-0.31	-0.28	0.51 *
H	165	D	-1.21	0.00	0.71	0.51	0.51	0.03	0.18	0.07	0.71 *	0.004	0.00	-0.28	-0.25	-0.28	0.51 *
H	166	D	-0.71	0.00	0.60	0.42	0.42	0.16	0.07	0.18	0.60 *	0.004	0.00	-0.16	-0.28	-0.16	0.42 *
H	167	C	-1.50	0.00	0.77	0.47	0.47	0.07	0.09	0.77 *	0.06	0.004	0.00	-0.28	-0.16	0.47 *	-0.27
H	168	C	-0.13	0.00	0.44	0.41	0.41	0.15	0.12	0.44 *	0.29	0.005	0.00	-0.13	-0.31	0.41 *	-0.10
H	169	C	-2.35	0.00	0.90	0.54	0.54	0.04	0.04	0.90 *	0.03	0.005	0.00	-0.28	-0.29	0.54 *	-0.28
H	170	D	-1.12	0.00	0.69	0.50	0.50	0.07	0.12	0.11	0.69 *	0.004	0.00	-0.24	-0.25	-0.23	0.50 *
H	171	C	-0.58	0.00	0.56	0.32	0.32	0.25	0.10	0.56 *	0.08	0.005	0.00	-0.03	-0.24	0.32 *	-0.23
H	172	C	-2.23	0.00	0.88	0.58	0.58	0.07	0.03	0.88 *	0.02	0.004	0.00	-0.41	-0.29	0.58 *	-0.17
H	173	B	-1.34	0.00	0.74	0.55	0.55	0.16	0.74 *	0.06	0.04	0.005	0.00	-0.33	0.55 *	-0.28	-0.21
H	174	C	-1.87	0.00	0.84	0.59	0.59	0.05	0.09	0.84 *	0.02	0.005	0.00	-0.35	-0.32	0.59 *	-0.26
H	175	A	-1.71	0.00	0.81	0.53	0.53	0.81 *	0.09	0.06	0.04	0.005	0.00	0.53 *	-0.25	-0.27	-0.30
H	176	A	-0.93	0.00	0.65	0.51	0.51	0.65 *	0.08	0.12	0.14	0.006	0.00	0.51 *	-0.22	-0.18	-0.31
H	177	C	-0.25	0.00	0.47	0.40	0.40	0.11	0.22	0.47 *	0.20	0.005	0.00	-0.22	-0.11	0.40 *	-0.18
H	178	A	-2.09	0.00	0.87	0.59	0.59	0.87 *	0.05	0.03	0.05	0.004	0.00	0.59 *	-0.29	-0.29	-0.33
H	179	C	-1.90	0.00	0.84	0.36	0.36	0.10	0.04	0.84 *	0.01	0.005	0.00	-0.18	-0.22	0.36 *	-0.19
H	180	B	-0.91	0.00	0.64	0.25	0.25	0.04	0.64 *	0.28	0.03	0.005	0.00	-0.27	0.25 *	0.00	-0.27
H	181	D	-0.87	0.00	0.63	0.60	0.60	0.21	0.05	0.10	0.63 *	0.005	0.00	-0.32	-0.33	-0.24	0.60 *
H	182	A	-1.61	0.00	0.79	0.57	0.57	0.79 *	0.09	0.04	0.08	0.006	0.00	0.57 *	-0.31	-0.28	-0.28
H	183	C	-1.20	0.00	0.71	0.50	0.50	0.07	0.15	0.71 *	0.07	0.006	0.00	-0.28	-0.24	0.50 *	-0.22
H	184	B	-1.95	0.00	0.85	0.51	0.51	0.06	0.85 *	0.03	0.06	0.006	0.00	-0.23	0.51 *	-0.30	-0.26

Appendix H: 2001 PSSA Grade Five Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(RC)	(RD)
I	159	B	-0.39	0.00	0.55	0.36	0.39	0.55 *	0.04	0.02	0.02	0.004	0.00	-0.17	0.36 *	-0.28	-0.21
I	160	A	-2.64	0.00	0.92	0.47	0.92 *	0.03	0.02	0.03	0.03	0.004	0.00	0.47 *	-0.24	-0.22	-0.26
I	161	A	-0.53	0.00	0.58	0.53	0.58 *	0.25	0.11	0.05	0.05	0.005	0.00	0.53 *	-0.30	-0.30	-0.11
I	162	C	-0.14	0.00	0.49	0.38	0.08	0.38	0.49 *	0.06	0.06	0.005	0.00	-0.27	-0.09	0.38 *	-0.25
I	163	A	-1.53	0.00	0.79	0.49	0.79 *	0.08	0.07	0.05	0.05	0.006	0.00	0.49 *	-0.29	-0.27	-0.16
I	164	A	-2.25	0.00	0.89	0.53	0.89 *	0.04	0.02	0.05	0.05	0.005	0.00	0.53 *	-0.24	-0.27	-0.31
I	165	D	0.39	0.00	0.36	0.22	0.07	0.40	0.17	0.36 *	0.05	0.005	0.00	-0.21	-0.01	-0.09	0.22 *
I	166	B	-1.63	0.00	0.81	0.52	0.03	0.81 *	0.06	0.10	0.10	0.004	0.00	-0.24	0.52 *	-0.22	-0.33
I	167	A	-1.18	0.00	0.73	0.42	0.73 *	0.19	0.05	0.02	0.02	0.005	0.00	0.42 *	-0.16	-0.36	-0.17
I	168	B	-1.23	0.00	0.74	0.48	0.05	0.74 *	0.07	0.13	0.13	0.005	0.00	-0.22	0.48 *	-0.33	-0.18
I	169	D	-0.73	0.00	0.63	0.44	0.28	0.03	0.05	0.63 *	0.05	0.005	0.00	-0.20	-0.24	-0.31	0.44 *
I	170	C	-0.88	0.00	0.67	0.45	0.12	0.06	0.67 *	0.14	0.14	0.005	0.00	-0.16	-0.30	0.45 *	-0.20
I	171	B	-0.34	0.00	0.54	0.40	0.29	0.54 *	0.13	0.04	0.04	0.005	0.00	-0.19	0.40 *	-0.15	-0.24
I	172	C	-2.02	0.00	0.86	0.44	0.04	0.07	0.86 *	0.03	0.03	0.005	0.00	-0.32	-0.17	0.44 *	-0.18
I	173	D	-0.50	0.00	0.58	0.35	0.19	0.05	0.18	0.58 *	0.05	0.006	0.00	-0.22	-0.30	-0.01	0.35 *
I	174	C	-1.85	0.00	0.84	0.57	0.06	0.08	0.84 *	0.02	0.02	0.005	0.00	-0.34	-0.31	0.57 *	-0.21
I	175	C	0.02	0.00	0.45	0.43	0.13	0.20	0.45 *	0.21	0.21	0.006	0.00	-0.27	-0.10	0.43 *	-0.16
I	176	D	-1.63	0.00	0.81	0.59	0.10	0.06	0.03	0.81 *	0.05	0.005	0.00	-0.35	-0.26	-0.28	0.59 *
I	177	D	-0.11	0.00	0.48	0.36	0.08	0.34	0.09	0.48 *	0.05	0.006	0.00	-0.17	-0.06	-0.30	0.36 *
I	178	C	1.06	0.00	0.21	0.16	0.16	0.14	0.21 *	0.48	0.08	0.008	0.00	-0.11	-0.12	0.16 *	0.06 ?
I	179	D	-2.43	0.00	0.91	0.56	0.04	0.02	0.03	0.91 *	0.05	0.005	0.00	-0.29	-0.24	-0.34	0.56 *
I	180	D	-1.28	0.00	0.75	0.49	0.03	0.06	0.15	0.75 *	0.05	0.006	0.00	-0.28	-0.34	-0.18	0.49 *
I	181	B	-0.76	0.00	0.64	0.53	0.19	0.64 *	0.12	0.04	0.04	0.006	0.00	-0.31	0.53 *	-0.19	-0.29
I	182	A	-1.14	0.00	0.72	0.45	0.72 *	0.03	0.09	0.15	0.05	0.006	0.00	0.45 *	-0.28	-0.21	-0.21
I	183	B	-1.32	0.00	0.76	0.54	0.07	0.76 *	0.11	0.05	0.05	0.006	0.00	-0.23	0.54 *	-0.30	-0.27
I	184	D	-1.52	0.00	0.79	0.52	0.06	0.06	0.08	0.79 *	0.05	0.007	0.00	-0.24	-0.36	-0.19	0.52 *

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(RC)	(RD)
J	159	D	-1.50	0.00	0.79	0.56	0.09	0.07	0.06	0.79	*	0.005	0.00	-0.38	-0.26	-0.20	0.56
J	160	D	-2.78	0.00	0.94	0.43	0.01	0.02	0.03	0.94	*	0.004	0.00	-0.21	-0.25	-0.21	0.43
J	161	C	-0.89	0.00	0.66	0.54	0.14	0.13	0.66	*	0.06	0.006	0.00	-0.26	-0.28	0.54	-0.24
J	162	A	-1.20	0.00	0.73	0.40	0.73	*	0.22	0.02	0.02	0.004	0.00	0.40	-0.23	-0.23	-0.22
J	163	B	-1.22	0.00	0.73	0.39	0.17	0.73	*	0.05	0.04	0.005	0.00	-0.18	0.39	-0.23	-0.20
J	164	B	1.13	0.00	0.19	0.16	0.53	?	0.19	*	0.06	0.005	0.00	0.10	0.16	-0.09	-0.26
J	165	D	-1.11	0.00	0.71	0.53	0.04	0.18	0.07	0.71	*	0.004	0.00	-0.29	-0.25	-0.30	0.53
J	166	B	-1.07	0.00	0.70	0.45	0.08	0.70	*	0.05	0.17	0.004	0.00	-0.26	0.45	-0.28	-0.17
J	167	A	-2.62	0.00	0.92	0.54	0.92	*	0.02	0.03	0.02	0.004	0.00	0.54	-0.29	-0.29	-0.26
J	168	C	-0.80	0.00	0.64	0.50	0.18	0.05	0.64	*	0.13	0.005	0.00	-0.27	-0.26	0.50	-0.20
J	169	C	-0.03	0.00	0.45	0.41	0.14	0.10	0.45	*	0.30	0.006	0.00	-0.13	-0.29	0.41	-0.12
J	170	D	-0.72	0.00	0.62	0.51	0.31	0.03	0.03	0.62	*	0.005	0.00	-0.30	-0.27	-0.26	0.51
J	171	A	-0.63	0.00	0.60	0.41	0.60	*	0.07	0.25	0.07	0.005	0.00	0.41	-0.25	-0.15	-0.22
J	172	C	-2.09	0.00	0.87	0.59	0.07	0.03	0.87	*	0.02	0.004	0.00	-0.40	-0.30	0.59	-0.19
J	173	C	-1.05	0.00	0.70	0.33	0.20	0.06	0.70	*	0.04	0.004	0.00	-0.12	-0.23	0.33	-0.18
J	174	B	-0.77	0.00	0.63	0.36	0.04	0.63	*	0.06	0.27	0.005	0.00	-0.27	0.36	-0.29	-0.09
J	175	A	-0.43	0.00	0.55	0.36	0.55	*	0.12	0.26	0.07	0.006	0.00	0.36	-0.21	-0.10	-0.19
J	176	C	-1.93	0.00	0.85	0.61	0.02	0.04	0.85	*	0.09	0.005	0.00	-0.29	-0.31	0.61	-0.36
J	177	C	1.40	0.00	0.15	0.18	0.28	0.33	0.15	*	0.24	0.006	0.00	-0.13	0.04	0.18	-0.01
J	178	D	-0.41	0.00	0.55	0.41	0.07	0.30	0.08	0.55	*	0.005	0.00	-0.26	-0.09	-0.30	0.41
J	179	D	-1.72	0.00	0.82	0.59	0.05	0.09	0.04	0.82	*	0.004	0.00	-0.37	-0.27	-0.29	0.59
J	180	D	-2.55	0.00	0.92	0.58	0.03	0.03	0.03	0.92	*	0.004	0.00	-0.31	-0.30	-0.31	0.58
J	181	A	-1.62	0.00	0.81	0.57	0.81	*	0.08	0.04	0.07	0.005	0.00	0.57	-0.31	-0.29	-0.28
J	182	B	0.15	0.00	0.40	0.25	0.25	0.40	*	0.21	0.13	0.006	0.00	-0.08	0.25	-0.11	-0.09
J	183	B	-1.35	0.00	0.76	0.56	0.08	0.76	*	0.09	0.07	0.005	0.00	-0.28	0.56	-0.26	-0.29
J	184	D	-2.13	0.00	0.88	0.58	0.03	0.04	0.04	0.88	*	0.006	0.00	-0.28	-0.31	-0.31	0.58

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	(R(C)	(R(D)
W	74	C	-0.24	0.00	0.55	0.45	0.10	0.26	0.55 *	0.09	0.001	0.00	-0.24	-0.09	0.45 *	-0.37	
W	75	A	-1.63	0.00	0.80	0.50	0.80 *	0.03	0.13	0.04	0.001	0.00	0.50 *	-0.26	-0.34	-0.20	
W	76	A	-0.71	0.00	0.64	0.35	0.64 *	0.09	0.03	0.24	0.001	0.00	0.35 *	-0.18	-0.18	-0.20	
W	77	C	0.01	0.00	0.49	0.46	0.10	0.10	0.49 *	0.30	0.001	0.00	-0.31	-0.34	0.46 *	-0.07	
W	78	D	-1.15	0.00	0.72	0.52	0.19	0.04	0.05	0.72 *	0.002	0.00	-0.31	-0.29	-0.25	0.52 *	
W	79	B	-1.58	0.00	0.79	0.42	0.07	0.79 *	0.05	0.09	0.001	0.00	-0.21	0.42 *	-0.25	-0.22	
W	80	A	-0.36	0.00	0.57	0.30	0.57 *	0.12	0.06	0.25	0.001	0.00	0.30 *	-0.24	-0.31	0.01 ?	
W	81	B	-1.16	0.00	0.73	0.51	0.07	0.73 *	0.18	0.02	0.001	0.00	-0.30	0.51 *	-0.31	-0.22	
W	82	C	-0.19	0.00	0.53	0.45	0.15	0.16	0.53 *	0.16	0.001	0.00	-0.19	-0.19	0.45 *	-0.23	
W	83	C	-0.38	0.00	0.57	0.44	0.09	0.05	0.57 *	0.29	0.001	0.00	-0.27	-0.26	0.44 *	-0.19	
W	84	B	-1.37	0.00	0.76	0.42	0.10	0.76 *	0.09	0.05	0.001	0.00	-0.12	0.42 *	-0.24	-0.32	
W	85	A	-2.18	0.00	0.87	0.43	0.87 *	0.05	0.05	0.03	0.002	0.00	0.43 *	-0.26	-0.25	-0.18	
W	86	D	-1.30	0.00	0.75	0.45	0.10	0.05	0.10	0.75 *	0.001	0.00	-0.27	-0.32	-0.14	0.45 *	
W	87	B	-1.40	0.00	0.77	0.42	0.12	0.77 *	0.07	0.04	0.002	0.00	-0.29	0.42 *	-0.16	-0.20	
W	88	C	-1.17	0.00	0.73	0.53	0.12	0.09	0.73 *	0.07	0.002	0.00	-0.33	-0.22	0.53 *	-0.26	
W	89	B	-0.76	0.00	0.65	0.48	0.13	0.65 *	0.12	0.10	0.002	0.00	-0.25	0.48 *	-0.18	-0.29	
W	90	D	-1.06	0.00	0.71	0.50	0.11	0.07	0.12	0.71 *	0.001	0.00	-0.39	-0.27	-0.12	0.50 *	
W	91	A	-1.03	0.00	0.70	0.29	0.70 *	0.18	0.05	0.07	0.002	0.00	0.29 *	-0.08	-0.26	-0.18	
W	92	C	-1.43	0.00	0.77	0.21	0.15	0.03	0.77 *	0.05	0.002	0.00	-0.04	-0.26	0.21 *	-0.15	
W	93	A	-0.84	0.00	0.67	0.53	0.67 *	0.16	0.13	0.04	0.002	0.00	0.53 *	-0.27	-0.28	-0.29	
W	94	B	-0.35	0.00	0.57	0.34	0.08	0.57 *	0.09	0.26	0.004	0.00	-0.19	0.34 *	-0.24	-0.12	
W	95	D	-0.17	0.00	0.53	0.48	0.10	0.11	0.26	0.53 *	0.002	0.00	-0.20	-0.31	-0.19	0.48 *	
W	96	D	-0.35	0.00	0.57	0.29	0.06	0.15	0.22	0.57 *	0.002	0.00	-0.23	-0.11	-0.11	0.29 *	
W	97	A	-1.22	0.00	0.74	0.46	0.74 *	0.06	0.04	0.16	0.002	0.00	0.46 *	-0.29	-0.25	-0.22	
W	98	A	0.00	0.00	0.50	0.22	0.50 *	0.23	0.16	0.11	0.003	0.00	0.22 *	0.00	-0.18	-0.13	
W	99	C	-2.34	0.00	0.88	0.38	0.05	0.04	0.88 *	0.02	0.003	0.00	-0.21	-0.21	0.38 *	-0.22	
W	101	A	-0.69	0.00	0.64	0.31	0.64 *	0.05	0.04	0.27	0.002	0.00	0.31 *	-0.22	-0.20	-0.14	
W	102	B	-1.11	0.00	0.72	0.46	0.05	0.72 *	0.15	0.08	0.001	0.00	-0.26	0.46 *	-0.29	-0.17	
W	103	B	-1.30	0.00	0.75	0.35	0.14	0.75 *	0.07	0.04	0.001	0.00	-0.10	0.35 *	-0.31	-0.19	
W	104	D	-0.68	0.00	0.64	0.46	0.11	0.09	0.16	0.64 *	0.003	0.00	-0.18	-0.22	-0.27	0.46 *	
W	105	A	-1.47	0.00	0.78	0.50	0.78 *	0.09	0.08	0.06	0.001	0.00	0.50 *	-0.23	-0.26	-0.32	
W	106	B	-0.85	0.00	0.67	0.43	0.17	0.67 *	0.11	0.05	0.001	0.00	-0.28	0.43 *	-0.13	-0.24	
W	107	C	-1.22	0.00	0.74	0.55	0.08	0.14	0.74 *	0.05	0.001	0.00	-0.24	-0.35	0.55 *	-0.27	
W	108	C	-1.59	0.00	0.79	0.54	0.08	0.06	0.79 *	0.07	0.001	0.00	-0.31	-0.31	0.54 *	-0.25	
W	109	B	-0.75	0.00	0.65	0.40	0.16	0.65 *	0.09	0.10	0.001	0.00	-0.04	0.40 *	-0.25	-0.35	
W	110	B	0.56	0.00	0.38	0.17	0.26	0.38 *	0.25	0.11	0.002	0.00	-0.11	0.17 *	0.03 ?	-0.14	

Appendix H: 2001 PSSA Grade Five Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	(RA)	(RB)	R(C)	R(D)	
W	111	D	0.39	0.00	0.41	0.35	0.36	0.07	0.16	0.41	*	0.001	0.00	-0.10	-0.17	-0.22	0.35	*
W	112	D	-0.66	0.00	0.63	0.44	0.05	0.07	0.24	0.63	*	0.003	0.00	-0.26	-0.30	-0.18	0.44	*
W	113	D	-0.60	0.00	0.62	0.46	0.09	0.06	0.23	0.62	*	0.001	0.00	-0.20	-0.28	-0.23	0.46	*
W	114	C	-1.28	0.00	0.75	0.37	0.05	0.17	0.75	0.03	0.002	0.00	0.00	-0.30	-0.17	0.37	*	-0.18
W	115	B	-1.99	0.00	0.85	0.56	0.06	0.85	0.05	0.04	0.002	0.00	0.00	-0.34	0.56	*	-0.28	-0.28
W	116	D	-0.30	0.00	0.56	0.38	0.17	0.12	0.15	0.56	*	0.002	0.00	-0.17	-0.24	-0.13	0.38	*
W	117	A	-1.36	0.00	0.76	0.36	0.76	0.17	0.04	0.03	0.001	0.00	0.00	0.36	*	-0.22	-0.20	-0.20
W	118	A	-0.86	0.00	0.67	0.45	0.67	0.12	0.10	0.11	0.002	0.00	0.00	0.45	*	-0.27	-0.15	-0.15
W	119	B	-1.18	0.00	0.73	0.40	0.04	0.73	0.14	0.09	0.002	0.00	0.00	-0.27	0.40	*	-0.06	-0.06
W	120	D	0.88	0.00	0.31	0.25	0.31	0.33	0.05	0.31	*	0.002	0.00	0.00	-0.13	-0.27	0.25	*
W	121	C	-0.24	0.00	0.55	0.27	0.25	0.13	0.55	0.07	0.003	0.00	0.00	-0.10	-0.13	0.27	*	-0.17
W	122	C	-1.69	0.00	0.81	0.53	0.06	0.07	0.81	0.06	0.002	0.00	0.00	-0.25	-0.34	0.53	*	-0.25
W	123	B	-0.92	0.00	0.68	0.30	0.06	0.68	0.22	0.04	0.003	0.00	0.00	-0.24	0.30	*	-0.21	-0.21
W	124	A	-1.32	0.00	0.75	0.41	0.75	0.10	0.11	0.04	0.002	0.00	0.00	0.41	*	-0.22	-0.23	-0.23
W	125	A	0.12	0.00	0.47	0.31	0.47	0.10	0.05	0.38	0.003	0.00	0.00	0.31	*	-0.28	-0.05	-0.05
W	126	C	-0.47	0.00	0.59	0.43	0.17	0.12	0.59	0.11	0.004	0.00	0.00	-0.20	-0.19	0.43	*	-0.23

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
A	179	D	-2.65	0.00	0.92	0.52	0.03	0.02	0.02	0.92	0.01	0.00	-0.28	-0.25	-0.22	0.52
A	180	B	-2.31	0.00	0.89	0.54	0.04	0.89	0.04	0.02	0.01	0.00	-0.26	0.54	-0.31	-0.22
A	181	B	-2.08	0.00	0.87	0.50	0.08	0.87	0.02	0.02	0.01	0.00	-0.28	0.50	-0.26	-0.23
A	182	B	-0.57	0.00	0.62	0.31	0.18	0.62	0.07	0.13	0.01	0.00	-0.11	0.31	-0.29	-0.03
A	183	B	-2.03	0.00	0.87	0.48	0.07	0.87	0.03	0.02	0.01	0.00	-0.22	0.48	-0.28	-0.22
A	184	B	0.03	0.00	0.47	0.27	0.09	0.47	0.41	0.02	0.01	0.00	-0.23	0.27	-0.02	-0.22
A	185	A	-1.74	0.00	0.83	0.43	0.83	0.12	0.02	0.02	0.01	0.00	0.43	-0.22	-0.27	-0.20
A	186	D	-2.50	0.00	0.91	0.57	0.03	0.03	0.03	0.91	0.01	0.00	-0.26	-0.30	-0.29	0.57
A	187	B	-0.38	0.00	0.57	0.43	0.15	0.57	0.16	0.11	0.01	0.00	-0.21	0.43	-0.12	-0.22
A	188	C	-0.28	0.00	0.55	0.37	0.26	0.06	0.55	0.13	0.01	0.00	-0.14	-0.22	0.37	-0.14
A	189	D	-1.49	0.00	0.79	0.50	0.09	0.04	0.07	0.79	0.01	0.00	-0.18	-0.31	-0.26	0.50
A	190	D	-0.73	0.00	0.65	0.43	0.22	0.05	0.07	0.65	0.01	0.00	-0.13	-0.29	-0.23	0.43
A	191	D	-0.19	0.00	0.53	0.49	0.14	0.17	0.15	0.53	0.01	0.00	-0.20	-0.17	-0.23	0.49
A	192	C	-1.63	0.00	0.81	0.31	0.04	0.12	0.81	0.02	0.01	0.00	-0.23	-0.06	0.31	-0.23
A	193	A	-0.35	0.00	0.56	0.38	0.56	0.29	0.05	0.08	0.01	0.00	0.38	-0.10	-0.25	-0.22
A	194	B	-1.13	0.00	0.73	0.53	0.12	0.73	0.09	0.06	0.01	0.00	-0.23	0.53	-0.28	-0.24
A	195	B	-1.29	0.00	0.76	0.50	0.11	0.76	0.07	0.05	0.01	0.00	-0.23	0.50	-0.28	-0.21
A	196	B	0.13	0.00	0.45	0.32	0.24	0.45	0.18	0.13	0.01	0.00	-0.09	0.32	-0.12	-0.16
A	197	C	-1.28	0.00	0.76	0.54	0.05	0.11	0.76	0.07	0.01	0.00	-0.26	-0.30	0.54	-0.21
A	198	C	-1.52	0.00	0.80	0.58	0.06	0.07	0.80	0.06	0.01	0.00	-0.27	-0.31	0.58	-0.25
A	199	D	-0.52	0.00	0.60	0.40	0.05	0.30	0.05	0.60	0.01	0.00	-0.26	-0.09	-0.34	0.40
A	200	B	-1.29	0.00	0.76	0.48	0.04	0.76	0.16	0.03	0.01	0.00	-0.28	0.48	-0.24	-0.22
A	201	A	-1.28	0.00	0.76	0.56	0.76	0.06	0.11	0.07	0.01	0.00	0.56	-0.31	-0.24	-0.26
A	202	D	0.02	0.00	0.47	0.41	0.31	0.16	0.05	0.47	0.01	0.00	-0.14	-0.16	-0.28	0.41
A	203	A	-0.76	0.00	0.66	0.43	0.66	0.05	0.05	0.23	0.01	0.00	0.43	-0.32	-0.33	-0.08
A	204	C	-1.11	0.00	0.73	0.59	0.07	0.08	0.73	0.12	0.01	0.00	-0.29	-0.30	0.59	-0.25
A	205	A	0.70	0.00	0.31	0.16	0.31	0.49	0.13	0.05	0.01	0.00	0.16	0.17	-0.24	-0.23
A	206	D	-0.32	0.00	0.56	0.37	0.28	0.08	0.08	0.56	0.01	0.00	0.00	-0.30	-0.27	0.37
A	207	B	0.42	0.00	0.38	0.34	0.15	0.38	0.30	0.17	0.01	0.00	-0.10	0.34	-0.17	-0.06
A	208	D	0.63	0.00	0.33	0.28	0.31	0.11	0.24	0.33	0.01	0.00	-0.01	-0.24	-0.05	0.28
A	209	D	-1.75	0.00	0.83	0.59	0.04	0.06	0.06	0.83	0.01	0.00	-0.30	-0.29	-0.27	0.59
A	210	A	-1.83	0.00	0.84	0.57	0.84	0.06	0.05	0.05	0.01	0.00	0.57	-0.32	-0.28	-0.22
A	211	A	0.80	0.00	0.29	0.25	0.29	0.18	0.22	0.30	0.01	0.00	0.25	-0.19	-0.01	-0.02
A	212	B	-1.01	0.00	0.71	0.41	0.20	0.71	0.06	0.03	0.01	0.00	-0.10	0.41	-0.31	-0.26
A	213	B	0.88	0.00	0.28	0.16	0.38	0.28	0.18	0.16	0.01	0.00	0.11	0.16	-0.23	-0.04
A	214	A	-0.59	0.00	0.62	0.39	0.62	0.15	0.13	0.09	0.01	0.00	0.39	-0.20	-0.10	-0.19

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
B	179	D	-2.60	0.00	0.92	0.43	0.03	0.02	0.02	0.92	0.01	0.00	-0.20	-0.20	-0.18	0.43
B	180	C	-0.55	0.00	0.61	0.47	0.09	0.08	0.61	0.23	0.01	0.00	-0.16	-0.26	0.47	-0.22
B	181	B	-2.30	0.00	0.90	0.54	0.03	0.90	0.04	0.02	0.01	0.00	-0.24	0.54	-0.32	-0.22
B	182	C	0.50	0.00	0.35	0.17	0.21	0.09	0.35	0.34	0.01	0.00	-0.09	-0.14	0.17	0.05
B	183	D	-1.15	0.00	0.74	0.50	0.14	0.09	0.03	0.74	0.01	0.00	-0.23	-0.25	-0.25	0.50
B	184	A	-1.84	0.00	0.85	0.50	0.85	0.07	0.03	0.05	0.01	0.00	0.50	-0.23	-0.27	-0.24
B	185	A	-2.39	0.00	0.91	0.50	0.91	0.03	0.02	0.03	0.01	0.00	0.50	-0.23	-0.25	-0.24
B	186	D	-2.36	0.00	0.90	0.56	0.03	0.03	0.03	0.90	0.01	0.00	-0.24	-0.28	-0.29	0.56
B	187	B	0.06	0.00	0.45	0.34	0.02	0.45	0.36	0.16	0.01	0.00	-0.24	0.34	-0.07	-0.20
B	188	A	-0.67	0.00	0.63	0.46	0.63	0.21	0.13	0.03	0.01	0.00	0.46	-0.19	-0.22	-0.28
B	189	D	-0.15	0.00	0.51	0.45	0.23	0.16	0.10	0.51	0.01	0.00	-0.14	-0.22	-0.19	0.45
B	190	B	-0.92	0.00	0.69	0.42	0.08	0.69	0.15	0.08	0.01	0.00	-0.22	0.42	-0.18	-0.17
B	191	B	-1.52	0.00	0.80	0.47	0.14	0.80	0.03	0.02	0.01	0.00	-0.22	0.47	-0.28	-0.22
B	192	D	-1.69	0.00	0.83	0.59	0.09	0.04	0.04	0.83	0.01	0.00	-0.30	-0.29	-0.30	0.59
B	193	B	1.12	0.00	0.22	0.09	0.71	0.22	0.02	0.04	0.01	0.00	0.16	0.09	-0.25	-0.23
B	194	D	-1.29	0.00	0.76	0.50	0.12	0.06	0.05	0.76	0.01	0.00	-0.25	-0.21	-0.24	0.50
B	195	D	-1.04	0.00	0.71	0.58	0.19	0.05	0.04	0.71	0.01	0.00	-0.29	-0.27	-0.30	0.58
B	196	A	0.24	0.00	0.41	0.29	0.41	0.27	0.12	0.20	0.01	0.00	0.29	-0.10	-0.20	-0.02
B	197	B	0.61	0.00	0.32	0.22	0.14	0.32	0.50	0.03	0.01	0.00	-0.17	0.22	0.04	-0.21
B	198	D	-0.02	0.00	0.47	0.41	0.16	0.27	0.09	0.47	0.01	0.00	-0.15	-0.12	-0.23	0.41
B	199	B	-1.18	0.00	0.74	0.58	0.07	0.74	0.10	0.09	0.01	0.00	-0.28	0.58	-0.30	-0.23
B	200	B	-1.54	0.00	0.80	0.57	0.05	0.80	0.08	0.05	0.01	0.00	-0.29	0.57	-0.27	-0.27
B	201	A	-0.78	0.00	0.66	0.52	0.66	0.19	0.09	0.05	0.01	0.00	0.52	-0.25	-0.28	-0.17
B	202	C	-0.62	0.00	0.62	0.41	0.05	0.08	0.62	0.24	0.01	0.00	-0.24	-0.26	0.41	-0.12
B	203	B	0.47	0.00	0.35	0.30	0.40	0.35	0.03	0.21	0.01	0.00	-0.01	0.30	-0.27	-0.16
B	204	B	-0.80	0.00	0.66	0.48	0.07	0.66	0.18	0.07	0.01	0.00	-0.21	0.48	-0.17	-0.30
B	205	B	-2.49	0.00	0.92	0.52	0.02	0.92	0.03	0.02	0.01	0.00	-0.25	0.52	-0.26	-0.23
B	206	C	-0.05	0.00	0.48	0.35	0.11	0.25	0.48	0.15	0.01	0.00	-0.19	-0.12	0.35	-0.11
B	207	A	-0.75	0.00	0.65	0.47	0.65	0.18	0.12	0.04	0.01	0.00	0.47	-0.26	-0.14	-0.25
B	208	B	-0.25	0.00	0.53	0.23	0.06	0.53	0.11	0.28	0.01	0.00	-0.24	0.23	-0.25	0.12
B	209	C	0.64	0.00	0.31	0.34	0.26	0.29	0.31	0.14	0.01	0.00	-0.12	-0.11	0.34	-0.07
B	210	C	-0.75	0.00	0.65	0.45	0.06	0.24	0.65	0.04	0.01	0.00	-0.28	-0.16	0.45	-0.24
B	211	A	-1.88	0.00	0.85	0.56	0.85	0.05	0.04	0.04	0.01	0.00	0.56	-0.31	-0.29	-0.21
B	212	B	-0.47	0.00	0.58	0.33	0.05	0.58	0.05	0.31	0.01	0.00	-0.24	0.33	-0.29	-0.04
B	213	D	-1.83	0.00	0.85	0.54	0.06	0.05	0.04	0.85	0.01	0.00	-0.25	-0.26	-0.27	0.54
B	214	B	0.17	0.00	0.43	0.37	0.18	0.43	0.30	0.09	0.01	0.00	-0.13	0.37	-0.20	-0.05

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
C 179	A	-1.21	0.00	0.74	0.38	0.74*	0.11	0.12	0.02	0.01	0.00	0.38*	-0.22	-0.15	-0.19
C 180	B	-0.86	0.00	0.67	0.37	0.11	0.67*	0.04	0.18	0.01	0.00	-0.26	0.37*	-0.25	-0.06
C 181	D	-2.18	0.00	0.88	0.57	0.02	0.04	0.04	0.88*	0.01	0.00	-0.25	-0.29	-0.32	0.57*
C 182	A	1.28	0.00	0.18	0.11	0.18*	0.43	0.15	0.23	0.01	0.00	0.11*	0.10?	-0.09	-0.09
C 183	B	-1.46	0.00	0.79	0.50	0.04	0.79*	0.12	0.05	0.01	0.00	-0.27	0.50*	-0.24	-0.24
C 184	C	-1.27	0.00	0.75	0.41	0.13	0.06	0.75*	0.05	0.01	0.00	-0.11	-0.28	0.41*	-0.25
C 185	C	-1.27	0.00	0.75	0.50	0.19	0.04	0.75*	0.01	0.01	0.00	-0.31	-0.26	0.50*	-0.21
C 186	B	-0.79	0.00	0.65	0.40	0.13	0.65*	0.02	0.19	0.01	0.00	-0.24	0.40*	-0.26	-0.13
C 187	B	0.11	0.00	0.43	0.32	0.33	0.43*	0.14	0.09	0.01	0.00	-0.12	0.32*	-0.11	-0.14
C 188	B	0.15	0.00	0.42	0.35	0.16	0.42*	0.32	0.09	0.01	0.00	-0.12	0.35*	-0.12	-0.17
C 189	A	0.22	0.00	0.41	0.26	0.41*	0.24	0.10	0.24	0.01	0.00	0.26*	-0.11	-0.20	0.00
C 190	B	-0.35	0.00	0.55	0.39	0.30	0.55*	0.06	0.09	0.01	0.00	-0.11	0.39*	-0.28	-0.19
C 191	C	-2.84	0.00	0.94	0.49	0.02	0.02	0.94*	0.01	0.01	0.00	-0.23	-0.27	0.49*	-0.21
C 192	C	-0.87	0.00	0.67	0.51	0.14	0.11	0.67*	0.08	0.01	0.00	-0.22	-0.25	0.51*	-0.25
C 193	A	-1.16	0.00	0.73	0.40	0.73*	0.03	0.15	0.08	0.01	0.00	0.40*	-0.29	-0.15	-0.19
C 194	B	0.34	0.00	0.38	0.32	0.41	0.38*	0.12	0.09	0.01	0.00	-0.12	0.32*	-0.15	-0.09
C 195	A	-1.45	0.00	0.79	0.47	0.79*	0.11	0.06	0.03	0.01	0.00	0.47*	-0.23	-0.25	-0.21
C 196	A	-1.77	0.00	0.83	0.43	0.83*	0.07	0.03	0.06	0.01	0.00	0.43*	-0.18	-0.26	-0.19
C 197	B	-1.59	0.00	0.81	0.55	0.10	0.81*	0.06	0.03	0.01	0.00	-0.26	0.55*	-0.31	-0.24
C 198	B	-1.57	0.00	0.80	0.59	0.05	0.80*	0.08	0.06	0.01	0.00	-0.30	0.59*	-0.28	-0.28
C 199	C	-1.62	0.00	0.81	0.60	0.06	0.09	0.81*	0.03	0.01	0.00	-0.29	-0.35	0.60*	-0.23
C 200	B	-1.19	0.00	0.74	0.60	0.07	0.74*	0.11	0.07	0.01	0.00	-0.31	0.60*	-0.30	-0.26
C 201	B	-1.22	0.00	0.74	0.49	0.06	0.74*	0.13	0.06	0.01	0.00	-0.30	0.49*	-0.20	-0.21
C 202	B	-1.89	0.00	0.85	0.63	0.06	0.85*	0.04	0.05	0.01	0.00	-0.33	0.63*	-0.32	-0.29
C 203	C	-1.57	0.00	0.81	0.60	0.05	0.07	0.81*	0.07	0.01	0.00	-0.30	-0.31	0.60*	-0.27
C 204	D	-0.34	0.00	0.55	0.47	0.06	0.11	0.28	0.55*	0.01	0.00	-0.28	-0.23	-0.16	0.47*
C 205	A	-0.94	0.00	0.69	0.45	0.69*	0.20	0.04	0.06	0.01	0.00	0.45*	-0.18	-0.29	-0.21
C 206	D	0.24	0.00	0.40	0.24	0.14	0.21	0.24	0.40*	0.01	0.00	-0.10	-0.10	-0.05	0.24*
C 207	D	-1.26	0.00	0.75	0.65	0.10	0.07	0.08	0.75*	0.01	0.00	-0.30	-0.33	-0.32	0.65*
C 208	A	-0.12	0.00	0.49	0.27	0.49*	0.23	0.19	0.08	0.01	0.00	0.27*	-0.11	-0.06	-0.14
C 209	A	-1.06	0.00	0.71	0.48	0.71*	0.10	0.09	0.09	0.01	0.00	0.48*	-0.29	-0.23	-0.12
C 210	B	0.64	0.00	0.31	0.23	0.11	0.31*	0.50	0.08	0.01	0.00	-0.19	0.23*	0.03?	-0.13
C 211	B	-1.06	0.00	0.71	0.50	0.10	0.71*	0.07	0.11	0.01	0.00	-0.28	0.50*	-0.28	-0.15
C 212	D	-1.16	0.00	0.73	0.61	0.10	0.07	0.10	0.73*	0.01	0.00	-0.25	-0.32	-0.31	0.61*
C 213	B	-1.68	0.00	0.82	0.57	0.06	0.82*	0.07	0.04	0.01	0.00	-0.29	0.57*	-0.30	-0.24
C 214	B	-0.18	0.00	0.51	0.38	0.14	0.51*	0.12	0.22	0.01	0.00	-0.17	0.38*	-0.14	-0.14

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
D 179	B	0.14	0.00	0.38	0.21	0.33	0.38 *	0.22	0.06	0.01	0.00	0.05 ?	0.21 *	-0.13	-0.19
D 180	D	-1.38	0.00	0.76	0.42	0.07	0.07	0.10	0.76 *	0.01	0.00	-0.16	-0.24	-0.19	0.42 *
D 181	B	-1.67	0.00	0.81	0.53	0.07	0.81 *	0.06	0.05	0.01	0.00	-0.32	0.53 *	-0.24	-0.21
D 182	A	-1.59	0.00	0.80	0.54	0.80 *	0.11	0.05	0.04	0.01	0.00	0.54 *	-0.36	-0.26	-0.16
D 183	A	-2.07	0.00	0.87	0.61	0.87 *	0.06	0.02	0.05	0.01	0.00	0.61 *	-0.34	-0.25	-0.31
D 184	B	-0.87	0.00	0.64	0.40	0.13	0.64 *	0.02	0.20	0.01	0.00	-0.28	0.40 *	-0.26	-0.09
D 185	C	-1.35	0.00	0.75	0.44	0.07	0.10	0.75 *	0.08	0.01	0.00	-0.16	-0.31	0.44 *	-0.13
D 186	D	-2.23	0.00	0.89	0.60	0.04	0.04	0.03	0.89 *	0.01	0.00	-0.28	-0.32	-0.30	0.60 *
D 187	A	0.20	0.00	0.36	0.33	0.36 *	0.23	0.14	0.26	0.01	0.00	0.33 *	-0.06	-0.23	-0.06
D 188	A	-1.95	0.00	0.85	0.48	0.85 *	0.06	0.03	0.05	0.01	0.00	0.48 *	-0.22	-0.28	-0.22
D 189	B	-0.67	0.00	0.59	0.43	0.15	0.59 *	0.15	0.10	0.01	0.00	-0.26	0.43 *	-0.12	-0.18
D 190	C	-2.13	0.00	0.88	0.50	0.05	0.04	0.88 *	0.03	0.01	0.00	-0.21	-0.32	0.50 *	-0.22
D 191	A	-1.67	0.00	0.81	0.57	0.81 *	0.09	0.05	0.04	0.01	0.00	0.57 *	-0.30	-0.29	-0.25
D 192	A	-1.12	0.00	0.70	0.57	0.70 *	0.08	0.12	0.10	0.01	0.00	0.57 *	-0.30	-0.30	-0.21
D 193	A	-1.48	0.00	0.78	0.42	0.78 *	0.07	0.10	0.05	0.01	0.00	0.42 *	-0.22	-0.17	-0.21
D 194	D	-1.41	0.00	0.76	0.44	0.08	0.05	0.10	0.76 *	0.01	0.00	-0.25	-0.25	-0.14	0.44 *
D 195	B	0.34	0.00	0.33	0.24	0.48	0.33 *	0.12	0.06	0.01	0.00	-0.06	0.24 *	-0.11	-0.08
D 196	B	0.23	0.00	0.35	0.28	0.03	0.35 *	0.39	0.22	0.01	0.00	-0.27	0.28 *	-0.05	-0.10
D 197	A	-1.72	0.00	0.82	0.60	0.82 *	0.07	0.05	0.05	0.01	0.00	0.60 *	-0.31	-0.28	-0.28
D 198	B	-1.50	0.00	0.78	0.57	0.05	0.78 *	0.08	0.09	0.01	0.00	-0.30	0.57 *	-0.35	-0.19
D 199	D	-1.63	0.00	0.80	0.66	0.04	0.09	0.06	0.80 *	0.01	0.00	-0.28	-0.38	-0.31	0.66 *
D 200	A	-0.71	0.00	0.60	0.38	0.60 *	0.16	0.05	0.18	0.01	0.00	0.38 *	-0.17	-0.30	-0.08
D 201	B	-1.25	0.00	0.73	0.58	0.09	0.73 *	0.09	0.08	0.01	0.00	-0.31	0.58 *	-0.33	-0.18
D 202	C	-1.14	0.00	0.71	0.55	0.09	0.14	0.71 *	0.06	0.01	0.00	-0.24	-0.31	0.55 *	-0.20
D 203	A	-1.70	0.00	0.82	0.65	0.82 *	0.07	0.08	0.03	0.01	0.00	0.65 *	-0.32	-0.36	-0.27
D 204	D	-1.61	0.00	0.80	0.66	0.07	0.06	0.07	0.80 *	0.01	0.00	-0.31	-0.35	-0.31	0.66 *
D 205	B	-0.40	0.00	0.52	0.41	0.29	0.52 *	0.08	0.10	0.01	0.00	-0.17	0.41 *	-0.27	-0.09
D 206	D	-0.56	0.00	0.57	0.49	0.19	0.10	0.14	0.57 *	0.01	0.00	-0.16	-0.27	-0.21	0.49 *
D 207	D	-0.51	0.00	0.55	0.38	0.09	0.15	0.19	0.55 *	0.01	0.00	-0.26	-0.16	-0.08	0.38 *
D 208	D	-1.28	0.00	0.74	0.65	0.09	0.07	0.09	0.74 *	0.01	0.00	-0.26	-0.34	-0.33	0.65 *
D 209	A	-1.33	0.00	0.75	0.61	0.75 *	0.11	0.08	0.05	0.01	0.00	0.61 *	-0.28	-0.33	-0.28
D 210	D	-1.19	0.00	0.72	0.60	0.12	0.09	0.07	0.72 *	0.01	0.00	-0.27	-0.29	-0.28	0.60 *
D 211	A	-1.70	0.00	0.82	0.67	0.82 *	0.05	0.06	0.06	0.01	0.00	0.67 *	-0.34	-0.35	-0.30
D 212	D	-0.40	0.00	0.52	0.42	0.10	0.12	0.25	0.52 *	0.01	0.00	-0.21	-0.22	-0.10	0.42 *
D 213	A	-2.44	0.00	0.91	0.55	0.91 *	0.03	0.03	0.02	0.01	0.00	0.55 *	-0.29	-0.28	-0.24
D 214	D	-0.58	0.00	0.57	0.35	0.08	0.26	0.08	0.57 *	0.01	0.00	-0.20	-0.05	-0.26	0.35 *

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
E 179	C	-1.41	0.00	0.78	0.44	0.04	0.12	0.78 *	0.05	0.01	0.00	-0.27	-0.22	0.44 *	-0.16
E 180	D	-0.30	0.00	0.55	0.51	0.13	0.14	0.17	0.55 *	0.01	0.00	-0.22	-0.21	-0.24	0.51 *
E 181	B	0.54	0.00	0.35	0.27	0.12	0.35 *	0.41	0.11	0.01	0.00	-0.10	0.27 *	-0.11	-0.07
E 182	C	0.13	0.00	0.45	0.29	0.45	0.05	0.45 *	0.05	0.01	0.00	-0.07	-0.24	0.29 *	-0.18
E 183	B	0.24	0.00	0.42	0.33	0.38	0.42 *	0.07	0.12	0.01	0.00	-0.05	0.33 *	-0.27	-0.16
E 184	B	-1.04	0.00	0.71	0.55	0.13	0.71 *	0.09	0.05	0.01	0.00	-0.26	0.55 *	-0.29	-0.23
E 185	C	-1.22	0.00	0.75	0.56	0.08	0.13	0.75 *	0.03	0.01	0.00	-0.31	-0.30	0.56 *	-0.23
E 186	B	-1.11	0.00	0.73	0.55	0.16	0.73 *	0.05	0.06	0.01	0.00	-0.28	0.55 *	-0.29	-0.27
E 187	B	-1.78	0.00	0.84	0.49	0.03	0.84 *	0.07	0.06	0.01	0.00	-0.27	0.49 *	-0.25	-0.23
E 188	D	-1.74	0.00	0.83	0.57	0.04	0.04	0.08	0.83 *	0.01	0.00	-0.29	-0.29	-0.29	0.57 *
E 189	C	-2.14	0.00	0.88	0.53	0.03	0.04	0.88 *	0.05	0.01	0.00	-0.27	-0.31	0.53 *	-0.24
E 190	D	-0.31	0.00	0.55	0.41	0.05	0.25	0.14	0.55 *	0.01	0.00	-0.21	-0.20	-0.15	0.41 *
E 191	D	-2.38	0.00	0.90	0.50	0.04	0.03	0.02	0.90 *	0.01	0.00	-0.24	-0.27	-0.24	0.50 *
E 192	B	-1.07	0.00	0.72	0.39	0.09	0.72 *	0.12	0.06	0.01	0.00	-0.25	0.39 *	-0.13	-0.17
E 193	D	-0.51	0.00	0.60	0.35	0.19	0.17	0.03	0.60 *	0.01	0.00	-0.14	-0.15	-0.25	0.35 *
E 194	A	-0.12	0.00	0.51	0.36	0.51 *	0.07	0.24	0.18	0.01	0.00	0.36 *	-0.19	-0.12	-0.17
E 195	A	-0.86	0.00	0.68	0.42	0.68 *	0.03	0.23	0.06	0.01	0.00	0.42 *	-0.27	-0.22	-0.18
E 196	B	-0.12	0.00	0.51	0.34	0.13	0.51 *	0.25	0.11	0.01	0.00	-0.20	0.34 *	-0.06	-0.20
E 197	C	-0.46	0.00	0.59	0.34	0.04	0.31	0.59 *	0.05	0.01	0.00	-0.24	-0.11	0.34 *	-0.20
E 198	C	-0.30	0.00	0.55	0.38	0.08	0.21	0.55 *	0.15	0.01	0.00	-0.23	-0.09	0.38 *	-0.19
E 199	A	-0.68	0.00	0.64	0.51	0.64 *	0.10	0.21	0.05	0.01	0.00	0.51 *	-0.25	-0.25	-0.22
E 200	C	-1.44	0.00	0.79	0.57	0.07	0.07	0.79 *	0.07	0.01	0.00	-0.29	-0.27	0.57 *	-0.28
E 201	C	-1.57	0.00	0.81	0.62	0.06	0.08	0.81 *	0.05	0.01	0.00	-0.26	-0.36	0.62 *	-0.30
E 202	B	-1.65	0.00	0.82	0.59	0.05	0.82 *	0.09	0.04	0.01	0.00	-0.26	0.59 *	-0.35	-0.28
E 203	B	-0.79	0.00	0.66	0.49	0.18	0.66 *	0.05	0.10	0.01	0.00	-0.22	0.49 *	-0.30	-0.21
E 204	C	-0.98	0.00	0.70	0.60	0.07	0.07	0.70 *	0.15	0.01	0.00	-0.28	-0.29	0.60 *	-0.30
E 205	B	-1.46	0.00	0.79	0.56	0.05	0.79 *	0.12	0.04	0.01	0.00	-0.30	0.56 *	-0.28	-0.26
E 206	B	0.00	0.00	0.48	0.17	0.06	0.48 *	0.08	0.37	0.01	0.00	-0.27	0.17 *	-0.27	0.16 ?
E 207	A	-0.11	0.00	0.51	0.21	0.51 *	0.23	0.19	0.07	0.01	0.00	0.21 *	-0.09	-0.03	-0.14
E 208	C	0.45	0.00	0.37	0.25	0.30	0.19	0.37 *	0.13	0.01	0.00	-0.03	-0.14	0.25 *	-0.09
E 209	A	-0.24	0.00	0.54	0.42	0.54 *	0.14	0.15	0.17	0.01	0.00	0.42 *	-0.25	-0.13	-0.15
E 210	B	-0.27	0.00	0.54	0.42	0.09	0.54 *	0.07	0.29	0.01	0.00	-0.19	0.42 *	-0.32	-0.12
E 211	B	-0.92	0.00	0.69	0.49	0.12	0.69 *	0.07	0.12	0.01	0.00	-0.27	0.49 *	-0.28	-0.16
E 212	B	-0.16	0.00	0.52	0.42	0.18	0.52 *	0.21	0.08	0.01	0.00	-0.21	0.42 *	-0.15	-0.16
E 213	A	-0.52	0.00	0.60	0.47	0.60 *	0.20	0.12	0.08	0.01	0.00	0.47 *	-0.17	-0.24	-0.25
E 214	C	-0.83	0.00	0.67	0.47	0.08	0.11	0.67 *	0.14	0.01	0.00	-0.25	-0.24	0.47 *	-0.16

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
F	179	B	-1.36	0.00	0.76	0.57	0.05	0.76 *	0.09	0.10	0.01	0.00	-0.28	0.57 *	-0.29	-0.26
F	180	A	-1.92	0.00	0.85	0.57	0.85 *	0.09	0.03	0.03	0.01	0.00	0.57 *	-0.35	-0.28	-0.23
F	181	B	-2.15	0.00	0.88	0.57	0.03	0.88 *	0.06	0.03	0.01	0.00	-0.26	0.57 *	-0.33	-0.28
F	182	C	-1.83	0.00	0.84	0.58	0.05	0.06	0.84 *	0.06	0.01	0.00	-0.29	-0.29	0.58 *	-0.30
F	183	C	-1.46	0.00	0.78	0.46	0.06	0.07	0.78 *	0.09	0.01	0.00	-0.31	-0.26	0.46 *	-0.12
F	184	D	-1.20	0.00	0.73	0.55	0.06	0.14	0.07	0.73 *	0.01	0.00	-0.28	-0.24	-0.29	0.55 *
F	185	B	0.28	0.00	0.36	0.31	0.36	0.36 *	0.02	0.26	0.01	0.00	-0.03	0.31 *	-0.28	-0.17
F	186	B	-0.25	0.00	0.50	0.37	0.30	0.50 *	0.06	0.14	0.01	0.00	-0.11	0.37 *	-0.32	-0.11
F	187	A	-1.49	0.00	0.78	0.54	0.78 *	0.12	0.06	0.04	0.01	0.00	0.54 *	-0.27	-0.27	-0.27
F	188	B	-1.80	0.00	0.83	0.56	0.04	0.83 *	0.09	0.04	0.01	0.00	-0.28	0.56 *	-0.26	-0.32
F	189	C	-0.34	0.00	0.52	0.34	0.09	0.26	0.52 *	0.13	0.01	0.00	-0.19	-0.15	0.34 *	-0.09
F	190	B	-2.86	0.00	0.94	0.51	0.02	0.94 *	0.02	0.01	0.01	0.00	-0.25	0.51 *	-0.28	-0.22
F	191	B	0.53	0.00	0.30	0.25	0.11	0.30 *	0.52 ?	0.07	0.01	0.00	-0.18	0.25 *	-0.01	-0.13
F	192	B	-1.27	0.00	0.74	0.46	0.08	0.74 *	0.05	0.13	0.01	0.00	-0.25	0.46 *	-0.26	-0.17
F	193	A	-1.50	0.00	0.78	0.62	0.78 *	0.08	0.07	0.05	0.01	0.00	0.62 *	-0.30	-0.33	-0.29
F	194	B	-0.18	0.00	0.48	0.25	0.42	0.48 *	0.08	0.02	0.01	0.00	0.02 ?	0.25 *	-0.28	-0.25
F	195	A	-1.73	0.00	0.82	0.61	0.82 *	0.04	0.08	0.06	0.01	0.00	0.61 *	-0.31	-0.37	-0.24
F	196	D	-1.74	0.00	0.82	0.61	0.04	0.08	0.05	0.82 *	0.01	0.00	-0.30	-0.31	-0.31	0.61 *
F	197	D	-2.26	0.00	0.89	0.61	0.04	0.04	0.03	0.89 *	0.01	0.00	-0.32	-0.31	-0.29	0.61 *
F	198	B	-2.16	0.00	0.88	0.60	0.04	0.88 *	0.05	0.02	0.01	0.00	-0.27	0.60 *	-0.37	-0.25
F	199	B	-1.97	0.00	0.85	0.56	0.09	0.85 *	0.03	0.02	0.01	0.00	-0.29	0.56 *	-0.31	-0.26
F	200	B	-0.72	0.00	0.62	0.34	0.17	0.62 *	0.07	0.13	0.01	0.00	-0.11	0.34 *	-0.32	-0.04
F	201	B	-1.98	0.00	0.86	0.51	0.08	0.86 *	0.03	0.03	0.01	0.00	-0.25	0.51 *	-0.28	-0.24
F	202	B	-0.26	0.00	0.50	0.29	0.08	0.50 *	0.38	0.03	0.01	0.00	-0.23	0.29 *	-0.03	-0.27
F	203	A	-1.55	0.00	0.79	0.48	0.79 *	0.14	0.03	0.03	0.01	0.00	0.48 *	-0.21	-0.33	-0.23
F	204	D	-2.23	0.00	0.89	0.63	0.04	0.04	0.04	0.89 *	0.01	0.00	-0.29	-0.33	-0.33	0.63 *
F	205	B	-0.47	0.00	0.55	0.41	0.15	0.55 *	0.17	0.11	0.01	0.00	-0.17	0.41 *	-0.14	-0.21
F	206	C	-0.45	0.00	0.55	0.38	0.25	0.07	0.55 *	0.12	0.01	0.00	-0.10	-0.28	0.38 *	-0.16
F	207	D	-1.43	0.00	0.77	0.55	0.09	0.05	0.08	0.77 *	0.01	0.00	-0.20	-0.35	-0.28	0.55 *
F	208	D	-0.75	0.00	0.62	0.45	0.24	0.06	0.08	0.62 *	0.01	0.00	-0.11	-0.31	-0.28	0.45 *
F	209	D	-0.35	0.00	0.52	0.49	0.14	0.18	0.15	0.52 *	0.01	0.00	-0.21	-0.18	-0.22	0.49 *
F	210	C	-1.66	0.00	0.81	0.38	0.04	0.11	0.81 *	0.03	0.01	0.00	-0.27	-0.09	0.38 *	-0.26
F	211	A	-0.39	0.00	0.53	0.37	0.53 *	0.32	0.07	0.07	0.01	0.00	0.37 *	-0.08	-0.26	-0.21
F	212	B	-1.19	0.00	0.72	0.53	0.13	0.72 *	0.09	0.05	0.01	0.00	-0.23	0.53 *	-0.28	-0.24
F	213	B	-1.27	0.00	0.74	0.50	0.13	0.74 *	0.07	0.05	0.01	0.00	-0.24	0.50 *	-0.27	-0.22
F	214	B	0.10	0.00	0.40	0.29	0.23	0.40 *	0.22	0.13	0.01	0.00	-0.06	0.29 *	-0.09	-0.17

Appendix I: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
G	179	D	-0.97	0.00	0.70	0.39	0.04	0.24	0.02	0.70	0.01	0.00	-0.26	-0.17	-0.23	0.39
G	180	D	-0.66	0.00	0.63	0.53	0.05	0.12	0.20	0.63	0.01	0.00	-0.28	-0.28	-0.20	0.53
G	181	D	-1.43	0.00	0.79	0.53	0.04	0.05	0.12	0.79	0.01	0.00	-0.28	-0.26	-0.26	0.53
G	182	D	-0.16	0.00	0.50	0.42	0.14	0.27	0.08	0.50	0.01	0.00	-0.15	-0.16	-0.23	0.42
G	183	B	-2.01	0.00	0.87	0.59	0.03	0.87	0.07	0.03	0.01	0.00	-0.27	0.59	-0.35	-0.27
G	184	C	-1.52	0.00	0.80	0.51	0.08	0.07	0.80	0.04	0.01	0.00	-0.29	-0.21	0.51	-0.24
G	185	C	-1.15	0.00	0.73	0.53	0.07	0.12	0.73	0.06	0.01	0.00	-0.23	-0.30	0.53	-0.20
G	186	A	-1.81	0.00	0.84	0.61	0.84	0.06	0.07	0.03	0.01	0.00	0.61	-0.30	-0.35	-0.25
G	187	D	-0.64	0.00	0.62	0.54	0.16	0.08	0.13	0.62	0.01	0.00	-0.22	-0.30	-0.22	0.54
G	188	B	0.04	0.00	0.45	0.41	0.15	0.45	0.25	0.15	0.01	0.00	-0.10	0.41	-0.21	-0.14
G	189	A	-0.49	0.00	0.58	0.41	0.58	0.12	0.13	0.16	0.01	0.00	0.41	-0.23	-0.14	-0.15
G	190	D	0.56	0.00	0.32	0.25	0.32	0.13	0.23	0.32	0.01	0.00	0.00	-0.18	-0.08	0.25
G	191	A	0.63	0.00	0.30	0.30	0.30	0.18	0.21	0.30	0.01	0.00	0.30	-0.20	-0.02	-0.05
G	192	D	-1.37	0.00	0.78	0.55	0.09	0.07	0.05	0.78	0.01	0.00	-0.24	-0.29	-0.27	0.55
G	193	A	-1.69	0.00	0.83	0.62	0.83	0.04	0.06	0.07	0.01	0.00	0.62	-0.31	-0.32	-0.28
G	194	B	-0.42	0.00	0.57	0.41	0.17	0.57	0.13	0.13	0.01	0.00	-0.12	0.41	-0.26	-0.14
G	195	C	-1.93	0.00	0.86	0.54	0.03	0.04	0.86	0.06	0.01	0.00	-0.28	-0.30	0.54	-0.23
G	196	B	0.34	0.00	0.37	0.12	0.06	0.37	0.48	0.08	0.01	0.00	-0.17	0.12	0.18	0.29
G	197	D	-2.37	0.00	0.91	0.52	0.03	0.03	0.03	0.91	0.01	0.00	-0.24	-0.27	-0.24	0.52
G	198	C	-0.53	0.00	0.59	0.47	0.10	0.08	0.59	0.22	0.01	0.00	-0.16	-0.30	0.47	-0.18
G	199	B	-2.07	0.00	0.88	0.60	0.04	0.88	0.05	0.02	0.01	0.00	-0.27	0.60	-0.36	-0.25
G	200	C	0.42	0.00	0.35	0.15	0.20	0.09	0.35	0.34	0.01	0.00	-0.10	-0.16	0.15	0.09
G	201	D	-1.04	0.00	0.71	0.54	0.15	0.10	0.03	0.71	0.01	0.00	-0.23	-0.28	-0.28	0.54
G	202	A	-1.59	0.00	0.81	0.53	0.81	0.09	0.03	0.06	0.01	0.00	0.53	-0.24	-0.29	-0.26
G	203	A	-2.15	0.00	0.89	0.55	0.89	0.04	0.03	0.04	0.01	0.00	0.55	-0.27	-0.29	-0.26
G	204	D	-2.04	0.00	0.87	0.62	0.04	0.04	0.04	0.87	0.01	0.00	-0.28	-0.32	-0.32	0.62
G	205	B	0.04	0.00	0.45	0.31	0.03	0.45	0.36	0.15	0.01	0.00	-0.29	0.31	-0.04	-0.16
G	206	A	-0.62	0.00	0.62	0.49	0.62	0.21	0.14	0.03	0.01	0.00	0.49	-0.19	-0.24	-0.28
G	207	D	-0.10	0.00	0.48	0.43	0.24	0.16	0.11	0.48	0.01	0.00	-0.12	-0.21	-0.19	0.43
G	208	B	-0.94	0.00	0.69	0.43	0.08	0.69	0.15	0.07	0.01	0.00	-0.23	0.43	-0.18	-0.16
G	209	B	-1.42	0.00	0.78	0.51	0.14	0.78	0.04	0.03	0.01	0.00	-0.23	0.51	-0.32	-0.22
G	210	D	-1.56	0.00	0.81	0.62	0.10	0.05	0.04	0.81	0.01	0.00	-0.30	-0.32	-0.30	0.62
G	211	B	1.07	0.00	0.21	0.07	0.71	?	0.21	0.03	0.01	0.00	0.21	?	-0.29	-0.24
G	212	D	-1.21	0.00	0.74	0.53	0.12	0.07	0.06	0.74	0.01	0.00	-0.24	-0.24	-0.27	0.53
G	213	D	-0.96	0.00	0.69	0.58	0.19	0.06	0.05	0.69	0.01	0.00	-0.28	-0.28	-0.31	0.58
G	214	A	0.18	0.00	0.41	0.29	0.41	0.28	0.12	0.18	0.01	0.00	0.29	-0.08	-0.19	-0.05

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
H	179	D	-2.37	0.00	0.90	0.45	0.02	0.05	0.02	0.90	0.01	0.00	-0.23	-0.20	-0.21	0.45
H	180	A	-1.70	0.00	0.83	0.54	0.83	0.08	0.04	0.05	0.01	0.00	0.54	-0.28	-0.24	-0.26
H	181	B	-1.63	0.00	0.82	0.53	0.04	0.82	0.09	0.05	0.01	0.00	-0.25	0.53	-0.26	-0.26
H	182	B	-1.52	0.00	0.80	0.55	0.03	0.80	0.07	0.09	0.01	0.00	-0.25	0.55	-0.32	-0.23
H	183	C	0.18	0.00	0.44	0.22	0.09	0.08	0.44	0.38	0.01	0.00	-0.26	-0.35	0.22	0.18
H	184	D	-0.02	0.00	0.49	0.39	0.29	0.18	0.04	0.49	0.01	0.00	-0.15	-0.13	-0.28	0.39
H	185	C	-2.54	0.00	0.91	0.57	0.03	0.03	0.91	0.02	0.01	0.00	-0.29	-0.29	0.57	-0.25
H	186	D	-0.29	0.00	0.55	0.41	0.05	0.10	0.29	0.55	0.01	0.00	-0.28	-0.21	-0.12	0.41
H	187	A	-1.18	0.00	0.74	0.47	0.74	0.16	0.03	0.06	0.01	0.00	0.47	-0.22	-0.26	-0.21
H	188	D	-0.02	0.00	0.49	0.25	0.35	0.07	0.08	0.49	0.01	0.00	0.07	-0.26	-0.24	0.25
H	189	A	0.60	0.00	0.34	0.15	0.34	0.53	0.09	0.04	0.01	0.00	0.15	0.15	-0.25	-0.23
H	190	D	-0.59	0.00	0.62	0.38	0.08	0.14	0.15	0.62	0.01	0.00	-0.20	-0.13	-0.15	0.38
H	191	C	-0.60	0.00	0.63	0.43	0.07	0.26	0.63	0.04	0.01	0.00	-0.26	-0.16	0.43	-0.24
H	192	C	0.67	0.00	0.33	0.34	0.31	0.24	0.33	0.12	0.01	0.00	-0.07	-0.14	0.34	-0.12
H	193	D	-2.08	0.00	0.87	0.55	0.03	0.04	0.05	0.87	0.01	0.00	-0.28	-0.26	-0.27	0.55
H	194	C	-1.15	0.00	0.74	0.48	0.13	0.06	0.74	0.07	0.01	0.00	-0.18	-0.32	0.48	-0.21
H	195	C	-1.58	0.00	0.81	0.52	0.03	0.07	0.81	0.08	0.01	0.00	-0.28	-0.27	0.52	-0.21
H	196	A	0.89	0.00	0.28	0.29	0.28	0.04	0.33	0.34	0.01	0.00	0.29	-0.24	-0.04	-0.08
H	197	A	-1.01	0.00	0.71	0.41	0.71	0.11	0.14	0.02	0.01	0.00	0.41	-0.20	-0.16	-0.21
H	198	B	-0.77	0.00	0.66	0.40	0.10	0.66	0.05	0.17	0.01	0.00	-0.28	0.40	-0.29	-0.03
H	199	D	-1.87	0.00	0.85	0.63	0.03	0.06	0.05	0.85	0.01	0.00	-0.27	-0.34	-0.31	0.63
H	200	A	1.41	0.00	0.19	0.09	0.19	0.43	0.15	0.22	0.01	0.00	0.09	0.12	-0.10	-0.06
H	201	B	-1.32	0.00	0.77	0.52	0.05	0.77	0.12	0.05	0.01	0.00	-0.29	0.52	-0.24	-0.23
H	202	C	-1.22	0.00	0.75	0.44	0.13	0.07	0.75	0.04	0.01	0.00	-0.11	-0.31	0.44	-0.24
H	203	C	-1.03	0.00	0.72	0.52	0.21	0.05	0.72	0.02	0.01	0.00	-0.28	-0.28	0.52	-0.24
H	204	B	-0.69	0.00	0.65	0.41	0.13	0.65	0.03	0.19	0.01	0.00	-0.23	0.41	-0.27	-0.11
H	205	B	0.28	0.00	0.42	0.31	0.30	0.42	0.17	0.10	0.01	0.00	-0.08	0.31	-0.11	-0.15
H	206	B	0.26	0.00	0.42	0.34	0.17	0.42	0.31	0.09	0.01	0.00	-0.10	0.34	-0.11	-0.17
H	207	A	0.27	0.00	0.42	0.29	0.42	0.23	0.10	0.24	0.01	0.00	0.29	-0.14	-0.21	0.02
H	208	B	-0.19	0.00	0.53	0.40	0.30	0.53	0.07	0.09	0.01	0.00	-0.10	0.40	-0.29	-0.17
H	209	C	-2.55	0.00	0.92	0.55	0.03	0.03	0.92	0.02	0.01	0.00	-0.28	-0.29	0.55	-0.21
H	210	C	-0.69	0.00	0.65	0.52	0.16	0.12	0.65	0.07	0.01	0.00	-0.22	-0.24	0.52	-0.23
H	211	A	-1.00	0.00	0.71	0.44	0.71	0.04	0.17	0.07	0.01	0.00	0.44	-0.30	-0.16	-0.18
H	212	B	0.49	0.00	0.37	0.29	0.41	0.37	0.12	0.09	0.01	0.00	-0.08	0.29	-0.16	-0.07
H	213	A	-1.25	0.00	0.76	0.48	0.76	0.12	0.08	0.04	0.01	0.00	0.48	-0.19	-0.27	-0.23
H	214	A	-1.57	0.00	0.81	0.47	0.81	0.08	0.04	0.06	0.01	0.00	0.47	-0.19	-0.28	-0.20

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
I 179	C	-1.48	0.00	0.79	0.50	0.04	0.10	0.79 *	0.06	0.01	0.00	-0.23	-0.29	0.50 *	-0.20
I 180	C	-1.77	0.00	0.84	0.54	0.05	0.06	0.84 *	0.05	0.01	0.00	-0.24	-0.28	0.54 *	-0.27
I 181	D	-0.69	0.00	0.64	0.39	0.04	0.28	0.03	0.64 *	0.01	0.00	-0.29	-0.14	-0.27	0.39 *
I 182	B	-1.51	0.00	0.80	0.44	0.03	0.80 *	0.15	0.02	0.01	0.00	-0.22	0.44 *	-0.26	-0.21
I 183	A	-1.38	0.00	0.78	0.54	0.07	0.05	0.11	0.06	0.01	0.00	0.54 *	-0.31	-0.25	-0.24
I 184	D	-0.11	0.00	0.51	0.39	0.28	0.18	0.03	0.51 *	0.01	0.00	-0.18	-0.13	-0.24	0.39 *
I 185	A	-0.86	0.00	0.68	0.39	0.68 *	0.04	0.04	0.24	0.01	0.00	0.39 *	-0.30	-0.30	-0.11
I 186	C	-1.26	0.00	0.76	0.59	0.06	0.07	0.76 *	0.11	0.01	0.00	-0.29	-0.30	0.59 *	-0.29
I 187	A	0.72	0.00	0.31	0.14	0.31 *	0.52 ?	0.12	0.04	0.01	0.00	0.14 *	0.17 ?	-0.27	-0.22
I 188	D	-0.43	0.00	0.58	0.33	0.28	0.06	0.07	0.58 *	0.01	0.00	-0.01	-0.28	-0.27	0.33 *
I 189	B	0.25	0.00	0.42	0.39	0.12	0.42 *	0.29	0.16	0.01	0.00	-0.11	0.39 *	-0.21	-0.11
I 190	D	0.51	0.00	0.36	0.27	0.31	0.11	0.22	0.36 *	0.01	0.00	-0.02	-0.21	-0.09	0.27 *
I 191	D	-1.95	0.00	0.86	0.55	0.03	0.05	0.06	0.86 *	0.01	0.00	-0.28	-0.28	-0.26	0.55 *
I 192	A	-1.98	0.00	0.86	0.56	0.86 *	0.05	0.04	0.04	0.01	0.00	0.56 *	-0.32	-0.30	-0.22
I 193	A	0.82	0.00	0.29	0.26	0.29 *	0.18	0.21	0.31	0.01	0.00	0.26 *	-0.20	-0.02	-0.01
I 194	B	-1.17	0.00	0.74	0.39	0.18	0.74 *	0.05	0.02	0.01	0.00	-0.12	0.39 *	-0.30	-0.26
I 195	B	0.98	0.00	0.26	0.14	0.44	0.26 *	0.15	0.15	0.01	0.00	0.14 ?	0.14 *	-0.25	-0.06
I 196	A	-0.62	0.00	0.63	0.40	0.63 *	0.15	0.14	0.08	0.01	0.00	0.40 *	-0.23	-0.11	-0.21
I 197	B	0.42	0.00	0.38	0.23	0.36	0.38 *	0.19	0.06	0.01	0.00	0.04 ?	0.23 *	-0.15	-0.18
I 198	D	-1.27	0.00	0.76	0.50	0.07	0.07	0.09	0.76 *	0.01	0.00	-0.22	-0.30	-0.21	0.50 *
I 199	B	-1.35	0.00	0.77	0.57	0.08	0.77 *	0.08	0.06	0.01	0.00	-0.30	0.57 *	-0.28	-0.23
I 200	A	-1.47	0.00	0.79	0.57	0.79 *	0.11	0.05	0.04	0.01	0.00	0.57 *	-0.35	-0.27	-0.19
I 201	A	-1.79	0.00	0.84	0.64	0.84 *	0.07	0.04	0.05	0.01	0.00	0.64 *	-0.36	-0.31	-0.30
I 202	B	-0.59	0.00	0.62	0.38	0.14	0.62 *	0.03	0.21	0.01	0.00	-0.25	0.38 *	-0.30	-0.05
I 203	C	-1.12	0.00	0.73	0.46	0.08	0.11	0.73 *	0.08	0.01	0.00	-0.18	-0.30	0.46 *	-0.15
I 204	D	-1.93	0.00	0.86	0.64	0.04	0.05	0.04	0.86 *	0.01	0.00	-0.29	-0.34	-0.33	0.64 *
I 205	A	0.44	0.00	0.38	0.33	0.38 *	0.22	0.15	0.25	0.01	0.00	0.33 *	-0.07	-0.21	-0.08
I 206	A	-1.67	0.00	0.82	0.52	0.82 *	0.08	0.04	0.05	0.01	0.00	0.52 *	-0.24	-0.29	-0.23
I 207	B	-0.41	0.00	0.58	0.44	0.16	0.58 *	0.15	0.10	0.01	0.00	-0.27	0.44 *	-0.11	-0.19
I 208	C	-1.93	0.00	0.86	0.55	0.06	0.05	0.86 *	0.03	0.01	0.00	-0.25	-0.34	0.55 *	-0.22
I 209	A	-1.50	0.00	0.80	0.56	0.80 *	0.09	0.06	0.05	0.01	0.00	0.56 *	-0.28	-0.29	-0.25
I 210	A	-0.92	0.00	0.69	0.56	0.69 *	0.09	0.12	0.10	0.01	0.00	0.56 *	-0.31	-0.28	-0.19
I 211	A	-1.42	0.00	0.78	0.48	0.78 *	0.07	0.09	0.05	0.01	0.00	0.48 *	-0.23	-0.23	-0.23
I 212	D	-1.30	0.00	0.76	0.48	0.08	0.05	0.10	0.76 *	0.01	0.00	-0.26	-0.27	-0.17	0.48 *
I 213	B	0.80	0.00	0.29	0.21	0.51 ?	0.29 *	0.13	0.06	0.01	0.00	-0.01	0.21 *	-0.12	-0.10
I 214	B	0.45	0.00	0.37	0.29	0.04	0.37 *	0.38	0.20	0.01	0.00	-0.29	0.29 *	-0.03	-0.12

Appendix I: 2001 PSSA Grade Eight Item Analysis

Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
J	179	B	0.54	0.00	0.35	0.24	0.19	0.35 *	0.43	0.02	0.01	0.00	-0.14	0.24 *	-0.01	-0.17
J	180	D	-0.21	0.00	0.53	0.44	0.13	0.25	0.08	0.53 *	0.01	0.00	-0.17	-0.16	-0.24	0.44 *
J	181	B	-1.36	0.00	0.78	0.58	0.05	0.78 *	0.08	0.09	0.01	0.00	-0.26	0.58 *	-0.31	-0.27
J	182	B	-1.53	0.00	0.80	0.56	0.05	0.80 *	0.09	0.05	0.01	0.00	-0.28	0.56 *	-0.26	-0.28
J	183	A	-0.76	0.00	0.66	0.51	0.66 *	0.20	0.09	0.05	0.01	0.00	0.51 *	-0.27	-0.26	-0.16
J	184	C	-0.59	0.00	0.62	0.42	0.04	0.07	0.62 *	0.26	0.01	0.00	-0.24	-0.24	0.42 *	-0.16
J	185	B	0.44	0.00	0.37	0.35	0.38	0.37 *	0.02	0.22	0.01	0.00	-0.06	0.35 *	-0.23	-0.19
J	186	B	-0.78	0.00	0.66	0.45	0.06	0.66 *	0.20	0.07	0.01	0.00	-0.18	0.45 *	-0.15	-0.32
J	187	B	-2.85	0.00	0.94	0.46	0.02	0.94 *	0.02	0.01	0.01	0.00	-0.21	0.46 *	-0.24	-0.19
J	188	C	-0.24	0.00	0.53	0.36	0.09	0.23	0.53 *	0.14	0.01	0.00	-0.17	-0.14	0.36 *	-0.12
J	189	A	-0.84	0.00	0.67	0.47	0.67 *	0.15	0.13	0.04	0.01	0.00	0.47 *	-0.24	-0.17	-0.26
J	190	B	-0.23	0.00	0.53	0.21	0.06	0.53 *	0.10	0.29	0.01	0.00	-0.25	0.21 *	-0.25	0.13 ?
J	191	C	0.76	0.00	0.30	0.33	0.25	0.30 *	0.30 *	0.14	0.01	0.00	-0.09	-0.13	0.33 *	-0.08
J	192	C	-0.78	0.00	0.66	0.45	0.06	0.24	0.66 *	0.03	0.01	0.00	-0.27	-0.20	0.45 *	-0.22
J	193	A	-2.05	0.00	0.87	0.52	0.87 *	0.04	0.04	0.04	0.01	0.00	0.52 *	-0.28	-0.29	-0.18
J	194	B	-0.47	0.00	0.59	0.32	0.04	0.59 *	0.06	0.30	0.01	0.00	-0.20	0.32 *	-0.28	-0.05
J	195	D	-2.02	0.00	0.87	0.50	0.05	0.04	0.04	0.87 *	0.01	0.00	-0.24	-0.22	-0.26	0.50 *
J	196	B	0.16	0.00	0.44	0.37	0.17	0.44 *	0.29	0.10	0.01	0.00	-0.14	0.37 *	-0.23	-0.01
J	197	C	-1.35	0.00	0.77	0.47	0.05	0.12	0.77 *	0.05	0.01	0.00	-0.27	-0.23	0.47 *	-0.18
J	198	D	-0.24	0.00	0.54	0.53	0.14	0.14	0.17	0.54 *	0.01	0.00	-0.23	-0.21	-0.22	0.53 *
J	199	B	0.59	0.00	0.34	0.23	0.11	0.34 *	0.43	0.12	0.01	0.00	-0.12	0.23 *	-0.03	-0.10
J	200	C	0.14	0.00	0.44	0.32	0.43	0.06	0.44 *	0.06	0.01	0.00	-0.05	-0.25	0.32 *	-0.19
J	201	B	0.35	0.00	0.39	0.31	0.39	0.39 *	0.09	0.12	0.01	0.00	0.00 ?	0.31 *	-0.25	-0.17
J	202	B	-0.96	0.00	0.70	0.56	0.13	0.70 *	0.11	0.05	0.01	0.00	-0.25	0.56 *	-0.30	-0.23
J	203	C	-1.15	0.00	0.74	0.57	0.08	0.14	0.74 *	0.04	0.01	0.00	-0.27	-0.29	0.57 *	-0.25
J	204	B	-1.02	0.00	0.71	0.57	0.16	0.71 *	0.06	0.06	0.01	0.00	-0.26	0.57 *	-0.30	-0.27
J	205	B	-1.59	0.00	0.81	0.51	0.03	0.81 *	0.08	0.06	0.01	0.00	-0.26	0.51 *	-0.26	-0.23
J	206	D	-1.58	0.00	0.81	0.58	0.05	0.05	0.09	0.81 *	0.01	0.00	-0.29	-0.29	-0.28	0.58 *
J	207	C	-1.84	0.00	0.85	0.56	0.05	0.05	0.85 *	0.05	0.01	0.00	-0.30	-0.31	0.56 *	-0.21
J	208	D	-0.24	0.00	0.54	0.42	0.05	0.27	0.14	0.54 *	0.01	0.00	-0.19	-0.20	-0.16	0.42 *
J	209	D	-2.15	0.00	0.88	0.52	0.05	0.03	0.03	0.88 *	0.01	0.00	-0.24	-0.29	-0.24	0.52 *
J	210	B	-0.99	0.00	0.71	0.40	0.09	0.71 *	0.13	0.07	0.01	0.00	-0.24	0.40 *	-0.15	-0.16
J	211	D	-0.41	0.00	0.58	0.38	0.20	0.17	0.04	0.58 *	0.01	0.00	-0.13	-0.16	-0.25	0.38 *
J	212	A	-0.10	0.00	0.50	0.36	0.50 *	0.08	0.25	0.16	0.01	0.00	0.36 *	-0.20	-0.10	-0.14
J	213	A	-0.83	0.00	0.67	0.45	0.67 *	0.04	0.22	0.07	0.01	0.00	0.45 *	-0.28	-0.21	-0.17
J	214	B	-0.07	0.00	0.49	0.35	0.14	0.49 *	0.25	0.10	0.01	0.00	-0.18	0.35 *	-0.05	-0.21

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
W	74	A	-0.14	0.00	0.55	0.12	0.55*	0.24	0.15	0.05	0.00	0.00	0.12*	0.05?	-0.10	-0.22
W	75	D	-0.89	0.00	0.68	0.47	0.15	0.09	0.08	0.68*	0.00	0.00	-0.25	-0.25	-0.22	0.47*
W	76	C	0.26	0.00	0.47	0.32	0.36	0.12	0.47*	0.05	0.00	0.00	-0.13	-0.15	0.32*	-0.21
W	77	B	-0.35	0.00	0.59	0.42	0.16	0.59*	0.14	0.11	0.00	0.00	-0.14	0.42*	-0.27	-0.20
W	78	A	-2.27	0.00	0.86	0.48	0.86*	0.04	0.05	0.05	0.00	0.00	0.48*	-0.28	-0.28	-0.23
W	79	A	-0.34	0.00	0.59	0.37	0.59*	0.07	0.22	0.12	0.00	0.00	0.37*	-0.23	-0.15	-0.17
W	80	B	-1.48	0.00	0.77	0.43	0.03	0.77*	0.08	0.13	0.00	0.00	-0.28	0.43*	-0.24	-0.22
W	81	D	-0.90	0.00	0.68	0.48	0.11	0.05	0.15	0.68*	0.00	0.00	-0.32	-0.24	-0.18	0.48*
W	82	B	-0.44	0.00	0.60	0.39	0.30	0.60*	0.06	0.04	0.00	0.00	-0.20	0.39*	-0.26	-0.22
W	83	A	-2.60	0.00	0.89	0.42	0.89*	0.06	0.04	0.02	0.00	0.00	0.42*	-0.23	-0.26	-0.22
W	84	D	0.53	0.00	0.42	0.28	0.13	0.11	0.33	0.42*	0.01	0.00	-0.06	-0.20	-0.11	0.28*
W	85	C	-1.54	0.00	0.78	0.47	0.09	0.06	0.78*	0.08	0.00	0.00	-0.20	-0.26	0.47*	-0.29
W	86	C	-1.00	0.00	0.70	0.36	0.05	0.03	0.70*	0.22	0.00	0.00	-0.27	-0.24	0.36*	-0.15
W	87	B	-1.22	0.00	0.73	0.41	0.13	0.73*	0.09	0.05	0.00	0.00	-0.20	0.41*	-0.23	-0.23
W	88	B	-1.09	0.00	0.71	0.51	0.07	0.71*	0.15	0.06	0.00	0.00	-0.31	0.51*	-0.28	-0.19
W	89	D	-1.78	0.00	0.81	0.46	0.05	0.05	0.09	0.81*	0.00	0.00	-0.26	-0.28	-0.20	0.46*
W	90	C	-1.31	0.00	0.75	0.48	0.03	0.11	0.75*	0.11	0.00	0.00	-0.24	-0.30	0.48*	-0.22
W	91	A	-1.79	0.00	0.81	0.53	0.81*	0.12	0.04	0.04	0.00	0.00	0.53*	-0.33	-0.29	-0.25
W	92	A	-1.19	0.00	0.73	0.26	0.73*	0.24	0.02	0.01	0.00	0.00	0.26*	-0.15	-0.23	-0.18
W	93	B	-0.58	0.00	0.63	0.34	0.13	0.63*	0.20	0.04	0.00	0.00	-0.20	0.34*	-0.10	-0.27
W	94	C	-0.47	0.00	0.61	0.36	0.29	0.02	0.61*	0.08	0.00	0.00	-0.22	-0.25	0.36*	-0.15
W	95	A	-0.77	0.00	0.66	0.34	0.66*	0.05	0.20	0.08	0.00	0.00	0.34*	-0.26	-0.10	-0.23
W	96	C	-2.05	0.00	0.84	0.36	0.09	0.03	0.84*	0.04	0.00	0.00	-0.19	-0.26	0.36*	-0.17
W	97	D	0.01	0.00	0.52	0.39	0.16	0.18	0.14	0.52*	0.00	0.00	-0.09	-0.26	-0.17	0.39*
W	98	C	0.59	0.00	0.41	0.13	0.54?	0.03	0.41*	0.02	0.00	0.00	0.03?	-0.26	0.13*	-0.21
W	99	B	-0.64	0.00	0.64	0.33	0.13	0.64*	0.17	0.05	0.00	0.00	-0.20	0.33*	-0.12	-0.20
W	100	D	0.94	0.00	0.35	0.20	0.21	0.24	0.20	0.35*	0.00	0.00	-0.28	-0.03	0.08?	0.20*
W	101	B	-0.38	0.00	0.59	0.32	0.10	0.59*	0.06	0.25	0.00	0.00	-0.20	0.32*	-0.21	-0.10
W	102	A	-1.49	0.00	0.77	0.30	0.77*	0.08	0.03	0.11	0.00	0.00	0.30*	-0.26	-0.25	-0.02
W	103	A	-2.19	0.00	0.85	0.47	0.85*	0.09	0.03	0.02	0.00	0.00	0.47*	-0.30	-0.26	-0.22
W	104	B	-0.13	0.00	0.55	0.34	0.26	0.55*	0.10	0.10	0.00	0.00	-0.08	0.34*	-0.26	-0.17
W	105	D	-0.37	0.00	0.59	0.37	0.09	0.26	0.06	0.59*	0.00	0.00	-0.22	-0.13	-0.26	0.37*
W	106	A	0.65	0.00	0.40	0.21	0.40*	0.07	0.06	0.47	0.00	0.00	0.21*	-0.24	-0.29	0.06?
W	107	B	-1.39	0.00	0.76	0.29	0.17	0.76*	0.04	0.04	0.00	0.00	-0.09	0.29*	-0.27	-0.20
W	108	B	-1.40	0.00	0.76	0.44	0.04	0.76*	0.13	0.08	0.00	0.00	-0.27	0.44*	-0.26	-0.17
W	109	C	-0.48	0.00	0.61	0.47	0.07	0.06	0.61*	0.25	0.01	0.00	-0.24	-0.25	0.47*	-0.23

Appendix I: 2001 PSSA Grade Eight Item Analysis Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	(RB)	R(C)	R(D)
W	111	A	-0.62	0.00	0.64	0.31	0.64*	0.04	0.09	0.22	0.00	0.00	0.31*	-0.26	-0.21	-0.08
W	112	D	-0.79	0.00	0.66	0.46	0.14	0.12	0.08	0.66*	0.00	0.00	-0.26	-0.23	-0.20	0.46*
W	113	D	0.21	0.00	0.48	0.23	0.27	0.08	0.17	0.48*	0.00	0.00	0.14?	-0.14	-0.36	0.23*
W	114	C	-2.31	0.00	0.86	0.51	0.01	0.09	0.86*	0.04	0.00	0.00	-0.19	-0.41	0.51*	-0.21
W	115	A	-1.78	0.00	0.81	0.40	0.81*	0.07	0.02	0.10	0.00	0.00	0.40*	-0.16	-0.21	-0.29
W	116	C	-1.28	0.00	0.74	0.31	0.06	0.09	0.74*	0.10	0.00	0.00	-0.24	-0.11	0.31*	-0.15
W	117	B	-2.51	0.00	0.88	0.37	0.02	0.88*	0.03	0.07	0.00	0.00	-0.24	0.37*	-0.20	-0.20
W	118	A	0.53	0.00	0.42	0.28	0.42*	0.07	0.12	0.39	0.00	0.00	0.28*	-0.26	-0.23	0.00
W	119	D	-0.92	0.00	0.69	0.56	0.16	0.08	0.08	0.69*	0.00	0.00	-0.32	-0.34	-0.19	0.56*
W	120	C	-1.39	0.00	0.76	0.46	0.11	0.05	0.76*	0.08	0.00	0.00	-0.31	-0.24	0.46*	-0.17
W	121	B	-1.03	0.00	0.70	0.38	0.20	0.70*	0.03	0.07	0.00	0.00	-0.23	0.38*	-0.26	-0.15
W	122	B	0.30	0.00	0.47	0.39	0.20	0.47*	0.17	0.17	0.00	0.00	-0.10	0.39*	-0.06	-0.35
W	123	C	0.78	0.00	0.38	0.27	0.40	0.09	0.38*	0.14	0.00	0.00	-0.11	-0.20	0.27*	-0.07
W	124	C	-1.96	0.00	0.83	0.51	0.07	0.04	0.83*	0.06	0.00	0.00	-0.34	-0.23	0.51*	-0.24
W	125	D	0.47	0.00	0.44	0.21	0.18	0.35	0.04	0.44*	0.00	0.00	-0.20	0.06?	-0.29	0.21*
W	126	A	0.60	0.00	0.41	0.06	0.41*	0.25	0.08	0.26	0.00	0.00	0.06*	0.10?	-0.21	-0.03
W	127	B	-1.40	0.00	0.76	0.31	0.16	0.76*	0.05	0.04	0.00	0.00	-0.16	0.31*	-0.23	-0.13
W	128	C	-1.12	0.00	0.72	0.47	0.09	0.06	0.72*	0.13	0.00	0.00	-0.28	-0.26	0.47*	-0.21
W	129	B	-0.14	0.00	0.55	0.40	0.05	0.55*	0.05	0.35	0.00	0.00	-0.29	0.40*	-0.28	-0.14
W	130	A	-1.08	0.00	0.71	0.35	0.71*	0.13	0.11	0.04	0.00	0.00	0.35*	-0.11	-0.23	-0.21
W	131	C	-0.83	0.00	0.67	0.43	0.17	0.11	0.67*	0.05	0.00	0.00	-0.14	-0.28	0.43*	-0.27
W	132	C	-0.34	0.00	0.59	0.36	0.26	0.05	0.59*	0.11	0.00	0.00	-0.25	-0.24	0.36*	-0.05
W	133	A	-1.22	0.00	0.73	0.55	0.73*	0.15	0.07	0.04	0.00	0.00	0.55*	-0.30	-0.32	-0.25
W	134	C	-0.18	0.00	0.56	0.42	0.05	0.28	0.56*	0.11	0.00	0.00	-0.27	-0.21	0.42*	-0.16
W	135	B	-0.07	0.00	0.54	0.32	0.15	0.54*	0.17	0.13	0.00	0.00	-0.14	0.32*	-0.19	-0.10
W	136	A	-2.07	0.00	0.84	0.56	0.84*	0.05	0.07	0.04	0.00	0.00	0.56*	-0.32	-0.34	-0.25
W	137	D	0.61	0.00	0.41	0.30	0.09	0.35	0.15	0.41*	0.01	0.00	-0.11	-0.08	-0.22	0.30*
W	138	C	-0.36	0.00	0.59	0.43	0.09	0.15	0.59*	0.17	0.00	0.00	-0.25	-0.22	0.43*	-0.15
W	139	D	0.79	0.00	0.38	0.23	0.25	0.32	0.06	0.38*	0.00	0.00	-0.18	0.07?	-0.25	0.23*
W	140	A	-0.03	0.00	0.53	0.26	0.53*	0.09	0.19	0.19	0.00	0.00	0.26*	-0.27	-0.14	0.02?
W	141	D	-0.96	0.00	0.69	0.45	0.09	0.11	0.11	0.69*	0.00	0.00	-0.21	-0.20	-0.26	0.45*
W	142	A	1.18	0.00	0.31	0.11	0.31*	0.41	0.11	0.18	0.00	0.00	0.11*	0.11?	-0.21	-0.09
W	143	D	0.62	0.00	0.41	0.14	0.27	0.14	0.18	0.41*	0.00	0.00	-0.13	-0.15	0.12?	0.14*
W	144	D	-0.61	0.00	0.63	0.55	0.21	0.08	0.07	0.63*	0.00	0.00	-0.26	-0.31	-0.26	0.55*
W	145	B	-0.11	0.00	0.54	0.31	0.23	0.54*	0.16	0.06	0.00	0.00	0.02?	0.31*	-0.28	-0.24
W	146	B	-1.02	0.00	0.70	0.41	0.10	0.70*	0.07	0.13	0.00	0.00	-0.26	0.41*	-0.24	-0.13

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis	Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
A	189	A	0.68	0.00	0.31	0.11	0.31	0.47	0.04	0.18	0.01	0.00	0.11	0.16	-0.23	-0.13	
A	190	C	0.34	0.00	0.39	0.15	0.03	0.09	0.39	0.48	0.01	0.00	-0.23	-0.25	0.15	0.16	
A	191	C	-0.31	0.00	0.56	0.51	0.16	0.20	0.56	0.07	0.01	0.00	-0.25	-0.24	0.51	-0.09	
A	192	C	-0.59	0.00	0.63	0.50	0.10	0.10	0.63	0.17	0.01	0.00	-0.22	-0.26	0.50	-0.17	
A	193	B	-0.11	0.00	0.50	0.31	0.09	0.50	0.20	0.20	0.01	0.00	-0.27	0.31	-0.16	0.06	
A	194	A	0.02	0.00	0.47	0.40	0.47	0.26	0.16	0.10	0.01	0.00	0.40	-0.06	-0.19	-0.22	
A	195	B	-0.47	0.00	0.60	0.46	0.19	0.60	0.11	0.09	0.01	0.00	-0.14	0.46	-0.28	-0.14	
A	196	B	-0.88	0.00	0.69	0.54	0.09	0.69	0.13	0.08	0.01	0.00	-0.27	0.54	-0.23	-0.21	
A	197	B	0.04	0.00	0.47	0.30	0.15	0.47	0.09	0.28	0.01	0.00	-0.08	0.30	-0.22	-0.04	
A	198	B	-1.52	0.00	0.81	0.61	0.06	0.81	0.07	0.05	0.01	0.00	-0.27	0.61	-0.31	-0.27	
A	199	D	0.60	0.00	0.32	0.28	0.34	0.23	0.09	0.32	0.01	0.00	0.02	-0.08	-0.22	0.28	
A	200	B	-1.62	0.00	0.83	0.61	0.05	0.83	0.06	0.05	0.01	0.00	-0.29	0.61	-0.29	-0.27	
A	201	A	-1.63	0.00	0.83	0.60	0.83	0.05	0.07	0.04	0.01	0.00	0.60	-0.32	-0.27	-0.23	
A	202	D	-1.35	0.00	0.78	0.56	0.05	0.78	0.10	0.78	0.01	0.00	-0.25	-0.31	-0.21	0.56	
A	203	B	-0.89	0.00	0.69	0.54	0.09	0.69	0.13	0.07	0.01	0.00	-0.22	0.54	-0.25	-0.24	
A	204	A	-0.48	0.00	0.60	0.44	0.60	0.15	0.11	0.13	0.01	0.00	0.44	-0.21	-0.21	-0.11	
A	205	A	0.55	0.00	0.34	0.18	0.34	0.44	0.08	0.13	0.01	0.00	0.18	0.07	-0.21	-0.07	
A	206	A	-1.52	0.00	0.81	0.52	0.81	0.07	0.07	0.04	0.01	0.00	0.52	-0.26	-0.22	-0.22	
A	207	B	-0.80	0.00	0.67	0.29	0.12	0.67	0.08	0.12	0.01	0.00	-0.07	0.29	-0.30	0.02	
A	208	C	0.65	0.00	0.31	0.24	0.42	0.06	0.31	0.19	0.01	0.00	0.10	-0.29	0.24	-0.13	
A	209	B	-1.10	0.00	0.74	0.53	0.07	0.74	0.14	0.04	0.02	0.00	-0.24	0.53	-0.26	-0.20	
A	210	B	-1.70	0.00	0.84	0.57	0.09	0.84	0.03	0.03	0.02	0.00	-0.25	0.57	-0.28	-0.27	
A	211	A	1.15	0.00	0.21	0.11	0.21	0.32	0.38	0.08	0.02	0.00	0.11	0.01	0.09	-0.19	
A	212	A	-0.70	0.00	0.65	0.43	0.65	0.17	0.06	0.12	0.02	0.00	0.43	-0.21	-0.26	-0.07	
A	213	B	-0.08	0.00	0.50	0.29	0.16	0.50	0.10	0.23	0.02	0.00	-0.14	0.29	-0.24	0.06	
A	214	D	-1.76	0.00	0.85	0.63	0.05	0.04	0.06	0.85	0.01	0.00	-0.28	-0.31	-0.29	0.63	
A	215	D	-1.39	0.00	0.79	0.63	0.08	0.07	0.05	0.79	0.01	0.00	-0.29	-0.30	-0.28	0.63	
A	216	A	-1.89	0.00	0.86	0.62	0.86	0.04	0.05	0.03	0.02	0.00	0.62	-0.29	-0.31	-0.25	
A	217	A	-0.73	0.00	0.66	0.52	0.66	0.07	0.14	0.13	0.02	0.00	0.52	-0.30	-0.21	-0.17	
A	218	D	-0.42	0.00	0.58	0.53	0.17	0.07	0.16	0.58	0.02	0.00	-0.16	-0.31	-0.23	0.53	
A	219	C	-0.55	0.00	0.62	0.48	0.13	0.09	0.62	0.16	0.02	0.00	-0.22	-0.28	0.48	-0.10	
A	220	A	-0.68	0.00	0.65	0.51	0.65	0.13	0.08	0.13	0.02	0.00	0.51	-0.19	-0.22	-0.23	
A	221	B	-1.54	0.00	0.81	0.62	0.09	0.81	0.05	0.04	0.02	0.00	-0.34	0.62	-0.29	-0.22	
A	222	B	-1.60	0.00	0.82	0.55	0.07	0.82	0.07	0.03	0.02	0.00	-0.21	0.55	-0.31	-0.24	
A	223	D	-1.08	0.00	0.73	0.66	0.11	0.06	0.09	0.73	0.02	0.00	-0.31	-0.30	-0.29	0.66	
A	224	D	-0.13	0.00	0.51	0.54	0.18	0.09	0.21	0.51	0.02	0.00	-0.18	-0.27	-0.19	0.54	
A	225	B	0.39	0.00	0.38	0.34	0.14	0.38	0.17	0.30	0.02	0.00	-0.15	0.34	-0.14	-0.04	
A	226	A	0.06	0.00	0.46	0.31	0.46	0.25	0.17	0.11	0.02	0.00	0.31	-0.12	-0.11	-0.06	
A	227	B	-1.02	0.00	0.72	0.49	0.12	0.72	0.05	0.10	0.02	0.00	-0.23	0.49	-0.31	-0.12	
A	228	A	-1.76	0.00	0.85	0.61	0.85	0.05	0.05	0.04	0.02	0.00	0.61	-0.29	-0.30	-0.26	

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
B	189	B	-1.04	0.00	0.70	0.45	0.11	0.70*	0.15	0.03	0.01	0.00	-0.23	0.45*	-0.18	-0.19
B	190	A	-1.59	0.00	0.81	0.47	0.81*	0.10	0.04	0.04	0.01	0.00	0.47*	-0.14	-0.31	-0.22
B	191	A	-1.69	0.00	0.82	0.46	0.82*	0.07	0.04	0.06	0.01	0.00	0.46*	-0.25	-0.25	-0.12
B	192	C	-0.55	0.00	0.59	0.19	0.05	0.06	0.59*	0.29	0.01	0.00	-0.18	-0.26	0.19*	0.11?
B	193	B	-1.26	0.00	0.75	0.54	0.07	0.75*	0.13	0.05	0.01	0.00	-0.26	0.54*	-0.23	-0.26
B	194	A	-2.15	0.00	0.88	0.60	0.88*	0.04	0.04	0.02	0.01	0.00	0.60*	-0.31	-0.27	-0.26
B	195	A	-1.45	0.00	0.78	0.63	0.78*	0.08	0.09	0.04	0.01	0.00	0.63*	-0.31	-0.33	-0.22
B	196	A	-1.07	0.00	0.71	0.56	0.71*	0.12	0.10	0.06	0.01	0.00	0.56*	-0.23	-0.28	-0.24
B	197	C	-0.88	0.00	0.67	0.49	0.08	0.16	0.67*	0.08	0.01	0.00	-0.18	-0.23	0.49*	-0.21
B	198	D	0.07	0.00	0.42	0.32	0.09	0.34	0.14	0.42*	0.01	0.00	-0.09	-0.07	-0.17	0.32*
B	199	C	-0.83	0.00	0.65	0.52	0.10	0.15	0.65*	0.08	0.01	0.00	-0.20	-0.23	0.52*	-0.24
B	200	A	-0.99	0.00	0.69	0.47	0.69*	0.12	0.09	0.09	0.01	0.00	0.47*	-0.20	-0.22	-0.18
B	201	C	-1.65	0.00	0.82	0.63	0.07	0.09	0.82*	0.02	0.01	0.00	-0.34	-0.31	0.63*	-0.23
B	202	B	0.31	0.00	0.36	0.14	0.27	0.36*	0.21	0.15	0.01	0.00	-0.03	0.14*	-0.11	0.09?
B	203	C	-1.09	0.00	0.71	0.44	0.08	0.08	0.71*	0.12	0.01	0.00	-0.24	-0.24	0.44*	-0.10
B	204	B	-1.07	0.00	0.71	0.44	0.19	0.71*	0.06	0.03	0.01	0.00	-0.16	0.44*	-0.22	-0.28
B	205	C	-1.35	0.00	0.76	0.50	0.04	0.08	0.76*	0.10	0.01	0.00	-0.31	-0.26	0.50*	-0.13
B	206	A	-0.47	0.00	0.57	0.50	0.57*	0.26	0.09	0.07	0.01	0.00	0.50*	-0.18	-0.29	-0.18
B	207	B	-1.51	0.00	0.79	0.59	0.06	0.79*	0.07	0.06	0.01	0.00	-0.30	0.59*	-0.29	-0.21
B	208	A	-1.25	0.00	0.74	0.58	0.74*	0.09	0.09	0.06	0.01	0.00	0.58*	-0.27	-0.27	-0.25
B	209	B	-0.65	0.00	0.61	0.36	0.05	0.61*	0.08	0.25	0.01	0.00	-0.26	0.36*	-0.24	-0.04
B	210	C	-2.03	0.00	0.87	0.63	0.04	0.05	0.87*	0.03	0.01	0.00	-0.29	-0.32	0.63*	-0.28
B	211	D	-1.50	0.00	0.79	0.64	0.09	0.06	0.05	0.79*	0.01	0.00	-0.31	-0.32	-0.25	0.64*
B	212	C	-1.52	0.00	0.79	0.54	0.05	0.10	0.79*	0.04	0.01	0.00	-0.25	-0.23	0.54*	-0.26
B	213	B	-1.45	0.00	0.78	0.49	0.05	0.78*	0.08	0.08	0.01	0.00	-0.30	0.49*	-0.19	-0.16
B	214	C	0.37	0.00	0.34	0.17	0.05	0.05	0.34*	0.55?	0.01	0.00	-0.31	-0.32	0.17*	0.19?
B	215	A	-1.03	0.00	0.70	0.52	0.70*	0.10	0.09	0.10	0.01	0.00	0.52*	-0.26	-0.24	-0.16
B	216	B	-1.21	0.00	0.74	0.51	0.08	0.74*	0.08	0.09	0.01	0.00	-0.28	0.51*	-0.25	-0.14
B	217	C	-2.01	0.00	0.87	0.66	0.04	0.05	0.87*	0.04	0.01	0.00	-0.34	-0.32	0.66*	-0.28
B	218	A	-0.30	0.00	0.52	0.38	0.52*	0.07	0.07	0.32	0.01	0.00	0.38*	-0.29	-0.28	0.00
B	219	D	-0.82	0.00	0.65	0.56	0.13	0.11	0.10	0.65*	0.01	0.00	-0.23	-0.20	-0.29	0.56*
B	220	B	-0.38	0.00	0.54	0.45	0.20	0.54*	0.16	0.08	0.02	0.00	-0.10	0.45*	-0.24	-0.19
B	221	A	-0.27	0.00	0.51	0.24	0.51*	0.18	0.24	0.05	0.02	0.00	0.24*	-0.15	0.03?	-0.14
B	222	B	-0.34	0.00	0.53	0.33	0.33	0.53*	0.09	0.05	0.01	0.00	-0.01	0.33*	-0.28	-0.20
B	223	B	-0.53	0.00	0.58	0.39	0.18	0.58*	0.09	0.14	0.02	0.00	-0.10	0.39*	-0.30	-0.09
B	224	C	-1.01	0.00	0.70	0.56	0.17	0.07	0.70*	0.05	0.02	0.00	-0.23	-0.29	0.56*	-0.26
B	225	A	-1.83	0.00	0.84	0.65	0.84*	0.05	0.05	0.05	0.01	0.00	0.65*	-0.34	-0.35	-0.23
B	226	C	-1.43	0.00	0.78	0.63	0.08	0.08	0.78*	0.04	0.01	0.00	-0.29	-0.29	0.63*	-0.28
B	227	A	-1.69	0.00	0.82	0.65	0.82*	0.08	0.05	0.03	0.01	0.00	0.65*	-0.32	-0.35	-0.25
B	228	D	-1.39	0.00	0.77	0.60	0.05	0.05	0.10	0.77*	0.02	0.00	-0.33	-0.27	-0.24	0.60*

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PIBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
C	189	B	-1.68	0.00	0.84	0.48	0.05	0.84*	0.07	0.03	0.02	0.00	-0.21	0.48*	-0.25	-0.17
C	190	B	-0.44	0.00	0.59	0.48	0.25	0.59*	0.07	0.07	0.02	0.00	-0.18	0.48*	-0.21	-0.24
C	191	D	-0.01	0.00	0.48	0.48	0.09	0.23	0.19	0.48*	0.02	0.00	-0.23	-0.09	-0.24	0.48*
C	192	D	-1.44	0.00	0.80	0.59	0.06	0.08	0.05	0.80*	0.01	0.00	-0.26	-0.27	-0.29	0.59*
C	193	D	-0.72	0.00	0.66	0.56	0.10	0.13	0.10	0.66*	0.01	0.00	-0.21	-0.26	-0.25	0.56*
C	194	B	-1.32	0.00	0.78	0.61	0.08	0.78*	0.07	0.06	0.01	0.00	-0.30	0.61*	-0.29	-0.25
C	195	A	-0.68	0.00	0.65	0.49	0.65*	0.10	0.19	0.05	0.01	0.00	0.49*	-0.20	-0.21	-0.23
C	196	C	-0.86	0.00	0.69	0.58	0.17	0.08	0.69*	0.06	0.02	0.00	-0.27	-0.26	0.58*	-0.25
C	197	A	-0.89	0.00	0.69	0.54	0.69*	0.11	0.08	0.10	0.01	0.00	0.54*	-0.24	-0.28	-0.18
C	198	A	0.77	0.00	0.28	0.18	0.28*	0.24	0.36	0.11	0.02	0.00	0.18*	-0.03	0.01?	-0.11
C	199	B	-0.18	0.00	0.52	0.36	0.20	0.52*	0.12	0.14	0.02	0.00	-0.12	0.36*	-0.16	-0.11
C	200	A	0.46	0.00	0.35	0.34	0.35*	0.35	0.14	0.15	0.02	0.00	0.34*	-0.04	-0.23	-0.07
C	201	A	-0.36	0.00	0.57	0.40	0.57*	0.17	0.12	0.14	0.01	0.00	0.40*	-0.22	-0.18	-0.05
C	202	B	0.12	0.00	0.44	0.36	0.32	0.44*	0.09	0.13	0.01	0.00	-0.07	0.36*	-0.29	-0.07
C	203	D	0.14	0.00	0.44	0.26	0.11	0.17	0.27	0.44*	0.02	0.00	-0.07	-0.13	-0.04	0.26*
C	204	A	-1.82	0.00	0.86	0.57	0.86*	0.06	0.04	0.03	0.01	0.00	0.57*	-0.25	-0.29	-0.24
C	205	B	0.29	0.00	0.40	0.34	0.33	0.40*	0.09	0.17	0.01	0.00	0.01?	0.34*	-0.33	-0.11
C	206	C	-1.21	0.00	0.76	0.52	0.05	0.08	0.76*	0.10	0.01	0.00	-0.30	-0.29	0.52*	-0.14
C	207	B	-0.28	0.00	0.55	0.45	0.23	0.55*	0.17	0.04	0.01	0.00	-0.21	0.45*	-0.12	-0.25
C	208	C	-1.16	0.00	0.75	0.48	0.14	0.06	0.75*	0.04	0.01	0.00	-0.17	-0.27	0.48*	-0.24
C	209	D	-1.27	0.00	0.77	0.57	0.11	0.05	0.05	0.77*	0.02	0.00	-0.22	-0.30	-0.27	0.57*
C	210	B	-1.64	0.00	0.83	0.58	0.04	0.83*	0.08	0.04	0.02	0.00	-0.29	0.58*	-0.26	-0.25
C	211	A	0.34	0.00	0.38	0.33	0.38*	0.47	0.08	0.05	0.02	0.00	0.33*	-0.04	-0.21	-0.17
C	212	C	-2.09	0.00	0.89	0.60	0.03	0.04	0.89*	0.02	0.02	0.00	-0.29	-0.30	0.60*	-0.23
C	213	B	-0.13	0.00	0.51	0.25	0.39	0.51*	0.06	0.03	0.02	0.00	0.03?	0.25*	-0.23	-0.23
C	214	D	-0.80	0.00	0.68	0.47	0.09	0.15	0.07	0.68*	0.02	0.00	-0.15	-0.17	-0.29	0.47*
C	215	A	-1.42	0.00	0.80	0.57	0.80*	0.08	0.06	0.05	0.02	0.00	0.57*	-0.28	-0.27	-0.22
C	216	A	0.43	0.00	0.36	0.18	0.36*	0.20	0.22	0.20	0.02	0.00	0.18*	-0.08	-0.09	0.08?
C	217	B	0.02	0.00	0.47	0.40	0.09	0.47*	0.27	0.16	0.02	0.00	-0.29	0.40*	-0.05	-0.15
C	218	B	0.00	0.00	0.47	0.33	0.13	0.47*	0.30	0.09	0.02	0.00	-0.14	0.33*	-0.08	-0.14
C	219	C	-0.85	0.00	0.68	0.45	0.18	0.06	0.68*	0.06	0.02	0.00	-0.12	-0.28	0.45*	-0.23
C	220	A	0.06	0.00	0.46	0.34	0.46*	0.10	0.21	0.22	0.02	0.00	0.34*	-0.20	-0.07	-0.09
C	221	D	-0.73	0.00	0.66	0.66	0.13	0.08	0.12	0.66*	0.02	0.00	-0.32	-0.29	-0.25	0.66*
C	222	C	-0.43	0.00	0.59	0.40	0.05	0.29	0.59*	0.05	0.02	0.00	-0.26	-0.11	0.40*	-0.20
C	223	C	-0.62	0.00	0.63	0.52	0.17	0.07	0.63*	0.11	0.02	0.00	-0.19	-0.29	0.52*	-0.19
C	224	C	0.79	0.00	0.28	0.14	0.29	0.31	0.28*	0.10	0.02	0.00	0.01?	0.07?	0.14*	-0.19
C	225	A	-1.54	0.00	0.82	0.64	0.82*	0.08	0.05	0.03	0.02	0.00	0.64*	-0.30	-0.33	-0.24
C	226	D	-1.30	0.00	0.78	0.62	0.08	0.06	0.07	0.78*	0.02	0.00	-0.25	-0.29	-0.31	0.62*
C	227	B	-1.29	0.00	0.78	0.59	0.07	0.78*	0.06	0.08	0.02	0.00	-0.31	0.59*	-0.30	-0.19
C	228	D	-1.12	0.00	0.74	0.58	0.06	0.06	0.13	0.74*	0.02	0.00	-0.30	-0.30	-0.21	0.58*

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
D	189	B	-1.04	0.00	0.73	0.46	0.10	0.73*	0.13	0.02	0.01	0.00	-0.22	0.46*	-0.20	-0.21
D	190	D	-0.20	0.00	0.55	0.50	0.11	0.07	0.26	0.55*	0.02	0.00	-0.24	-0.21	-0.18	0.50*
D	191	C	-0.49	0.00	0.62	0.27	0.07	0.07	0.62*	0.23	0.01	0.00	-0.22	-0.26	0.27*	0.07?
D	192	C	0.57	0.00	0.37	0.12	0.03	0.07	0.37*	0.51?	0.01	0.00	-0.25	-0.28	0.12*	0.20?
D	193	B	-0.54	0.00	0.63	0.53	0.18	0.63*	0.14	0.04	0.01	0.00	-0.28	0.53*	-0.20	-0.21
D	194	C	-1.17	0.00	0.75	0.55	0.08	0.08	0.75*	0.08	0.01	0.00	-0.21	-0.29	0.55*	-0.24
D	195	D	-1.10	0.00	0.74	0.54	0.06	0.08	0.11	0.74*	0.01	0.00	-0.30	-0.25	-0.17	0.54*
D	196	A	-1.96	0.00	0.86	0.59	0.86*	0.05	0.05	0.03	0.01	0.00	0.59*	-0.31	-0.26	-0.25
D	197	A	-0.46	0.00	0.61	0.36	0.61*	0.04	0.18	0.16	0.01	0.00	0.36*	-0.28	-0.11	-0.11
D	198	B	-1.70	0.00	0.83	0.62	0.05	0.83*	0.06	0.04	0.01	0.00	-0.27	0.62*	-0.31	-0.28
D	199	C	-1.99	0.00	0.87	0.59	0.05	0.04	0.87*	0.03	0.01	0.00	-0.27	-0.31	0.59*	-0.23
D	200	A	-0.92	0.00	0.71	0.47	0.71*	0.10	0.10	0.08	0.01	0.00	0.47*	-0.23	-0.18	-0.18
D	201	A	-1.01	0.00	0.72	0.58	0.72*	0.10	0.08	0.09	0.01	0.00	0.58*	-0.25	-0.30	-0.22
D	202	B	-0.05	0.00	0.52	0.36	0.15	0.52*	0.17	0.14	0.01	0.00	-0.14	0.36*	-0.18	-0.07
D	203	A	0.91	0.00	0.30	0.21	0.30*	0.28	0.04	0.36	0.01	0.00	0.21*	0.02?	-0.26	-0.02
D	204	D	-0.55	0.00	0.63	0.55	0.08	0.14	0.13	0.63*	0.01	0.00	-0.25	-0.29	-0.16	0.55*
D	205	A	0.71	0.00	0.34	0.20	0.34*	0.47	0.07	0.10	0.01	0.00	0.20*	0.05?	-0.20	-0.10
D	206	B	-0.26	0.00	0.57	0.47	0.20	0.57*	0.09	0.13	0.01	0.00	-0.15	0.47*	-0.31	-0.12
D	207	B	-0.56	0.00	0.63	0.45	0.11	0.63*	0.11	0.14	0.01	0.00	-0.21	0.45*	-0.19	-0.15
D	208	A	1.19	0.00	0.25	0.17	0.25*	0.17	0.06	0.51?	0.01	0.00	0.17*	-0.14	-0.26	0.16?
D	209	B	0.49	0.00	0.39	0.28	0.12	0.39*	0.38	0.10	0.02	0.00	-0.08	0.28*	-0.04	-0.16
D	210	D	0.44	0.00	0.40	0.43	0.15	0.10	0.33	0.40*	0.02	0.00	-0.21	-0.22	-0.06	0.43*
D	211	B	0.38	0.00	0.42	0.25	0.14	0.42*	0.37	0.05	0.02	0.00	-0.13	0.25*	0.02?	-0.19
D	212	C	0.73	0.00	0.34	0.12	0.10	0.46	0.34*	0.08	0.01	0.00	-0.18	0.13?	0.12*	-0.09
D	213	B	-1.15	0.00	0.75	0.59	0.09	0.75*	0.05	0.10	0.01	0.00	-0.30	0.59*	-0.29	-0.22
D	214	D	-0.18	0.00	0.55	0.37	0.08	0.15	0.21	0.55*	0.01	0.00	-0.18	-0.16	-0.09	0.37*
D	215	A	-1.88	0.00	0.85	0.59	0.85*	0.05	0.06	0.03	0.01	0.00	0.59*	-0.27	-0.29	-0.25
D	216	C	-0.88	0.00	0.70	0.52	0.05	0.12	0.70*	0.12	0.01	0.00	-0.22	-0.27	0.52*	-0.19
D	217	B	-0.70	0.00	0.66	0.37	0.08	0.66*	0.21	0.03	0.01	0.00	-0.18	0.37*	-0.11	-0.24
D	218	B	-0.47	0.00	0.61	0.40	0.08	0.61*	0.12	0.18	0.02	0.00	-0.20	0.40*	-0.11	-0.17
D	219	A	-0.23	0.00	0.56	0.45	0.56*	0.28	0.09	0.05	0.01	0.00	0.45*	-0.14	-0.25	-0.20
D	220	B	-1.10	0.00	0.74	0.53	0.09	0.74*	0.05	0.10	0.02	0.00	-0.22	0.53*	-0.28	-0.20
D	221	C	-1.37	0.00	0.79	0.60	0.11	0.06	0.79*	0.04	0.02	0.00	-0.32	-0.27	0.60*	-0.23
D	222	A	1.64	0.00	0.17	0.01	0.17*	0.24	0.53?	0.04	0.02	0.00	0.01*	0.03?	0.12?	-0.17
D	223	B	0.33	0.00	0.43	0.23	0.23	0.43*	0.08	0.24	0.02	0.00	-0.15	0.23*	-0.19	0.10?
D	224	B	-0.29	0.00	0.57	0.34	0.09	0.57*	0.18	0.14	0.02	0.00	-0.20	0.34*	-0.14	-0.05
D	225	A	0.22	0.00	0.45	0.31	0.45*	0.19	0.10	0.24	0.02	0.00	0.31*	-0.20	-0.27	0.11?
D	226	C	0.49	0.00	0.39	0.36	0.36	0.17	0.39*	0.07	0.01	0.00	-0.06	-0.15	0.36*	-0.18
D	227	C	0.56	0.00	0.38	0.10	0.09	0.05	0.38*	0.47	0.01	0.00	-0.21	-0.27	0.10*	0.23?
D	228	B	1.11	0.00	0.26	0.19	0.30	0.26*	0.39	0.04	0.02	0.00	-0.04	0.19*	0.04?	-0.22

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
E	189	A	-0.94	0.00	0.72	0.52	0.72*	0.07	0.04	0.16	0.02	0.00	0.52*	-0.27	-0.24	-0.20
E	190	A	0.91	0.00	0.29	0.13	0.29*	0.46	0.04	0.19	0.02	0.00	0.13*	0.21?	-0.28	-0.14
E	191	D	0.16	0.00	0.46	0.48	0.08	0.24	0.20	0.46*	0.02	0.00	-0.23	-0.10	-0.22	0.48*
E	192	B	-0.69	0.00	0.66	0.47	0.11	0.66*	0.18	0.03	0.02	0.00	-0.20	0.47*	-0.18	-0.24
E	193	C	-1.59	0.00	0.82	0.61	0.04	0.08	0.82*	0.05	0.02	0.00	-0.28	-0.32	0.61*	-0.23
E	194	B	-1.36	0.00	0.79	0.61	0.07	0.79*	0.06	0.07	0.02	0.00	-0.29	0.61*	-0.28	-0.26
E	195	B	-0.66	0.00	0.66	0.56	0.17	0.66*	0.10	0.06	0.02	0.00	-0.21	0.56*	-0.31	-0.22
E	196	D	-0.92	0.00	0.71	0.59	0.09	0.11	0.08	0.71*	0.02	0.00	-0.21	-0.27	-0.29	0.59*
E	197	B	-1.73	0.00	0.84	0.64	0.05	0.84*	0.05	0.04	0.02	0.00	-0.31	0.64*	-0.31	-0.26
E	198	A	0.76	0.00	0.32	0.18	0.32*	0.23	0.34	0.10	0.02	0.00	0.18*	0.00	-0.02	-0.11
E	199	B	0.15	0.00	0.47	0.31	0.15	0.47*	0.08	0.29	0.02	0.00	-0.09	0.31*	-0.24	-0.02
E	200	B	0.41	0.00	0.40	0.27	0.17	0.40*	0.08	0.34	0.02	0.00	-0.13	0.27*	-0.26	0.07?
E	201	B	-1.27	0.00	0.78	0.58	0.05	0.78*	0.12	0.04	0.02	0.00	-0.33	0.58*	-0.22	-0.26
E	202	A	-0.99	0.00	0.73	0.61	0.73*	0.08	0.08	0.10	0.02	0.00	0.61*	-0.28	-0.32	-0.21
E	203	A	-1.89	0.00	0.86	0.58	0.86*	0.06	0.04	0.03	0.02	0.00	0.58*	-0.25	-0.31	-0.23
E	204	C	-0.97	0.00	0.72	0.44	0.06	0.07	0.72*	0.14	0.02	0.00	-0.27	-0.22	0.44*	-0.09
E	205	A	0.55	0.00	0.37	0.21	0.37*	0.44	0.07	0.11	0.02	0.00	0.21*	0.05?	-0.21	-0.10
E	206	B	0.36	0.00	0.41	0.34	0.29	0.41*	0.11	0.17	0.02	0.00	0.00	0.34*	-0.28	-0.09
E	207	C	1.31	0.00	0.21	0.09	0.30	0.41	0.21*	0.07	0.02	0.00	-0.12	0.22?	0.09*	-0.19
E	208	D	-1.31	0.00	0.78	0.54	0.12	0.04	0.04	0.78*	0.02	0.00	-0.20	-0.27	-0.30	0.54*
E	209	A	-0.82	0.00	0.69	0.56	0.69*	0.07	0.14	0.08	0.02	0.00	0.56*	-0.30	-0.21	-0.23
E	210	A	-1.47	0.00	0.81	0.63	0.81*	0.06	0.07	0.05	0.02	0.00	0.63*	-0.29	-0.30	-0.27
E	211	B	-0.64	0.00	0.65	0.46	0.18	0.65*	0.09	0.06	0.02	0.00	-0.23	0.46*	-0.18	-0.14
E	212	A	-0.73	0.00	0.67	0.40	0.67*	0.05	0.15	0.11	0.02	0.00	0.40*	-0.26	-0.18	-0.07
E	213	A	-0.64	0.00	0.65	0.43	0.65*	0.06	0.09	0.18	0.02	0.00	0.43*	-0.31	-0.27	-0.02
E	214	A	0.63	0.00	0.35	0.22	0.35*	0.10	0.48	0.06	0.02	0.00	0.22*	-0.22	0.09?	-0.17
E	215	D	0.87	0.00	0.29	0.23	0.29	0.31	0.09	0.29*	0.02	0.00	-0.04	0.04?	-0.19	0.23*
E	216	A	0.60	0.00	0.36	0.18	0.36*	0.15	0.38	0.09	0.02	0.00	0.18*	-0.13	0.07?	-0.09
E	217	B	0.04	0.00	0.49	0.39	0.08	0.49*	0.34	0.08	0.02	0.00	-0.23	0.39*	-0.07	-0.20
E	218	D	-0.07	0.00	0.52	0.46	0.21	0.09	0.16	0.52*	0.02	0.00	-0.12	-0.29	-0.14	0.46*
E	219	A	-0.45	0.00	0.61	0.42	0.61*	0.09	0.11	0.17	0.02	0.00	0.42*	-0.23	-0.24	-0.04
E	220	B	-1.05	0.00	0.74	0.58	0.11	0.74*	0.07	0.07	0.02	0.00	-0.27	0.58*	-0.28	-0.20
E	221	B	-1.50	0.00	0.81	0.61	0.10	0.81*	0.05	0.03	0.02	0.00	-0.31	0.61*	-0.27	-0.23
E	222	A	0.56	0.00	0.36	0.16	0.36*	0.09	0.08	0.45	0.02	0.00	0.16*	-0.21	-0.25	0.20?
E	223	D	-0.92	0.00	0.71	0.64	0.11	0.07	0.09	0.71*	0.02	0.00	-0.29	-0.29	-0.27	0.64*
E	224	D	0.41	0.00	0.40	0.33	0.24	0.23	0.12	0.40*	0.02	0.00	-0.03	-0.13	-0.14	0.33*
E	225	D	-0.02	0.00	0.51	0.39	0.06	0.20	0.22	0.51*	0.02	0.00	-0.26	-0.08	-0.12	0.39*
E	226	B	0.97	0.00	0.27	0.06	0.05	0.27*	0.08	0.58?	0.02	0.00	-0.27	0.06*	-0.25	0.30?
E	227	C	-0.58	0.00	0.64	0.37	0.05	0.26	0.64*	0.03	0.02	0.00	-0.29	-0.05	0.37*	-0.23
E	228	C	0.44	0.00	0.39	0.23	0.08	0.46	0.39*	0.05	0.02	0.00	-0.26	0.12?	0.23*	-0.26

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
F	189	B	-0.18	0.00	0.54	0.40	0.07	0.54*	0.31	0.07	0.02	0.00	-0.13	0.40*	-0.18	-0.17
F	190	D	0.14	0.00	0.46	0.27	0.27	0.07	0.19	0.46*	0.02	0.00	0.03?	-0.21	-0.15	0.27*
F	191	C	-1.91	0.00	0.86	0.54	0.05	0.05	0.86*	0.03	0.01	0.00	-0.28	-0.26	0.54*	-0.21
F	192	C	0.98	0.00	0.27	0.13	0.08	0.35	0.27*	0.29	0.02	0.00	-0.11	0.02?	0.13*	-0.01
F	193	A	-0.99	0.00	0.72	0.58	0.72*	0.11	0.08	0.08	0.01	0.00	0.58*	-0.30	-0.27	-0.21
F	194	B	-0.19	0.00	0.54	0.40	0.30	0.54*	0.10	0.05	0.01	0.00	-0.09	0.40*	-0.25	-0.23
F	195	D	-1.04	0.00	0.73	0.46	0.09	0.10	0.07	0.73*	0.01	0.00	-0.16	-0.21	-0.24	0.46*
F	196	B	-0.98	0.00	0.72	0.50	0.11	0.72*	0.05	0.11	0.01	0.00	-0.24	0.50*	-0.25	-0.19
F	197	C	-0.96	0.00	0.72	0.54	0.07	0.10	0.72*	0.11	0.01	0.00	-0.26	-0.27	0.54*	-0.21
F	198	A	-0.22	0.00	0.55	0.49	0.55*	0.12	0.13	0.19	0.02	0.00	0.49*	-0.24	-0.27	-0.10
F	199	A	-0.28	0.00	0.56	0.33	0.56*	0.16	0.22	0.05	0.02	0.00	0.33*	-0.10	-0.09	-0.23
F	200	A	0.30	0.00	0.42	0.24	0.42*	0.10	0.11	0.36	0.01	0.00	0.24*	-0.22	-0.29	0.16?
F	201	C	-0.62	0.00	0.64	0.55	0.11	0.16	0.64*	0.08	0.02	0.00	-0.24	-0.29	0.55*	-0.17
F	202	C	0.66	0.00	0.33	0.21	0.26	0.28	0.33*	0.11	0.01	0.00	-0.03	0.01?	0.21*	-0.16
F	203	D	0.25	0.00	0.43	0.36	0.24	0.20	0.12	0.43*	0.02	0.00	-0.05	-0.18	-0.15	0.36*
F	204	B	-0.46	0.00	0.61	0.41	0.26	0.61*	0.07	0.05	0.01	0.00	-0.15	0.41*	-0.23	-0.18
F	205	D	-0.69	0.00	0.66	0.49	0.07	0.15	0.11	0.66*	0.01	0.00	-0.26	-0.17	-0.21	0.49*
F	206	D	-1.22	0.00	0.76	0.51	0.06	0.05	0.12	0.76*	0.01	0.00	-0.25	-0.30	-0.18	0.51*
F	207	C	-1.60	0.00	0.82	0.62	0.03	0.07	0.82*	0.06	0.01	0.00	-0.27	-0.33	0.62*	-0.27
F	208	C	-0.11	0.00	0.52	0.32	0.11	0.30	0.52*	0.06	0.01	0.00	-0.23	-0.01	0.32*	-0.18
F	209	C	-0.53	0.00	0.62	0.52	0.10	0.11	0.62*	0.15	0.02	0.00	-0.24	-0.26	0.52*	-0.16
F	210	D	-1.34	0.00	0.78	0.61	0.07	0.08	0.05	0.78*	0.02	0.00	-0.29	-0.29	-0.27	0.61*
F	211	A	-0.95	0.00	0.71	0.54	0.71*	0.10	0.11	0.07	0.01	0.00	0.54*	-0.28	-0.27	-0.14
F	212	C	-0.37	0.00	0.58	0.26	0.07	0.08	0.58*	0.25	0.01	0.00	-0.21	-0.28	0.26*	0.10?
F	213	C	-1.11	0.00	0.74	0.60	0.12	0.08	0.74*	0.05	0.01	0.00	-0.29	-0.30	0.60*	-0.23
F	214	A	-1.10	0.00	0.74	0.59	0.74*	0.10	0.09	0.06	0.02	0.00	0.59*	-0.30	-0.27	-0.23
F	215	A	-0.75	0.00	0.67	0.57	0.67*	0.13	0.12	0.07	0.02	0.00	0.57*	-0.24	-0.28	-0.22
F	216	C	0.63	0.00	0.34	0.17	0.05	0.52?	0.34*	0.07	0.02	0.00	-0.28	0.14?	0.17*	-0.20
F	217	C	-0.46	0.00	0.61	0.49	0.12	0.15	0.61*	0.11	0.02	0.00	-0.15	-0.25	0.49*	-0.19
F	218	B	0.11	0.00	0.47	0.35	0.20	0.47*	0.18	0.14	0.02	0.00	-0.12	0.35*	-0.17	-0.06
F	219	A	0.75	0.00	0.31	0.32	0.31*	0.39	0.12	0.16	0.02	0.00	0.32*	0.00	-0.24	-0.08
F	220	D	0.77	0.00	0.31	0.28	0.34	0.23	0.11	0.31*	0.02	0.00	0.01?	-0.06	-0.21	0.28*
F	221	C	-1.00	0.00	0.72	0.57	0.18	0.06	0.72*	0.03	0.01	0.00	-0.29	-0.31	0.57*	-0.19
F	222	D	-0.46	0.00	0.61	0.56	0.10	0.15	0.13	0.61*	0.02	0.00	-0.23	-0.30	-0.18	0.56*
F	223	B	0.01	0.00	0.49	0.35	0.16	0.49*	0.19	0.14	0.02	0.00	-0.10	0.35*	-0.16	-0.10
F	224	A	-0.16	0.00	0.53	0.46	0.53*	0.18	0.11	0.16	0.02	0.00	0.46*	-0.21	-0.22	-0.10
F	225	B	-1.15	0.00	0.75	0.44	0.08	0.75*	0.07	0.08	0.02	0.00	-0.18	0.44*	-0.31	-0.07
F	226	C	0.94	0.00	0.28	0.22	0.42	0.08	0.28*	0.21	0.02	0.00	0.12?	-0.29	0.22*	-0.09
F	227	B	-0.50	0.00	0.62	0.48	0.11	0.62*	0.12	0.14	0.02	0.00	-0.25	0.48*	-0.20	-0.14
F	228	A	-0.29	0.00	0.56	0.52	0.56*	0.24	0.12	0.06	0.02	0.00	0.52*	-0.18	-0.29	-0.21

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
G	189	A	-1.11	0.00	0.71	0.45	0.71*	0.05	0.18	0.04	0.02	0.00	0.45*	-0.28	-0.20	-0.13
G	190	C	-1.63	0.00	0.82	0.49	0.03	0.03	0.82*	0.11	0.02	0.00	-0.27	-0.27	0.49*	-0.18
G	191	C	-0.88	0.00	0.66	0.40	0.07	0.23	0.66*	0.02	0.01	0.00	-0.28	-0.11	0.40*	-0.20
G	192	B	-1.69	0.00	0.83	0.51	0.04	0.83*	0.03	0.08	0.01	0.00	-0.27	0.51*	-0.25	-0.19
G	193	B	-1.10	0.00	0.71	0.50	0.15	0.71*	0.05	0.07	0.01	0.00	-0.20	0.50*	-0.29	-0.20
G	194	B	-0.33	0.00	0.51	0.27	0.11	0.51*	0.08	0.29	0.02	0.00	-0.15	0.27*	-0.24	0.05?
G	195	C	-1.17	0.00	0.73	0.39	0.19	0.04	0.73*	0.03	0.01	0.00	-0.12	-0.24	0.39*	-0.23
G	196	D	-1.72	0.00	0.83	0.58	0.06	0.05	0.04	0.83*	0.01	0.00	-0.27	-0.29	-0.23	0.58*
G	197	D	-0.03	0.00	0.42	0.45	0.29	0.17	0.11	0.42*	0.02	0.00	-0.20	-0.14	-0.12	0.45*
G	198	C	-1.05	0.00	0.70	0.48	0.13	0.10	0.70*	0.06	0.02	0.00	-0.16	-0.27	0.48*	-0.20
G	199	D	-0.75	0.00	0.62	0.51	0.20	0.08	0.08	0.62*	0.02	0.00	-0.19	-0.26	-0.21	0.51*
G	200	A	-0.37	0.00	0.52	0.46	0.52*	0.24	0.08	0.15	0.02	0.00	0.46*	-0.13	-0.24	-0.19
G	201	C	-1.25	0.00	0.74	0.55	0.17	0.05	0.74*	0.03	0.02	0.00	-0.28	-0.28	0.55*	-0.21
G	202	A	-1.36	0.00	0.77	0.51	0.77*	0.07	0.04	0.11	0.01	0.00	0.51*	-0.30	-0.30	-0.12
G	203	C	-1.77	0.00	0.84	0.60	0.07	0.04	0.84*	0.04	0.01	0.00	-0.28	-0.29	0.60*	-0.27
G	204	B	-0.37	0.00	0.52	0.32	0.15	0.52*	0.05	0.27	0.02	0.00	-0.17	0.32*	-0.27	0.00
G	205	A	-0.88	0.00	0.66	0.51	0.66*	0.06	0.19	0.08	0.02	0.00	0.51*	-0.31	-0.19	-0.20
G	206	B	-1.65	0.00	0.82	0.58	0.05	0.82*	0.05	0.07	0.01	0.00	-0.30	0.58*	-0.28	-0.22
G	207	B	-0.74	0.00	0.62	0.47	0.12	0.62*	0.10	0.14	0.02	0.00	-0.20	0.47*	-0.22	-0.16
G	208	C	-0.91	0.00	0.66	0.52	0.12	0.14	0.66*	0.06	0.01	0.00	-0.29	-0.20	0.52*	-0.16
G	209	B	-1.98	0.00	0.87	0.52	0.03	0.87*	0.06	0.03	0.02	0.00	-0.22	0.52*	-0.26	-0.20
G	210	D	-0.66	0.00	0.60	0.53	0.13	0.06	0.20	0.60*	0.02	0.00	-0.25	-0.23	-0.19	0.53*
G	211	B	-1.66	0.00	0.82	0.56	0.05	0.82*	0.08	0.03	0.02	0.00	-0.28	0.56*	-0.26	-0.22
G	212	B	-0.90	0.00	0.66	0.50	0.10	0.66*	0.19	0.04	0.01	0.00	-0.23	0.50*	-0.20	-0.23
G	213	A	-0.03	0.00	0.42	0.37	0.42*	0.27	0.18	0.11	0.02	0.00	0.37*	-0.01	-0.17	-0.20
G	214	D	-0.72	0.00	0.61	0.49	0.24	0.06	0.07	0.61*	0.02	0.00	-0.11	-0.31	-0.27	0.49*
G	215	D	-1.17	0.00	0.73	0.56	0.05	0.09	0.11	0.73*	0.02	0.00	-0.30	-0.27	-0.19	0.56*
G	216	B	-0.65	0.00	0.60	0.48	0.17	0.60*	0.16	0.05	0.02	0.00	-0.20	0.48*	-0.17	-0.22
G	217	B	-1.59	0.00	0.81	0.63	0.06	0.81*	0.07	0.05	0.02	0.00	-0.30	0.63*	-0.30	-0.27
G	218	D	0.03	0.00	0.41	0.30	0.10	0.29	0.18	0.41*	0.02	0.00	-0.10	-0.04	-0.15	0.30*
G	219	D	-0.62	0.00	0.59	0.55	0.17	0.10	0.12	0.59*	0.02	0.00	-0.19	-0.27	-0.22	0.55*
G	220	C	-1.66	0.00	0.82	0.64	0.06	0.06	0.82*	0.05	0.02	0.00	-0.28	-0.32	0.64*	-0.28
G	221	B	-0.98	0.00	0.68	0.54	0.11	0.68*	0.13	0.06	0.02	0.00	-0.28	0.54*	-0.20	-0.21
G	222	B	-1.36	0.00	0.77	0.60	0.05	0.77*	0.12	0.05	0.02	0.00	-0.31	0.60*	-0.25	-0.27
G	223	D	-0.18	0.00	0.47	0.35	0.13	0.13	0.26	0.47*	0.02	0.00	-0.10	-0.16	-0.10	0.35*
G	224	D	-1.43	0.00	0.78	0.61	0.06	0.06	0.08	0.78*	0.02	0.00	-0.30	-0.31	-0.22	0.61*
G	225	C	-1.26	0.00	0.75	0.55	0.05	0.10	0.75*	0.09	0.02	0.00	-0.29	-0.29	0.55*	-0.14
G	226	B	-0.33	0.00	0.51	0.42	0.26	0.51*	0.18	0.05	0.02	0.00	-0.17	0.42*	-0.10	-0.27
G	227	D	-1.40	0.00	0.77	0.61	0.09	0.06	0.06	0.77*	0.02	0.00	-0.25	-0.25	-0.32	0.61*
G	228	B	-1.49	0.00	0.79	0.59	0.07	0.79*	0.07	0.05	0.02	0.00	-0.29	0.59*	-0.28	-0.22

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PfBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
H	189	C	2.45	0.00	0.09	-0.17	0.08	0.58 ?	0.09 *	0.24	0.02	0.00	-0.13	0.34 ?	-0.17 *	-0.10
H	190	A	-0.79	0.00	0.68	0.36	0.68 *	0.08	0.03	0.19	0.01	0.00	0.36 *	-0.14	-0.21	-0.13
H	191	D	1.07	0.00	0.28	0.31	0.14	0.28	0.28	0.28 *	0.02	0.00	-0.23	-0.10	0.06 ?	0.31 *
H	192	B	-0.70	0.00	0.67	0.39	0.13	0.67 *	0.12	0.06	0.01	0.00	-0.22	0.39 *	-0.12	-0.13
H	193	B	-1.06	0.00	0.73	0.52	0.11	0.73 *	0.05	0.09	0.01	0.00	-0.24	0.52 *	-0.25	-0.19
H	194	A	1.82	0.00	0.16	-0.09	0.16 *	0.04	0.70 ?	0.09	0.01	0.00	-0.09 *	-0.25	0.39 ?	-0.20
H	195	D	0.19	0.00	0.47	0.35	0.08	0.22	0.22	0.47 *	0.01	0.00	-0.12	-0.14	-0.10	0.35 *
H	196	D	1.02	0.00	0.29	0.20	0.30	0.32	0.08	0.29 *	0.01	0.00	-0.02	0.01 ?	-0.17	0.20 *
H	197	C	1.55	0.00	0.19	0.01	0.56 ?	0.16	0.19 *	0.07	0.01	0.00	0.22 ?	-0.07	0.01 *	-0.19
H	198	D	0.36	0.00	0.43	0.36	0.14	0.12	0.30	0.43 *	0.01	0.00	-0.16	-0.21	-0.03	0.36 *
H	199	C	-0.30	0.00	0.58	0.43	0.20	0.17	0.58 *	0.04	0.01	0.00	-0.15	-0.17	0.43 *	-0.23
H	200	B	-1.16	0.00	0.75	0.54	0.07	0.75 *	0.09	0.07	0.02	0.00	-0.21	0.54 *	-0.25	-0.25
H	201	A	-0.04	0.00	0.52	0.25	0.52 *	0.18	0.24	0.04	0.01	0.00	0.25 *	-0.15	0.01 ?	-0.15
H	202	A	1.43	0.00	0.21	0.05	0.21 *	0.28	0.46	0.04	0.02	0.00	0.05 *	0.12 ?	-0.01	-0.14
H	203	A	0.49	0.00	0.40	0.15	0.40 *	0.10	0.08	0.42	0.01	0.00	0.15 *	-0.18	-0.19	0.14 ?
H	204	B	-0.39	0.00	0.60	0.28	0.10	0.60 *	0.15	0.14	0.01	0.00	-0.17	0.28 *	-0.10	-0.03
H	205	C	-1.55	0.00	0.81	0.58	0.04	0.06	0.81 *	0.07	0.01	0.00	-0.27	-0.29	0.58 *	-0.23
H	206	B	0.03	0.00	0.50	0.45	0.31	0.50 *	0.07	0.11	0.01	0.00	-0.16	0.45 *	-0.27	-0.13
H	207	B	0.83	0.00	0.32	0.07	0.04	0.32 *	0.30	0.32	0.01	0.00	-0.27	0.07 *	-0.07	0.21 ?
H	208	A	0.18	0.00	0.47	0.37	0.47 *	0.21	0.10	0.21	0.01	0.00	0.37 *	-0.19	-0.25	0.03 ?
H	209	B	0.60	0.00	0.37	0.33	0.35	0.37 *	0.15	0.11	0.02	0.00	-0.08	0.33 *	-0.13	-0.10
H	210	C	0.73	0.00	0.35	0.18	0.04	0.10	0.35 *	0.50 ?	0.02	0.00	-0.26	-0.27	0.18 *	0.18 ?
H	211	D	-1.29	0.00	0.77	0.62	0.07	0.10	0.05	0.77 *	0.01	0.00	-0.29	-0.30	-0.25	0.62 *
H	212	C	-0.40	0.00	0.60	0.52	0.11	0.12	0.60 *	0.16	0.01	0.00	-0.23	-0.24	0.52 *	-0.17
H	213	C	-0.99	0.00	0.72	0.56	0.09	0.09	0.72 *	0.08	0.01	0.00	-0.21	-0.32	0.56 *	-0.21
H	214	B	-1.22	0.00	0.76	0.61	0.08	0.76 *	0.08	0.07	0.01	0.00	-0.27	0.61 *	-0.29	-0.26
H	215	B	-0.61	0.00	0.65	0.57	0.11	0.65 *	0.13	0.10	0.02	0.00	-0.28	0.57 *	-0.23	-0.21
H	216	B	-0.68	0.00	0.66	0.51	0.07	0.66 *	0.19	0.06	0.02	0.00	-0.22	0.51 *	-0.21	-0.24
H	217	A	0.04	0.00	0.50	0.36	0.50 *	0.06	0.25	0.18	0.02	0.00	0.36 *	-0.31	-0.09	-0.06
H	218	B	0.64	0.00	0.37	0.26	0.12	0.37 *	0.29	0.21	0.02	0.00	-0.14	0.26 *	-0.05	-0.03
H	219	C	-0.55	0.00	0.63	0.55	0.12	0.16	0.63 *	0.08	0.02	0.00	-0.21	-0.26	0.55 *	-0.21
H	220	A	-0.88	0.00	0.70	0.53	0.70 *	0.11	0.10	0.07	0.02	0.00	-0.32	-0.21	-0.25	-0.22
H	221	C	-1.30	0.00	0.77	0.62	0.10	0.09	0.77 *	0.02	0.02	0.00	-0.32	-0.31	0.62 *	-0.19
H	222	B	-1.02	0.00	0.73	0.47	0.16	0.73 *	0.07	0.03	0.02	0.00	-0.20	0.47 *	-0.22	-0.22
H	223	B	0.44	0.00	0.41	0.36	0.31	0.41 *	0.11	0.15	0.02	0.00	-0.05	0.36 *	-0.28	-0.05
H	224	B	0.87	0.00	0.32	0.12	0.28	0.32 *	0.24	0.15	0.02	0.00	-0.02	0.12 *	-0.06	0.06 ?
H	225	B	-1.25	0.00	0.77	0.46	0.08	0.77 *	0.07	0.07	0.02	0.00	-0.17	0.46 *	-0.30	-0.11
H	226	C	1.10	0.00	0.27	0.21	0.46	0.08	0.27 *	0.18	0.02	0.00	0.12 ?	-0.29	0.21 *	-0.09
H	227	B	-0.49	0.00	0.62	0.48	0.11	0.62 *	0.12	0.14	0.02	0.00	-0.22	0.48 *	-0.21	-0.15
H	228	A	-0.91	0.00	0.71	0.56	0.71 *	0.10	0.10	0.07	0.02	0.00	0.56 *	-0.27	-0.24	-0.23

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form Sequence	Key	Logit	SEC	P-Value	PIBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
I 189	B	-1.27	0.00	0.77	0.48	0.06	0.77 *	0.13	0.03	0.01	0.00	-0.23	0.48 *	-0.22	-0.19
I 190	B	-1.96	0.00	0.87	0.52	0.07	0.87 *	0.02	0.02	0.01	0.00	-0.26	0.52 *	-0.24	-0.22
I 191	A	1.16	0.00	0.20	0.12	0.20 *	0.30	0.40	0.08	0.01	0.00	0.12 *	0.00	0.09 ?	-0.20
I 192	A	-0.66	0.00	0.64	0.38	0.64 *	0.17	0.05	0.12	0.01	0.00	0.38 *	-0.19	-0.26	-0.04
I 193	B	-0.12	0.00	0.50	0.25	0.16	0.50 *	0.09	0.24	0.02	0.00	-0.12	0.25 *	-0.24	0.06 ?
I 194	D	-2.09	0.00	0.88	0.57	0.04	0.03	0.04	0.88 *	0.01	0.00	-0.25	-0.29	-0.25	0.57 *
I 195	D	-1.61	0.00	0.82	0.57	0.07	0.06	0.04	0.82 *	0.01	0.00	-0.28	-0.28	-0.23	0.57 *
I 196	A	-2.20	0.00	0.90	0.57	0.90 *	0.03	0.04	0.02	0.01	0.00	0.57 *	-0.28	-0.27	-0.24
I 197	A	-0.83	0.00	0.68	0.48	0.68 *	0.05	0.13	0.12	0.01	0.00	0.48 *	-0.28	-0.19	-0.18
I 198	D	-0.47	0.00	0.59	0.52	0.18	0.06	0.16	0.59 *	0.01	0.00	-0.16	-0.29	-0.23	0.52 *
I 199	C	-0.68	0.00	0.64	0.47	0.12	0.07	0.64 *	0.16	0.01	0.00	-0.20	-0.26	0.47 *	-0.15
I 200	A	-0.81	0.00	0.67	0.48	0.67 *	0.12	0.07	0.12	0.02	0.00	0.48 *	-0.18	-0.21	-0.23
I 201	B	-1.69	0.00	0.84	0.59	0.08	0.84 *	0.04	0.03	0.01	0.00	-0.31	0.59 *	-0.29	-0.23
I 202	B	-1.79	0.00	0.85	0.52	0.06	0.85 *	0.06	0.02	0.01	0.00	-0.22	0.52 *	-0.27	-0.24
I 203	D	-1.32	0.00	0.77	0.64	0.09	0.05	0.07	0.77 *	0.01	0.00	-0.33	-0.28	-0.28	0.64 *
I 204	D	-0.24	0.00	0.53	0.55	0.17	0.07	0.21	0.53 *	0.02	0.00	-0.21	-0.25	-0.22	0.55 *
I 205	B	0.27	0.00	0.40	0.37	0.14	0.40 *	0.15	0.29	0.01	0.00	-0.17	0.37 *	-0.15	-0.06
I 206	A	-0.04	0.00	0.48	0.27	0.48 *	0.24	0.17	0.10	0.01	0.00	0.27 *	-0.11	-0.09	-0.05
I 207	B	-1.24	0.00	0.76	0.48	0.10	0.76 *	0.04	0.09	0.01	0.00	-0.23	0.48 *	-0.31	-0.12
I 208	A	-2.07	0.00	0.88	0.60	0.88 *	0.04	0.04	0.02	0.01	0.00	0.60 *	-0.28	-0.31	-0.25
I 209	A	0.63	0.00	0.31	0.15	0.31 *	0.44	0.05	0.18	0.01	0.00	0.15 *	0.17 ?	-0.28	-0.13
I 210	C	0.27	0.00	0.40	0.21	0.04	0.09	0.40 *	0.45	0.02	0.00	-0.29	-0.27	0.21 *	0.14 ?
I 211	B	-0.89	0.00	0.69	0.52	0.11	0.69 *	0.16	0.03	0.01	0.00	-0.27	0.52 *	-0.21	-0.23
I 212	C	-0.58	0.00	0.62	0.52	0.11	0.10	0.62 *	0.16	0.01	0.00	-0.24	-0.26	0.52 *	-0.16
I 213	B	-0.14	0.00	0.51	0.33	0.09	0.51 *	0.20	0.19	0.01	0.00	-0.27	0.33 *	-0.14	0.02 ?
I 214	A	0.15	0.00	0.43	0.38	0.43 *	0.28	0.16	0.11	0.02	0.00	0.38 *	-0.04	-0.18	-0.19
I 215	B	-0.64	0.00	0.63	0.54	0.17	0.63 *	0.11	0.08	0.02	0.00	-0.20	0.54 *	-0.28	-0.20
I 216	B	-0.84	0.00	0.68	0.53	0.10	0.68 *	0.13	0.08	0.02	0.00	-0.25	0.53 *	-0.22	-0.21
I 217	B	0.02	0.00	0.47	0.34	0.14	0.47 *	0.10	0.27	0.02	0.00	-0.12	0.34 *	-0.22	-0.04
I 218	B	-1.40	0.00	0.79	0.63	0.07	0.79 *	0.08	0.05	0.02	0.00	-0.27	0.63 *	-0.31	-0.27
I 219	D	0.61	0.00	0.32	0.30	0.34	0.23	0.10	0.32 *	0.02	0.00	0.02 ?	-0.09	-0.22	0.30 *
I 220	B	-1.46	0.00	0.80	0.62	0.06	0.80 *	0.07	0.06	0.02	0.00	-0.28	0.62 *	-0.29	-0.27
I 221	A	-1.57	0.00	0.82	0.60	0.82 *	0.07	0.07	0.04	0.02	0.00	0.60 *	-0.34	-0.26	-0.21
I 222	D	-1.28	0.00	0.77	0.59	0.05	0.07	0.10	0.77 *	0.02	0.00	-0.28	-0.32	-0.22	0.59 *
I 223	B	-0.84	0.00	0.68	0.54	0.11	0.68 *	0.13	0.07	0.01	0.00	-0.26	0.54 *	-0.22	-0.21
I 224	A	-0.53	0.00	0.61	0.49	0.61 *	0.15	0.12	0.11	0.02	0.00	0.49 *	-0.22	-0.22	-0.15
I 225	A	0.66	0.00	0.31	0.16	0.31 *	0.47	0.08	0.13	0.02	0.00	0.16 *	0.12 ?	-0.21	-0.09
I 226	A	-1.41	0.00	0.79	0.53	0.79 *	0.08	0.07	0.05	0.02	0.00	0.53 *	-0.27	-0.21	-0.22
I 227	B	-0.81	0.00	0.67	0.32	0.12	0.67 *	0.07	0.12	0.02	0.00	-0.10	0.32 *	-0.30	0.01 ?
I 228	C	0.70	0.00	0.30	0.24	0.43	0.07	0.30 *	0.19	0.02	0.00	0.09 ?	-0.27	0.24 *	-0.11

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PtBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
J	189	B	-0.77	0.00	0.64	0.33	0.03	0.64*	0.06	0.25	0.01	0.00	-0.23	0.33*	-0.24	-0.04
J	190	C	-2.30	0.00	0.90	0.58	0.03	0.04	0.90*	0.02	0.01	0.00	-0.27	-0.27	0.58*	-0.25
J	191	D	-1.67	0.00	0.82	0.60	0.07	0.05	0.05	0.82*	0.01	0.00	-0.30	-0.29	-0.23	0.60*
J	192	C	-1.59	0.00	0.81	0.52	0.05	0.09	0.81*	0.04	0.01	0.00	-0.22	-0.23	0.52*	-0.25
J	193	B	-1.64	0.00	0.82	0.45	0.04	0.82*	0.06	0.07	0.01	0.00	-0.29	0.45*	-0.16	-0.15
J	194	C	0.58	0.00	0.29	0.11	0.04	0.04	0.29*	0.62?	0.01	0.00	-0.30	-0.27	0.11*	0.20?
J	195	A	-1.07	0.00	0.71	0.48	0.71*	0.10	0.09	0.09	0.01	0.00	0.48*	-0.25	-0.22	-0.13
J	196	B	-1.23	0.00	0.74	0.48	0.08	0.74*	0.07	0.10	0.01	0.00	-0.30	0.48*	-0.20	-0.12
J	197	C	-2.25	0.00	0.89	0.64	0.03	0.04	0.89*	0.03	0.01	0.00	-0.33	-0.31	0.64*	-0.25
J	198	A	-0.36	0.00	0.54	0.37	0.54*	0.07	0.06	0.32	0.01	0.00	0.37*	-0.28	-0.25	-0.02
J	199	D	-1.04	0.00	0.70	0.56	0.11	0.10	0.08	0.70*	0.01	0.00	-0.25	-0.21	-0.28	0.56*
J	200	B	-0.43	0.00	0.55	0.43	0.20	0.55*	0.15	0.08	0.02	0.00	-0.10	0.43*	-0.24	-0.17
J	201	A	-0.33	0.00	0.53	0.26	0.53*	0.17	0.24	0.05	0.02	0.00	0.26*	-0.15	0.00	-0.14
J	202	B	-0.44	0.00	0.56	0.35	0.31	0.56*	0.07	0.05	0.01	0.00	-0.06	0.35*	-0.27	-0.16
J	203	B	-0.48	0.00	0.57	0.36	0.20	0.57*	0.07	0.15	0.02	0.00	-0.07	0.36*	-0.28	-0.10
J	204	C	-1.14	0.00	0.73	0.55	0.15	0.06	0.73*	0.05	0.01	0.00	-0.23	-0.27	0.55*	-0.26
J	205	A	-2.02	0.00	0.87	0.61	0.87*	0.03	0.03	0.05	0.01	0.00	0.61*	-0.32	-0.33	-0.22
J	206	C	-1.60	0.00	0.81	0.62	0.07	0.07	0.81*	0.03	0.01	0.00	-0.31	-0.28	0.62*	-0.26
J	207	A	-1.89	0.00	0.85	0.64	0.85*	0.07	0.04	0.03	0.01	0.00	0.64*	-0.30	-0.34	-0.26
J	208	D	-1.51	0.00	0.80	0.60	0.04	0.05	0.10	0.80*	0.01	0.00	-0.30	-0.31	-0.23	0.60*
J	209	B	-0.98	0.00	0.69	0.47	0.11	0.69*	0.16	0.03	0.02	0.00	-0.22	0.47*	-0.18	-0.23
J	210	A	-1.42	0.00	0.78	0.52	0.78*	0.11	0.05	0.04	0.02	0.00	0.52*	-0.16	-0.31	-0.24
J	211	A	-1.49	0.00	0.79	0.50	0.79*	0.08	0.05	0.07	0.01	0.00	0.50*	-0.26	-0.27	-0.13
J	212	C	-0.51	0.00	0.57	0.23	0.07	0.08	0.57*	0.27	0.02	0.00	-0.18	-0.29	0.23*	0.12?
J	213	B	-1.17	0.00	0.73	0.55	0.07	0.73*	0.13	0.06	0.01	0.00	-0.26	0.55*	-0.23	-0.25
J	214	A	-1.93	0.00	0.86	0.64	0.86*	0.05	0.04	0.04	0.01	0.00	0.64*	-0.29	-0.28	-0.31
J	215	A	-1.18	0.00	0.73	0.61	0.73*	0.10	0.11	0.04	0.01	0.00	0.61*	-0.31	-0.29	-0.20
J	216	A	-0.97	0.00	0.69	0.58	0.69*	0.13	0.11	0.06	0.02	0.00	0.58*	-0.25	-0.26	-0.24
J	217	C	-0.82	0.00	0.65	0.52	0.09	0.16	0.65*	0.09	0.02	0.00	-0.22	-0.22	0.52*	-0.22
J	218	D	0.17	0.00	0.39	0.31	0.10	0.35	0.15	0.39*	0.02	0.00	-0.12	-0.02	-0.16	0.31*
J	219	C	-0.80	0.00	0.65	0.54	0.11	0.17	0.65*	0.06	0.02	0.00	-0.23	-0.21	0.54*	-0.25
J	220	A	-0.81	0.00	0.65	0.48	0.65*	0.12	0.11	0.10	0.02	0.00	0.48*	-0.19	-0.21	-0.18
J	221	C	-1.44	0.00	0.78	0.66	0.09	0.10	0.78*	0.02	0.01	0.00	-0.35	-0.32	0.66*	-0.22
J	222	B	0.24	0.00	0.37	0.16	0.26	0.37*	0.21	0.14	0.02	0.00	-0.02	0.16*	-0.11	0.06?
J	223	C	-0.98	0.00	0.69	0.48	0.09	0.08	0.69*	0.13	0.02	0.00	-0.27	-0.29	0.48*	-0.07
J	224	B	-0.94	0.00	0.68	0.47	0.20	0.68*	0.07	0.04	0.02	0.00	-0.15	0.47*	-0.24	-0.29
J	225	C	-1.21	0.00	0.74	0.53	0.06	0.09	0.74*	0.10	0.02	0.00	-0.31	-0.27	0.53*	-0.14
J	226	A	-0.43	0.00	0.55	0.49	0.55*	0.26	0.10	0.07	0.02	0.00	0.49*	-0.14	-0.29	-0.20
J	227	B	-1.32	0.00	0.76	0.58	0.07	0.76*	0.09	0.07	0.02	0.00	-0.32	0.58*	-0.27	-0.18
J	228	A	-1.15	0.00	0.73	0.56	0.73*	0.09	0.10	0.07	0.02	0.00	0.56*	-0.24	-0.26	-0.24

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PIBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
W	74	C	-1.55	0.00	0.78	0.39	0.03	0.06	0.78*	0.14	0.00	0.00	-0.23	-0.29	0.39*	-0.16
W	75	D	0.78	0.00	0.37	0.27	0.19	0.30	0.13	0.37*	0.01	0.00	0.01?	-0.12	-0.24	0.27*
W	76	C	-0.41	0.00	0.59	0.37	0.06	0.16	0.59*	0.18	0.00	0.00	-0.27	-0.26	0.37*	-0.05
W	77	B	-0.85	0.00	0.67	0.49	0.16	0.67*	0.04	0.13	0.00	0.00	-0.28	0.49*	-0.27	-0.22
W	78	A	-1.25	0.00	0.74	0.42	0.74*	0.06	0.09	0.11	0.01	0.00	0.42*	-0.26	-0.17	-0.24
W	79	A	-1.72	0.00	0.80	0.42	0.80*	0.06	0.07	0.07	0.00	0.00	0.42*	-0.26	-0.19	-0.22
W	80	C	-0.27	0.00	0.57	0.39	0.06	0.16	0.57*	0.20	0.01	0.00	-0.19	-0.29	0.39*	-0.10
W	81	A	-1.01	0.00	0.70	0.42	0.70*	0.16	0.11	0.04	0.00	0.00	0.42*	-0.34	-0.08	-0.22
W	82	C	-1.10	0.00	0.71	0.26	0.03	0.13	0.71*	0.13	0.00	0.00	-0.20	-0.04	0.26*	-0.20
W	83	D	-0.64	0.00	0.64	0.33	0.05	0.07	0.24	0.64*	0.00	0.00	-0.30	-0.35	0.01?	0.33*
W	84	B	0.71	0.00	0.39	0.19	0.34	0.39*	0.03	0.24	0.00	0.00	-0.08	0.19*	-0.27	-0.02
W	85	A	-0.87	0.00	0.67	0.33	0.67*	0.25	0.04	0.04	0.00	0.00	0.33*	-0.12	-0.27	-0.26
W	86	D	-2.22	0.00	0.86	0.55	0.03	0.04	0.08	0.86*	0.00	0.00	-0.27	-0.30	-0.33	0.55*
W	87	B	-1.21	0.00	0.73	0.38	0.08	0.73*	0.12	0.07	0.00	0.00	-0.27	0.38*	-0.07	-0.28
W	88	B	-0.17	0.00	0.55	0.37	0.24	0.55*	0.07	0.13	0.00	0.00	-0.24	0.37*	-0.30	0.00
W	89	D	-1.84	0.00	0.81	0.50	0.03	0.07	0.09	0.81*	0.00	0.00	-0.29	-0.21	-0.32	0.50*
W	90	D	-0.33	0.00	0.58	0.43	0.23	0.07	0.12	0.58*	0.00	0.00	-0.22	-0.26	-0.17	0.43*
W	91	A	-1.12	0.00	0.72	0.48	0.72*	0.11	0.11	0.06	0.00	0.00	0.48*	-0.27	-0.26	-0.21
W	92	C	-0.72	0.00	0.65	0.41	0.15	0.12	0.65*	0.08	0.00	0.00	-0.21	-0.25	0.41*	-0.14
W	93	B	0.20	0.00	0.48	0.25	0.10	0.48*	0.37	0.05	0.00	0.00	-0.21	0.25*	-0.04	-0.19
W	94	C	0.14	0.00	0.49	0.28	0.22	0.24	0.49*	0.05	0.01	0.00	-0.19	-0.04	0.28*	-0.19
W	95	D	-0.73	0.00	0.65	0.15	0.23	0.05	0.06	0.65*	0.00	0.00	0.15?	-0.31	-0.25	0.15*
W	96	B	-0.45	0.00	0.60	0.22	0.22	0.60*	0.15	0.03	0.00	0.00	-0.04	0.22*	-0.14	-0.24
W	97	A	-1.31	0.00	0.74	0.44	0.74*	0.07	0.06	0.12	0.00	0.00	0.44*	-0.27	-0.33	-0.12
W	98	D	-0.09	0.00	0.54	0.33	0.06	0.16	0.24	0.54*	0.00	0.00	-0.24	-0.16	-0.10	0.33*
W	99	B	0.42	0.00	0.44	0.28	0.20	0.44*	0.28	0.08	0.00	0.00	-0.16	0.28*	-0.04	-0.19
W	100	C	-0.02	0.00	0.52	0.31	0.27	0.14	0.52*	0.06	0.01	0.00	-0.08	-0.21	0.31*	-0.19
W	101	A	0.64	0.00	0.40	0.31	0.40*	0.11	0.16	0.32	0.00	0.00	0.31*	-0.22	-0.17	-0.03
W	102	B	-0.23	0.00	0.56	0.28	0.15	0.56*	0.12	0.17	0.00	0.00	-0.17	0.28*	-0.18	-0.05
W	103	C	-0.93	0.00	0.68	0.54	0.04	0.16	0.68*	0.12	0.00	0.00	-0.29	-0.36	0.54*	-0.19
W	104	A	-2.00	0.00	0.83	0.57	0.83*	0.06	0.06	0.05	0.00	0.00	0.57*	-0.32	-0.33	-0.27
W	105	C	-1.69	0.00	0.80	0.53	0.06	0.06	0.80*	0.09	0.00	0.00	-0.29	-0.32	0.53*	-0.23
W	106	C	-0.95	0.00	0.69	0.35	0.21	0.06	0.69*	0.04	0.00	0.00	-0.13	-0.24	0.35*	-0.25
W	107	A	-1.03	0.00	0.70	0.42	0.70*	0.05	0.13	0.12	0.00	0.00	0.42*	-0.30	-0.22	-0.16
W	108	A	-0.89	0.00	0.68	0.44	0.68*	0.05	0.11	0.16	0.00	0.00	0.44*	-0.30	-0.15	-0.24
W	109	D	-0.15	0.00	0.55	0.51	0.20	0.13	0.12	0.55*	0.01	0.00	-0.21	-0.29	-0.22	0.51*
W	110	B	-0.24	0.00	0.56	0.29	0.26	0.56*	0.09	0.09	0.00	0.00	-0.06	0.29*	-0.27	-0.14
W	111	C	0.14	0.00	0.49	0.40	0.33	0.09	0.49*	0.08	0.00	0.00	-0.14	-0.22	0.40*	-0.24
W	112	B	-1.42	0.00	0.76	0.45	0.04	0.76*	0.07	0.13	0.00	0.00	-0.29	0.45*	-0.28	-0.17
W	113	D	-1.84	0.00	0.81	0.51	0.09	0.05	0.05	0.81*	0.00	0.00	-0.25	-0.29	-0.27	0.51*

Appendix J: 2001 Grade Eleven Item Analysis
Multiple Choice Items for Reading

Form	Sequence	Key	Logit	SEC	P-Value	PIBis Corr	%A	%B	%C	%D	Blank	Invalid	R(A)	R(B)	R(C)	R(D)
W	115	D	0.01	0.00	0.52	0.19	0.11	0.05	0.33	0.52	0.00	0.00	-0.18	-0.28	0.05	0.19
W	116	C	0.08	0.00	0.50	0.32	0.10	0.25	0.50	0.14	0.01	0.00	-0.19	-0.25	0.32	0.02
W	117	D	-1.22	0.00	0.73	0.31	0.11	0.11	0.05	0.73	0.00	0.00	-0.17	-0.12	-0.22	0.31
W	118	A	0.73	0.00	0.38	0.32	0.38	0.33	0.16	0.13	0.00	0.00	0.32	-0.10	-0.22	-0.07
W	119	D	0.04	0.00	0.51	0.36	0.14	0.17	0.17	0.51	0.00	0.00	-0.19	-0.14	-0.17	0.36
W	120	C	-0.66	0.00	0.64	0.35	0.07	0.09	0.64	0.19	0.00	0.00	-0.29	-0.24	0.35	-0.05
W	121	A	0.24	0.00	0.47	0.20	0.47	0.27	0.21	0.05	0.00	0.00	0.20	0.06	-0.19	-0.21
W	122	B	-0.31	0.00	0.58	0.36	0.19	0.58	0.12	0.12	0.00	0.00	-0.06	0.36	-0.36	-0.12
W	123	A	-0.13	0.00	0.54	0.29	0.54	0.34	0.08	0.04	0.00	0.00	0.29	-0.12	-0.19	-0.19
W	124	A	-0.69	0.00	0.64	0.51	0.64	0.09	0.15	0.11	0.00	0.00	0.51	-0.29	-0.27	-0.19
W	125	A	-2.12	0.00	0.85	0.52	0.85	0.06	0.07	0.03	0.00	0.00	0.52	-0.28	-0.32	-0.24
W	126	B	0.65	0.00	0.40	0.10	0.21	0.40	0.29	0.10	0.00	0.00	-0.05	0.10	0.08	-0.20
W	127	C	-0.12	0.00	0.54	0.27	0.24	0.11	0.54	0.11	0.00	0.00	-0.09	-0.21	0.27	-0.09
W	128	A	0.12	0.00	0.50	0.36	0.50	0.20	0.17	0.13	0.00	0.00	0.36	-0.10	-0.26	-0.12
W	129	B	-1.28	0.00	0.74	0.43	0.03	0.74	0.14	0.09	0.00	0.00	-0.27	0.43	-0.22	-0.22
W	130	D	-1.83	0.00	0.81	0.57	0.08	0.04	0.07	0.81	0.00	0.00	-0.34	-0.31	-0.27	0.57
W	131	B	-1.69	0.00	0.80	0.46	0.06	0.80	0.10	0.05	0.00	0.00	-0.30	0.46	-0.27	-0.17
W	132	B	-0.34	0.00	0.58	0.26	0.23	0.58	0.14	0.04	0.00	0.00	-0.09	0.26	-0.13	-0.21
W	133	D	-0.98	0.00	0.69	0.42	0.10	0.09	0.11	0.69	0.00	0.00	-0.19	-0.24	-0.20	0.42
W	134	C	0.06	0.00	0.51	0.21	0.10	0.20	0.51	0.19	0.00	0.00	-0.20	-0.11	0.21	0.00
W	135	D	-0.65	0.00	0.64	0.58	0.11	0.16	0.09	0.64	0.00	0.00	-0.24	-0.36	-0.24	0.58
W	136	D	1.15	0.00	0.31	0.02	0.50	0.12	0.07	0.31	0.00	0.00	0.13	-0.09	-0.16	0.02
W	137	C	-0.62	0.00	0.63	0.48	0.09	0.16	0.63	0.12	0.00	0.00	-0.23	-0.20	0.48	-0.28
W	138	A	-0.41	0.00	0.60	0.49	0.60	0.20	0.08	0.12	0.00	0.00	0.49	-0.26	-0.26	-0.19
W	139	B	-0.93	0.00	0.69	0.52	0.07	0.69	0.09	0.15	0.00	0.00	-0.28	0.52	-0.30	-0.23
W	140	C	0.43	0.00	0.44	0.18	0.10	0.31	0.44	0.15	0.00	0.00	-0.25	0.06	0.18	-0.10
W	141	B	0.36	0.00	0.45	0.34	0.08	0.45	0.16	0.30	0.01	0.00	-0.30	0.34	-0.09	-0.11
W	142	D	0.16	0.00	0.49	0.28	0.22	0.24	0.05	0.49	0.00	0.00	-0.19	0.01	-0.30	0.28
W	143	C	-0.35	0.00	0.58	0.28	0.07	0.16	0.58	0.18	0.00	0.00	-0.22	-0.21	0.28	0.00
W	144	A	-1.16	0.00	0.72	0.50	0.72	0.05	0.05	0.17	0.00	0.00	0.50	-0.28	-0.25	-0.27
W	145	B	-0.04	0.00	0.53	0.32	0.34	0.53	0.08	0.05	0.00	0.00	-0.09	0.32	-0.22	-0.25
W	146	A	-0.57	0.00	0.62	0.46	0.62	0.28	0.05	0.05	0.00	0.00	0.46	-0.21	-0.31	-0.26
W	147	B	-0.50	0.00	0.61	0.35	0.09	0.61	0.27	0.03	0.00	0.00	-0.32	0.35	-0.09	-0.22
W	148	D	-0.31	0.00	0.58	0.47	0.10	0.23	0.09	0.58	0.00	0.00	-0.26	-0.16	-0.29	0.47
W	149	C	-1.22	0.00	0.73	0.46	0.06	0.14	0.73	0.07	0.00	0.00	-0.29	-0.22	0.46	-0.21
W	150	B	0.46	0.00	0.43	0.23	0.08	0.43	0.07	0.42	0.00	0.00	-0.22	0.23	-0.25	0.03
W	151	B	-1.32	0.00	0.75	0.46	0.16	0.75	0.06	0.03	0.00	0.00	-0.21	0.46	-0.30	-0.26
W	152	C	-0.73	0.00	0.65	0.46	0.10	0.12	0.65	0.13	0.00	0.00	-0.30	-0.20	0.46	-0.18
W	153	D	-0.04	0.00	0.53	0.47	0.10	0.17	0.21	0.53	0.00	0.00	-0.28	-0.17	-0.21	0.47
W	154	A	0.18	0.00	0.48	0.21	0.48	0.08	0.07	0.36	0.01	0.00	0.21	-0.31	-0.32	0.14

Appendix K: 2001 PSSA Grade Five Task Analysis
Open Ended Tasks for Reading

Position	Step	Logit	Task Mean	Correlation	% Correct				R(0)	R(1)	R(2)	R(3)	R(4)	
					Zero	One	Two	Three						Four
A185	1	-2.89	2.01	0.58	0.04	0.20	0.49	0.23	0.03	-0.29	-0.37	0.07	0.35	0.19
	2	-1.13												
	3	1.05												
	4	2.77												
B185	1	-3.30	1.91	0.51	0.03	0.24	0.52	0.18	0.02	-0.28	-0.34	0.14	0.29	0.13
	2	-0.97												
	3	1.42												
	4	3.27												
C185	1	-3.74	1.94	0.52	0.02	0.27	0.46	0.23	0.02	-0.25	-0.37	0.11	0.32	0.14
	2	-0.76												
	3	1.07												
	4	3.39												
D185	1	-2.89	2.00	0.55	0.04	0.20	0.50	0.23	0.03	-0.30	-0.35	0.08	0.33	0.16
	2	-1.14												
	3	1.11												
	4	2.91												
E185	1	-3.25	1.92	0.53	0.03	0.25	0.50	0.19	0.02	-0.28	-0.37	0.15	0.31	0.14
	2	-0.91												
	3	1.30												
	4	3.15												
F185	1	-3.64	2.05	0.58	0.02	0.17	0.56	0.24	0.02	-0.26	-0.46	0.11	0.34	0.13
	2	-1.48												
	3	1.17												
	4	3.69												
G185	1	-3.07	2.15	0.60	0.03	0.11	0.54	0.30	0.02	-0.31	-0.42	0.01	0.38	0.12
	2	-1.85												
	3	0.82												
	4	3.82												
H185	1	-3.63	2.07	0.56	0.02	0.15	0.58	0.24	0.01	-0.26	-0.44	0.09	0.33	0.12
	2	-1.67												
	3	1.13												
	4	3.80												

Appendix K: 2001 PSSA Grade Five Task Analysis
Open Ended Tasks for Reading

Position	Step	Logit	Task Mean	Correlation	% Zero	% One	% Two	% Three	% Four	R(0)	R(1)	R(2)	R(3)	R(4)
I185	1	-2.92	2.09	0.61	0.04	0.13	0.54	0.28	0.01	-0.32	-0.44	0.07	0.38	0.11
	2	-1.65												
	3	0.92												
	4	4.30												
J185	1	-3.52	2.07	0.59	0.02	0.15	0.56	0.25	0.01	-0.28	-0.47	0.11	0.34	0.11
	2	-1.61												
	3	1.07												
	4	3.66												
W100	1	-3.69	1.87	0.54	0.02	0.28	0.52	0.18	0.01	-0.27	-0.41	0.18	0.33	0.11
	2	-0.84												
	3	1.47												
	4	3.99												
W127	1	-3.40	1.79	0.57	0.03	0.33	0.47	0.17	0.01	-0.31	-0.41	0.22	0.35	0.10
	2	-0.53												
	3	1.48												
	4	4.25												

Appendix L: 2001 PSSA Grade Eight Task Analysis
Open Ended Tasks for Reading

Position	Step	Logit	Task Mean	Correlation	%					R(0)	R(1)	R(2)	R(3)	R(4)
					Zero	One	Two	Three	Four					
A215	1	-1.63	1.69	0.68	0.12	0.26	0.43	0.17	0.02	-0.54	-0.24	0.28	0.36	0.14
	2	-0.46												
	3	1.52												
	4	3.65												
B215	1	-1.08	1.49	0.70	0.17	0.29	0.40	0.12	0.01	-0.56	-0.18	0.37	0.35	0.12
	2	-0.19												
	3	1.88												
	4	3.92												
C215	1	-1.69	1.70	0.68	0.11	0.26	0.44	0.17	0.02	-0.53	-0.24	0.28	0.35	0.15
	2	-0.48												
	3	1.55												
	4	3.52												
D215	1	-1.21	1.51	0.70	0.17	0.29	0.40	0.13	0.01	-0.56	-0.18	0.37	0.34	0.11
	2	-0.20												
	3	1.80												
	4	3.75												
E215	1	-1.60	1.70	0.69	0.12	0.25	0.43	0.18	0.01	-0.54	-0.24	0.27	0.38	0.13
	2	-0.55												
	3	1.50												
	4	3.82												
F215	1	-1.73	1.51	0.62	0.12	0.36	0.38	0.12	0.01	-0.47	-0.20	0.31	0.31	0.10
	2	0.06												
	3	1.86												
	4	3.97												
G215	1	-1.85	1.71	0.64	0.10	0.26	0.47	0.15	0.01	-0.45	-0.29	0.28	0.34	0.13
	2	-0.59												
	3	1.70												
	4	3.48												
H215	1	-1.77	1.48	0.61	0.12	0.39	0.38	0.11	0.01	-0.45	-0.21	0.34	0.30	0.09
	2	0.18												
	3	2.09												
	4	4.31												

Appendix L: 2001 PSSA Grade Eight Task Analysis
Open Ended Tasks for Reading

Position	Step	Logit	Task Mean	Correlation	%					R(0)	R(1)	R(2)	R(3)	R(4)
					Zero	One	Two	Three	Four					
I215	1	-1.93	1.75	0.65	0.09	0.25	0.47	0.17	0.02	-0.47	-0.30	0.27	0.35	0.14
	2	-0.64												
	3	1.64												
	4	3.49												
J215	1	-1.79	1.50	0.61	0.12	0.38	0.38	0.11	0.01	-0.45	-0.20	0.31	0.31	0.09
	2	0.12												
	3	1.99												
	4	4.18												
W110	1	-2.94	1.98	0.60	0.05	0.18	0.53	0.23	0.02	-0.38	-0.37	0.11	0.36	0.14
	2	-1.25												
	3	1.33												
	4	3.79												
W147	1	-1.74	1.73	0.66	0.12	0.27	0.40	0.20	0.02	-0.49	-0.30	0.22	0.40	0.14
	2	-0.38												
	3	1.25												
	4	3.75												

Appendix M: 2001 PSSA Grade Eleven Task Analysis
Open Ended Tasks for Reading

Position	Step	Logit	Task Mean	Corre- lation	% %					R(0)	R(1)	R(2)	R(3)	R(4)
					Zero	One	Two	Three	Four					
A229	1	-0.96	1.78	0.66	0.16	0.18	0.39	0.23	0.03	-0.48	-0.22	0.16	0.40	0.19
	2	-0.73												
	3	0.99												
	4	3.07												
B229	1	-1.03	1.76	0.70	0.16	0.21	0.34	0.23	0.04	-0.54	-0.21	0.19	0.40	0.22
	2	-0.45												
	3	0.91												
	4	2.70												
C229	1	-1.18	1.94	0.68	0.12	0.15	0.38	0.29	0.04	-0.47	-0.26	0.08	0.43	0.21
	2	-1.01												
	3	0.65												
	4	3.15												
D229	1	-0.94	1.76	0.67	0.16	0.19	0.38	0.23	0.03	-0.49	-0.23	0.17	0.40	0.20
	2	-0.68												
	3	1.07												
	4	3.17												
E229	1	-0.87	1.79	0.70	0.16	0.19	0.36	0.24	0.05	-0.54	-0.19	0.17	0.40	0.23
	2	-0.62												
	3	0.90												
	4	2.74												
F229	1	-1.75	1.80	0.63	0.10	0.22	0.46	0.19	0.03	-0.40	-0.30	0.19	0.36	0.18
	2	-0.83												
	3	1.49												
	4	3.13												
G229	1	-0.97	1.60	0.65	0.18	0.25	0.34	0.19	0.03	-0.46	-0.21	0.24	0.37	0.19
	2	-0.21												
	3	1.20												
	4	3.03												
H229	1	-1.56	1.83	0.64	0.11	0.20	0.46	0.20	0.03	-0.43	-0.31	0.20	0.35	0.18
	2	-0.91												
	3	1.39												
	4	3.09												

Appendix M: 2001 PSSA Grade Eleven Task Analysis
Open Ended Tasks for Reading

Position	Step	Logit	Task Mean	Correlation	% Open Ended					R(0)	R(1)	R(2)	R(3)	R(4)	
					Zero	One	Two	Three	Four						
I229	1	-0.84	1.48	0.63	0.20	0.28	0.34	0.15	0.02	-0.48	-0.15	0.29	0.34	0.16	
	2	-0.06													
	3	1.51													
	4	3.30													
J229	1	-1.65	1.85	0.65	0.10	0.20	0.46	0.20	0.03	-0.44	-0.30	0.21	0.34	0.20	
	2	-0.93													
	3	1.38													
	4	2.82													
W114	1	-1.65	2.22	0.68	0.09	0.12	0.33	0.40	0.06	-0.42	-0.37	-0.09	0.46	0.25	
	2	-1.25													
	3	0.03													
	4	2.77													
W155	1	-2.02	2.10	0.63	0.08	0.14	0.45	0.28	0.06	-0.42	-0.34	0.02	0.36	0.23	
	2	-1.38													
	3	0.80													
	4	2.56													

Appendix N: 2001 PSSA Grade Five Across Year Linking

Grade 5 Math						
Item 2001	2000 Logit	2001 Logit	Difference	P 2000	P 2001	Logit* 2001
G133	-1.94	-1.95	-0.73	0.90	0.87	-1.21
E141	-1.14	-1.28	-0.60	0.81	0.74	-0.54
I127	-1.88	-2.08	-0.54	0.89	0.88	-1.34
G134	-0.90	-1.12	-0.52	0.77	0.72	-0.38
B131	-1.97	-2.20	-0.51	0.90	0.89	-1.46
B140	-0.57	-0.80	-0.51	0.71	0.65	-0.06
J139	-0.93	-1.18	-0.49	0.78	0.72	-0.44
F127	-1.25	-1.51	-0.48	0.82	0.78	-0.77
D129	-1.27	-1.54	-0.47	0.82	0.81	-0.80
I136	0.20	-0.09	-0.45	0.57	0.46	0.65
I137	0.82	0.50	-0.42	0.44	0.35	1.24
J128	-2.34	-2.67	-0.41	0.93	0.92	-1.93
A134	-0.61	-0.98	-0.37	0.72	0.68	-0.24
J129	-0.30	-0.70	-0.34	0.67	0.62	0.04
D127	-1.16	-1.57	-0.33	0.80	0.81	-0.83
F134	-1.21	-1.64	-0.31	0.81	0.80	-0.90
E131	-1.23	-1.67	-0.30	0.82	0.83	-0.93
A131	-1.22	-1.67	-0.29	0.81	0.82	-0.93
D130	-0.78	-1.24	-0.28	0.75	0.75	-0.50
B135	-0.92	-1.39	-0.27	0.77	0.76	-0.65
H134	-0.79	-1.26	-0.27	0.76	0.74	-0.52
E130	-0.82	-1.32	-0.24	0.76	0.77	-0.58
C129	-0.23	-0.74	-0.23	0.66	0.63	0.00
E129	-0.88	-1.40	-0.22	0.77	0.78	-0.66
C130	-0.44	-0.96	-0.22	0.70	0.68	-0.22
E127	0.00	-0.52	-0.22	0.61	0.58	0.22
E133	-0.39	-0.92	-0.21	0.69	0.68	-0.18
C133	-1.35	-1.90	-0.19	0.84	0.84	-1.16
D128	-0.18	-0.73	-0.19	0.64	0.63	0.01
D131	-2.07	-2.62	-0.19	0.90	0.92	-1.88

Grade 5 Reading						
Item 2001	2000 Logit	2001 Logit	Difference	P 2000	P 2001	Logit* 2001
A155	-1.58	-1.99	-0.35	0.87	0.85	-1.23
C161	-0.98	-1.69	-0.05	0.81	0.81	-0.93
D164	-0.94	-1.32	-0.38	0.81	0.75	-0.56
A154	-0.85	-1.28	-0.33	0.78	0.75	-0.52
A158	-0.71	-1.36	-0.11	0.76	0.76	-0.60
A179	-0.57	-1.59	0.26	0.73	0.79	-0.83
C173	-0.48	-1.30	0.06	0.74	0.75	-0.54
A178	-0.43	-1.22	0.03	0.71	0.74	-0.46
C175	-0.42	-1.47	0.29	0.73	0.78	-0.71
B158	-0.41	-0.86	-0.31	0.73	0.67	-0.10
D159	-0.24	-1.18	0.18	0.70	0.73	-0.42
B175	-0.20	-0.75	-0.21	0.69	0.65	0.01
C163	-0.13	-0.92	0.03	0.68	0.68	-0.16
B182	-0.12	-0.66	-0.22	0.68	0.63	0.10
C171	-0.12	-0.69	-0.19	0.68	0.64	0.07
D171	-0.10	-1.11	0.25	0.67	0.72	-0.35
D183	0.06	-0.60	-0.10	0.64	0.62	0.16
C176	0.16	-0.85	0.25	0.63	0.67	-0.09
A156	0.18	-0.30	-0.28	0.60	0.56	0.46
C174	0.25	-0.68	0.17	0.61	0.64	0.08
D166	0.29	-0.47	0.00	0.60	0.59	0.29
C160	0.72	-0.24	0.20	0.51	0.55	0.52
A181	1.00	0.39	-0.15	0.43	0.41	1.15
B165	1.12	0.12	0.24	0.42	0.47	0.88
B180	1.60	0.56	0.28	0.33	0.38	1.32
A162	1.97	0.88	0.33	0.25	0.31	1.64

Appendix N: 2001 PSSA Grade Five Across Year Linking

Item 2001	2000 Logit	2001 Logit	Differ- ence	P		Logit* 2001
				2000	2001	
G130	-0.60	-1.16	-0.18	0.72	0.73	-0.42
F137	0.24	-0.33	-0.17	0.56	0.54	0.41
A129	-0.51	-1.08	-0.17	0.70	0.70	-0.34
I133	-1.88	-2.47	-0.15	0.89	0.91	-1.73
B137	-0.73	-1.33	-0.14	0.74	0.75	-0.59
J131	-0.45	-1.06	-0.13	0.70	0.70	-0.32
W066	-0.68	-1.30	-0.12	0.73	0.75	-0.56
H137	-0.53	-1.16	-0.11	0.71	0.71	-0.42
C140	0.22	-0.41	-0.11	0.57	0.56	0.33
J135	0.23	-0.40	-0.11	0.57	0.56	0.34
G127	-0.54	-1.18	-0.10	0.71	0.73	-0.44
G135	0.05	-0.59	-0.10	0.60	0.58	0.15
J130	-0.85	-1.50	-0.09	0.77	0.78	-0.76
G140	0.84	0.18	-0.08	0.44	0.42	0.92
E128	-0.07	-0.73	-0.08	0.62	0.63	0.01
G128	-0.42	-1.08	-0.08	0.69	0.71	-0.34
A130	-0.73	-1.40	-0.07	0.74	0.76	-0.66
C135	-0.48	-1.15	-0.07	0.70	0.71	-0.41
A132	-0.04	-0.71	-0.07	0.61	0.63	0.03
F135	0.10	-0.58	-0.06	0.59	0.56	0.16
B129	-1.18	-1.86	-0.06	0.81	0.84	-1.12
D132	0.43	-0.26	-0.05	0.51	0.52	0.48
H132	-0.13	-0.83	-0.04	0.64	0.63	-0.09
H136	0.13	-0.57	-0.04	0.59	0.59	0.17
E132	0.24	-0.48	-0.02	0.56	0.56	0.26
F132	-0.01	-0.73	-0.02	0.61	0.60	0.01
D137	0.46	-0.26	-0.02	0.51	0.50	0.48
E135	1.15	0.41	0.00	0.37	0.34	1.15
G131	-0.43	-1.17	0.00	0.69	0.73	-0.43
G129	-0.60	-1.34	0.00	0.72	0.77	-0.60
E138	-0.27	-1.02	0.01	0.66	0.69	-0.28

Item 2001	2000 logit	2001 logit	Differ- ence	2000 P	2001 P	Logit* 2001
--------------	---------------	---------------	-----------------	-----------	-----------	----------------

Appendix N: 2001 PSSA Grade Five Across Year Linking

Item 2001	2000 Logit	2001 Logit	Differ- ence	P 2000	P 2001	Logit*	2000 logit	2001 logit	Differ- ence	2000 P	2001 P	Logit*
B132	0.06	-0.70	0.02	0.59	0.58	0.04						
D139	0.41	-0.35	0.02	0.52	0.53	0.39						
I129	-0.22	-0.98	0.02	0.65	0.67	-0.24						
D135	0.58	-0.18	0.02	0.48	0.50	0.56						
G132	0.43	-0.33	0.02	0.52	0.51	0.41						
H130	-0.53	-1.29	0.02	0.71	0.74	-0.55						
I139	1.46	0.70	0.02	0.31	0.31	1.44						
F136	-0.11	-0.88	0.03	0.63	0.66	-0.14						
H140	0.05	-0.73	0.04	0.60	0.61	0.01						
D134	0.68	-0.11	0.05	0.46	0.49	0.63						
H131	-1.21	-2.01	0.06	0.82	0.86	-1.27						
F129	-1.59	-2.39	0.06	0.86	0.90	-1.65						
F133	0.49	-0.31	0.06	0.51	0.48	0.43						
C136	0.04	-0.79	0.09	0.61	0.62	-0.05						
C139	0.78	-0.06	0.10	0.45	0.48	0.68						
G136	0.89	0.05	0.10	0.43	0.45	0.79						
B138	0.80	-0.04	0.10	0.44	0.47	0.70						
H127	-0.45	-1.30	0.11	0.70	0.75	-0.56						
F128	-0.13	-0.99	0.12	0.63	0.67	-0.25						
D136	1.11	0.21	0.16	0.38	0.38	0.95						
B127	0.19	-0.72	0.17	0.57	0.63	0.02						
B136	-0.05	-0.96	0.17	0.61	0.65	-0.22						
B134	0.04	-0.87	0.17	0.59	0.62	-0.13						
A140	0.43	-0.50	0.19	0.51	0.58	0.24						
J134	-0.61	-1.54	0.19	0.73	0.80	-0.80						
C127	-1.04	-2.01	0.23	0.80	0.86	-1.27						
J132	-0.23	-1.20	0.23	0.66	0.73	-0.46						
F131	0.68	-0.29	0.23	0.46	0.48	0.45						
I128	-0.17	-1.15	0.24	0.64	0.71	-0.41						
F141	0.75	-0.23	0.24	0.45	0.52	0.51						
B141	0.93	-0.06	0.25	0.41	0.40	0.68						

Appendix N: 2001 PSSA Grade Five Across Year Linking

Item 2001	2000 Logit	2001 Logit	Differ- ence	P		2000 Logit	2001 Logit*
				2000	2001		
C134	0.75	-0.26	0.27	0.46	0.47	0.48	0.48
I135	0.35	-0.66	0.27	0.54	0.59	0.08	0.08
W020	0.82	-0.21	0.29	0.44	0.46	0.53	0.53
A135	0.59	-0.44	0.29	0.48	0.54	0.30	0.30
H139	-0.18	-1.21	0.29	0.65	0.73	-0.47	-0.47
C137	0.75	-0.28	0.29	0.46	0.48	0.46	0.46
E140	1.42	0.37	0.31	0.32	0.35	1.11	1.11
C138	0.76	-0.30	0.32	0.46	0.48	0.44	0.44
J140	0.15	-0.92	0.33	0.59	0.67	-0.18	-0.18
D141	0.65	-0.43	0.34	0.47	0.55	0.31	0.31
W061	0.27	-0.85	0.38	0.56	0.64	-0.11	-0.11
J137	1.16	-0.01	0.43	0.38	0.41	0.73	0.73
G139	0.24	-0.94	0.44	0.56	0.67	-0.20	-0.20
F140	1.77	0.57	0.46	0.26	0.28	1.31	1.31
J141	0.07	-1.23	0.56	0.60	0.73	-0.49	-0.49
B133	-0.04	-1.36	0.58	0.61	0.74	-0.62	-0.62
A137	0.99	-0.40	0.65	0.39	0.53	0.34	0.34
I138	0.46	-0.98	0.70	0.51	0.56	-0.24	-0.24
A136	0.92	-0.60	0.78	0.41	0.60	0.14	0.14
J138	1.40	-0.13	0.79	0.33	0.44	0.61	0.61
C128	-0.98	-2.69	0.97	0.79	0.92	-1.95	-1.95

Appendix O: 2001 PSSA Grade Eight Across Year Linking

Grade 8 Mathematics						
Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	Logit* 2001
C134	-0.83	-0.40	-0.43	0.72	0.57	-0.40
H141	-1.22	-0.88	-0.34	0.78	0.69	-0.88
A130	-0.75	-0.46	-0.29	0.70	0.59	-0.46
A139	-1.50	-1.40	-0.10	0.82	0.80	-1.40
F139	-0.61	-0.51	-0.10	0.68	0.56	-0.51
B127	-1.31	-1.27	-0.04	0.79	0.78	-1.27
E128	0.05	0.06	-0.01	0.55	0.45	0.06
W047	-0.56	-0.56	0.00	0.67	0.61	-0.56
H128	-1.54	-1.54	0.00	0.82	0.82	-1.54
W012	-0.33	-0.37	0.04	0.63	0.57	-0.37
E135	0.44	0.40	0.04	0.47	0.37	0.40
W017	-0.23	-0.30	0.07	0.61	0.53	-0.30
W037	-1.22	-1.33	0.11	0.78	0.78	-1.33
W011	-1.58	-1.70	0.12	0.83	0.85	-1.70
E131	-0.74	-0.86	0.12	0.70	0.69	-0.86
W015	-1.12	-1.25	0.13	0.77	0.77	-1.25
F134	-1.72	-1.85	0.13	0.85	0.87	-1.85
W016	-0.75	-0.90	0.15	0.70	0.67	-0.90
H129	-0.89	-1.04	0.15	0.73	0.71	-1.04
W013	-0.93	-1.09	0.16	0.74	0.72	-1.09
C139	-0.66	-0.83	0.17	0.69	0.68	-0.83
C136	-0.30	-0.47	0.17	0.63	0.59	-0.47
A128	-0.47	-0.64	0.17	0.65	0.63	-0.64
G138	-0.89	-1.06	0.17	0.74	0.73	-1.06
E136	-1.52	-1.70	0.18	0.82	0.85	-1.70
I127	-1.20	-1.39	0.19	0.79	0.77	-1.39
G140	-0.32	-0.51	0.19	0.63	0.58	-0.51
J130	-0.90	-1.11	0.21	0.74	0.72	-1.11
W009	-0.27	-0.49	0.22	0.62	0.59	-0.49
J132	-0.65	-0.87	0.22	0.70	0.67	-0.87
E129	-0.28	-0.51	0.23	0.62	0.60	-0.51

Grade 8 Reading						
Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	Logit* 2001
B181	-1.36	-2.07	0.71	0.86	0.84	-2.07
C160	-1.28	-2.19	0.91	0.84	0.85	-2.19
A161	-1.09	-2.05	0.96	0.82	0.84	-2.05
B172	-1.01	-1.22	0.21	0.82	0.73	-1.22
C158	-0.75	-1.49	0.74	0.77	0.77	-1.49
D154	-0.72	-1.40	0.68	0.77	0.76	-1.40
C165	-0.57	-1.39	0.82	0.74	0.76	-1.39
A155	-0.53	-1.19	0.66	0.74	0.73	-1.19
A174	-0.37	-1.02	0.65	0.71	0.70	-1.02
D183	-0.37	-1.08	0.71	0.71	0.71	-1.08
A160	-0.34	-0.77	0.43	0.71	0.66	-0.77
C180	-0.34	-0.96	0.62	0.70	0.69	-0.96
C171	-0.28	-0.36	0.08	0.69	0.59	-0.36
B178	-0.24	-0.07	-0.17	0.70	0.54	-0.07
A175	-0.18	-0.83	0.65	0.68	0.67	-0.83
D180	-0.15	-0.61	0.46	0.67	0.63	-0.61
A158	-0.09	-0.47	0.38	0.66	0.61	-0.47
D166	-0.05	-0.48	0.43	0.65	0.61	-0.48
B156	0.03	-0.64	0.67	0.65	0.64	-0.64
A157	0.04	-0.58	0.62	0.64	0.63	-0.58
C155	0.24	-0.38	0.62	0.58	0.59	-0.38
C163	0.34	-0.37	0.71	0.56	0.59	-0.37
A179	0.41	-0.34	0.75	0.56	0.59	-0.34
D182	0.49	-0.11	0.60	0.54	0.54	-0.11
C178	0.51	-0.03	0.54	0.53	0.53	-0.03
A172	0.55	-0.14	0.69	0.53	0.55	-0.14
C162	0.60	-0.13	0.73	0.51	0.55	-0.13
A162	0.68	0.01	0.67	0.51	0.52	0.01
B175	0.82	-0.18	1.00	0.49	0.56	-0.18
A165	0.86	0.59	0.27	0.47	0.41	0.59
C172	1.05	0.79	0.26	0.41	0.38	0.79

Appendix O: 2001 PSSA Grade Eight Across Year Linking

Item 2001	2000 Logit	2001 Logit	Differ- ence	2000 P	2001 P	Logit* 2001
W031	0.31	0.07	0.24	0.50	0.45	0.07
H137	-1.01	-1.25	0.24	0.74	0.76	-1.25
W062	-0.10	-0.34	0.24	0.59	0.56	-0.34
E134	-1.80	-2.04	0.24	0.85	0.87	-2.04
E133	-0.42	-0.69	0.27	0.64	0.64	-0.69
J131	-0.24	-0.51	0.27	0.62	0.57	-0.51
F127	-0.32	-0.60	0.28	0.63	0.59	-0.60
W022	0.10	-0.18	0.28	0.54	0.49	-0.18
A131	0.01	-0.27	0.28	0.56	0.53	-0.27
J137	-0.59	-0.87	0.28	0.69	0.67	-0.87
F138	-0.42	-0.71	0.29	0.65	0.63	-0.71
G134	-0.73	-1.02	0.29	0.71	0.69	-1.02
E139	0.26	-0.04	0.30	0.51	0.47	-0.04
D141	-0.61	-0.91	0.30	0.68	0.68	-0.91
J127	-0.51	-0.81	0.30	0.67	0.65	-0.81
I130	-1.41	-1.72	0.31	0.81	0.82	-1.72
A141	0.09	-0.23	0.32	0.54	0.51	-0.23
B133	-1.14	-1.46	0.32	0.77	0.78	-1.46
W048	-0.85	-1.18	0.33	0.72	0.73	-1.18
G137	-0.94	-1.27	0.33	0.74	0.77	-1.27
W030	-0.65	-0.99	0.34	0.69	0.70	-0.99
D133	-0.08	-0.42	0.34	0.58	0.56	-0.42
F129	-0.42	-0.76	0.34	0.65	0.64	-0.76
F136	-1.33	-1.68	0.35	0.80	0.82	-1.68
F133	-0.38	-0.73	0.35	0.64	0.63	-0.73
G139	-0.26	-0.61	0.35	0.62	0.61	-0.61
H130	0.53	0.18	0.35	0.46	0.37	0.18
W008	-0.58	-0.94	0.36	0.68	0.69	-0.94
D132	-0.87	-1.23	0.36	0.73	0.75	-1.23
F132	-0.07	-0.43	0.36	0.58	0.56	-0.43
I136	-0.45	-0.81	0.36	0.66	0.65	-0.81
F135	-1.05	-1.42	0.37	0.76	0.79	-1.42

Item 2001	2000 Logit	2001 Logit	Differ- ence	2000 P	2001 P	Logit* 2001
D177	1.16	0.62	0.54	0.39	0.41	0.62
D174	1.23	1.18	0.05	0.38	0.31	1.18
B183	1.25	0.65	0.60	0.37	0.40	0.65
C164	1.25	0.61	0.64	0.40	0.41	0.61
B163	1.84	0.94	0.90	0.28	0.35	0.94

Appendix O: 2001 PSSA Grade Eight Across Year Linking

Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	Logit* 2001
H131	-0.20	-0.58	0.38	0.60	0.58	-0.58
H136	-0.21	-0.59	0.38	0.60	0.59	-0.59
B132	-0.26	-0.64	0.38	0.61	0.63	-0.64
H127	-0.38	-0.76	0.38	0.64	0.63	-0.76
I133	-0.92	-1.30	0.38	0.74	0.75	-1.30
W035	-0.17	-0.55	0.38	0.60	0.61	-0.55
W036	-0.17	-0.55	0.38	0.60	0.61	-0.55
D136	-0.69	-1.07	0.38	0.70	0.72	-1.07
B135	-1.20	-1.58	0.38	0.78	0.80	-1.58
C138	-0.33	-0.72	0.39	0.63	0.63	-0.72
G136	-0.62	-1.01	0.39	0.69	0.69	-1.01
B130	0.19	-0.22	0.41	0.53	0.51	-0.22
H139	-0.02	-0.45	0.43	0.57	0.57	-0.45
D139	-0.36	-0.79	0.43	0.64	0.65	-0.79
E137	-0.25	-0.69	0.44	0.61	0.62	-0.69
I140	-0.79	-1.23	0.44	0.72	0.74	-1.23
I139	-0.03	-0.47	0.44	0.58	0.57	-0.47
W021	0.21	-0.23	0.44	0.52	0.51	-0.23
H140	-0.74	-1.19	0.45	0.70	0.73	-1.19
C130	0.08	-0.37	0.45	0.55	0.55	-0.37
D129	-0.11	-0.56	0.45	0.59	0.59	-0.56
A129	-0.21	-0.67	0.46	0.60	0.64	-0.67
B138	-0.74	-1.21	0.47	0.70	0.73	-1.21
B129	0.24	-0.23	0.47	0.52	0.51	-0.23
D127	-0.87	-1.34	0.47	0.73	0.76	-1.34
C141	0.92	0.44	0.48	0.39	0.36	0.44
E138	0.74	0.26	0.48	0.41	0.39	0.26
H138	-0.06	-0.54	0.48	0.57	0.57	-0.54
D134	-0.94	-1.42	0.48	0.74	0.77	-1.42
G133	-0.01	-0.50	0.49	0.57	0.58	-0.50
A127	0.32	-0.17	0.49	0.50	0.51	-0.17
I141	-1.34	-1.83	0.49	0.80	0.84	-1.83

Appendix O: 2001 PSSA Grade Eight Across Year Linking

Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	Logit* 2001
J141	-0.61	-1.10	0.49	0.69	0.71	-1.10
B136	-0.93	-1.43	0.50	0.73	0.77	-1.43
C132	-0.26	-0.76	0.50	0.62	0.64	-0.76
A137	-0.44	-0.95	0.51	0.65	0.68	-0.95
G132	-0.64	-1.16	0.52	0.69	0.72	-1.16
A140	0.22	-0.30	0.52	0.52	0.53	-0.30
G141	0.01	-0.51	0.52	0.57	0.58	-0.51
W040	-0.67	-1.20	0.53	0.69	0.76	-1.20
G127	-0.18	-0.71	0.53	0.61	0.63	-0.71
D130	-0.10	-0.63	0.53	0.59	0.61	-0.63
B131	0.53	0.00	0.53	0.46	0.45	0.00
F128	-0.25	-0.78	0.53	0.62	0.64	-0.78
E141	-1.80	-2.34	0.54	0.85	0.90	-2.34
A132	0.12	-0.42	0.54	0.54	0.58	-0.42
D135	-1.02	-1.57	0.55	0.75	0.80	-1.57
J128	0.41	-0.14	0.55	0.49	0.47	-0.14
H132	0.39	-0.17	0.56	0.48	0.46	-0.17
F131	0.00	-0.56	0.56	0.57	0.58	-0.56
E130	-0.02	-0.59	0.57	0.56	0.60	-0.59
B137	0.40	-0.17	0.57	0.49	0.50	-0.17
I138	0.34	-0.24	0.58	0.51	0.52	-0.24
I137	-0.88	-1.47	0.59	0.74	0.78	-1.47
F141	0.40	-0.19	0.59	0.49	0.50	-0.19
F137	0.70	0.09	0.61	0.43	0.44	0.09
G130	0.14	-0.47	0.61	0.54	0.57	-0.47
W069	0.83	0.21	0.62	0.40	0.39	0.21
C135	0.64	0.02	0.62	0.44	0.46	0.02
G129	0.25	-0.37	0.62	0.52	0.54	-0.37
D138	0.04	-0.59	0.63	0.56	0.60	-0.59
B128	0.69	0.05	0.64	0.43	0.43	0.05
G131	-0.07	-0.71	0.64	0.59	0.63	-0.71
A136	-0.25	-0.90	0.65	0.61	0.67	-0.90

Appendix O: 2001 PSSA Grade Eight Across Year Linking

Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	2000 Logit	2001 Logit	Difference	2000 P	2001 P	Logit* 2001
I129	0.32	-0.33	0.65	0.51	0.54	-0.33	-0.33	-0.33			-0.33
A135	-0.77	-1.43	0.66	0.71	0.81	-1.43	-1.43	-1.43			-1.43
W066	0.44	-0.22	0.66	0.48	0.53	-0.22	-0.22	-0.22			-0.22
C137	-0.21	-0.87	0.66	0.61	0.66	-0.87	-0.87	-0.87			-0.87
F140	0.25	-0.42	0.67	0.52	0.53	-0.42	-0.42	-0.42			-0.42
H133	0.38	-0.29	0.67	0.49	0.54	-0.29	-0.29	-0.29			-0.29
I128	0.64	-0.05	0.69	0.45	0.47	-0.05	-0.05	-0.05			-0.05
J133	0.29	-0.41	0.70	0.52	0.54	-0.41	-0.41	-0.41			-0.41
G135	0.64	-0.07	0.71	0.44	0.46	-0.07	-0.07	-0.07			-0.07
E140	0.61	-0.11	0.72	0.44	0.48	-0.11	-0.11	-0.11			-0.11
I131	-0.02	-0.74	0.72	0.58	0.63	-0.74	-0.74	-0.74			-0.74
C140	0.41	-0.33	0.74	0.49	0.54	-0.33	-0.33	-0.33			-0.33
I135	0.81	0.07	0.74	0.41	0.44	0.07	0.07	0.07			0.07
E132	1.07	0.33	0.74	0.35	0.38	0.33	0.33	0.33			0.33
F130	0.13	-0.64	0.77	0.54	0.60	-0.64	-0.64	-0.64			-0.64
J129	0.61	-0.16	0.77	0.45	0.47	-0.16	-0.16	-0.16			-0.16
B141	0.10	-0.69	0.79	0.54	0.62	-0.69	-0.69	-0.69			-0.69
D128	0.19	-0.69	0.88	0.53	0.62	-0.69	-0.69	-0.69			-0.69
I134	0.63	-0.30	0.93	0.45	0.53	-0.30	-0.30	-0.30			-0.30
I132	-0.01	-0.95	0.94	0.58	0.68	-0.95	-0.95	-0.95			-0.95
G128	-0.15	-1.35	1.20	0.60	0.79	-1.35	-1.35	-1.35			-1.35
D131	0.16	-1.10	1.26	0.54	0.71	-1.10	-1.10	-1.10			-1.10
H134	0.52	-1.09	1.61	0.46	0.50	-1.09	-1.09	-1.09			-1.09

Appendix P: 2001 PSSA Grade 11 Across Year Linking

Item 2001	Grade 11 Mathematics					Logit* 2001
	2000 Logit	2001 Logit	Differ- ence	2000 P	2001 P	
W002	-2.22	-1.27	-0.95	0.89	0.75	-1.27
B143	-2.10	-1.89	-0.21	0.87	0.87	-1.89
B137	-0.69	-0.48	-0.21	0.67	0.61	-0.48
J141	-0.82	-0.65	-0.17	0.69	0.66	-0.65
D148	-1.82	-1.68	-0.14	0.85	0.87	-1.68
I147	-0.01	0.11	-0.12	0.53	0.45	0.11
E148	-1.09	-1.00	-0.09	0.74	0.73	-1.00
G139	-1.13	-1.04	-0.09	0.75	0.70	-1.04
D146	0.01	0.09	-0.08	0.54	0.45	0.09
A140	-0.93	-0.87	-0.06	0.72	0.70	-0.87
H148	-1.78	-1.72	-0.06	0.84	0.87	-1.72
E135	-1.15	-1.09	-0.06	0.75	0.76	-1.09
A147	-1.05	-1.00	-0.05	0.74	0.74	-1.00
G140	-0.10	-0.07	-0.03	0.56	0.49	-0.07
E138	-0.88	-0.88	0.00	0.71	0.72	-0.88
H149	-0.54	-0.54	0.00	0.64	0.60	-0.54
J142	-0.05	-0.05	0.00	0.54	0.48	-0.05
C139	-0.37	-0.39	0.02	0.61	0.59	-0.39
J135	-0.08	-0.10	0.02	0.55	0.51	-0.10
F136	-0.70	-0.73	0.03	0.67	0.67	-0.73
C137	-0.81	-0.85	0.04	0.69	0.71	-0.85
G136	-1.12	-1.17	0.05	0.75	0.77	-1.17
F140	-0.64	-0.69	0.05	0.66	0.66	-0.69
J140	-0.82	-0.87	0.05	0.69	0.71	-0.87
J138	-0.55	-0.61	0.06	0.64	0.65	-0.61
A148	-0.16	-0.22	0.06	0.57	0.55	-0.22
D142	0.45	0.39	0.06	0.45	0.38	0.39
C142	1.00	0.94	0.06	0.34	0.27	0.94
I142	-0.83	-0.89	0.06	0.69	0.67	-0.89
I144	-0.45	-0.52	0.07	0.62	0.62	-0.52
F138	-0.57	-0.64	0.07	0.64	0.65	-0.64
E136	-1.72	-1.80	0.08	0.83	0.85	-1.80

Item 2001	Grade 11 Reading					Logit* 2001
	2000 Logit	2001 Logit	Differ- ence	2000 P	2001 P	
B188	-1.25	-2.00	0.26	0.84	0.83	-1.51
B189	-1.13	-1.69	0.07	0.82	0.80	-1.20
D193	-1.08	-1.84	0.27	0.82	0.81	-1.35
D176	-0.75	-1.32	0.08	0.77	0.75	-0.83
D183	-0.71	-1.42	0.22	0.76	0.76	-0.93
C183	-0.65	-1.31	0.17	0.76	0.74	-0.82
B168	-0.53	-0.73	-0.29	0.72	0.65	-0.24
D172	-0.50	-1.22	0.23	0.73	0.73	-0.73
B191	-0.47	-0.95	-0.01	0.71	0.69	-0.46
B187	-0.41	-0.93	0.03	0.70	0.68	-0.44
A171	-0.31	-0.93	0.13	0.69	0.69	-0.44
D165	-0.30	-0.50	-0.29	0.69	0.61	-0.01
B176	-0.20	-0.35	-0.34	0.66	0.58	0.14
C182	-0.19	-1.03	0.35	0.67	0.70	-0.54
A184	-0.15	-0.45	-0.19	0.65	0.60	0.04
C164	-0.13	-1.16	0.54	0.66	0.72	-0.67
A164	-0.02	-0.65	0.14	0.63	0.64	-0.16
A167	0.00	-0.62	0.13	0.62	0.63	-0.13
C186	0.01	-0.31	-0.17	0.62	0.58	0.18
D171	0.01	-0.89	0.41	0.63	0.68	-0.40
C169	0.03	-0.04	-0.42	0.62	0.53	0.45
A183	0.08	-0.73	0.32	0.60	0.65	-0.24
C192	0.15	-0.24	-0.10	0.60	0.56	0.25
C170	0.16	-0.57	0.24	0.59	0.62	-0.08
A168	0.18	-0.41	0.10	0.58	0.60	0.08
C188	0.33	-0.15	-0.01	0.55	0.55	0.34
A192	0.36	-0.09	-0.04	0.54	0.54	0.40
C166	0.37	-0.04	-0.08	0.54	0.53	0.45
B185	0.43	-0.23	0.17	0.52	0.56	0.26
B183	0.47	-0.02	0.00	0.51	0.52	0.47
B173	0.50	0.16	-0.15	0.50	0.49	0.65
B165	0.60	0.36	-0.25	0.48	0.45	0.85

Appendix P: 2001 PSSA Grade 11 Across Year Linking

Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	Logit* 2001
E140	-0.52	-0.61	0.09	0.64	0.65	-0.61
B138	-0.36	-0.45	0.09	0.60	0.61	-0.45
E137	-0.41	-0.51	0.10	0.62	0.62	-0.51
F145	0.15	0.04	0.11	0.50	0.46	0.04
C141	-0.27	-0.39	0.12	0.59	0.59	-0.39
A146	-0.15	-0.27	0.12	0.57	0.54	-0.27
F139	0.17	0.03	0.14	0.50	0.47	0.03
F149	0.16	0.02	0.14	0.50	0.47	0.02
E139	-0.29	-0.43	0.14	0.60	0.60	-0.43
F135	0.04	-0.10	0.14	0.52	0.51	-0.10
F137	-0.87	-1.01	0.14	0.70	0.74	-1.01
I145	0.81	0.67	0.14	0.37	0.33	0.67
C149	0.23	0.09	0.14	0.49	0.47	0.09
C135	-0.94	-1.11	0.17	0.72	0.77	-1.11
C138	-0.06	-0.24	0.18	0.55	0.53	-0.24
G135	-0.35	-0.54	0.19	0.61	0.63	-0.54
E141	-0.20	-0.40	0.20	0.58	0.59	-0.40
F148	0.74	0.53	0.21	0.38	0.36	0.53
G146	1.00	0.78	0.22	0.34	0.31	0.78
D144	-0.90	-1.12	0.22	0.72	0.76	-1.12
B136	0.41	0.18	0.23	0.45	0.43	0.18
J136	0.09	-0.14	0.23	0.51	0.53	-0.14
I138	-0.29	-0.52	0.23	0.59	0.61	-0.52
A135	-0.28	-0.53	0.25	0.60	0.59	-0.53
A149	0.80	0.55	0.25	0.38	0.35	0.55
F144	-0.20	-0.45	0.25	0.57	0.60	-0.45
H135	-1.35	-1.60	0.25	0.78	0.81	-1.60
B141	0.17	-0.08	0.25	0.50	0.51	-0.08
H144	-0.91	-1.17	0.26	0.71	0.73	-1.17
A138	-0.54	-0.81	0.27	0.65	0.66	-0.81
D139	-1.87	-2.14	0.27	0.86	0.90	-2.14
B145	-0.64	-0.93	0.29	0.66	0.68	-0.93
G142	0.74	0.44	0.30	0.39	0.39	0.44

Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	Logit* 2001
B184	0.62	0.64	-0.51	0.47	0.40	1.13
A182	0.64	0.14	0.01	0.47	0.49	0.63
A165	0.66	1.15	-0.98	0.47	0.31	1.64
B182	0.70	0.42	-0.21	0.45	0.44	0.91
C193	0.70	0.14	0.07	0.47	0.49	0.63
A176	0.77	0.18	0.10	0.44	0.48	0.67
A174	0.78	0.43	-0.14	0.44	0.44	0.92

Appendix P: 2001 PSSA Grade 11 Across Year Linking

Item 2001	2000 Logit	2001 Logit	Difference	2000 P	2001 P	2000 P	2001 P	Logit* 2001
H141	0.19	-0.12	0.31	0.50	0.50	0.50	0.50	-0.12
A136	-0.58	-0.89	0.31	0.66	0.67	0.66	0.67	-0.89
J137	0.29	-0.03	0.32	0.47	0.50	0.47	0.50	-0.03
B146	0.17	-0.15	0.32	0.50	0.51	0.50	0.51	-0.15
G148	0.43	0.11	0.32	0.45	0.45	0.45	0.45	0.11
J139	0.55	0.23	0.32	0.42	0.43	0.42	0.43	0.23
G143	0.18	-0.15	0.33	0.50	0.51	0.50	0.51	-0.15
G141	-0.30	-0.64	0.34	0.60	0.62	0.60	0.62	-0.64
A139	-1.53	-1.88	0.35	0.81	0.85	0.81	0.85	-1.88
A142	0.43	0.08	0.35	0.46	0.46	0.46	0.46	0.08
C146	0.47	0.12	0.35	0.44	0.45	0.44	0.45	0.12
F141	-0.67	-1.02	0.35	0.66	0.74	0.66	0.74	-1.02
F142	0.06	-0.29	0.35	0.52	0.54	0.52	0.54	-0.29
I146	-1.57	-1.93	0.36	0.81	0.85	0.81	0.85	-1.93
G137	0.13	-0.23	0.36	0.51	0.52	0.51	0.52	-0.23
C140	0.91	0.54	0.37	0.36	0.35	0.36	0.35	0.54
E144	-0.22	-0.60	0.38	0.58	0.61	0.58	0.61	-0.60
G147	-0.43	-0.81	0.38	0.62	0.65	0.62	0.65	-0.81
D138	1.13	0.74	0.39	0.32	0.31	0.32	0.31	0.74
B139	0.19	-0.20	0.39	0.49	0.54	0.49	0.54	-0.20
G138	-1.65	-2.04	0.39	0.83	0.87	0.83	0.87	-2.04
H146	0.42	0.02	0.40	0.45	0.47	0.45	0.47	0.02
C144	0.73	0.32	0.41	0.39	0.40	0.39	0.40	0.32
H147	-0.54	-0.97	0.43	0.64	0.69	0.64	0.69	-0.97
J145	-1.29	-1.72	0.43	0.77	0.82	0.77	0.82	-1.72
B135	0.89	0.46	0.43	0.36	0.36	0.36	0.36	0.46
B140	0.99	0.55	0.44	0.34	0.34	0.34	0.34	0.55
H136	0.79	0.32	0.47	0.38	0.40	0.38	0.40	0.32
D137	-1.63	-2.10	0.47	0.83	0.87	0.83	0.87	-2.10
W017	-0.92	-1.40	0.48	0.71	0.77	0.71	0.77	-1.40
D140	0.09	-0.41	0.50	0.52	0.57	0.52	0.57	-0.41
E149	-0.66	-1.17	0.51	0.67	0.73	0.67	0.73	-1.17
I137	0.41	-0.11	0.52	0.45	0.51	0.45	0.51	-0.11

Appendix P: 2001 PSSA Grade 11 Across Year Linking

Item 2001	2000 Logit	2001 Logit	Differ- ence	2000 P	2001 P	Logit* 2001
H140	-0.71	-1.25	0.54	0.67	0.75	-1.25
H138	0.65	0.11	0.55	0.40	0.44	0.11
G145	0.37	-0.18	0.55	0.46	0.51	-0.18
A145	-0.13	-0.73	0.60	0.57	0.64	-0.73
E146	-0.11	-0.71	0.60	0.56	0.63	-0.71
W011	0.11	-0.50	0.61	0.51	0.59	-0.50
H139	0.44	-0.18	0.62	0.44	0.51	-0.18
A137	0.47	-0.18	0.65	0.45	0.51	-0.18
I140	-0.57	-1.41	0.84	0.64	0.77	-1.41
B142	0.79	-0.10	0.89	0.38	0.50	-0.10
W047	-0.64	-1.57	0.93	0.66	0.80	-1.57
D141	0.69	-0.33	1.02	0.40	0.55	-0.33

Item 2001	2000 Logit	2001 Logit	Differ- ence	2000 P	2001 P	Logit* 2001
--------------	---------------	---------------	-----------------	-----------	-----------	----------------

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	A	128	2	1	8	64.89	8.11	1.40	-0.8	A-
5	A	129	2	1	8	32.79	4.10	0.97	0.1	A+
5	A	130	2	1	8	18.23	2.28	1.01	0.0	A-
5	A	131	2	1	8	21.48	2.68	1.03	-0.1	A-
5	A	132	2	1	8	29.79	3.72	1.12	-0.3	A-
5	A	133	2	1	8	163.29	20.41	0.74	0.7	A+
5	A	134	2	1	8	42.57	5.32	0.85	0.4	A+
5	A	135	2	1	8	14.33	1.79	1.07	-0.2	A-
5	A	136	2	1	8	13.07	1.63	0.96	0.1	A+
5	A	137	2	1	8	30.92	3.87	0.97	0.1	A+
5	A	138	2	1	8	122.14	15.27	0.75	0.7	A+
5	A	139	2	1	8	23.30	2.91	1.06	-0.1	A-
5	A	140	2	1	8	46.72	5.84	1.12	-0.3	A-
5	A	141	2	1	8	52.98	6.62	1.23	-0.5	A-
5	A	142	2	1	8	44.76	5.60	0.90	0.3	A+
5	B	128	2	1	8	215.61	26.95	0.60	1.2	B+
5	B	129	2	1	8	22.24	2.78	1.17	-0.4	A-
5	B	130	2	1	8	31.92	3.99	1.13	-0.3	A-
5	B	131	2	1	8	34.10	4.26	1.07	-0.2	A-
5	B	132	2	1	8	45.28	5.66	1.18	-0.4	A-
5	B	133	2	1	8	17.95	2.24	1.08	-0.2	A-
5	B	134	2	1	8	28.89	3.61	0.91	0.2	A+
5	B	135	2	1	8	447.43	55.93	2.13	-1.8	C-
5	B	136	2	1	8	333.89	41.74	1.50	-1.0	A-
5	B	137	2	1	8	62.72	7.84	1.01	0.0	A-
5	B	138	2	1	8	19.12	2.39	1.14	-0.3	A-
5	B	139	2	1	8	82.61	10.33	1.37	-0.7	A-
5	B	140	2	1	8	73.73	9.22	0.95	0.1	A+
5	B	141	2	1	8	29.62	3.70	1.06	-0.1	A-
5	B	142	2	1	8	16.80	2.10	1.04	-0.1	A-
5	C	128	2	1	8	153.31	19.16	1.49	-0.9	A-
5	C	129	2	1	8	20.12	2.52	0.94	0.2	A+
5	C	130	2	1	8	21.54	2.69	1.08	-0.2	A-
5	C	131	2	1	8	27.98	3.50	1.13	-0.3	A-
5	C	132	2	1	8	76.82	9.60	1.24	-0.5	A-
5	C	133	2	1	8	262.58	32.82	1.54	-1.0	B-
5	C	134	2	1	8	49.90	6.24	0.84	0.4	A+
5	C	135	2	1	8	17.78	2.22	1.01	0.0	A-
5	C	136	2	1	8	15.81	1.98	0.98	0.1	A+
5	C	137	2	1	8	18.87	2.36	0.93	0.2	A+
5	C	138	2	1	8	135.71	16.96	0.78	0.6	A+
5	C	139	2	1	8	25.57	3.20	1.11	-0.2	A-
5	C	140	2	1	8	30.14	3.77	1.14	-0.3	A-
5	C	141	2	1	8	68.21	8.53	0.80	0.5	A+
5	C	142	2	1	8	32.95	4.12	1.11	-0.3	A-

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	D	128	2	1	8	16.09	2.01	0.92	0.2	A+
5	D	129	2	1	8	88.73	11.09	0.80	0.5	A+
5	D	130	2	1	8	7.16	0.90	1.03	-0.1	A-
5	D	131	2	1	8	47.76	5.97	1.05	-0.1	A-
5	D	132	2	1	8	50.20	6.27	1.17	-0.4	A-
5	D	133	2	1	8	19.59	2.45	1.05	-0.1	A-
5	D	134	2	1	8	21.72	2.72	1.05	-0.1	A-
5	D	135	2	1	8	85.33	10.67	1.23	-0.5	A-
5	D	136	2	1	8	28.11	3.51	0.92	0.2	A+
5	D	137	2	1	8	102.59	12.82	0.81	0.5	A+
5	D	138	2	1	8	417.36	52.17	0.58	1.3	B+
5	D	139	2	1	8	53.80	6.72	1.16	-0.4	A-
5	D	140	2	1	8	63.07	7.88	0.98	0.0	A+
5	D	141	2	1	8	29.74	3.72	0.90	0.2	A+
5	D	142	2	1	8	115.93	14.49	0.78	0.6	A+
5	E	128	2	1	8	19.52	2.44	0.91	0.2	A+
5	E	129	2	1	8	110.04	13.76	1.07	-0.2	A-
5	E	130	2	1	8	20.19	2.52	1.00	0.0	A+
5	E	131	2	1	8	36.43	4.55	0.86	0.3	A+
5	E	132	2	1	8	159.02	19.88	1.50	-1.0	A-
5	E	133	2	1	8	29.49	3.69	0.90	0.2	A+
5	E	134	2	1	8	30.66	3.83	1.07	-0.2	A-
5	E	135	2	1	8	29.55	3.69	0.90	0.2	A+
5	E	136	2	1	8	79.88	9.99	1.21	-0.5	A-
5	E	137	2	1	8	47.29	5.91	1.16	-0.4	A-
5	E	138	2	1	8	182.67	22.83	0.71	0.8	A+
5	E	139	2	1	8	60.67	7.58	1.22	-0.5	A-
5	E	140	2	1	8	15.71	1.96	1.10	-0.2	A-
5	E	141	2	1	8	10.26	1.28	0.96	0.1	A+
5	E	142	2	1	8	49.96	6.25	1.17	-0.4	A-
5	F	128	2	1	8	62.21	7.78	1.46	-0.9	A-
5	F	129	2	1	8	73.10	9.14	0.81	0.5	A+
5	F	130	2	1	8	10.20	1.28	0.99	0.0	A+
5	F	131	2	1	8	40.68	5.09	0.85	0.4	A+
5	F	132	2	1	8	89.06	11.13	1.34	-0.7	A-
5	F	133	2	1	8	101.32	12.66	0.77	0.6	A+
5	F	134	2	1	8	4.48	0.56	1.02	0.0	A-
5	F	135	2	1	8	114.90	14.36	1.25	-0.5	A-
5	F	136	2	1	8	52.26	6.53	1.17	-0.4	A-
5	F	137	2	1	8	48.98	6.12	0.83	0.4	A+
5	F	138	2	1	8	59.89	7.49	1.18	-0.4	A-
5	F	139	2	1	8	40.61	5.08	0.86	0.4	A+
5	F	140	2	1	8	140.28	17.54	0.73	0.7	A+
5	F	141	2	1	8	72.28	9.03	0.80	0.5	A+
5	F	142	2	1	8	15.08	1.89	0.99	0.0	A+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	G	128	2	1	8	38.20	4.78	0.86	0.3	A+
5	G	129	2	1	8	14.84	1.85	1.00	0.0	A
5	G	130	2	1	8	38.26	4.78	1.18	-0.4	A-
5	G	131	2	1	8	64.11	8.01	1.22	-0.5	A-
5	G	132	2	1	8	231.11	28.89	0.60	1.2	B+
5	G	133	2	1	8	19.03	2.38	1.00	0.0	A+
5	G	134	2	1	8	79.91	9.99	1.35	-0.7	A-
5	G	135	2	1	8	51.81	6.48	1.22	-0.5	A-
5	G	136	2	1	8	114.57	14.32	0.74	0.7	A+
5	G	137	2	1	8	45.12	5.64	0.88	0.3	A+
5	G	138	2	1	8	30.66	3.83	0.87	0.3	A+
5	G	139	2	1	8	38.82	4.85	0.95	0.1	A+
5	G	140	2	1	8	28.58	3.57	0.89	0.3	A+
5	G	141	2	1	8	34.33	4.29	0.92	0.2	A+
5	G	142	2	1	8	18.66	2.33	1.02	0.0	A-
5	H	128	2	1	8	105.80	13.23	1.28	-0.6	A-
5	H	129	2	1	8	118.01	14.75	0.62	1.1	B+
5	H	130	2	1	8	44.01	5.50	1.06	-0.1	A-
5	H	131	2	1	8	51.75	6.47	1.10	-0.2	A-
5	H	132	2	1	8	32.25	4.03	0.94	0.2	A+
5	H	133	2	1	8	9.38	1.17	1.00	0.0	A-
5	H	134	2	1	8	110.75	13.84	1.52	-1.0	A-
5	H	135	2	1	8	148.37	18.55	0.74	0.7	A+
5	H	136	2	1	8	242.28	30.28	0.68	0.9	A+
5	H	137	2	1	8	52.98	6.62	0.96	0.1	A+
5	H	138	2	1	8	35.72	4.46	0.97	0.1	A+
5	H	139	2	1	8	802.16	100.27	0.48	1.7	C+
5	H	140	2	1	8	298.97	37.37	0.61	1.1	B+
5	H	141	2	1	8	131.86	16.48	0.75	0.7	A+
5	H	142	2	1	8	33.57	4.20	1.11	-0.2	A-
5	I	128	2	1	8	47.18	5.90	0.83	0.4	A+
5	I	129	2	1	8	14.83	1.85	1.08	-0.2	A-
5	I	130	2	1	8	219.45	27.43	0.65	1.0	B+
5	I	131	2	1	8	42.88	5.36	1.26	-0.5	A-
5	I	132	2	1	8	19.51	2.44	1.07	-0.2	A-
5	I	133	2	1	8	53.49	6.69	1.12	-0.3	A-
5	I	134	2	1	8	56.40	7.05	0.84	0.4	A+
5	I	135	2	1	8	128.97	16.12	0.75	0.7	A+
5	I	136	2	1	8	289.01	36.13	1.49	-0.9	A-
5	I	137	2	1	8	62.62	7.83	1.08	-0.2	A-
5	I	138	2	1	8	63.08	7.88	0.81	0.5	A+
5	I	139	2	1	8	115.31	14.41	1.31	-0.6	A-
5	I	140	2	1	8	37.83	4.73	0.88	0.3	A+
5	I	141	2	1	8	266.64	33.33	1.48	-0.9	A-
5	I	142	2	1	8	46.64	5.83	0.93	0.2	A+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	J	128	2	1	8	79.19	9.90	1.25	-0.5	A-
5	J	129	2	1	8	133.49	16.69	1.35	-0.7	A-
5	J	130	2	1	8	74.11	9.26	1.46	-0.9	A-
5	J	131	2	1	8	140.23	17.53	0.77	0.6	A+
5	J	132	2	1	8	18.14	2.27	0.91	0.2	A+
5	J	133	2	1	8	142.74	17.84	0.70	0.8	A+
5	J	134	2	1	8	24.34	3.04	1.00	0.0	A-
5	J	135	2	1	8	92.86	11.61	0.77	0.6	A+
5	J	136	2	1	8	34.15	4.27	1.10	-0.2	A-
5	J	137	2	1	8	9.41	1.18	1.00	0.0	A-
5	J	138	2	1	8	256.99	32.12	1.54	-1.0	B-
5	J	139	2	1	8	16.06	2.01	0.97	0.1	A+
5	J	140	2	1	8	77.41	9.68	1.34	-0.7	A-
5	J	141	2	1	8	10.25	1.28	1.03	-0.1	A-
5	J	142	2	1	8	169.74	21.22	0.83	0.4	A+
5	W	1	2	1	8	176.27	22.03	1.15	-0.3	A-
5	W	2	2	1	8	224.02	28.00	1.11	-0.3	A-
5	W	3	2	1	8	970.11	121.26	1.31	-0.6	A-
5	W	4	2	1	8	580.32	72.54	1.27	-0.6	A-
5	W	5	2	1	8	230.02	28.75	0.88	0.3	A+
5	W	6	2	1	8	979.62	122.45	1.34	-0.7	A-
5	W	7	2	1	8	190.94	23.87	0.90	0.2	A+
5	W	8	2	1	8	25.79	3.22	1.00	0.0	A-
5	W	9	2	1	8	42.10	5.26	0.96	0.1	A+
5	W	10	2	1	8	195.38	24.42	0.85	0.4	A+
5	W	11	2	1	8	416.86	52.11	1.34	-0.7	A-
5	W	12	2	1	8	243.05	30.38	1.13	-0.3	A-
5	W	13	2	1	8	93.53	11.69	0.99	0.0	A+
5	W	14	2	1	8	524.86	65.61	1.06	-0.1	A-
5	W	15	2	1	8	2207.12	275.89	1.48	-0.9	A-
5	W	16	2	1	8	514.19	64.27	1.37	-0.7	A-
5	W	17	2	1	8	887.72	110.97	0.77	0.6	A+
5	W	18	2	1	8	1311.89	163.99	0.66	1.0	A+
5	W	19	2	1	8	139.20	17.40	1.11	-0.2	A-
5	W	20	2	1	8	147.45	18.43	1.07	-0.2	A-
5	W	21	2	1	8	278.98	34.87	1.10	-0.2	A-
5	W	22	2	1	8	596.09	74.51	0.81	0.5	A+
5	W	23	2	1	8	352.19	44.02	0.86	0.3	A+
5	W	24	2	1	8	19.93	2.49	0.99	0.0	A+
5	W	26	2	1	8	130.90	16.36	1.18	-0.4	A-
5	W	27	2	1	8	138.04	17.26	1.09	-0.2	A-
5	W	28	2	1	8	148.07	18.51	0.92	0.2	A+
5	W	29	2	1	8	20.83	2.60	0.99	0.0	A+
5	W	30	2	1	8	116.89	14.61	0.98	0.0	A+
5	W	31	2	1	8	109.97	13.75	1.13	-0.3	A-
5	W	32	2	1	8	757.95	94.74	0.78	0.6	A+
5	W	33	2	1	8	509.01	63.63	0.82	0.5	A+
5	W	34	2	1	8	63.45	7.93	0.99	0.0	A+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	W	35	2	1	8	59.08	7.38	1.05	-0.1	A-
5	W	36	2	1	8	366.75	45.84	1.13	-0.3	A-
5	W	37	2	1	8	63.74	7.97	1.07	-0.2	A-
5	W	38	2	1	8	106.49	13.31	1.09	-0.2	A-
5	W	39	2	1	8	441.63	55.20	0.85	0.4	A+
5	W	40	2	1	8	66.24	8.28	1.04	-0.1	A-
5	W	41	2	1	8	73.38	9.17	0.98	0.1	A+
5	W	42	2	1	8	123.13	15.39	0.96	0.1	A+
5	W	43	2	1	8	60.81	7.60	1.00	0.0	A+
5	W	44	2	1	8	54.29	6.79	1.00	0.0	A+
5	W	45	2	1	8	189.62	23.70	1.07	-0.2	A-
5	W	46	2	1	8	100.72	12.59	0.95	0.1	A+
5	W	47	2	1	8	775.59	96.95	0.76	0.6	A+
5	W	48	2	1	8	452.40	56.55	1.24	-0.5	A-
5	W	49	2	1	8	210.51	26.31	1.11	-0.2	A-
5	W	51	2	1	8	1409.83	176.23	0.73	0.7	A+
5	W	52	2	1	8	106.21	13.28	1.14	-0.3	A-
5	W	53	2	1	8	390.15	48.77	1.15	-0.3	A-
5	W	54	2	1	8	270.74	33.84	1.10	-0.2	A-
5	W	55	2	1	8	27.22	3.40	0.99	0.0	A+
5	W	56	2	1	8	34.67	4.33	1.04	-0.1	A-
5	W	57	2	1	8	53.91	6.74	0.99	0.0	A+
5	W	58	2	1	8	1073.11	134.14	0.76	0.6	A+
5	W	59	2	1	8	1049.77	131.22	1.29	-0.6	A-
5	W	60	2	1	8	66.00	8.25	1.06	-0.1	A-
5	W	61	2	1	8	61.60	7.70	1.00	0.0	A-
5	W	62	2	1	8	627.82	78.48	0.80	0.5	A+
5	W	63	2	1	8	1559.91	194.99	0.71	0.8	A+
5	W	64	2	1	8	396.34	49.54	0.87	0.3	A+
5	W	65	2	1	8	188.83	23.60	0.93	0.2	A+
5	W	66	2	1	8	52.44	6.55	0.95	0.1	A+
5	W	67	2	1	8	145.13	18.14	0.91	0.2	A+
5	W	68	2	1	8	496.45	62.06	0.87	0.3	A+
5	W	69	2	1	8	360.34	45.04	1.20	-0.4	A-
5	W	70	2	1	8	78.08	9.76	0.99	0.0	A+
5	W	71	2	1	8	483.24	60.40	1.20	-0.4	A-
5	W	72	2	1	8	1188.55	148.57	0.74	0.7	A+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	A	148	2	1	8	28.72	3.59	0.99	0.0	A+
8	A	149	2	1	8	63.32	7.92	1.23	-0.5	A-
8	A	150	2	1	8	37.30	4.66	0.96	0.1	A+
8	A	151	2	1	8	75.02	9.38	1.23	-0.5	A-
8	A	152	2	1	8	69.41	8.68	1.16	-0.4	A-
8	A	153	2	1	8	55.87	6.98	0.84	0.4	A+
8	A	154	2	1	8	56.14	7.02	1.20	-0.4	A-
8	A	155	2	1	8	25.73	3.22	1.08	-0.2	A-
8	A	156	2	1	8	56.11	7.01	1.22	-0.5	A-
8	A	157	2	1	8	328.00	41.00	1.75	-1.3	B-
8	A	158	2	1	8	71.84	8.98	1.16	-0.3	A-
8	A	159	2	1	8	42.47	5.31	1.13	-0.3	A-
8	A	160	2	1	8	8.55	1.07	0.99	0.0	A+
8	A	161	2	1	8	59.06	7.38	0.87	0.3	A+
8	A	162	2	1	8	64.92	8.11	0.83	0.4	A+
8	B	148	2	1	8	141.12	17.64	0.73	0.8	A+
8	B	149	2	1	8	45.32	5.67	1.14	-0.3	A-
8	B	150	2	1	8	21.19	2.65	1.06	-0.1	A-
8	B	151	2	1	8	157.77	19.72	1.33	-0.7	A-
8	B	152	2	1	8	18.18	2.27	0.97	0.1	A+
8	B	153	2	1	8	153.87	19.23	0.78	0.6	A+
8	B	154	2	1	8	200.65	25.08	1.43	-0.8	A-
8	B	155	2	1	8	13.20	1.65	1.04	-0.1	A-
8	B	156	2	1	8	745.45	93.18	0.43	2.0	C+
8	B	157	2	1	8	76.83	9.60	1.29	-0.6	A-
8	B	158	2	1	8	12.81	1.60	1.03	-0.1	A-
8	B	159	2	1	8	175.31	21.91	0.67	0.9	A+
8	B	160	2	1	8	235.80	29.47	0.66	1.0	A+
8	B	161	2	1	8	18.67	2.33	0.96	0.1	A+
8	B	162	2	1	8	71.14	8.89	1.20	-0.4	A-
8	C	148	2	1	8	67.60	8.45	1.17	-0.4	A-
8	C	149	2	1	8	13.98	1.75	0.95	0.1	A+
8	C	150	2	1	8	344.73	43.09	0.62	1.1	B+
8	C	151	2	1	8	25.90	3.24	1.05	-0.1	A-
8	C	152	2	1	8	38.00	4.75	1.16	-0.4	A-
8	C	153	2	1	8	116.84	14.61	1.23	-0.5	A-
8	C	154	2	1	8	145.87	18.23	0.72	0.8	A+
8	C	155	2	1	8	75.94	9.49	0.80	0.5	A+
8	C	156	2	1	8	247.88	30.98	1.43	-0.8	A-
8	C	157	2	1	8	31.52	3.94	0.93	0.2	A+
8	C	158	2	1	8	22.11	2.76	0.96	0.1	A+
8	C	159	2	1	8	53.73	6.72	1.11	-0.3	A-
8	C	160	2	1	8	54.48	6.81	0.85	0.4	A+
8	C	161	2	1	8	101.99	12.75	0.79	0.6	A+
8	C	162	2	1	8	32.74	4.09	0.96	0.1	A+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	D	148	2	1	8	56.70	7.09	1.01	0.0	A-
8	D	149	2	1	8	79.97	10.00	0.74	0.7	A+
8	D	150	2	1	8	8.11	1.01	1.02	0.0	A-
8	D	151	2	1	8	177.30	22.16	1.42	-0.8	A-
8	D	152	2	1	8	24.63	3.08	1.11	-0.2	A-
8	D	153	2	1	8	444.83	55.60	0.57	1.3	B+
8	D	154	2	1	8	18.27	2.28	1.02	0.0	A-
8	D	155	2	1	8	22.96	2.87	1.08	-0.2	A-
8	D	156	2	1	8	291.89	36.49	1.63	-1.2	B-
8	D	157	2	1	8	37.96	4.75	0.94	0.1	A+
8	D	158	2	1	8	45.84	5.73	0.92	0.2	A+
8	D	159	2	1	8	35.28	4.41	1.08	-0.2	A-
8	D	160	2	1	8	39.15	4.89	0.91	0.2	A+
8	D	161	2	1	8	113.38	14.17	1.29	-0.6	A-
8	D	162	2	1	8	22.83	2.85	1.04	-0.1	A-
8	E	148	2	1	8	1134.49	141.81	0.37	2.3	C+
8	E	149	2	1	8	24.60	3.07	1.05	-0.1	A-
8	E	150	2	1	8	24.14	3.02	0.95	0.1	A+
8	E	151	2	1	8	240.34	30.04	1.51	-1.0	A-
8	E	152	2	1	8	22.80	2.85	0.92	0.2	A+
8	E	153	2	1	8	40.36	5.04	0.88	0.3	A+
8	E	154	2	1	8	29.33	3.67	1.04	-0.1	A-
8	E	155	2	1	8	51.24	6.40	0.97	0.1	A+
8	E	156	2	1	8	32.57	4.07	1.10	-0.2	A-
8	E	157	2	1	8	107.53	13.44	0.91	0.2	A+
8	E	158	2	1	8	39.08	4.89	1.12	-0.3	A-
8	E	159	2	1	8	46.00	5.75	1.17	-0.4	A-
8	E	160	2	1	8	107.67	13.46	1.21	-0.5	A-
8	E	161	2	1	8	41.88	5.24	1.09	-0.2	A-
8	E	162	2	1	8	44.86	5.61	0.90	0.2	A+
8	F	148	2	1	8	396.69	49.59	0.61	1.2	B+
8	F	149	2	1	8	105.51	13.19	0.78	0.6	A+
8	F	150	2	1	8	95.30	11.91	0.79	0.5	A+
8	F	151	2	1	8	34.31	4.29	0.86	0.4	A+
8	F	152	2	1	8	12.24	1.53	0.96	0.1	A+
8	F	153	2	1	8	34.60	4.32	1.08	-0.2	A-
8	F	154	2	1	8	24.24	3.03	1.05	-0.1	A-
8	F	155	2	1	8	82.13	10.27	1.08	-0.2	A-
8	F	156	2	1	8	47.18	5.90	0.91	0.2	A+
8	F	157	2	1	8	68.12	8.51	1.24	-0.5	A-
8	F	158	2	1	8	168.93	21.12	1.46	-0.9	A-
8	F	159	2	1	8	21.51	2.69	0.94	0.2	A+
8	F	160	2	1	8	37.05	4.63	1.09	-0.2	A-
8	F	161	2	1	8	51.82	6.48	0.85	0.4	A+
8	F	162	2	1	8	132.67	16.58	1.56	-1.0	B-

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	G	148	2	1	8	22.48	2.81	1.06	-0.1	A-
8	G	149	2	1	8	89.31	11.16	1.22	-0.5	A-
8	G	150	2	1	8	40.94	5.12	1.09	-0.2	A-
8	G	151	2	1	8	67.84	8.48	1.12	-0.3	A-
8	G	152	2	1	8	102.99	12.87	1.22	-0.5	A-
8	G	153	2	1	8	220.99	27.62	0.68	0.9	A+
8	G	154	2	1	8	122.56	15.32	1.36	-0.7	A-
8	G	155	2	1	8	146.54	18.32	1.31	-0.6	A-
8	G	156	2	1	8	54.42	6.80	0.83	0.4	A+
8	G	157	2	1	8	11.55	1.44	1.07	-0.2	A-
8	G	158	2	1	8	195.43	24.43	0.72	0.8	A+
8	G	159	2	1	8	27.41	3.43	1.00	0.0	A+
8	G	160	2	1	8	217.22	27.15	0.67	0.9	A+
8	G	161	2	1	8	51.63	6.45	0.84	0.4	A+
8	G	162	2	1	8	56.54	7.07	0.81	0.5	A+
8	H	148	2	1	8	37.18	4.65	0.87	0.3	A+
8	H	149	2	1	8	120.35	15.04	0.74	0.7	A+
8	H	150	2	1	8	87.75	10.97	1.26	-0.5	A-
8	H	151	2	1	8	107.76	13.47	0.75	0.7	A+
8	H	152	2	1	8	63.17	7.90	1.18	-0.4	A-
8	H	153	2	1	8	76.04	9.51	0.81	0.5	A+
8	H	154	2	1	8	140.41	17.55	1.38	-0.8	A-
8	H	155	2	1	8	37.68	4.71	0.94	0.1	A+
8	H	156	2	1	8	33.66	4.21	1.04	-0.1	A-
8	H	157	2	1	8	95.57	11.95	1.27	-0.6	A-
8	H	158	2	1	8	34.05	4.26	0.90	0.3	A+
8	H	159	2	1	8	65.11	8.14	1.23	-0.5	A-
8	H	160	2	1	8	36.20	4.52	0.88	0.3	A+
8	H	161	2	1	8	29.27	3.66	1.00	0.0	A+
8	H	162	2	1	8	20.36	2.54	1.04	-0.1	A-
8	I	148	2	1	8	12.08	1.51	0.98	0.0	A+
8	I	149	2	1	8	90.59	11.32	0.92	0.2	A+
8	I	150	2	1	8	59.19	7.40	0.76	0.6	A+
8	I	151	2	1	8	127.45	15.93	0.74	0.7	A+
8	I	152	2	1	8	65.63	8.20	0.81	0.5	A+
8	I	153	2	1	8	85.06	10.63	0.81	0.5	A+
8	I	154	2	1	8	39.73	4.97	0.97	0.1	A+
8	I	155	2	1	8	7.36	0.92	1.00	0.0	A+
8	I	156	2	1	8	89.87	11.23	1.23	-0.5	A-
8	I	157	2	1	8	14.51	1.81	1.06	-0.1	A-
8	I	158	2	1	8	24.66	3.08	1.11	-0.2	A-
8	I	159	2	1	8	115.95	14.49	1.38	-0.8	A-
8	I	160	2	1	8	81.17	10.15	1.32	-0.7	A-
8	I	161	2	1	8	49.54	6.19	0.92	0.2	A+
8	I	162	2	1	8	111.15	13.89	1.28	-0.6	A-

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	J	148	2	1	8	33.29	4.16	0.89	0.3	A+
8	J	149	2	1	8	72.80	9.10	0.91	0.2	A+
8	J	150	2	1	8	32.87	4.11	1.12	-0.3	A-
8	J	151	2	1	8	17.53	2.19	1.00	0.0	A
8	J	152	2	1	8	107.75	13.47	1.28	-0.6	A-
8	J	153	2	1	8	53.62	6.70	0.85	0.4	A+
8	J	154	2	1	8	67.76	8.47	1.20	-0.4	A-
8	J	155	2	1	8	35.68	4.46	0.88	0.3	A+
8	J	156	2	1	8	68.94	8.62	1.20	-0.4	A-
8	J	157	2	1	8	87.02	10.88	1.06	-0.1	A-
8	J	158	2	1	8	54.00	6.75	1.21	-0.5	A-
8	J	159	2	1	8	179.19	22.40	1.39	-0.8	A-
8	J	160	2	1	8	76.09	9.51	1.06	-0.1	A-
8	J	161	2	1	8	22.80	2.85	0.92	0.2	A+
8	J	162	2	1	8	67.72	8.47	0.77	0.6	A+
8	W	1	2	1	8	535.36	66.92	1.29	-0.6	A-
8	W	2	2	1	8	83.52	10.44	0.94	0.2	A+
8	W	3	2	1	8	633.42	79.18	1.21	-0.5	A-
8	W	4	2	1	8	239.96	30.00	0.92	0.2	A+
8	W	5	2	1	8	1368.94	171.12	0.71	0.8	A+
8	W	6	2	1	8	164.86	20.61	1.13	-0.3	A-
8	W	7	2	1	8	944.54	118.07	1.27	-0.6	A-
8	W	8	2	1	8	31.69	3.96	1.00	0.0	A-
8	W	9	2	1	8	405.19	50.65	1.22	-0.5	A-
8	W	10	2	1	8	506.86	63.36	1.23	-0.5	A-
8	W	11	2	1	8	677.85	84.73	0.74	0.7	A+
8	W	12	2	1	8	313.95	39.24	1.13	-0.3	A-
8	W	13	2	1	8	105.25	13.16	1.07	-0.2	A-
8	W	14	2	1	8	361.99	45.25	0.83	0.4	A+
8	W	15	2	1	8	805.75	100.72	0.79	0.6	A+
8	W	16	2	1	8	447.39	55.92	0.85	0.4	A+
8	W	17	2	1	8	852.11	106.51	0.74	0.7	A+
8	W	18	2	1	8	281.55	35.19	1.06	-0.1	A-
8	W	19	2	1	8	150.74	18.84	0.95	0.1	A+
8	W	20	2	1	8	310.67	38.83	0.93	0.2	A+
8	W	21	2	1	8	189.14	23.64	1.07	-0.2	A-
8	W	22	2	1	8	769.64	96.20	0.78	0.6	A+
8	W	23	2	1	8	252.74	31.59	0.89	0.3	A+
8	W	24	2	1	8	970.28	121.28	1.30	-0.6	A-
8	W	26	2	1	8	456.04	57.00	0.81	0.5	A+
8	W	27	2	1	8	275.47	34.43	0.89	0.3	A+
8	W	28	2	1	8	267.98	33.50	1.13	-0.3	A-
8	W	29	2	1	8	497.46	62.18	0.84	0.4	A+
8	W	30	2	1	8	48.20	6.02	0.97	0.1	A+
8	W	31	2	1	8	792.97	99.12	1.28	-0.6	A-
8	W	32	2	1	8	53.40	6.68	0.98	0.1	A+
8	W	33	2	1	8	999.16	124.89	0.74	0.7	A+
8	W	34	2	1	8	734.50	91.81	0.84	0.4	A+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	W	35	2	1	8	116.42	14.55	1.01	0.0	A-
8	W	36	2	1	8	401.76	50.22	1.20	-0.4	A-
8	W	37	2	1	8	625.18	78.15	0.81	0.5	A+
8	W	38	2	1	8	619.14	77.39	0.82	0.5	A+
8	W	39	2	1	8	92.05	11.51	1.00	0.0	A-
8	W	40	2	1	8	698.25	87.28	0.82	0.5	A+
8	W	41	2	1	8	3759.01	469.88	0.57	1.3	B+
8	W	42	2	1	8	141.79	17.72	1.01	0.0	A-
8	W	43	2	1	8	737.34	92.17	1.31	-0.6	A-
8	W	44	2	1	8	1675.18	209.40	0.68	0.9	A+
8	W	45	2	1	8	934.27	116.78	0.75	0.7	A+
8	W	46	2	1	8	200.18	25.02	1.16	-0.4	A-
8	W	47	2	1	8	37.84	4.73	1.03	-0.1	A-
8	W	48	2	1	8	37.71	4.71	1.05	-0.1	A-
8	W	49	2	1	8	90.35	11.29	1.09	-0.2	A-
8	W	51	2	1	8	77.82	9.73	1.07	-0.2	A-
8	W	52	2	1	8	878.69	109.84	1.25	-0.5	A-
8	W	53	2	1	8	534.31	66.79	1.26	-0.5	A-
8	W	54	2	1	8	146.89	18.36	0.97	0.1	A+
8	W	55	2	1	8	1952.94	244.12	0.69	0.9	A+
8	W	56	2	1	8	620.57	77.57	0.79	0.6	A+
8	W	57	2	1	8	215.59	26.95	0.89	0.3	A+
8	W	58	2	1	8	190.57	23.82	0.89	0.3	A+
8	W	59	2	1	8	126.32	15.79	1.05	-0.1	A-
8	W	60	2	1	8	152.01	19.00	0.93	0.2	A+
8	W	61	2	1	8	570.63	71.33	1.21	-0.5	A-
8	W	62	2	1	8	1346.65	168.33	1.38	-0.7	A-
8	W	63	2	1	8	460.32	57.54	0.84	0.4	A+
8	W	64	2	1	8	100.24	12.53	1.01	0.0	A-
8	W	65	2	1	8	71.83	8.98	0.97	0.1	A+
8	W	66	2	1	8	895.45	111.93	0.78	0.6	A+
8	W	67	2	1	8	209.85	26.23	1.06	-0.1	A-
8	W	68	2	1	8	386.85	48.36	0.93	0.2	A+
8	W	69	2	1	8	173.71	21.71	0.97	0.1	A+
8	W	70	2	1	8	1474.17	184.27	0.71	0.8	A+
8	W	71	2	1	8	112.70	14.09	0.95	0.1	A+
8	W	72	2	1	8	1117.33	139.67	1.31	-0.6	A-

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	A	156	2	1	8	53.61	6.70	1.18	-0.4	A-
11	A	157	2	1	8	30.57	3.82	1.07	-0.2	A-
11	A	158	2	1	8	119.37	14.92	1.32	-0.7	A-
11	A	159	2	1	8	12.55	1.57	1.03	-0.1	A-
11	A	160	2	1	8	21.26	2.66	1.03	-0.1	A-
11	A	161	2	1	8	88.46	11.06	1.30	-0.6	A-
11	A	162	2	1	8	36.92	4.61	1.01	0.0	A-
11	A	163	2	1	8	25.55	3.19	0.97	0.1	A+
11	A	164	2	1	8	13.62	1.70	0.94	0.1	A+
11	A	165	2	1	8	31.26	3.91	0.97	0.1	A+
11	A	166	2	1	8	34.24	4.28	1.10	-0.2	A-
11	A	167	2	1	8	57.53	7.19	0.83	0.4	A+
11	A	168	2	1	8	153.26	19.16	0.72	0.8	A+
11	A	169	2	1	8	31.48	3.93	0.93	0.2	A+
11	A	170	2	1	8	28.96	3.62	0.94	0.1	A+
11	B	156	2	1	8	58.96	7.37	1.14	-0.3	A-
11	B	157	2	1	8	48.39	6.05	0.85	0.4	A+
11	B	158	2	1	8	90.31	11.29	0.80	0.5	A+
11	B	159	2	1	8	85.33	10.67	0.76	0.6	A+
11	B	160	2	1	8	457.21	57.15	0.53	1.5	C+
11	B	161	2	1	8	118.97	14.87	0.75	0.7	A+
11	B	162	2	1	8	27.22	3.40	0.95	0.1	A+
11	B	163	2	1	8	18.20	2.28	0.99	0.0	A+
11	B	164	2	1	8	39.67	4.96	1.11	-0.2	A-
11	B	165	2	1	8	127.26	15.91	0.70	0.8	A+
11	B	166	2	1	8	48.60	6.07	0.85	0.4	A+
11	B	167	2	1	8	49.92	6.24	0.85	0.4	A+
11	B	168	2	1	8	88.48	11.06	1.26	-0.6	A-
11	B	169	2	1	8	9.21	1.15	0.97	0.1	A+
11	B	170	2	1	8	25.13	3.14	0.92	0.2	A+
11	C	156	2	1	8	303.58	37.95	1.68	-1.2	B-
11	C	157	2	1	8	36.39	4.55	1.20	-0.4	A-
11	C	158	2	1	8	22.93	2.87	1.13	-0.3	A-
11	C	159	2	1	8	72.56	9.07	1.28	-0.6	A-
11	C	160	2	1	8	18.29	2.29	1.01	0.0	A-
11	C	161	2	1	8	18.36	2.29	0.96	0.1	A+
11	C	162	2	1	8	27.88	3.48	1.00	0.0	A-
11	C	163	2	1	8	131.24	16.41	0.74	0.7	A+
11	C	164	2	1	8	69.31	8.66	0.86	0.4	A+
11	C	165	2	1	8	11.69	1.46	1.02	-0.1	A-
11	C	166	2	1	8	24.25	3.03	1.03	-0.1	A-
11	C	167	2	1	8	18.77	2.35	1.00	0.0	A-
11	C	168	2	1	8	39.98	5.00	0.88	0.3	A+
11	C	169	2	1	8	919.87	114.98	0.44	1.9	C+
11	C	170	2	1	8	36.09	4.51	0.93	0.2	A+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	D	156	2	1	8	53.74	6.72	1.20	-0.4	A-
11	D	157	2	1	8	62.71	7.84	0.76	0.6	A+
11	D	158	2	1	8	66.89	8.36	1.28	-0.6	A-
11	D	159	2	1	8	86.46	10.81	1.20	-0.4	A-
11	D	160	2	1	8	45.41	5.68	1.07	-0.2	A-
11	D	161	2	1	8	26.65	3.33	0.91	0.2	A+
11	D	162	2	1	8	55.26	6.91	1.17	-0.4	A-
11	D	163	2	1	8	38.80	4.85	0.89	0.3	A+
11	D	164	2	1	8	35.13	4.39	0.99	0.0	A+
11	D	165	2	1	8	73.08	9.14	0.76	0.6	A+
11	D	166	2	1	8	198.09	24.76	1.54	-1.0	B-
11	D	167	2	1	8	229.29	28.66	0.65	1.0	B+
11	D	168	2	1	8	26.60	3.33	1.00	0.0	A-
11	D	169	2	1	8	18.52	2.31	1.02	-0.1	A-
11	D	170	2	1	8	121.43	15.18	1.33	-0.7	A-
11	E	156	2	1	8	11.95	1.49	1.10	-0.2	A-
11	E	157	2	1	8	130.65	16.33	1.40	-0.8	A-
11	E	158	2	1	8	30.71	3.84	0.91	0.2	A+
11	E	159	2	1	8	34.96	4.37	0.93	0.2	A+
11	E	160	2	1	8	72.82	9.10	1.26	-0.6	A-
11	E	161	2	1	8	10.22	1.28	0.93	0.2	A+
11	E	162	2	1	8	30.32	3.79	0.88	0.3	A+
11	E	163	2	1	8	57.87	7.23	0.85	0.4	A+
11	E	164	2	1	8	30.41	3.80	1.12	-0.3	A-
11	E	165	2	1	8	59.74	7.47	1.23	-0.5	A-
11	E	166	2	1	8	74.16	9.27	1.25	-0.5	A-
11	E	167	2	1	8	41.85	5.23	0.86	0.4	A+
11	E	168	2	1	8	23.38	2.92	0.97	0.1	A+
11	E	169	2	1	8	30.26	3.78	1.03	-0.1	A-
11	E	170	2	1	8	36.75	4.59	0.95	0.1	A+
11	F	156	2	1	8	32.76	4.09	1.03	-0.1	A-
11	F	157	2	1	8	33.79	4.22	1.17	-0.4	A-
11	F	158	2	1	8	101.68	12.71	0.80	0.5	A+
11	F	159	2	1	8	13.95	1.74	0.89	0.3	A+
11	F	160	2	1	8	55.99	7.00	0.88	0.3	A+
11	F	161	2	1	8	35.39	4.42	1.11	-0.2	A-
11	F	162	2	1	8	30.12	3.77	0.87	0.3	A+
11	F	163	2	1	8	8.34	1.04	1.03	-0.1	A-
11	F	164	2	1	8	34.31	4.29	0.85	0.4	A+
11	F	165	2	1	8	66.73	8.34	0.84	0.4	A+
11	F	166	2	1	8	22.38	2.80	0.93	0.2	A+
11	F	167	2	1	8	33.48	4.19	1.00	0.0	A+
11	F	168	2	1	8	26.73	3.34	1.00	0.0	A-
11	F	169	2	1	8	45.62	5.70	1.02	-0.1	A-
11	F	170	2	1	8	41.32	5.16	1.04	-0.1	A-

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	G	156	2	1	8	57.56	7.20	1.23	-0.5	A-
11	G	157	2	1	8	22.66	2.83	1.11	-0.2	A-
11	G	158	2	1	8	10.01	1.25	1.02	-0.1	A-
11	G	159	2	1	8	110.10	13.76	0.77	0.6	A+
11	G	160	2	1	8	23.93	2.99	0.99	0.0	A+
11	G	161	2	1	8	183.11	22.89	1.40	-0.8	A-
11	G	162	2	1	8	45.70	5.71	1.18	-0.4	A-
11	G	163	2	1	8	117.19	14.65	1.36	-0.7	A-
11	G	164	2	1	8	172.89	21.61	1.38	-0.8	A-
11	G	165	2	1	8	21.25	2.66	1.12	-0.3	A-
11	G	166	2	1	8	19.96	2.50	0.95	0.1	A+
11	G	167	2	1	8	22.39	2.80	0.92	0.2	A+
11	G	168	2	1	8	48.01	6.00	0.92	0.2	A+
11	G	169	2	1	8	9.09	1.14	1.01	0.0	A-
11	G	170	2	1	8	24.24	3.03	1.00	0.0	A-
11	H	156	2	1	8	46.41	5.80	0.80	0.5	A+
11	H	157	2	1	8	82.98	10.37	0.73	0.7	A+
11	H	158	2	1	8	13.15	1.64	0.99	0.0	A+
11	H	159	2	1	8	16.02	2.00	0.92	0.2	A+
11	H	160	2	1	8	71.70	8.96	1.29	-0.6	A-
11	H	161	2	1	8	25.50	3.19	1.13	-0.3	A-
11	H	162	2	1	8	21.73	2.72	0.91	0.2	A+
11	H	163	2	1	8	22.55	2.82	0.96	0.1	A+
11	H	164	2	1	8	178.74	22.34	0.69	0.9	A+
11	H	165	2	1	8	27.35	3.42	0.97	0.1	A+
11	H	166	2	1	8	131.18	16.40	0.78	0.6	A+
11	H	167	2	1	8	68.23	8.53	0.86	0.3	A+
11	H	168	2	1	8	31.88	3.99	1.13	-0.3	A-
11	H	169	2	1	8	28.67	3.58	0.88	0.3	A+
11	H	170	2	1	8	83.21	10.40	0.78	0.6	A+
11	I	156	2	1	8	95.78	11.97	1.55	-1.0	B-
11	I	157	2	1	8	44.99	5.62	0.79	0.6	A+
11	I	158	2	1	8	5.26	0.66	0.98	0.0	A+
11	I	159	2	1	8	43.26	5.41	0.88	0.3	A+
11	I	160	2	1	8	130.33	16.29	1.35	-0.7	A-
11	I	161	2	1	8	138.79	17.35	1.40	-0.8	A-
11	I	162	2	1	8	73.81	9.23	1.25	-0.5	A-
11	I	163	2	1	8	10.62	1.33	0.94	0.1	A+
11	I	164	2	1	8	14.88	1.86	1.04	-0.1	A-
11	I	165	2	1	8	22.77	2.85	1.13	-0.3	A-
11	I	166	2	1	8	65.48	8.18	1.21	-0.5	A-
11	I	167	2	1	8	32.83	4.10	0.86	0.4	A+
11	I	168	2	1	8	25.06	3.13	1.06	-0.1	A-
11	I	169	2	1	8	69.33	8.67	1.16	-0.3	A-
11	I	170	2	1	8	245.49	30.69	0.65	1.0	B+

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	J	156	2	1	8	67.24	8.41	0.85	0.4	A+
11	J	157	2	1	8	38.16	4.77	1.08	-0.2	A-
11	J	158	2	1	8	38.04	4.76	0.96	0.1	A+
11	J	159	2	1	8	9.70	1.21	0.95	0.1	A+
11	J	160	2	1	8	19.61	2.45	0.93	0.2	A+
11	J	161	2	1	8	216.39	27.05	1.56	-1.0	B-
11	J	162	2	1	8	68.85	8.61	0.90	0.3	A+
11	J	163	2	1	8	64.57	8.07	1.20	-0.4	A-
11	J	164	2	1	8	16.87	2.11	0.97	0.1	A+
11	J	165	2	1	8	67.13	8.39	0.85	0.4	A+
11	J	166	2	1	8	44.85	5.61	0.91	0.2	A+
11	J	167	2	1	8	83.92	10.49	1.20	-0.4	A-
11	J	168	2	1	8	12.53	1.57	0.95	0.1	A+
11	J	169	2	1	8	64.35	8.04	0.87	0.3	A+
11	J	170	2	1	8	151.82	18.98	1.41	-0.8	A-
11	W	1	2	1	8	27.32	3.41	1.02	0.0	A-
11	W	2	2	1	8	785.80	98.22	0.76	0.6	A+
11	W	3	2	1	8	199.36	24.92	1.03	-0.1	A-
11	W	4	2	1	8	3950.28	493.78	0.54	1.4	B+
11	W	5	2	1	8	229.48	28.69	1.23	-0.5	A-
11	W	6	2	1	8	121.71	15.21	0.86	0.3	A+
11	W	7	2	1	8	117.53	14.69	0.91	0.2	A+
11	W	8	2	1	8	165.80	20.72	1.16	-0.3	A-
11	W	9	2	1	8	233.38	29.17	0.87	0.3	A+
11	W	10	2	1	8	174.97	21.87	0.93	0.2	A+
11	W	11	2	1	8	141.50	17.69	0.87	0.3	A+
11	W	12	2	1	8	149.32	18.67	0.88	0.3	A+
11	W	13	2	1	8	86.28	10.79	1.07	-0.2	A-
11	W	14	2	1	8	378.55	47.32	1.15	-0.3	A-
11	W	15	2	1	8	213.47	26.68	0.88	0.3	A+
11	W	16	2	1	8	680.05	85.01	0.79	0.6	A+
11	W	17	2	1	8	81.37	10.17	1.04	-0.1	A-
11	W	18	2	1	8	317.25	39.66	1.13	-0.3	A-
11	W	19	2	1	8	1473.30	184.16	0.68	0.9	A+
11	W	20	2	1	8	340.10	42.51	1.15	-0.3	A-
11	W	21	2	1	8	799.34	99.92	1.30	-0.6	A-
11	W	22	2	1	8	300.61	37.58	0.91	0.2	A+
11	W	23	2	1	8	259.10	32.39	0.92	0.2	A+
11	W	24	2	1	8	421.75	52.72	1.16	-0.3	A-
11	W	26	2	1	8	692.64	86.58	0.66	1.0	A+
11	W	27	2	1	8	3513.46	439.18	0.50	1.6	C+
11	W	28	2	1	8	214.86	26.86	1.17	-0.4	A-
11	W	29	2	1	8	438.17	54.77	1.25	-0.5	A-
11	W	30	2	1	8	886.13	110.77	0.72	0.8	A+
11	W	31	2	1	8	647.62	80.95	0.85	0.4	A+
11	W	32	2	1	8	1132.93	141.62	0.77	0.6	A+
11	W	33	2	1	8	2117.85	264.73	0.69	0.9	A+
11	W	34	2	1	8	184.02	23.00	1.13	-0.3	A-

**Appendix Q: 2001 PSSA DIF Analysis
Multiple Choice Mathematics Items**

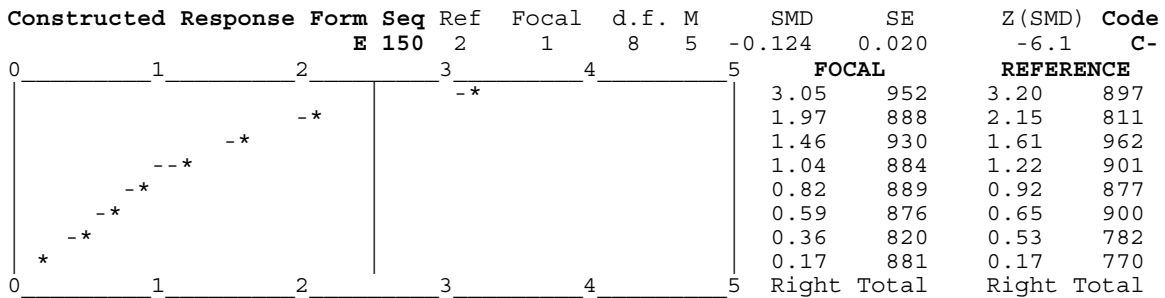
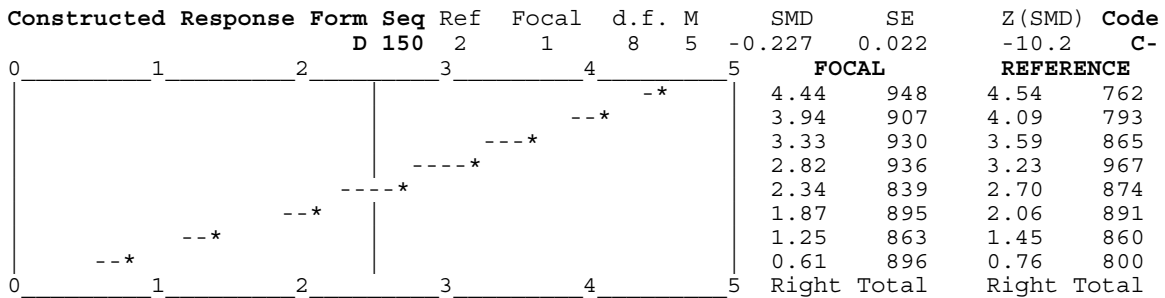
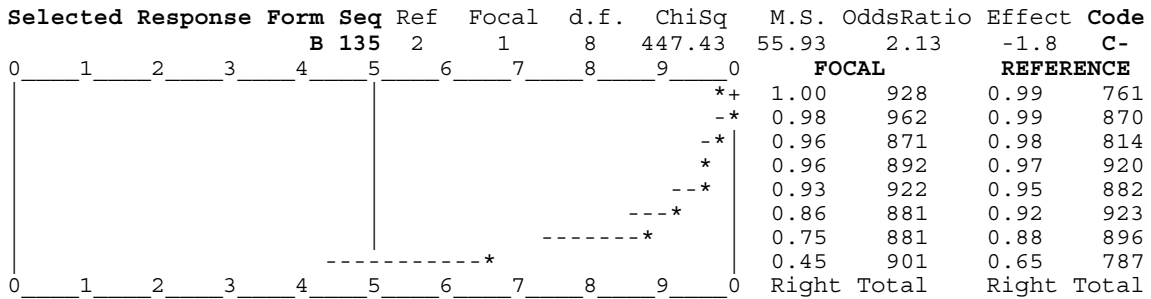
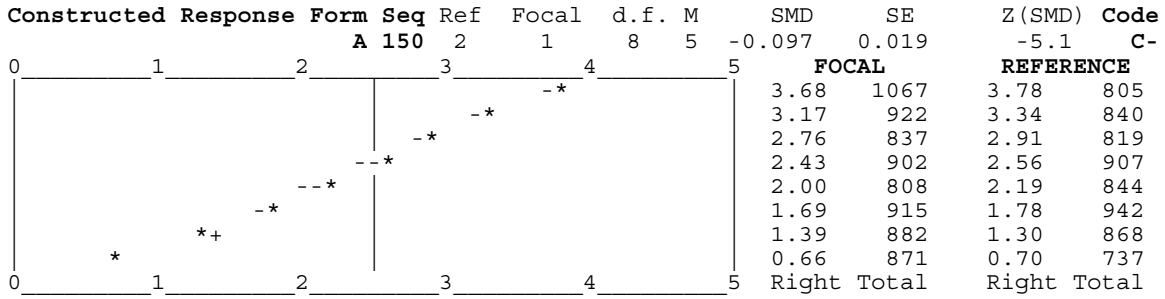
Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	W	35	2	1	8	2991.80	373.97	0.60	1.2	B+
11	W	36	2	1	8	594.97	74.37	1.34	-0.7	A-
11	W	37	2	1	8	16.65	2.08	1.00	0.0	A+
11	W	38	2	1	8	1817.52	227.19	0.66	1.0	A+
11	W	39	2	1	8	85.47	10.68	1.08	-0.2	A-
11	W	40	2	1	8	276.25	34.53	1.16	-0.3	A-
11	W	41	2	1	8	349.56	43.70	0.86	0.4	A+
11	W	42	2	1	8	1284.16	160.52	1.45	-0.9	A-
11	W	43	2	1	8	422.89	52.86	1.24	-0.5	A-
11	W	44	2	1	8	487.62	60.95	1.22	-0.5	A-
11	W	45	2	1	8	1197.43	149.68	0.72	0.8	A+
11	W	46	2	1	8	420.11	52.51	1.21	-0.5	A-
11	W	47	2	1	8	110.07	13.76	1.04	-0.1	A-
11	W	48	2	1	8	1675.16	209.39	0.72	0.8	A+
11	W	49	2	1	8	781.81	97.73	0.78	0.6	A+
11	W	51	2	1	8	373.90	46.74	1.28	-0.6	A-
11	W	52	2	1	8	506.20	63.28	1.30	-0.6	A-
11	W	53	2	1	8	178.22	22.28	1.17	-0.4	A-
11	W	54	2	1	8	843.49	105.44	0.72	0.8	A+
11	W	55	2	1	8	506.99	63.37	1.14	-0.3	A-
11	W	56	2	1	8	446.23	55.78	1.16	-0.4	A-
11	W	57	2	1	8	252.77	31.60	0.86	0.3	A+
11	W	58	2	1	8	651.69	81.46	0.82	0.5	A+
11	W	59	2	1	8	62.87	7.86	1.02	0.0	A-
11	W	60	2	1	8	1403.30	175.41	1.57	-1.1	B-
11	W	61	2	1	8	1539.32	192.42	0.69	0.9	A+
11	W	62	2	1	8	160.99	20.12	1.07	-0.1	A-
11	W	63	2	1	8	961.52	120.19	1.32	-0.7	A-
11	W	64	2	1	8	37.13	4.64	1.04	-0.1	A-
11	W	65	2	1	8	36.05	4.51	0.99	0.0	A+
11	W	66	2	1	8	283.61	35.45	0.87	0.3	A+
11	W	67	2	1	8	162.05	20.26	1.07	-0.2	A-
11	W	68	2	1	8	515.32	64.42	0.81	0.5	A+
11	W	69	2	1	8	95.22	11.90	1.03	-0.1	A-
11	W	70	2	1	8	221.14	27.64	1.02	0.0	A-
11	W	71	2	1	8	241.02	30.13	0.91	0.2	A+
11	W	72	2	1	8	967.81	120.98	1.31	-0.6	A-

**Appendix R: 2001 PSSA DIF Analysis
Open Ended Mathematics Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	A	150	2	1	8	5	-0.10	0.02	-5.1	C-
5	B	150	2	1	8	5	-0.06	0.02	-2.9	B-
5	C	150	2	1	8	5	-0.05	0.02	-2.8	B-
5	D	150	2	1	8	5	-0.23	0.02	-10.2	C-
5	E	150	2	1	8	5	-0.12	0.02	-6.1	C-
5	F	150	2	1	8	5	-0.18	0.02	-10.1	C-
5	G	150	2	1	8	5	-0.07	0.02	-4.1	B-
5	H	150	2	1	8	5	-0.12	0.02	-8.0	C-
5	I	150	2	1	8	5	0.00	0.02	0.0	A+
5	J	150	2	1	8	5	-0.11	0.02	-5.8	C-
5	W	25	2	1	8	5	-0.01	0.01	-2.5	B-
5	W	50	2	1	8	5	-0.06	0.01	-10.6	C-
5	W	73	2	1	8	5	-0.10	0.01	-17.5	C-
8	A	170	2	1	8	5	-0.25	0.02	-14.8	C-
8	B	170	2	1	8	5	-0.36	0.02	-20.3	C-
8	C	170	2	1	8	5	-0.24	0.02	-12.6	C-
8	D	170	2	1	8	5	-0.31	0.02	-14.5	C-
8	E	170	2	1	8	5	-0.12	0.02	-6.7	C-
8	F	170	2	1	8	5	-0.21	0.02	-11.2	C-
8	G	170	2	1	8	5	-0.16	0.02	-8.3	C-
8	H	170	2	1	8	5	-0.10	0.02	-6.0	C-
8	I	170	2	1	8	5	-0.10	0.02	-5.5	C-
8	J	170	2	1	8	5	-0.34	0.02	-17.6	C-
8	W	25	2	1	8	5	0.00	0.01	0.6	A+
8	W	50	2	1	8	5	-0.22	0.01	-41.7	C-
8	W	73	2	1	8	5	-0.09	0.01	-14.2	C-
11	A	180	2	1	8	5.00	-0.10	0.02	-5.4	C-
11	B	180	2	1	8	5.00	-0.18	0.02	-8.9	C-
11	C	180	2	1	8	5.00	0.06	0.02	4.1	B+
11	D	180	2	1	8	5.00	-0.05	0.02	-2.7	B-
11	E	180	2	1	8	5.00	-0.06	0.02	-3.9	B-
11	F	180	2	1	8	5.00	-0.34	0.02	-15.2	C-
11	G	180	2	1	8	5.00	0.03	0.02	1.8	A+
11	H	180	2	1	8	5.00	-0.12	0.02	-7.7	C-
11	I	180	2	1	8	5.00	0.09	0.02	5.5	C+
11	J	180	2	1	8	5.00	0.01	0.02	0.7	A+
11	W	25	2	1	8	5.00	-0.08	0.01	-12.3	C-
11	W	50	2	1	8	5.00	-0.16	0.01	-30.7	C-
11	W	73	2	1	8	5.00	-0.29	0.01	-50.1	C-

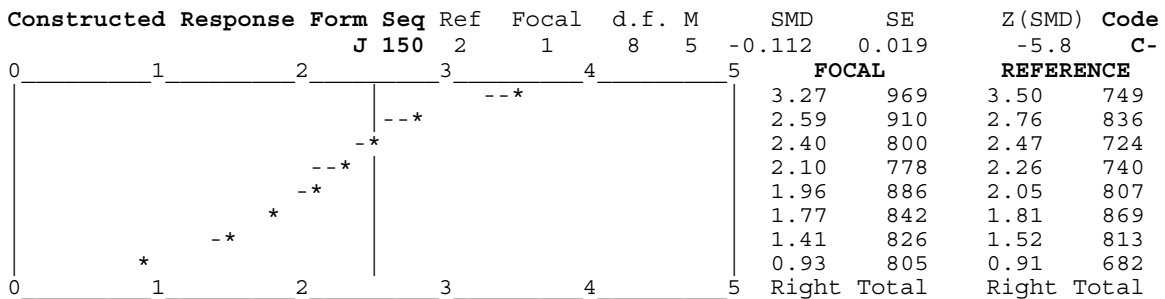
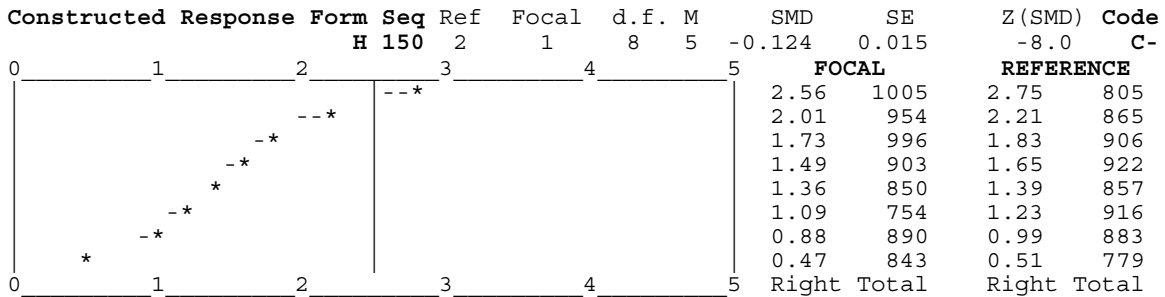
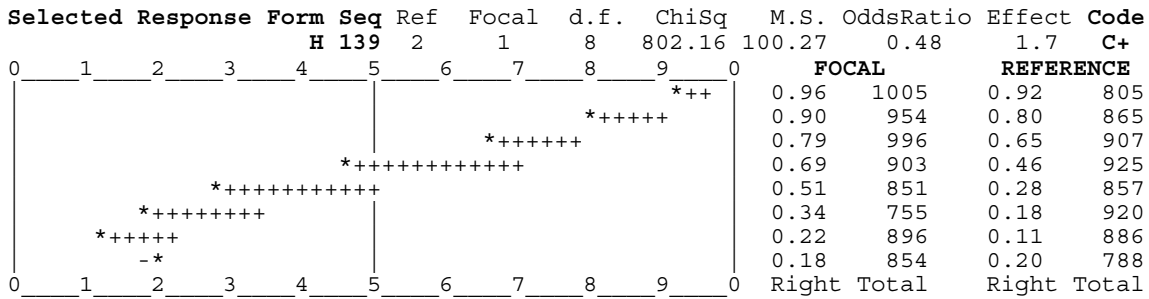
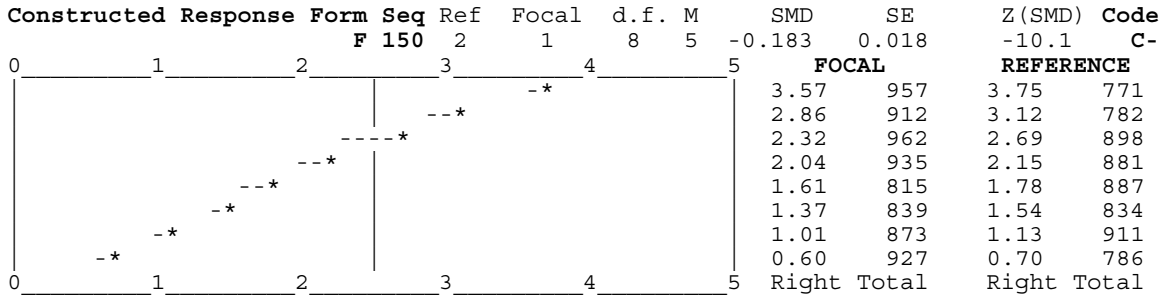
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 5 Math Items



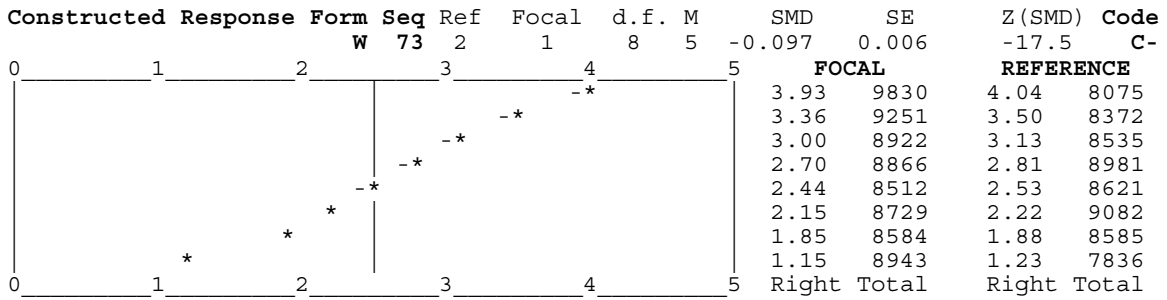
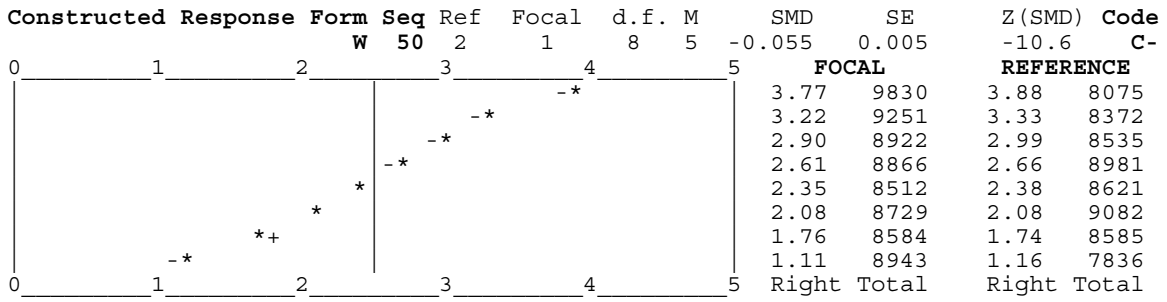
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 5 Math Items



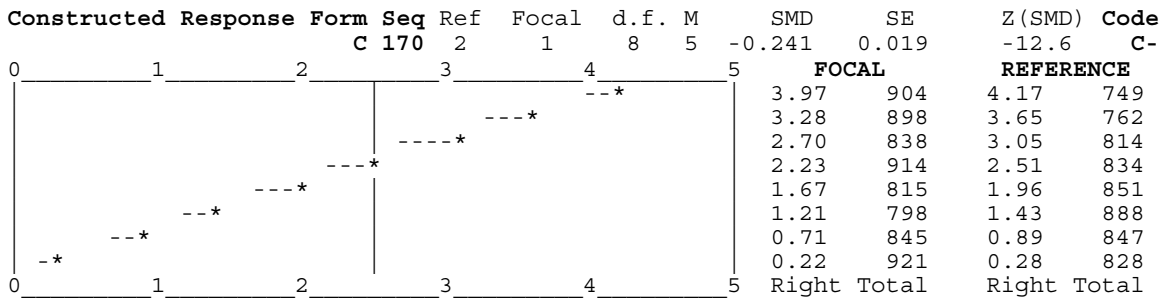
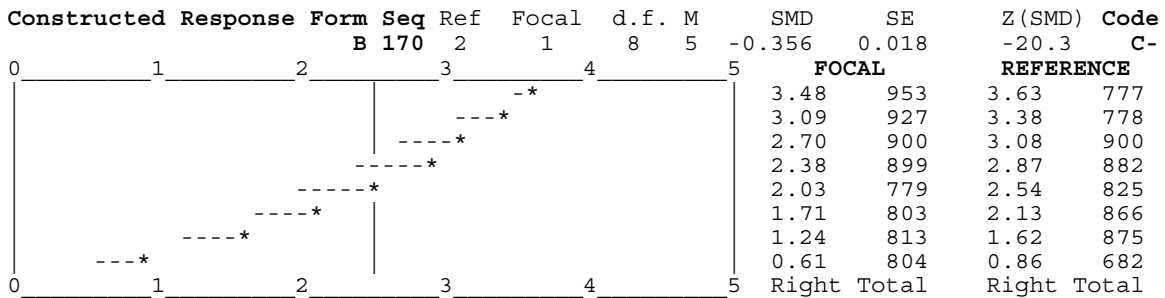
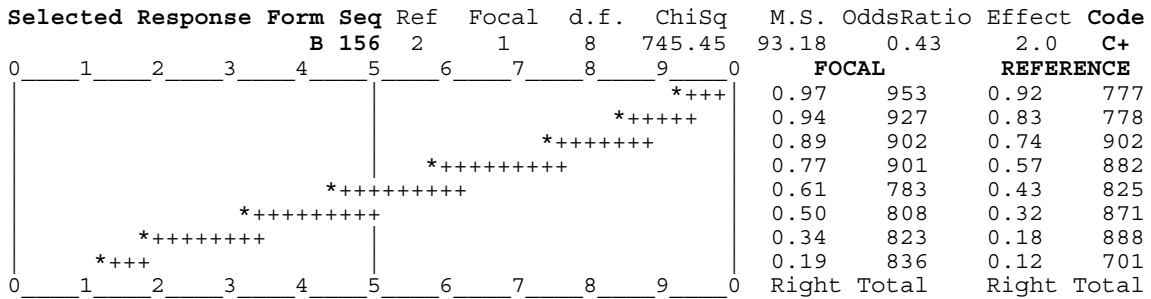
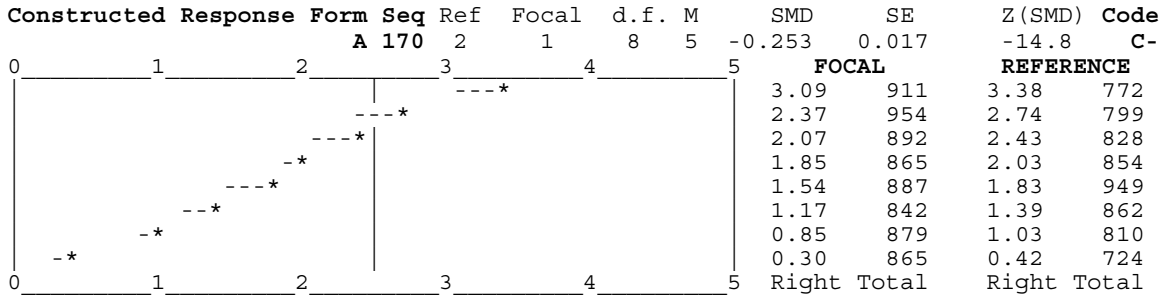
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 5 Math Items



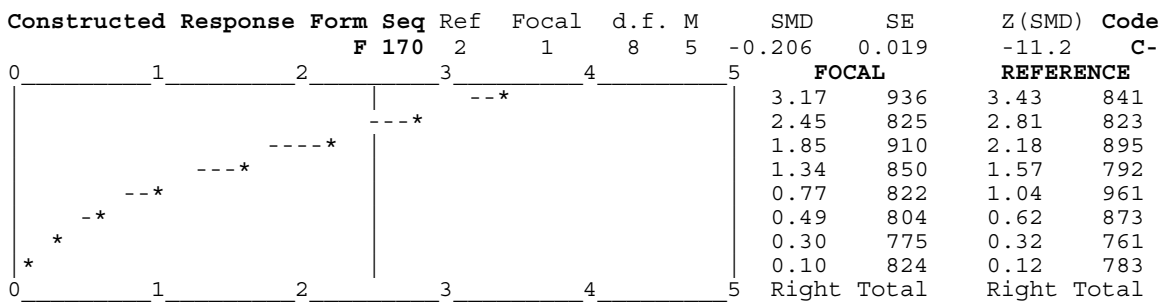
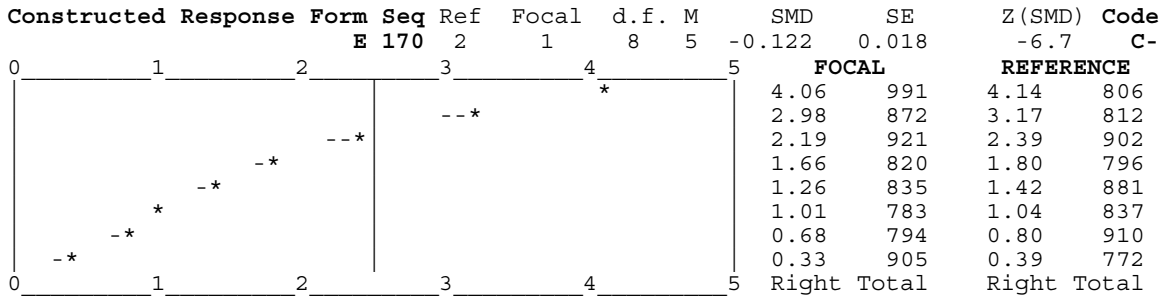
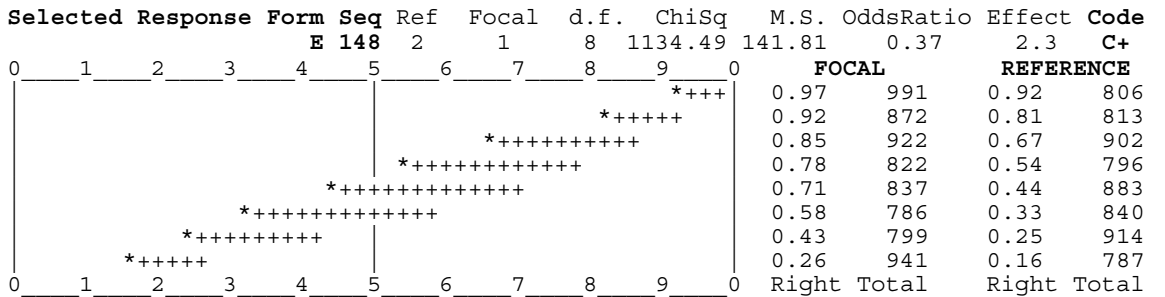
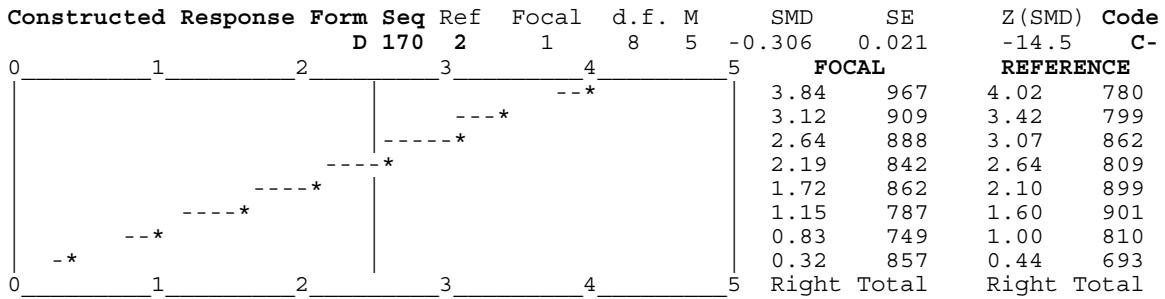
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 8 Math Items



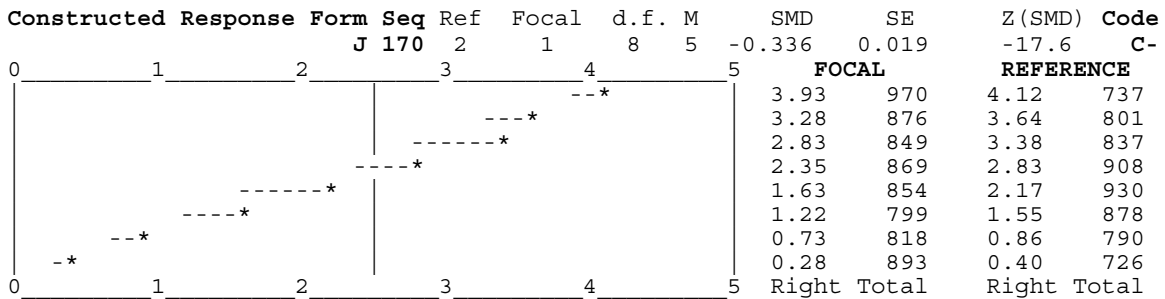
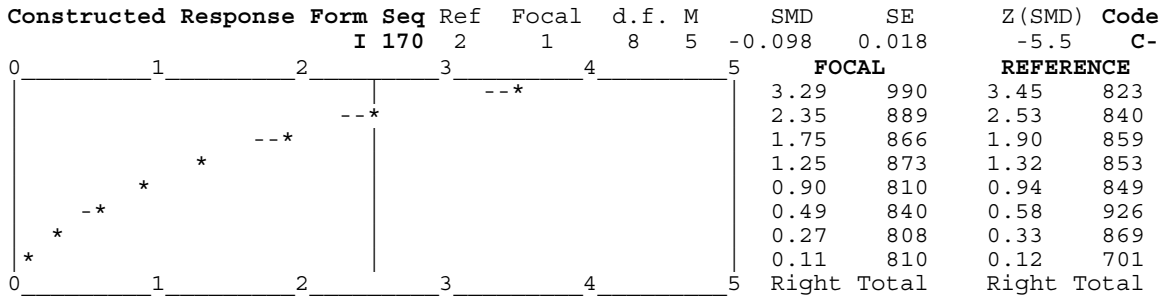
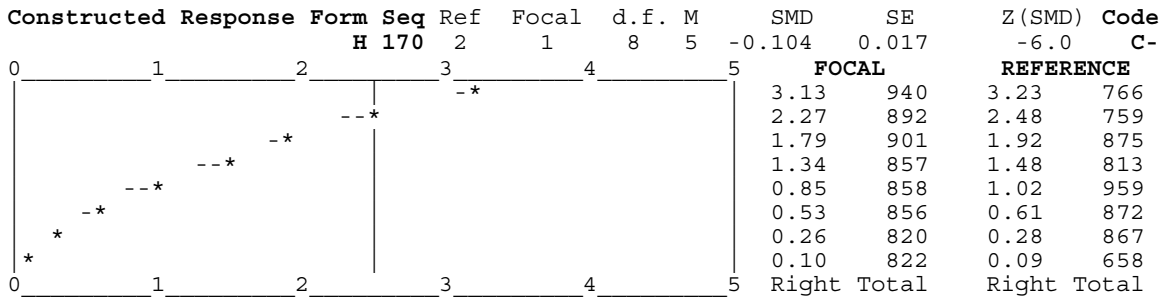
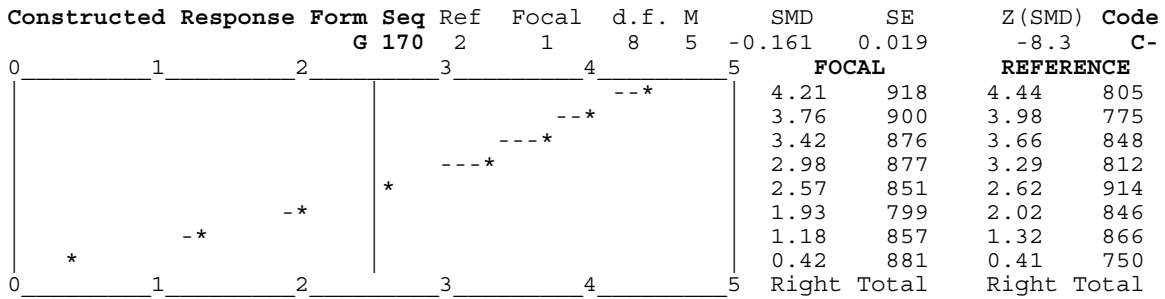
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 8 Math Items



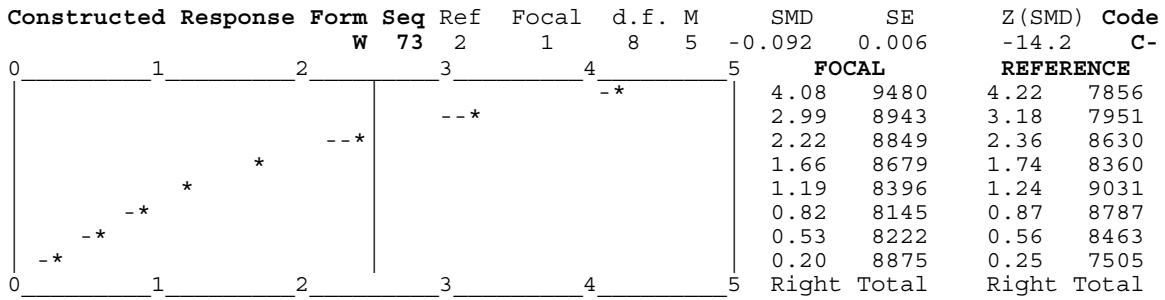
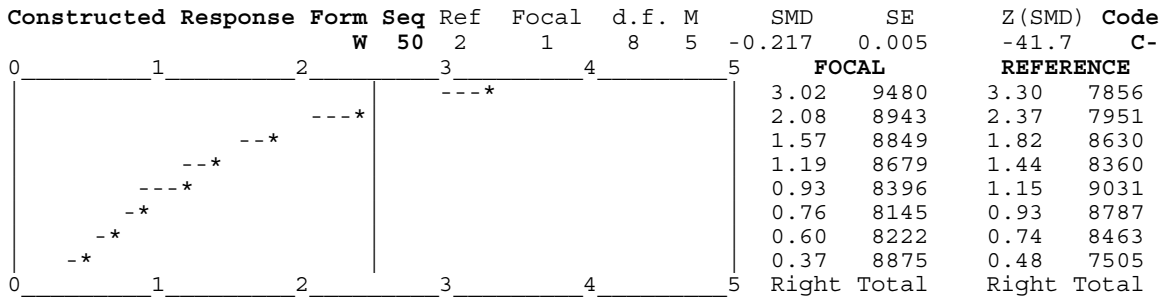
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 8 Math Items



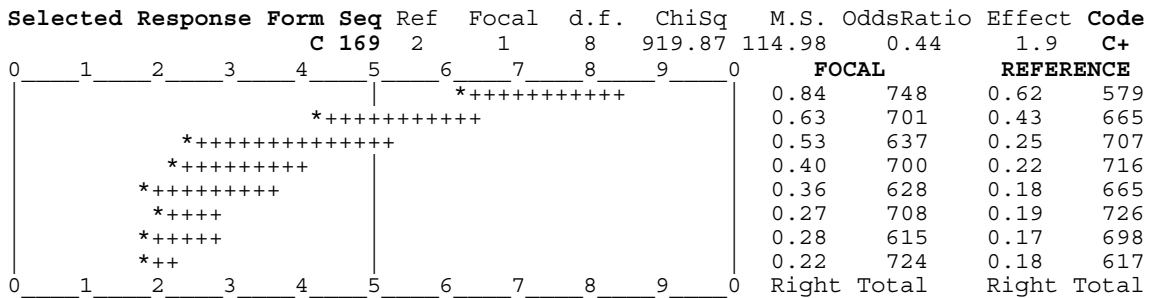
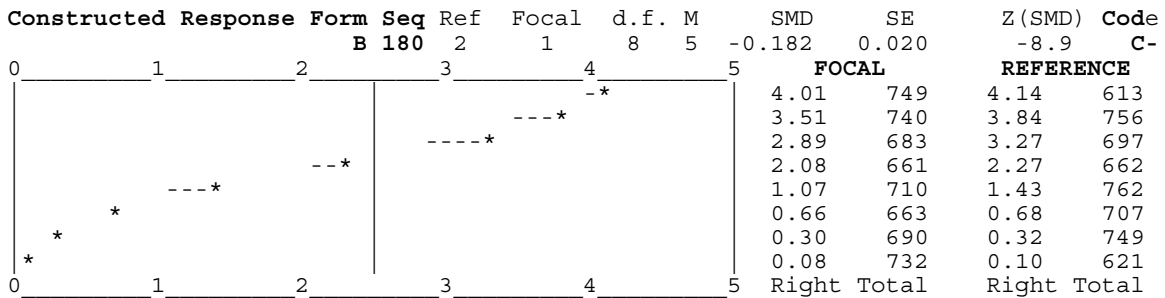
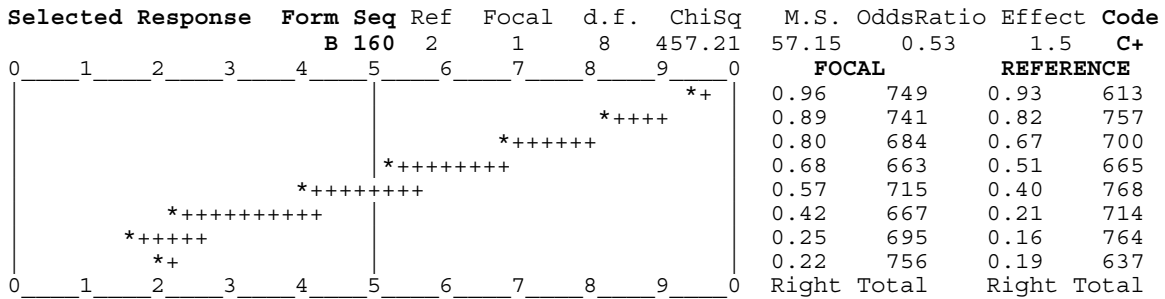
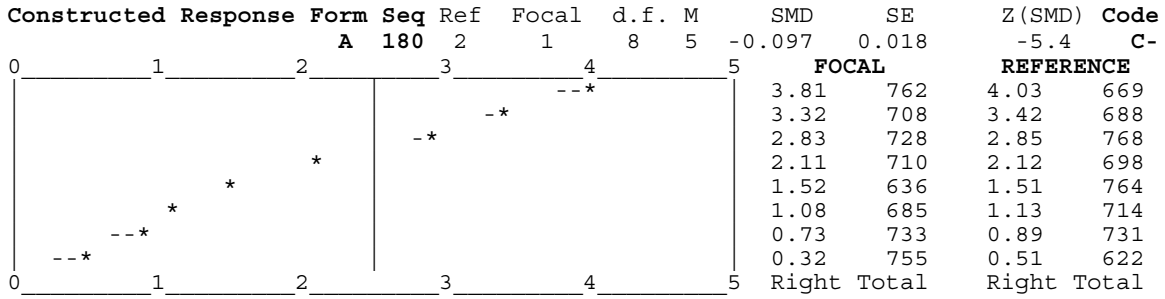
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 8 Math Items



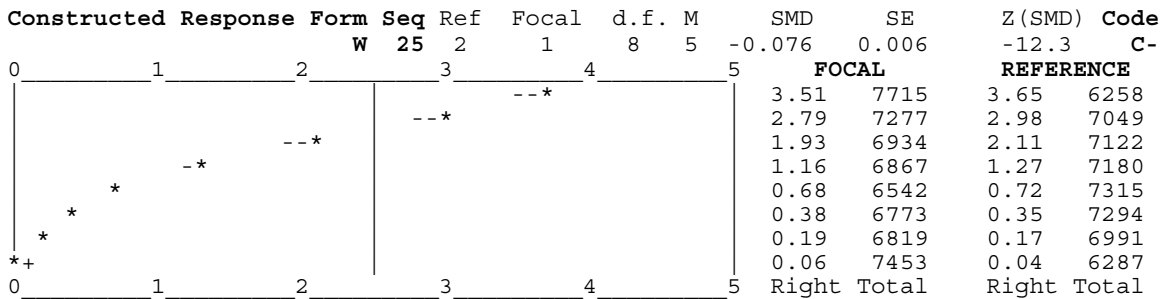
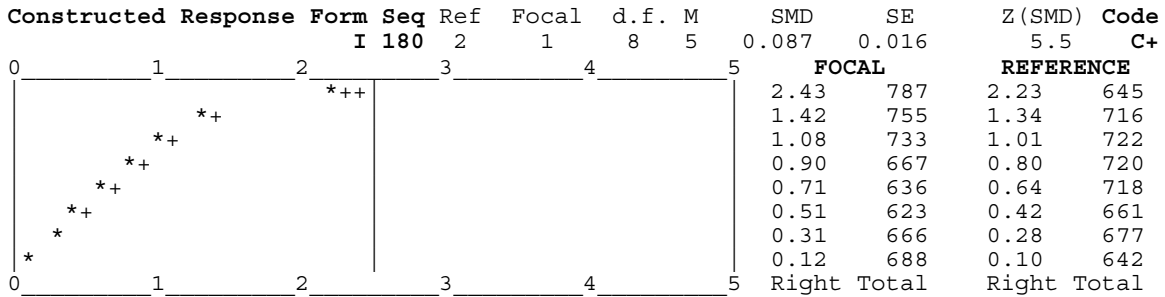
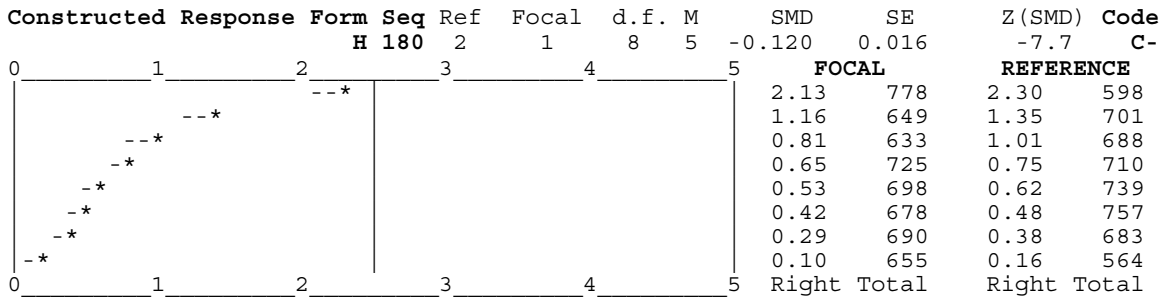
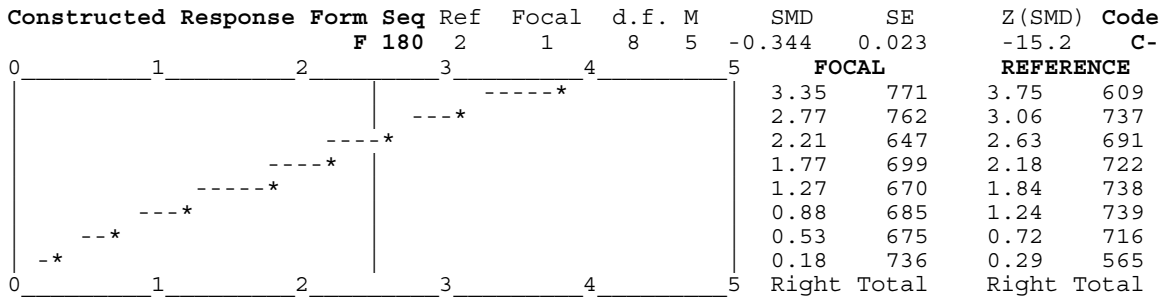
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 11 Math Items



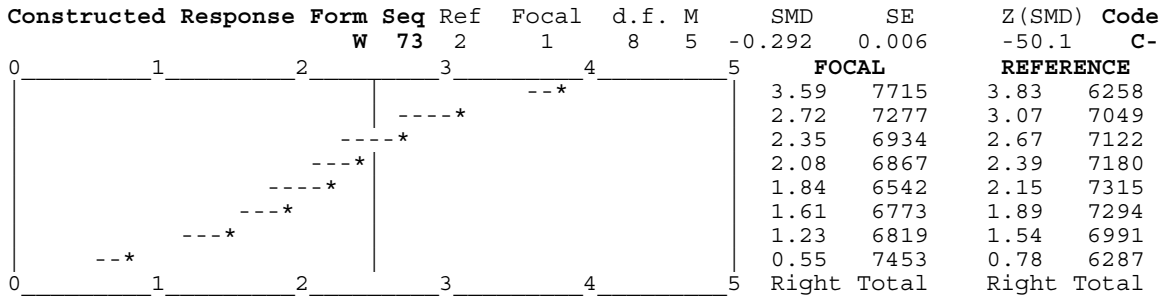
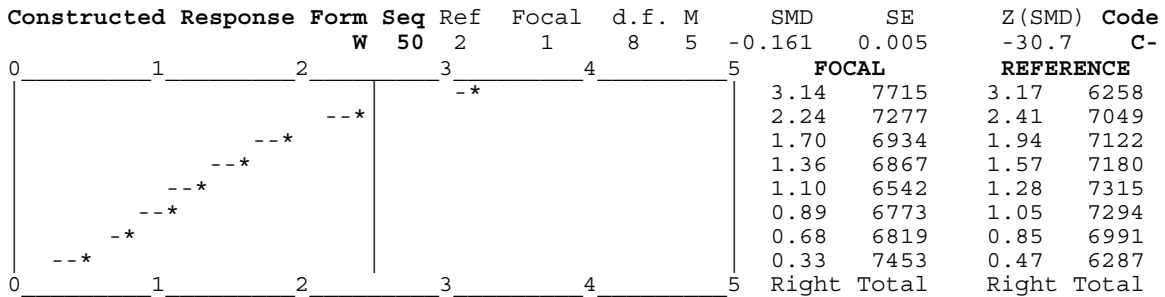
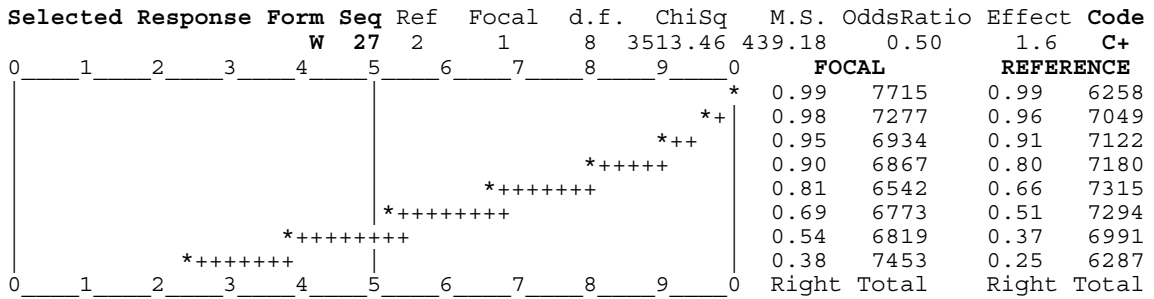
Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 11 Math Items



Appendix S: 2001 PSSA DIF Plots for Questionable Mathematics Items

Grade 11 Math Items



**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	A	159	2	1	8	57.46	7.18	0.93	0.2	A+
5	A	160	2	1	8	16.67	2.08	0.99	0.0	A+
5	A	161	2	1	8	98.49	12.31	1.17	-0.4	A-
5	A	162	2	1	8	37.23	4.65	1.16	-0.4	A-
5	A	163	2	1	8	15.71	1.96	1.04	-0.1	A-
5	A	164	2	1	8	136.37	17.05	1.29	-0.6	A-
5	A	166	2	1	8	113.11	14.14	1.54	-1.0	B-
5	A	167	2	1	8	48.92	6.12	0.93	0.2	A+
5	A	168	2	1	8	227.49	28.44	0.65	1.0	B+
5	A	169	2	1	8	49.53	6.19	0.83	0.4	A+
5	A	170	2	1	8	66.97	8.37	0.78	0.6	A+
5	A	171	2	1	8	32.30	4.04	1.06	-0.1	A-
5	A	172	2	1	8	57.28	7.16	0.87	0.3	A+
5	A	173	2	1	8	31.21	3.90	1.15	-0.3	A-
5	A	174	2	1	8	26.01	3.25	0.89	0.3	A+
5	A	175	2	1	8	123.24	15.41	0.77	0.6	A+
5	A	176	2	1	8	22.15	2.77	1.05	-0.1	A-
5	A	177	2	1	8	7.06	0.88	0.96	0.1	A+
5	A	178	2	1	8	24.51	3.06	0.99	0.0	A+
5	A	179	2	1	8	57.91	7.24	1.23	-0.5	A-
5	A	180	2	1	8	30.67	3.83	0.92	0.2	A+
5	A	181	2	1	8	41.99	5.25	0.91	0.2	A+
5	A	182	2	1	8	15.09	1.89	0.97	0.1	A+
5	A	183	2	1	8	10.28	1.28	0.95	0.1	A+
5	A	184	2	1	8	48.28	6.03	0.91	0.2	A+
5	B	159	2	1	8	49.79	6.22	1.29	-0.6	A-
5	B	160	2	1	8	126.09	15.76	0.77	0.6	A+
5	B	161	2	1	8	35.44	4.43	1.06	-0.1	A-
5	B	162	2	1	8	17.29	2.16	0.99	0.0	A+
5	B	163	2	1	8	24.61	3.08	0.83	0.4	A+
5	B	165	2	1	8	108.97	13.62	0.83	0.4	A+
5	B	166	2	1	8	23.94	2.99	1.01	0.0	A-
5	B	167	2	1	8	82.61	10.33	1.48	-0.9	A-
5	B	168	2	1	8	40.56	5.07	0.82	0.5	A+
5	B	169	2	1	8	45.45	5.68	1.08	-0.2	A-
5	B	170	2	1	8	109.47	13.68	0.73	0.7	A+
5	B	171	2	1	8	21.58	2.70	0.96	0.1	A+
5	B	172	2	1	8	13.35	1.67	0.94	0.1	A+
5	B	173	2	1	8	17.14	2.14	1.11	-0.2	A-
5	B	174	2	1	8	91.24	11.41	0.76	0.6	A+
5	B	175	2	1	8	73.83	9.23	0.88	0.3	A+
5	B	176	2	1	8	24.27	3.03	1.06	-0.1	A-
5	B	178	2	1	8	30.40	3.80	0.88	0.3	A+
5	B	179	2	1	8	52.13	6.52	1.13	-0.3	A-
5	B	180	2	1	8	16.49	2.06	1.08	-0.2	A-
5	B	181	2	1	8	36.79	4.60	0.94	0.1	A+
5	B	182	2	1	8	21.07	2.63	0.97	0.1	A+
5	B	183	2	1	8	60.78	7.60	0.84	0.4	A+
5	B	184	2	1	8	12.26	1.53	1.01	0.0	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	C	159	2	1	8	28.58	3.57	0.93	0.2	A+
5	C	160	2	1	8	488.71	61.09	0.47	1.8	C+
5	C	161	2	1	8	105.50	13.19	1.47	-0.9	A-
5	C	162	2	1	8	21.62	2.70	0.95	0.1	A+
5	C	163	2	1	8	29.17	3.65	0.88	0.3	A+
5	C	164	2	1	8	18.01	2.25	0.99	0.0	A+
5	C	165	2	1	8	23.91	2.99	1.13	-0.3	A-
5	C	166	2	1	8	54.27	6.78	0.87	0.3	A+
5	C	167	2	1	8	122.33	15.29	0.76	0.7	A+
5	C	168	2	1	8	57.11	7.14	0.82	0.5	A+
5	C	169	2	1	8	260.20	32.53	0.55	1.4	B+
5	C	170	2	1	8	49.26	6.16	0.88	0.3	A+
5	C	171	2	1	8	54.74	6.84	1.18	-0.4	A-
5	C	172	2	1	8	10.00	1.25	0.94	0.1	A+
5	C	173	2	1	8	12.76	1.60	0.92	0.2	A+
5	C	174	2	1	8	79.69	9.96	0.80	0.5	A+
5	C	175	2	1	8	7.33	0.92	1.08	-0.2	A-
5	C	177	2	1	8	22.13	2.77	1.09	-0.2	A-
5	C	178	2	1	8	19.16	2.39	0.92	0.2	A+
5	C	179	2	1	8	40.83	5.10	1.19	-0.4	A-
5	C	180	2	1	8	75.65	9.46	1.20	-0.4	A-
5	C	181	2	1	8	62.54	7.82	1.19	-0.4	A-
5	C	182	2	1	8	77.64	9.70	1.33	-0.7	A-
5	C	184	2	1	8	15.07	1.88	0.97	0.1	A+
5	D	159	2	1	8	17.04	2.13	1.02	0.0	A-
5	D	160	2	1	8	27.01	3.38	1.04	-0.1	A-
5	D	161	2	1	8	72.01	9.00	1.24	-0.5	A-
5	D	162	2	1	8	16.55	2.07	1.05	-0.1	A-
5	D	163	2	1	8	1.82	0.23	0.98	0.1	A+
5	D	164	2	1	8	17.46	2.18	0.88	0.3	A+
5	D	165	2	1	8	35.44	4.43	0.86	0.4	A+
5	D	166	2	1	8	31.96	4.00	0.96	0.1	A+
5	D	167	2	1	8	103.14	12.89	1.46	-0.9	A-
5	D	168	2	1	8	51.59	6.45	1.07	-0.2	A-
5	D	169	2	1	8	864.04	108.01	0.41	2.1	C+
5	D	170	2	1	8	49.41	6.18	0.87	0.3	A+
5	D	172	2	1	8	18.47	2.31	1.11	-0.2	A-
5	D	173	2	1	8	42.75	5.34	1.13	-0.3	A-
5	D	174	2	1	8	13.31	1.66	1.00	0.0	A
5	D	175	2	1	8	49.67	6.21	1.20	-0.4	A-
5	D	176	2	1	8	29.88	3.73	0.89	0.3	A+
5	D	177	2	1	8	33.77	4.22	1.11	-0.3	A-
5	D	178	2	1	8	207.27	25.91	1.39	-0.8	A-
5	D	179	2	1	8	19.76	2.47	1.00	0.0	A-
5	D	180	2	1	8	68.70	8.59	1.27	-0.6	A-
5	D	181	2	1	8	136.17	17.02	0.75	0.7	A+
5	D	182	2	1	8	10.44	1.31	0.99	0.0	A+
5	D	183	2	1	8	40.86	5.11	1.18	-0.4	A-
5	D	184	2	1	8	14.34	1.79	0.94	0.2	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	E	159	2	1	8	45.86	5.73	0.95	0.1	A+
5	E	160	2	1	8	131.32	16.41	1.46	-0.9	A-
5	E	161	2	1	8	29.45	3.68	0.96	0.1	A+
5	E	162	2	1	8	43.35	5.42	1.00	0.0	A+
5	E	163	2	1	8	16.50	2.06	1.01	0.0	A-
5	E	164	2	1	8	21.47	2.68	1.04	-0.1	A-
5	E	165	2	1	8	139.80	17.48	1.45	-0.9	A-
5	E	166	2	1	8	193.37	24.17	1.73	-1.3	B-
5	E	167	2	1	8	138.80	17.35	0.74	0.7	A+
5	E	169	2	1	8	873.56	109.20	0.39	2.2	C+
5	E	170	2	1	8	64.53	8.07	1.11	-0.2	A-
5	E	171	2	1	8	78.74	9.84	0.83	0.4	A+
5	E	172	2	1	8	43.41	5.43	0.83	0.4	A+
5	E	173	2	1	8	76.94	9.62	1.21	-0.5	A-
5	E	174	2	1	8	21.17	2.65	1.10	-0.2	A-
5	E	175	2	1	8	22.31	2.79	1.02	0.0	A-
5	E	176	2	1	8	31.59	3.95	1.09	-0.2	A-
5	E	177	2	1	8	100.75	12.59	1.27	-0.6	A-
5	E	178	2	1	8	30.03	3.75	0.92	0.2	A+
5	E	179	2	1	8	59.64	7.46	0.83	0.4	A+
5	E	180	2	1	8	29.88	3.73	1.12	-0.3	A-
5	E	181	2	1	8	56.34	7.04	1.28	-0.6	A-
5	E	182	2	1	8	30.78	3.85	1.05	-0.1	A-
5	E	183	2	1	8	14.86	1.86	0.98	0.1	A+
5	E	184	2	1	8	27.18	3.40	0.91	0.2	A+
5	F	159	2	1	8	79.13	9.89	0.81	0.5	A+
5	F	160	2	1	8	45.58	5.70	1.03	-0.1	A-
5	F	161	2	1	8	10.73	1.34	1.06	-0.1	A-
5	F	162	2	1	8	161.99	20.25	0.77	0.6	A+
5	F	163	2	1	8	20.38	2.55	1.09	-0.2	A-
5	F	165	2	1	8	25.74	3.22	0.98	0.0	A+
5	F	166	2	1	8	81.08	10.13	1.46	-0.9	A-
5	F	167	2	1	8	44.94	5.62	1.31	-0.6	A-
5	F	168	2	1	8	31.49	3.94	0.95	0.1	A+
5	F	169	2	1	8	27.31	3.41	0.93	0.2	A+
5	F	170	2	1	8	29.07	3.63	1.01	0.0	A-
5	F	171	2	1	8	12.89	1.61	1.03	-0.1	A-
5	F	172	2	1	8	153.34	19.17	0.75	0.7	A+
5	F	173	2	1	8	22.00	2.75	0.99	0.0	A+
5	F	174	2	1	8	16.58	2.07	1.09	-0.2	A-
5	F	175	2	1	8	10.30	1.29	1.02	0.0	A-
5	F	176	2	1	8	23.25	2.91	1.09	-0.2	A-
5	F	177	2	1	8	167.10	20.89	1.31	-0.6	A-
5	F	178	2	1	8	39.93	4.99	0.92	0.2	A+
5	F	180	2	1	8	95.47	11.93	0.88	0.3	A+
5	F	181	2	1	8	245.03	30.63	0.64	1.1	B+
5	F	182	2	1	8	19.60	2.45	0.89	0.3	A+
5	F	183	2	1	8	58.65	7.33	1.13	-0.3	A-
5	F	184	2	1	8	152.75	19.09	0.67	1.0	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	G	159	2	1	8	29.09	3.64	1.01	0.0	A-
5	G	160	2	1	8	24.14	3.02	0.88	0.3	A+
5	G	161	2	1	8	19.30	2.41	1.12	-0.3	A-
5	G	162	2	1	8	170.46	21.31	0.72	0.8	A+
5	G	164	2	1	8	14.80	1.85	0.93	0.2	A+
5	G	165	2	1	8	119.12	14.89	1.32	-0.6	A-
5	G	166	2	1	8	12.50	1.56	0.95	0.1	A+
5	G	167	2	1	8	19.30	2.41	1.15	-0.3	A-
5	G	168	2	1	8	132.90	16.61	0.75	0.7	A+
5	G	169	2	1	8	36.12	4.51	1.05	-0.1	A-
5	G	170	2	1	8	26.34	3.29	0.99	0.0	A+
5	G	171	2	1	8	48.13	6.02	0.84	0.4	A+
5	G	172	2	1	8	28.76	3.59	1.09	-0.2	A-
5	G	173	2	1	8	31.21	3.90	1.07	-0.1	A-
5	G	174	2	1	8	118.55	14.82	1.35	-0.7	A-
5	G	175	2	1	8	19.08	2.38	1.03	-0.1	A-
5	G	176	2	1	8	31.15	3.89	1.02	-0.1	A-
5	G	177	2	1	8	35.29	4.41	0.92	0.2	A+
5	G	178	2	1	8	61.70	7.71	1.14	-0.3	A-
5	G	180	2	1	8	50.66	6.33	0.84	0.4	A+
5	G	181	2	1	8	100.18	12.52	1.28	-0.6	A-
5	G	182	2	1	8	889.03	111.13	0.37	2.3	C+
5	G	183	2	1	8	52.38	6.55	1.29	-0.6	A-
5	G	184	2	1	8	55.70	6.96	0.85	0.4	A+
5	H	159	2	1	8	47.35	5.92	0.87	0.3	A+
5	H	160	2	1	8	33.26	4.16	0.91	0.2	A+
5	H	161	2	1	8	87.79	10.97	0.86	0.4	A+
5	H	162	2	1	8	27.96	3.49	0.93	0.2	A+
5	H	163	2	1	8	20.01	2.50	0.99	0.0	A+
5	H	164	2	1	8	36.68	4.59	1.11	-0.2	A-
5	H	165	2	1	8	61.90	7.74	0.82	0.5	A+
5	H	166	2	1	8	12.54	1.57	1.05	-0.1	A-
5	H	167	2	1	8	52.46	6.56	1.20	-0.4	A-
5	H	168	2	1	8	32.47	4.06	1.00	0.0	A+
5	H	169	2	1	8	16.29	2.04	1.06	-0.1	A-
5	H	170	2	1	8	10.16	1.27	0.95	0.1	A+
5	H	171	2	1	8	39.78	4.97	1.08	-0.2	A-
5	H	172	2	1	8	51.84	6.48	1.28	-0.6	A-
5	H	173	2	1	8	544.14	68.02	0.47	1.8	C+
5	H	174	2	1	8	23.49	2.94	1.03	-0.1	A-
5	H	175	2	1	8	26.25	3.28	0.95	0.1	A+
5	H	176	2	1	8	30.90	3.86	0.90	0.2	A+
5	H	177	2	1	8	58.26	7.28	1.10	-0.2	A-
5	H	178	2	1	8	107.56	13.44	1.46	-0.9	A-
5	H	179	2	1	8	134.70	16.84	1.36	-0.7	A-
5	H	180	2	1	8	10.33	1.29	1.02	0.0	A-
5	H	181	2	1	8	669.17	83.65	0.45	1.9	C+
5	H	182	2	1	8	49.49	6.19	0.82	0.5	A+
5	H	183	2	1	8	16.28	2.03	0.94	0.1	A+
5	H	184	2	1	8	48.74	6.09	1.14	-0.3	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	I	159	2	1	8	68.25	8.53	0.83	0.4	A+
5	I	160	2	1	8	16.59	2.07	1.10	-0.2	A-
5	I	161	2	1	8	20.51	2.56	0.91	0.2	A+
5	I	162	2	1	8	120.19	15.02	0.76	0.6	A+
5	I	163	2	1	8	15.44	1.93	0.98	0.0	A+
5	I	164	2	1	8	6.26	0.78	1.02	0.0	A-
5	I	165	2	1	8	22.54	2.82	0.94	0.1	A+
5	I	166	2	1	8	110.41	13.80	1.31	-0.6	A-
5	I	167	2	1	8	15.95	1.99	0.98	0.1	A+
5	I	168	2	1	8	32.92	4.11	0.96	0.1	A+
5	I	169	2	1	8	10.55	1.32	0.95	0.1	A+
5	I	170	2	1	8	10.76	1.35	1.03	-0.1	A-
5	I	171	2	1	8	68.02	8.50	0.86	0.4	A+
5	I	172	2	1	8	29.00	3.63	1.02	0.0	A-
5	I	173	2	1	8	23.81	2.98	1.03	-0.1	A-
5	I	174	2	1	8	7.49	0.94	1.04	-0.1	A-
5	I	175	2	1	8	1.61	0.20	1.02	0.0	A-
5	I	176	2	1	8	53.30	6.66	1.19	-0.4	A-
5	I	177	2	1	8	81.23	10.15	1.21	-0.4	A-
5	I	179	2	1	8	158.66	19.83	1.57	-1.1	B-
5	I	180	2	1	8	113.36	14.17	0.90	0.2	A+
5	I	181	2	1	8	299.22	37.40	0.61	1.2	B+
5	I	182	2	1	8	56.14	7.02	0.85	0.4	A+
5	I	183	2	1	8	68.05	8.51	0.77	0.6	A+
5	I	184	2	1	8	26.03	3.25	1.01	0.0	A-
5	J	159	2	1	8	15.80	1.98	0.90	0.2	A+
5	J	160	2	1	8	20.72	2.59	0.97	0.1	A+
5	J	161	2	1	8	105.90	13.24	0.74	0.7	A+
5	J	162	2	1	8	56.54	7.07	0.83	0.4	A+
5	J	163	2	1	8	39.83	4.98	1.03	-0.1	A-
5	J	165	2	1	8	63.26	7.91	0.81	0.5	A+
5	J	166	2	1	8	22.60	2.83	1.10	-0.2	A-
5	J	167	2	1	8	38.31	4.79	1.27	-0.6	A-
5	J	168	2	1	8	56.50	7.06	0.97	0.1	A+
5	J	169	2	1	8	35.82	4.48	1.00	0.0	A
5	J	170	2	1	8	47.32	5.92	0.84	0.4	A+
5	J	171	2	1	8	22.35	2.79	1.02	-0.1	A-
5	J	172	2	1	8	31.53	3.94	1.24	-0.5	A-
5	J	173	2	1	8	168.31	21.04	0.73	0.8	A+
5	J	174	2	1	8	31.74	3.97	1.04	-0.1	A-
5	J	175	2	1	8	24.54	3.07	0.97	0.1	A+
5	J	176	2	1	8	26.42	3.30	0.89	0.3	A+
5	J	178	2	1	8	100.17	12.52	0.83	0.4	A+
5	J	179	2	1	8	12.15	1.52	1.01	0.0	A-
5	J	180	2	1	8	35.63	4.45	1.32	-0.7	A-
5	J	181	2	1	8	47.84	5.98	0.84	0.4	A+
5	J	182	2	1	8	39.23	4.90	1.15	-0.3	A-
5	J	183	2	1	8	49.06	6.13	0.83	0.4	A+
5	J	184	2	1	8	15.01	1.88	0.88	0.3	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	W	74	2	1	8	25.02	3.13	0.98	0.0	A+
5	W	75	2	1	8	243.69	30.46	1.16	-0.3	A-
5	W	76	2	1	8	188.35	23.54	0.93	0.2	A+
5	W	77	2	1	8	222.09	27.76	0.89	0.3	A+
5	W	78	2	1	8	513.05	64.13	1.23	-0.5	A-
5	W	79	2	1	8	48.07	6.01	0.96	0.1	A+
5	W	80	2	1	8	651.64	81.45	0.90	0.3	A+
5	W	81	2	1	8	204.07	25.51	0.88	0.3	A+
5	W	82	2	1	8	111.43	13.93	0.99	0.0	A+
5	W	83	2	1	8	3807.50	475.94	0.60	1.2	B+
5	W	84	2	1	8	137.28	17.16	1.08	-0.2	A-
5	W	85	2	1	8	120.72	15.09	1.04	-0.1	A-
5	W	86	2	1	8	296.28	37.04	1.12	-0.3	A-
5	W	87	2	1	8	72.50	9.06	1.04	-0.1	A-
5	W	88	2	1	8	499.18	62.40	1.22	-0.5	A-
5	W	89	2	1	8	1025.95	128.24	1.28	-0.6	A-
5	W	90	2	1	8	147.23	18.40	1.10	-0.2	A-
5	W	91	2	1	8	109.19	13.65	1.08	-0.2	A-
5	W	92	2	1	8	528.13	66.02	1.19	-0.4	A-
5	W	93	2	1	8	143.63	17.95	1.09	-0.2	A-
5	W	94	2	1	8	96.74	12.09	1.05	-0.1	A-
5	W	95	2	1	8	1126.86	140.86	0.77	0.6	A+
5	W	96	2	1	8	78.77	9.85	1.07	-0.2	A-
5	W	97	2	1	8	84.99	10.62	1.08	-0.2	A-
5	W	98	2	1	8	235.71	29.46	0.91	0.2	A+
5	W	99	2	1	8	353.31	44.16	1.17	-0.4	A-
5	W	101	2	1	8	22.75	2.84	0.97	0.1	A+
5	W	102	2	1	8	117.60	14.70	0.91	0.2	A+
5	W	103	2	1	8	17.21	2.15	1.03	-0.1	A-
5	W	104	2	1	8	70.55	8.82	1.00	0.0	A+
5	W	105	2	1	8	27.45	3.43	0.99	0.0	A+
5	W	106	2	1	8	93.14	11.64	0.93	0.2	A+
5	W	107	2	1	8	12.92	1.61	1.02	0.0	A-
5	W	108	2	1	8	579.18	72.40	1.29	-0.6	A-
5	W	109	2	1	8	565.49	70.69	1.21	-0.5	A-
5	W	110	2	1	8	199.45	24.93	1.09	-0.2	A-
5	W	111	2	1	8	2577.12	322.14	0.69	0.9	A+
5	W	112	2	1	8	342.52	42.82	0.89	0.3	A+
5	W	113	2	1	8	32.25	4.03	1.03	-0.1	A-
5	W	114	2	1	8	297.22	37.15	1.01	0.0	A-
5	W	115	2	1	8	447.30	55.91	0.77	0.6	A+
5	W	116	2	1	8	502.49	62.81	1.19	-0.4	A-
5	W	117	2	1	8	221.64	27.71	1.11	-0.2	A-
5	W	118	2	1	8	69.72	8.72	1.06	-0.1	A-
5	W	119	2	1	8	96.08	12.01	1.00	0.0	A+
5	W	120	2	1	8	153.47	19.18	1.10	-0.2	A-
5	W	121	2	1	8	105.35	13.17	1.07	-0.2	A-
5	W	122	2	1	8	844.27	105.53	0.74	0.7	A+
5	W	123	2	1	8	357.63	44.70	0.88	0.3	A+
5	W	124	2	1	8	108.32	13.54	0.93	0.2	A+
5	W	125	2	1	8	114.41	14.30	1.05	-0.1	A-
5	W	126	2	1	8	1056.77	132.10	0.78	0.6	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	A	179	2	1	8	17.78	2.22	1.10	-0.2	A-
8	A	180	2	1	8	24.78	3.10	0.85	0.4	A+
8	A	181	2	1	8	17.06	2.13	1.03	-0.1	A-
8	A	182	2	1	8	80.15	10.02	0.81	0.5	A+
8	A	183	2	1	8	32.06	4.01	1.10	-0.2	A-
8	A	184	2	1	8	85.16	10.65	0.83	0.4	A+
8	A	185	2	1	8	42.72	5.34	1.00	0.0	A
8	A	186	2	1	8	41.84	5.23	1.31	-0.6	A-
8	A	187	2	1	8	38.17	4.77	0.98	0.0	A+
8	A	188	2	1	8	50.23	6.28	0.88	0.3	A+
8	A	189	2	1	8	29.70	3.71	1.02	0.0	A-
8	A	190	2	1	8	71.37	8.92	1.21	-0.4	A-
8	A	191	2	1	8	15.44	1.93	0.93	0.2	A+
8	A	192	2	1	8	282.51	35.31	1.61	-1.1	B-
8	A	193	2	1	8	25.88	3.24	0.96	0.1	A+
8	A	194	2	1	8	15.16	1.90	1.01	0.0	A-
8	A	195	2	1	8	21.44	2.68	1.07	-0.2	A-
8	A	196	2	1	8	34.28	4.29	1.12	-0.3	A-
8	A	197	2	1	8	198.89	24.86	0.64	1.0	B+
8	A	198	2	1	8	21.89	2.74	1.00	0.0	A-
8	A	199	2	1	8	115.56	14.44	0.77	0.6	A+
8	A	200	2	1	8	21.22	2.65	0.96	0.1	A+
8	A	201	2	1	8	18.44	2.31	0.91	0.2	A+
8	A	202	2	1	8	25.52	3.19	1.09	-0.2	A-
8	A	203	2	1	8	17.96	2.25	0.99	0.0	A+
8	A	204	2	1	8	199.19	24.90	0.63	1.1	B+
8	A	205	2	1	8	5.89	0.74	0.96	0.1	A+
8	A	206	2	1	8	68.16	8.52	1.21	-0.4	A-
8	A	207	2	1	8	48.31	6.04	0.87	0.3	A+
8	A	208	2	1	8	54.83	6.85	0.85	0.4	A+
8	A	209	2	1	8	16.07	2.01	1.02	0.0	A-
8	A	210	2	1	8	66.83	8.35	1.25	-0.5	A-
8	A	211	2	1	8	602.08	75.26	0.54	1.5	B+
8	A	212	2	1	8	28.47	3.56	1.05	-0.1	A-
8	A	213	2	1	8	18.03	2.25	0.94	0.1	A+
8	A	214	2	1	8	21.30	2.66	1.08	-0.2	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	B	179	2	1	8	32.59	4.07	1.18	-0.4	A-
8	B	180	2	1	8	289.77	36.22	0.62	1.1	B+
8	B	181	2	1	8	25.41	3.18	0.88	0.3	A+
8	B	182	2	1	8	26.50	3.31	1.11	-0.3	A-
8	B	183	2	1	8	9.97	1.25	1.05	-0.1	A-
8	B	184	2	1	8	17.22	2.15	1.15	-0.3	A-
8	B	185	2	1	8	43.38	5.42	0.81	0.5	A+
8	B	186	2	1	8	62.83	7.85	1.39	-0.8	A-
8	B	187	2	1	8	94.83	11.85	0.80	0.5	A+
8	B	188	2	1	8	30.47	3.81	1.13	-0.3	A-
8	B	189	2	1	8	47.51	5.94	1.16	-0.3	A-
8	B	190	2	1	8	80.62	10.08	1.38	-0.8	A-
8	B	191	2	1	8	110.72	13.84	0.78	0.6	A+
8	B	192	2	1	8	47.91	5.99	0.88	0.3	A+
8	B	193	2	1	8	50.57	6.32	1.11	-0.2	A-
8	B	194	2	1	8	99.93	12.49	1.11	-0.3	A-
8	B	195	2	1	8	30.63	3.83	1.15	-0.3	A-
8	B	196	2	1	8	34.20	4.27	0.92	0.2	A+
8	B	197	2	1	8	12.77	1.60	0.96	0.1	A+
8	B	198	2	1	8	186.20	23.28	0.71	0.8	A+
8	B	199	2	1	8	20.41	2.55	0.91	0.2	A+
8	B	200	2	1	8	157.92	19.74	0.62	1.1	B+
8	B	201	2	1	8	27.01	3.38	0.88	0.3	A+
8	B	202	2	1	8	315.07	39.38	0.62	1.1	B+
8	B	203	2	1	8	20.26	2.53	0.99	0.0	A+
8	B	204	2	1	8	67.91	8.49	1.19	-0.4	A-
8	B	205	2	1	8	108.56	13.57	1.58	-1.1	B-
8	B	206	2	1	8	47.07	5.88	1.13	-0.3	A-
8	B	207	2	1	8	26.53	3.32	0.92	0.2	A+
8	B	208	2	1	8	28.24	3.53	0.83	0.4	A+
8	B	209	2	1	8	129.19	16.15	0.74	0.7	A+
8	B	210	2	1	8	45.29	5.66	0.86	0.4	A+
8	B	211	2	1	8	65.05	8.13	1.32	-0.6	A-
8	B	212	2	1	8	175.22	21.90	0.71	0.8	A+
8	B	213	2	1	8	183.99	23.00	1.65	-1.2	B-
8	B	214	2	1	8	64.07	8.01	0.83	0.4	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	C	179	2	1	8	74.30	9.29	1.25	-0.5	A-
8	C	180	2	1	8	33.46	4.18	1.06	-0.1	A-
8	C	181	2	1	8	56.85	7.11	1.07	-0.2	A-
8	C	182	2	1	8	61.74	7.72	0.89	0.3	A+
8	C	183	2	1	8	11.18	1.40	1.02	0.0	A-
8	C	184	2	1	8	53.66	6.71	1.19	-0.4	A-
8	C	185	2	1	8	51.94	6.49	1.20	-0.4	A-
8	C	186	2	1	8	155.36	19.42	0.73	0.7	A+
8	C	187	2	1	8	21.31	2.66	1.05	-0.1	A-
8	C	188	2	1	8	29.99	3.75	1.12	-0.3	A-
8	C	189	2	1	8	56.40	7.05	0.85	0.4	A+
8	C	190	2	1	8	573.21	71.65	0.55	1.4	B+
8	C	191	2	1	8	57.61	7.20	1.39	-0.8	A-
8	C	192	2	1	8	16.61	2.08	1.09	-0.2	A-
8	C	193	2	1	8	17.55	2.19	1.07	-0.2	A-
8	C	194	2	1	8	43.91	5.49	0.98	0.0	A+
8	C	195	2	1	8	112.06	14.01	1.36	-0.7	A-
8	C	196	2	1	8	38.52	4.81	1.08	-0.2	A-
8	C	197	2	1	8	96.51	12.06	0.72	0.8	A+
8	C	198	2	1	8	179.92	22.49	0.61	1.2	B+
8	C	199	2	1	8	166.28	20.78	0.61	1.2	B+
8	C	200	2	1	8	75.12	9.39	1.15	-0.3	A-
8	C	201	2	1	8	26.60	3.32	0.94	0.2	A+
8	C	202	2	1	8	94.40	11.80	0.69	0.9	A+
8	C	203	2	1	8	30.52	3.82	0.99	0.0	A+
8	C	204	2	1	8	35.24	4.41	1.05	-0.1	A-
8	C	205	2	1	8	16.07	2.01	0.94	0.2	A+
8	C	206	2	1	8	40.39	5.05	1.04	-0.1	A-
8	C	207	2	1	8	65.56	8.19	0.77	0.6	A+
8	C	208	2	1	8	37.59	4.70	1.01	0.0	A-
8	C	209	2	1	8	54.56	6.82	0.82	0.5	A+
8	C	210	2	1	8	27.40	3.43	0.99	0.0	A+
8	C	211	2	1	8	41.97	5.25	0.84	0.4	A+
8	C	212	2	1	8	56.49	7.06	1.23	-0.5	A-
8	C	213	2	1	8	42.25	5.28	0.80	0.5	A+
8	C	214	2	1	8	61.80	7.73	0.86	0.4	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	D	179	2	1	8	82.78	10.35	1.26	-0.5	A-
8	D	180	2	1	8	128.94	16.12	1.38	-0.8	A-
8	D	181	2	1	8	154.73	19.34	0.65	1.0	B+
8	D	182	2	1	8	131.94	16.49	0.71	0.8	A+
8	D	183	2	1	8	7.89	0.99	1.02	0.0	A-
8	D	184	2	1	8	65.56	8.19	0.83	0.4	A+
8	D	185	2	1	8	83.66	10.46	1.28	-0.6	A-
8	D	186	2	1	8	40.26	5.03	1.22	-0.5	A-
8	D	187	2	1	8	37.53	4.69	1.01	0.0	A-
8	D	188	2	1	8	29.23	3.65	1.08	-0.2	A-
8	D	189	2	1	8	28.33	3.54	1.02	-0.1	A-
8	D	190	2	1	8	45.00	5.63	1.20	-0.4	A-
8	D	191	2	1	8	50.98	6.37	0.77	0.6	A+
8	D	192	2	1	8	28.43	3.55	0.86	0.3	A+
8	D	193	2	1	8	6.81	0.85	1.01	0.0	A-
8	D	194	2	1	8	51.63	6.45	1.10	-0.2	A-
8	D	195	2	1	8	94.73	11.84	1.04	-0.1	A-
8	D	196	2	1	8	33.80	4.22	0.87	0.3	A+
8	D	197	2	1	8	29.47	3.68	1.02	-0.1	A-
8	D	198	2	1	8	163.28	20.41	0.68	0.9	A+
8	D	199	2	1	8	12.23	1.53	0.97	0.1	A+
8	D	200	2	1	8	71.93	8.99	1.04	-0.1	A-
8	D	201	2	1	8	254.47	31.81	0.62	1.1	B+
8	D	202	2	1	8	76.01	9.50	0.78	0.6	A+
8	D	203	2	1	8	38.77	4.85	0.80	0.5	A+
8	D	204	2	1	8	16.41	2.05	1.13	-0.3	A-
8	D	205	2	1	8	61.31	7.66	0.84	0.4	A+
8	D	206	2	1	8	27.96	3.50	0.97	0.1	A+
8	D	207	2	1	8	49.89	6.24	0.97	0.1	A+
8	D	208	2	1	8	51.01	6.38	0.80	0.5	A+
8	D	209	2	1	8	97.62	12.20	0.76	0.7	A+
8	D	210	2	1	8	928.86	116.11	0.34	2.5	C+
8	D	211	2	1	8	49.43	6.18	0.80	0.5	A+
8	D	212	2	1	8	34.06	4.26	0.91	0.2	A+
8	D	213	2	1	8	171.43	21.43	1.78	-1.4	B-
8	D	214	2	1	8	105.68	13.21	1.28	-0.6	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	E	179	2	1	8	23.00	2.87	1.02	-0.1	A-
8	E	180	2	1	8	27.89	3.49	0.87	0.3	A+
8	E	181	2	1	8	92.86	11.61	0.74	0.7	A+
8	E	182	2	1	8	183.06	22.88	0.72	0.8	A+
8	E	183	2	1	8	78.31	9.79	0.85	0.4	A+
8	E	184	2	1	8	51.03	6.38	0.85	0.4	A+
8	E	185	2	1	8	35.34	4.42	0.84	0.4	A+
8	E	186	2	1	8	9.53	1.19	0.95	0.1	A+
8	E	187	2	1	8	71.73	8.97	1.30	-0.6	A-
8	E	188	2	1	8	31.14	3.89	0.85	0.4	A+
8	E	189	2	1	8	33.92	4.24	1.17	-0.4	A-
8	E	190	2	1	8	1315.17	164.40	0.39	2.2	C+
8	E	191	2	1	8	13.35	1.67	0.90	0.2	A+
8	E	192	2	1	8	52.34	6.54	0.90	0.2	A+
8	E	193	2	1	8	13.77	1.72	0.97	0.1	A+
8	E	194	2	1	8	21.61	2.70	1.05	-0.1	A-
8	E	195	2	1	8	115.82	14.48	0.76	0.7	A+
8	E	196	2	1	8	16.47	2.06	1.03	-0.1	A-
8	E	197	2	1	8	63.03	7.88	0.88	0.3	A+
8	E	198	2	1	8	86.64	10.83	1.20	-0.4	A-
8	E	199	2	1	8	235.05	29.38	0.67	0.9	A+
8	E	200	2	1	8	13.85	1.73	0.92	0.2	A+
8	E	201	2	1	8	141.27	17.66	0.67	0.9	A+
8	E	202	2	1	8	39.08	4.88	0.86	0.3	A+
8	E	203	2	1	8	28.17	3.52	0.92	0.2	A+
8	E	204	2	1	8	192.27	24.03	0.65	1.0	B+
8	E	205	2	1	8	32.85	4.11	0.88	0.3	A+
8	E	206	2	1	8	47.71	5.96	0.86	0.4	A+
8	E	207	2	1	8	22.55	2.82	1.02	0.0	A-
8	E	208	2	1	8	12.05	1.51	1.05	-0.1	A-
8	E	209	2	1	8	202.73	25.34	0.70	0.8	A+
8	E	210	2	1	8	17.39	2.17	0.93	0.2	A+
8	E	211	2	1	8	25.22	3.15	0.89	0.3	A+
8	E	212	2	1	8	65.67	8.21	1.22	-0.5	A-
8	E	213	2	1	8	19.16	2.40	0.97	0.1	A+
8	E	214	2	1	8	32.10	4.01	0.98	0.0	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	F	179	2	1	8	14.68	1.83	0.91	0.2	A+
8	F	180	2	1	8	131.29	16.41	0.64	1.0	B+
8	F	181	2	1	8	23.68	2.96	1.08	-0.2	A-
8	F	182	2	1	8	21.33	2.67	0.97	0.1	A+
8	F	183	2	1	8	93.48	11.69	0.76	0.6	A+
8	F	184	2	1	8	20.20	2.52	1.04	-0.1	A-
8	F	185	2	1	8	25.19	3.15	0.95	0.1	A+
8	F	186	2	1	8	129.87	16.23	0.77	0.6	A+
8	F	187	2	1	8	25.46	3.18	1.05	-0.1	A-
8	F	188	2	1	8	79.51	9.94	0.73	0.7	A+
8	F	189	2	1	8	35.02	4.38	1.01	0.0	A-
8	F	190	2	1	8	137.26	17.16	1.51	-1.0	A-
8	F	191	2	1	8	23.06	2.88	1.16	-0.4	A-
8	F	192	2	1	8	90.90	11.36	0.79	0.6	A+
8	F	193	2	1	8	126.72	15.84	0.68	0.9	A+
8	F	194	2	1	8	146.37	18.30	0.75	0.7	A+
8	F	195	2	1	8	17.60	2.20	0.88	0.3	A+
8	F	196	2	1	8	99.36	12.42	0.67	0.9	A+
8	F	197	2	1	8	19.28	2.41	1.14	-0.3	A-
8	F	198	2	1	8	9.18	1.15	0.94	0.1	A+
8	F	199	2	1	8	17.70	2.21	1.04	-0.1	A-
8	F	200	2	1	8	57.95	7.24	0.82	0.5	A+
8	F	201	2	1	8	49.46	6.18	1.28	-0.6	A-
8	F	202	2	1	8	118.40	14.80	0.82	0.5	A+
8	F	203	2	1	8	22.61	2.83	1.09	-0.2	A-
8	F	204	2	1	8	46.32	5.79	1.29	-0.6	A-
8	F	205	2	1	8	19.86	2.48	1.00	0.0	A+
8	F	206	2	1	8	64.54	8.07	0.87	0.3	A+
8	F	207	2	1	8	43.14	5.39	1.11	-0.2	A-
8	F	208	2	1	8	125.48	15.68	1.30	-0.6	A-
8	F	209	2	1	8	8.04	1.01	1.00	0.0	A+
8	F	210	2	1	8	352.87	44.11	1.74	-1.3	B-
8	F	211	2	1	8	22.54	2.82	0.96	0.1	A+
8	F	212	2	1	8	4.43	0.55	1.00	0.0	A-
8	F	213	2	1	8	13.85	1.73	1.04	-0.1	A-
8	F	214	2	1	8	20.15	2.52	1.10	-0.2	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	G	179	2	1	8	57.86	7.23	0.87	0.3	A+
8	G	180	2	1	8	23.59	2.95	0.94	0.1	A+
8	G	181	2	1	8	138.44	17.31	0.68	0.9	A+
8	G	182	2	1	8	232.59	29.07	0.69	0.9	A+
8	G	183	2	1	8	77.04	9.63	0.77	0.6	A+
8	G	184	2	1	8	36.70	4.59	1.15	-0.3	A-
8	G	185	2	1	8	48.92	6.11	0.84	0.4	A+
8	G	186	2	1	8	103.28	12.91	0.65	1.0	B+
8	G	187	2	1	8	10.74	1.34	0.97	0.1	A+
8	G	188	2	1	8	8.20	1.03	0.95	0.1	A+
8	G	189	2	1	8	181.82	22.73	0.71	0.8	A+
8	G	190	2	1	8	80.65	10.08	0.82	0.5	A+
8	G	191	2	1	8	499.74	62.47	0.57	1.3	B+
8	G	192	2	1	8	573.86	71.73	0.42	2.0	C+
8	G	193	2	1	8	125.40	15.68	0.70	0.8	A+
8	G	194	2	1	8	232.86	29.11	0.69	0.9	A+
8	G	195	2	1	8	22.40	2.80	1.00	0.0	A-
8	G	196	2	1	8	66.83	8.35	0.70	0.8	A+
8	G	197	2	1	8	64.08	8.01	1.33	-0.7	A-
8	G	198	2	1	8	211.33	26.42	0.70	0.9	A+
8	G	199	2	1	8	14.84	1.86	1.06	-0.1	A-
8	G	200	2	1	8	27.69	3.46	1.10	-0.2	A-
8	G	201	2	1	8	28.01	3.50	1.04	-0.1	A-
8	G	202	2	1	8	41.67	5.21	1.19	-0.4	A-
8	G	203	2	1	8	45.69	5.71	1.10	-0.2	A-
8	G	204	2	1	8	102.99	12.87	1.40	-0.8	A-
8	G	205	2	1	8	58.37	7.30	0.83	0.4	A+
8	G	206	2	1	8	35.33	4.42	1.08	-0.2	A-
8	G	207	2	1	8	77.93	9.74	1.21	-0.4	A-
8	G	208	2	1	8	60.50	7.56	1.36	-0.7	A-
8	G	209	2	1	8	96.13	12.02	0.88	0.3	A+
8	G	210	2	1	8	19.79	2.47	0.86	0.3	A+
8	G	211	2	1	8	44.22	5.53	1.14	-0.3	A-
8	G	212	2	1	8	117.62	14.70	1.27	-0.6	A-
8	G	213	2	1	8	35.53	4.44	1.13	-0.3	A-
8	G	214	2	1	8	28.48	3.56	0.96	0.1	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	H	179	2	1	8	20.48	2.56	1.08	-0.2	A-
8	H	180	2	1	8	84.80	10.60	0.72	0.8	A+
8	H	181	2	1	8	346.51	43.31	0.49	1.7	C+
8	H	182	2	1	8	314.58	39.32	0.52	1.6	C+
8	H	183	2	1	8	295.86	36.98	0.66	1.0	A+
8	H	184	2	1	8	49.43	6.18	1.17	-0.4	A-
8	H	185	2	1	8	11.44	1.43	0.91	0.2	A+
8	H	186	2	1	8	16.18	2.02	0.97	0.1	A+
8	H	187	2	1	8	33.32	4.16	0.86	0.3	A+
8	H	188	2	1	8	197.06	24.63	1.39	-0.8	A-
8	H	189	2	1	8	22.04	2.75	0.99	0.0	A+
8	H	190	2	1	8	41.93	5.24	0.93	0.2	A+
8	H	191	2	1	8	65.57	8.20	0.81	0.5	A+
8	H	192	2	1	8	136.75	17.09	0.72	0.8	A+
8	H	193	2	1	8	24.23	3.03	0.89	0.3	A+
8	H	194	2	1	8	17.29	2.16	1.05	-0.1	A-
8	H	195	2	1	8	14.01	1.75	1.01	0.0	A-
8	H	196	2	1	8	40.59	5.07	0.90	0.3	A+
8	H	197	2	1	8	203.97	25.50	1.43	-0.8	A-
8	H	198	2	1	8	42.32	5.29	1.07	-0.2	A-
8	H	199	2	1	8	3.46	0.43	0.95	0.1	A+
8	H	200	2	1	8	26.85	3.36	0.94	0.1	A+
8	H	201	2	1	8	29.70	3.71	1.06	-0.1	A-
8	H	202	2	1	8	15.47	1.93	1.10	-0.2	A-
8	H	203	2	1	8	212.09	26.51	1.33	-0.7	A-
8	H	204	2	1	8	77.84	9.73	0.80	0.5	A+
8	H	205	2	1	8	15.09	1.89	1.04	-0.1	A-
8	H	206	2	1	8	8.74	1.09	1.05	-0.1	A-
8	H	207	2	1	8	29.32	3.66	0.95	0.1	A+
8	H	208	2	1	8	391.06	48.88	0.60	1.2	B+
8	H	209	2	1	8	86.84	10.86	1.49	-0.9	A-
8	H	210	2	1	8	22.19	2.77	1.08	-0.2	A-
8	H	211	2	1	8	26.18	3.27	1.11	-0.2	A-
8	H	212	2	1	8	37.68	4.71	1.04	-0.1	A-
8	H	213	2	1	8	137.68	17.21	1.31	-0.6	A-
8	H	214	2	1	8	97.03	12.13	1.25	-0.5	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	I	179	2	1	8	127.42	15.93	0.71	0.8	A+
8	I	180	2	1	8	19.58	2.45	0.89	0.3	A+
8	I	181	2	1	8	44.29	5.54	0.86	0.3	A+
8	I	182	2	1	8	12.94	1.62	1.03	-0.1	A-
8	I	183	2	1	8	27.81	3.48	0.91	0.2	A+
8	I	184	2	1	8	47.88	5.98	1.14	-0.3	A-
8	I	185	2	1	8	45.64	5.70	0.92	0.2	A+
8	I	186	2	1	8	221.27	27.66	0.60	1.2	B+
8	I	187	2	1	8	5.81	0.73	1.01	0.0	A-
8	I	188	2	1	8	90.37	11.30	1.24	-0.5	A-
8	I	189	2	1	8	40.91	5.11	0.86	0.4	A+
8	I	190	2	1	8	83.86	10.48	0.81	0.5	A+
8	I	191	2	1	8	9.03	1.13	1.05	-0.1	A-
8	I	192	2	1	8	30.46	3.81	1.06	-0.1	A-
8	I	193	2	1	8	470.68	58.84	0.58	1.3	B+
8	I	194	2	1	8	18.16	2.27	1.03	-0.1	A-
8	I	195	2	1	8	44.24	5.53	0.87	0.3	A+
8	I	196	2	1	8	16.68	2.08	1.07	-0.2	A-
8	I	197	2	1	8	187.41	23.43	1.35	-0.7	A-
8	I	198	2	1	8	154.16	19.27	1.41	-0.8	A-
8	I	199	2	1	8	236.51	29.56	0.62	1.1	B+
8	I	200	2	1	8	60.52	7.57	0.78	0.6	A+
8	I	201	2	1	8	49.71	6.21	1.14	-0.3	A-
8	I	202	2	1	8	95.49	11.94	0.80	0.5	A+
8	I	203	2	1	8	45.98	5.75	1.18	-0.4	A-
8	I	204	2	1	8	56.45	7.06	1.30	-0.6	A-
8	I	205	2	1	8	19.15	2.39	0.98	0.0	A+
8	I	206	2	1	8	42.34	5.29	1.03	-0.1	A-
8	I	207	2	1	8	14.47	1.81	0.97	0.1	A+
8	I	208	2	1	8	38.17	4.77	1.23	-0.5	A-
8	I	209	2	1	8	85.80	10.72	0.76	0.6	A+
8	I	210	2	1	8	18.46	2.31	0.91	0.2	A+
8	I	211	2	1	8	26.70	3.34	1.04	-0.1	A-
8	I	212	2	1	8	37.49	4.69	1.10	-0.2	A-
8	I	213	2	1	8	93.97	11.75	1.10	-0.2	A-
8	I	214	2	1	8	68.00	8.50	0.82	0.5	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	J	179	2	1	8	39.39	4.92	0.94	0.2	A+
8	J	180	2	1	8	223.62	27.95	0.68	0.9	A+
8	J	181	2	1	8	39.19	4.90	0.94	0.2	A+
8	J	182	2	1	8	207.51	25.94	0.59	1.3	B+
8	J	183	2	1	8	14.14	1.77	0.91	0.2	A+
8	J	184	2	1	8	324.07	40.51	0.62	1.1	B+
8	J	185	2	1	8	34.71	4.34	0.93	0.2	A+
8	J	186	2	1	8	77.24	9.66	1.22	-0.5	A-
8	J	187	2	1	8	76.66	9.58	1.49	-0.9	A-
8	J	188	2	1	8	18.01	2.25	1.09	-0.2	A-
8	J	189	2	1	8	23.69	2.96	0.95	0.1	A+
8	J	190	2	1	8	10.62	1.33	0.90	0.3	A+
8	J	191	2	1	8	161.17	20.15	0.72	0.8	A+
8	J	192	2	1	8	42.85	5.36	0.86	0.3	A+
8	J	193	2	1	8	42.26	5.28	1.16	-0.3	A-
8	J	194	2	1	8	187.36	23.42	0.72	0.8	A+
8	J	195	2	1	8	203.40	25.42	1.57	-1.1	B-
8	J	196	2	1	8	57.63	7.20	0.86	0.4	A+
8	J	197	2	1	8	38.49	4.81	1.06	-0.1	A-
8	J	198	2	1	8	55.13	6.89	0.84	0.4	A+
8	J	199	2	1	8	160.84	20.11	0.71	0.8	A+
8	J	200	2	1	8	191.61	23.95	0.71	0.8	A+
8	J	201	2	1	8	84.52	10.56	0.82	0.5	A+
8	J	202	2	1	8	46.62	5.83	0.83	0.4	A+
8	J	203	2	1	8	19.09	2.39	0.93	0.2	A+
8	J	204	2	1	8	48.51	6.06	0.89	0.3	A+
8	J	205	2	1	8	110.76	13.84	1.39	-0.8	A-
8	J	206	2	1	8	19.08	2.39	0.89	0.3	A+
8	J	207	2	1	8	81.11	10.14	1.34	-0.7	A-
8	J	208	2	1	8	1471.17	183.90	0.37	2.4	C+
8	J	209	2	1	8	18.45	2.31	1.10	-0.2	A-
8	J	210	2	1	8	12.24	1.53	0.94	0.1	A+
8	J	211	2	1	8	19.55	2.44	0.97	0.1	A+
8	J	212	2	1	8	16.02	2.00	1.04	-0.1	A-
8	J	213	2	1	8	71.12	8.89	0.81	0.5	A+
8	J	214	2	1	8	28.32	3.54	1.05	-0.1	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	W	74	2	1	8	2139.01	267.38	1.41	-0.8	A-
8	W	75	2	1	8	136.67	17.08	0.97	0.1	A+
8	W	76	2	1	8	6086.68	760.84	0.54	1.4	B+
8	W	77	2	1	8	228.51	28.56	0.90	0.2	A+
8	W	78	2	1	8	107.34	13.42	0.97	0.1	A+
8	W	79	2	1	8	217.65	27.21	0.92	0.2	A+
8	W	80	2	1	8	21.57	2.70	0.99	0.0	A+
8	W	81	2	1	8	85.94	10.74	1.08	-0.2	A-
8	W	82	2	1	8	573.38	71.67	0.82	0.5	A+
8	W	83	2	1	8	614.12	76.77	1.33	-0.7	A-
8	W	84	2	1	8	311.55	38.94	1.13	-0.3	A-
8	W	85	2	1	8	696.00	87.00	0.79	0.5	A+
8	W	86	2	1	8	215.09	26.89	1.01	0.0	A-
8	W	87	2	1	8	368.86	46.11	1.19	-0.4	A-
8	W	88	2	1	8	1692.36	211.55	0.67	0.9	A+
8	W	89	2	1	8	53.68	6.71	1.03	-0.1	A-
8	W	90	2	1	8	363.34	45.42	1.15	-0.3	A-
8	W	91	2	1	8	280.11	35.01	1.18	-0.4	A-
8	W	92	2	1	8	326.24	40.78	1.12	-0.3	A-
8	W	93	2	1	8	113.73	14.22	0.92	0.2	A+
8	W	94	2	1	8	276.25	34.53	0.89	0.3	A+
8	W	95	2	1	8	84.06	10.51	1.06	-0.1	A-
8	W	96	2	1	8	833.53	104.19	1.30	-0.6	A-
8	W	97	2	1	8	483.29	60.41	0.87	0.3	A+
8	W	98	2	1	8	333.55	41.69	0.87	0.3	A+
8	W	99	2	1	8	149.53	18.69	1.05	-0.1	A-
8	W	100	2	1	8	40.08	5.01	0.99	0.0	A+
8	W	101	2	1	8	104.28	13.04	1.04	-0.1	A-
8	W	102	2	1	8	402.34	50.29	1.17	-0.4	A-
8	W	103	2	1	8	33.84	4.23	1.02	0.0	A-
8	W	104	2	1	8	43.56	5.45	1.00	0.0	A+
8	W	105	2	1	8	212.46	26.56	1.03	-0.1	A-
8	W	106	2	1	8	183.24	22.91	1.08	-0.2	A-
8	W	107	2	1	8	295.78	36.97	1.11	-0.2	A-
8	W	108	2	1	8	449.99	56.25	0.87	0.3	A+
8	W	109	2	1	8	440.27	55.03	1.13	-0.3	A-
8	W	111	2	1	8	259.64	32.46	0.90	0.3	A+
8	W	112	2	1	8	1743.44	217.93	0.69	0.9	A+
8	W	113	2	1	8	86.86	10.86	0.99	0.0	A+
8	W	114	2	1	8	323.40	40.42	0.80	0.5	A+
8	W	115	2	1	8	277.99	34.75	1.12	-0.3	A-
8	W	116	2	1	8	110.83	13.85	0.92	0.2	A+
8	W	117	2	1	8	666.94	83.37	1.18	-0.4	A-
8	W	118	2	1	8	1068.94	133.62	1.28	-0.6	A-
8	W	119	2	1	8	412.45	51.56	1.20	-0.4	A-
8	W	120	2	1	8	1025.33	128.17	0.74	0.7	A+
8	W	121	2	1	8	339.14	42.39	0.87	0.3	A+
8	W	122	2	1	8	359.17	44.90	1.13	-0.3	A-
8	W	123	2	1	8	470.00	58.75	1.04	-0.1	A-
8	W	124	2	1	8	375.47	46.93	0.80	0.5	A+
8	W	125	2	1	8	60.88	7.61	0.98	0.1	A+
8	W	126	2	1	8	204.14	25.52	0.98	0.0	A+
8	W	127	2	1	8	973.72	121.72	1.28	-0.6	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
8	W	128	2	1	8	79.85	9.98	1.07	-0.2	A-
8	W	129	2	1	8	1077.57	134.70	0.77	0.6	A+
8	W	130	2	1	8	754.90	94.36	1.25	-0.5	A-
8	W	131	2	1	8	96.91	12.11	1.06	-0.1	A-
8	W	132	2	1	8	352.91	44.11	1.16	-0.3	A-
8	W	133	2	1	8	563.62	70.45	0.84	0.4	A+
8	W	134	2	1	8	798.36	99.80	1.24	-0.5	A-
8	W	135	2	1	8	2374.57	296.82	1.46	-0.9	A-
8	W	136	2	1	8	14.13	1.77	0.98	0.1	A+
8	W	137	2	1	8	210.54	26.32	1.08	-0.2	A-
8	W	138	2	1	8	1494.91	186.86	1.34	-0.7	A-
8	W	139	2	1	8	174.59	21.82	1.08	-0.2	A-
8	W	140	2	1	8	160.11	20.01	1.02	-0.1	A-
8	W	141	2	1	8	173.38	21.67	1.06	-0.1	A-
8	W	142	2	1	8	194.45	24.31	0.90	0.3	A+
8	W	143	2	1	8	697.29	87.16	1.21	-0.5	A-
8	W	144	2	1	8	193.44	24.18	0.88	0.3	A+
8	W	145	2	1	8	210.35	26.29	1.08	-0.2	A-
8	W	146	2	1	8	427.33	53.42	1.16	-0.4	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	A	191	2	1	8	44.01	5.50	0.82	0.5	A+
11	A	192	2	1	8	244.48	30.56	0.62	1.1	B+
11	A	193	2	1	8	18.08	2.26	1.05	-0.1	A-
11	A	194	2	1	8	17.21	2.15	0.91	0.2	A+
11	A	195	2	1	8	65.91	8.24	0.86	0.4	A+
11	A	196	2	1	8	36.90	4.61	1.07	-0.2	A-
11	A	197	2	1	8	11.78	1.47	0.94	0.2	A+
11	A	198	2	1	8	94.00	11.75	1.35	-0.7	A-
11	A	199	2	1	8	1914.94	239.37	0.38	2.3	C+
11	A	200	2	1	8	43.12	5.39	1.17	-0.4	A-
11	A	201	2	1	8	10.56	1.32	1.02	0.0	A-
11	A	202	2	1	8	27.27	3.41	0.94	0.1	A+
11	A	203	2	1	8	13.49	1.69	1.04	-0.1	A-
11	A	204	2	1	8	14.10	1.76	1.00	0.0	A+
11	A	206	2	1	8	81.57	10.20	1.32	-0.7	A-
11	A	207	2	1	8	16.20	2.03	1.09	-0.2	A-
11	A	209	2	1	8	23.50	2.94	0.93	0.2	A+
11	A	210	2	1	8	183.99	23.00	1.51	-1.0	A-
11	A	212	2	1	8	94.56	11.82	0.76	0.6	A+
11	A	213	2	1	8	24.95	3.12	0.89	0.3	A+
11	A	214	2	1	8	118.38	14.80	1.37	-0.7	A-
11	A	215	2	1	8	143.39	17.92	1.47	-0.9	A-
11	A	216	2	1	8	130.31	16.29	1.53	-1.0	A-
11	A	217	2	1	8	50.16	6.27	1.17	-0.4	A-
11	A	218	2	1	8	70.03	8.75	1.21	-0.5	A-
11	A	219	2	1	8	16.65	2.08	1.10	-0.2	A-
11	A	220	2	1	8	17.34	2.17	1.06	-0.1	A-
11	A	221	2	1	8	11.98	1.50	1.05	-0.1	A-
11	A	222	2	1	8	81.95	10.24	1.26	-0.5	A-
11	A	223	2	1	8	20.20	2.53	0.94	0.2	A+
11	A	224	2	1	8	59.69	7.46	0.97	0.1	A+
11	A	225	2	1	8	108.85	13.61	0.76	0.7	A+
11	A	226	2	1	8	6.63	0.83	1.02	0.0	A-
11	A	227	2	1	8	41.68	5.21	0.92	0.2	A+
11	A	228	2	1	8	125.77	15.72	1.47	-0.9	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	B	189	2	1	8	35.10	4.39	0.86	0.4	A+
11	B	190	2	1	8	22.50	2.81	1.09	-0.2	A-
11	B	191	2	1	8	55.36	6.92	0.82	0.5	A+
11	B	192	2	1	8	142.46	17.81	1.31	-0.6	A-
11	B	193	2	1	8	76.81	9.60	0.74	0.7	A+
11	B	194	2	1	8	26.28	3.28	1.09	-0.2	A-
11	B	195	2	1	8	18.04	2.26	0.99	0.0	A+
11	B	196	2	1	8	47.55	5.94	0.90	0.3	A+
11	B	197	2	1	8	30.23	3.78	0.86	0.4	A+
11	B	198	2	1	8	23.98	3.00	1.06	-0.1	A-
11	B	199	2	1	8	116.74	14.59	0.70	0.8	A+
11	B	200	2	1	8	45.60	5.70	1.09	-0.2	A-
11	B	201	2	1	8	72.50	9.06	0.71	0.8	A+
11	B	202	2	1	8	16.99	2.12	0.98	0.0	A+
11	B	203	2	1	8	10.21	1.28	0.99	0.0	A+
11	B	204	2	1	8	277.35	34.67	0.61	1.2	B+
11	B	205	2	1	8	18.11	2.26	0.93	0.2	A+
11	B	206	2	1	8	147.69	18.46	0.70	0.8	A+
11	B	207	2	1	8	21.16	2.65	1.09	-0.2	A-
11	B	208	2	1	8	24.09	3.01	0.99	0.0	A+
11	B	209	2	1	8	29.11	3.64	1.10	-0.2	A-
11	B	210	2	1	8	123.93	15.49	1.15	-0.3	A-
11	B	211	2	1	8	15.49	1.94	1.08	-0.2	A-
11	B	212	2	1	8	46.16	5.77	1.18	-0.4	A-
11	B	213	2	1	8	21.45	2.68	1.04	-0.1	A-
11	B	215	2	1	8	19.74	2.47	0.95	0.1	A+
11	B	216	2	1	8	38.47	4.81	1.13	-0.3	A-
11	B	217	2	1	8	240.79	30.10	1.75	-1.3	B-
11	B	218	2	1	8	12.60	1.57	1.05	-0.1	A-
11	B	219	2	1	8	49.30	6.16	0.90	0.2	A+
11	B	220	2	1	8	40.85	5.11	1.17	-0.4	A-
11	B	221	2	1	8	427.50	53.44	1.73	-1.3	B-
11	B	222	2	1	8	50.88	6.36	0.86	0.4	A+
11	B	223	2	1	8	21.78	2.72	0.92	0.2	A+
11	B	224	2	1	8	115.11	14.39	0.70	0.8	A+
11	B	225	2	1	8	139.24	17.40	1.48	-0.9	A-
11	B	226	2	1	8	13.90	1.74	1.10	-0.2	A-
11	B	227	2	1	8	55.21	6.90	1.23	-0.5	A-
11	B	228	2	1	8	253.21	31.65	1.73	-1.3	B-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	C	189	2	1	8	8.52	1.06	1.01	0.0	A-
11	C	190	2	1	8	29.55	3.69	0.99	0.0	A+
11	C	191	2	1	8	82.24	10.28	0.82	0.5	A+
11	C	192	2	1	8	14.62	1.83	1.04	-0.1	A-
11	C	193	2	1	8	34.12	4.27	0.88	0.3	A+
11	C	194	2	1	8	31.21	3.90	0.97	0.1	A+
11	C	195	2	1	8	4.98	0.62	0.94	0.1	A+
11	C	196	2	1	8	7.00	0.88	0.95	0.1	A+
11	C	197	2	1	8	21.57	2.70	1.06	-0.1	A-
11	C	199	2	1	8	9.95	1.24	1.01	0.0	A-
11	C	200	2	1	8	8.57	1.07	0.98	0.1	A+
11	C	201	2	1	8	9.02	1.13	0.99	0.0	A+
11	C	202	2	1	8	30.02	3.75	1.05	-0.1	A-
11	C	203	2	1	8	67.12	8.39	1.18	-0.4	A-
11	C	204	2	1	8	38.70	4.84	1.11	-0.2	A-
11	C	205	2	1	8	176.11	22.01	0.70	0.8	A+
11	C	206	2	1	8	11.31	1.41	0.90	0.2	A+
11	C	207	2	1	8	21.35	2.67	0.99	0.0	A+
11	C	208	2	1	8	18.14	2.27	1.09	-0.2	A-
11	C	209	2	1	8	32.16	4.02	0.89	0.3	A+
11	C	210	2	1	8	52.36	6.54	1.27	-0.6	A-
11	C	211	2	1	8	113.41	14.18	1.13	-0.3	A-
11	C	212	2	1	8	18.82	2.35	1.19	-0.4	A-
11	C	213	2	1	8	62.18	7.77	0.93	0.2	A+
11	C	214	2	1	8	65.44	8.18	1.25	-0.5	A-
11	C	215	2	1	8	42.45	5.31	1.19	-0.4	A-
11	C	216	2	1	8	67.91	8.49	1.22	-0.5	A-
11	C	217	2	1	8	16.58	2.07	0.93	0.2	A+
11	C	218	2	1	8	27.72	3.47	1.05	-0.1	A-
11	C	219	2	1	8	63.00	7.88	1.22	-0.5	A-
11	C	220	2	1	8	36.70	4.59	1.00	0.0	A-
11	C	221	2	1	8	18.31	2.29	0.92	0.2	A+
11	C	222	2	1	8	46.38	5.80	1.06	-0.1	A-
11	C	223	2	1	8	47.09	5.89	0.81	0.5	A+
11	C	225	2	1	8	60.31	7.54	1.25	-0.5	A-
11	C	226	2	1	8	34.79	4.35	1.09	-0.2	A-
11	C	227	2	1	8	150.34	18.79	1.50	-1.0	A-
11	C	228	2	1	8	160.01	20.00	1.51	-1.0	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	D	189	2	1	8	45.44	5.68	1.17	-0.4	A-
11	D	190	2	1	8	28.38	3.55	0.91	0.2	A+
11	D	191	2	1	8	113.35	14.17	1.30	-0.6	A-
11	D	193	2	1	8	83.64	10.46	0.75	0.7	A+
11	D	194	2	1	8	52.83	6.60	1.18	-0.4	A-
11	D	195	2	1	8	71.92	8.99	1.31	-0.6	A-
11	D	196	2	1	8	32.75	4.09	1.13	-0.3	A-
11	D	197	2	1	8	49.78	6.22	0.85	0.4	A+
11	D	198	2	1	8	46.04	5.75	1.27	-0.6	A-
11	D	199	2	1	8	70.92	8.87	1.35	-0.7	A-
11	D	200	2	1	8	36.75	4.59	0.87	0.3	A+
11	D	201	2	1	8	14.38	1.80	0.92	0.2	A+
11	D	202	2	1	8	72.28	9.04	0.80	0.5	A+
11	D	203	2	1	8	37.94	4.74	0.96	0.1	A+
11	D	204	2	1	8	53.37	6.67	0.81	0.5	A+
11	D	206	2	1	8	111.66	13.96	0.77	0.6	A+
11	D	207	2	1	8	30.99	3.87	1.06	-0.1	A-
11	D	209	2	1	8	21.73	2.72	0.99	0.0	A+
11	D	210	2	1	8	66.56	8.32	1.04	-0.1	A-
11	D	211	2	1	8	273.75	34.22	0.67	0.9	A+
11	D	213	2	1	8	34.24	4.28	1.13	-0.3	A-
11	D	214	2	1	8	27.79	3.47	1.13	-0.3	A-
11	D	215	2	1	8	149.26	18.66	1.61	-1.1	B-
11	D	216	2	1	8	19.72	2.47	1.08	-0.2	A-
11	D	217	2	1	8	200.43	25.05	1.42	-0.8	A-
11	D	218	2	1	8	109.12	13.64	1.32	-0.6	A-
11	D	219	2	1	8	71.33	8.92	1.23	-0.5	A-
11	D	220	2	1	8	154.25	19.28	1.47	-0.9	A-
11	D	221	2	1	8	23.63	2.95	0.94	0.1	A+
11	D	223	2	1	8	32.10	4.01	1.00	0.0	A-
11	D	224	2	1	8	94.04	11.76	0.85	0.4	A+
11	D	225	2	1	8	15.25	1.91	0.94	0.1	A+
11	D	226	2	1	8	132.93	16.62	0.73	0.7	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	E	189	2	1	8	56.15	7.02	0.80	0.5	A+
11	E	191	2	1	8	45.90	5.74	0.83	0.4	A+
11	E	192	2	1	8	25.14	3.14	1.08	-0.2	A-
11	E	193	2	1	8	26.04	3.26	0.98	0.0	A+
11	E	194	2	1	8	35.13	4.39	0.99	0.0	A+
11	E	195	2	1	8	135.95	16.99	0.68	0.9	A+
11	E	196	2	1	8	50.81	6.35	0.95	0.1	A+
11	E	197	2	1	8	86.62	10.83	1.36	-0.7	A-
11	E	199	2	1	8	25.91	3.24	0.88	0.3	A+
11	E	200	2	1	8	18.01	2.25	1.08	-0.2	A-
11	E	201	2	1	8	47.26	5.91	0.83	0.4	A+
11	E	202	2	1	8	37.47	4.68	1.06	-0.1	A-
11	E	203	2	1	8	87.20	10.90	1.44	-0.9	A-
11	E	204	2	1	8	26.10	3.26	1.04	-0.1	A-
11	E	206	2	1	8	111.82	13.98	0.78	0.6	A+
11	E	208	2	1	8	67.85	8.48	1.25	-0.5	A-
11	E	209	2	1	8	55.59	6.95	1.23	-0.5	A-
11	E	210	2	1	8	18.69	2.34	0.88	0.3	A+
11	E	211	2	1	8	46.23	5.78	1.15	-0.3	A-
11	E	212	2	1	8	34.73	4.34	1.12	-0.3	A-
11	E	213	2	1	8	33.96	4.25	1.18	-0.4	A-
11	E	217	2	1	8	12.33	1.54	0.96	0.1	A+
11	E	218	2	1	8	102.68	12.84	1.34	-0.7	A-
11	E	219	2	1	8	37.06	4.63	0.94	0.1	A+
11	E	220	2	1	8	10.61	1.33	1.02	-0.1	A-
11	E	221	2	1	8	21.04	2.63	1.05	-0.1	A-
11	E	223	2	1	8	25.63	3.20	0.90	0.2	A+
11	E	224	2	1	8	25.71	3.21	1.06	-0.1	A-
11	E	225	2	1	8	105.43	13.18	1.30	-0.6	A-
11	E	227	2	1	8	79.50	9.94	1.25	-0.5	A-
11	E	228	2	1	8	10.06	1.26	1.04	-0.1	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	F	189	2	1	8	13.64	1.71	1.09	-0.2	A-
11	F	190	2	1	8	25.33	3.17	0.97	0.1	A+
11	F	191	2	1	8	23.19	2.90	1.18	-0.4	A-
11	F	193	2	1	8	98.66	12.33	0.69	0.9	A+
11	F	194	2	1	8	17.12	2.14	0.94	0.1	A+
11	F	195	2	1	8	128.34	16.04	1.38	-0.7	A-
11	F	196	2	1	8	9.65	1.21	0.99	0.0	A+
11	F	197	2	1	8	117.24	14.65	1.35	-0.7	A-
11	F	198	2	1	8	16.89	2.11	0.99	0.0	A+
11	F	199	2	1	8	7.15	0.89	1.02	0.0	A-
11	F	200	2	1	8	46.79	5.85	0.89	0.3	A+
11	F	201	2	1	8	36.07	4.51	1.13	-0.3	A-
11	F	203	2	1	8	77.45	9.68	1.15	-0.3	A-
11	F	204	2	1	8	42.94	5.37	0.95	0.1	A+
11	F	205	2	1	8	141.09	17.64	0.72	0.8	A+
11	F	206	2	1	8	82.70	10.34	1.06	-0.1	A-
11	F	207	2	1	8	30.78	3.85	0.88	0.3	A+
11	F	208	2	1	8	35.59	4.45	1.08	-0.2	A-
11	F	209	2	1	8	240.27	30.03	0.62	1.1	B+
11	F	210	2	1	8	12.40	1.55	1.09	-0.2	A-
11	F	211	2	1	8	13.38	1.67	1.06	-0.1	A-
11	F	212	2	1	8	95.09	11.89	1.27	-0.6	A-
11	F	213	2	1	8	53.55	6.69	1.23	-0.5	A-
11	F	214	2	1	8	39.43	4.93	1.22	-0.5	A-
11	F	215	2	1	8	20.20	2.52	0.99	0.0	A+
11	F	217	2	1	8	23.42	2.93	1.00	0.0	A+
11	F	218	2	1	8	63.11	7.89	1.23	-0.5	A-
11	F	219	2	1	8	40.34	5.04	1.00	0.0	A
11	F	220	2	1	8	1677.73	209.72	0.40	2.2	C+
11	F	221	2	1	8	44.72	5.59	1.08	-0.2	A-
11	F	222	2	1	8	85.61	10.70	0.78	0.6	A+
11	F	223	2	1	8	112.60	14.08	0.76	0.6	A+
11	F	224	2	1	8	45.61	5.70	1.00	0.0	A
11	F	225	2	1	8	41.60	5.20	1.18	-0.4	A-
11	F	227	2	1	8	24.32	3.04	1.12	-0.3	A-
11	F	228	2	1	8	122.33	15.29	0.72	0.8	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	G	189	2	1	8	22.61	2.83	0.94	0.2	A+
11	G	190	2	1	8	41.98	5.25	0.88	0.3	A+
11	G	191	2	1	8	19.45	2.43	1.05	-0.1	A-
11	G	192	2	1	8	38.99	4.87	0.88	0.3	A+
11	G	193	2	1	8	70.49	8.81	0.81	0.5	A+
11	G	194	2	1	8	32.71	4.09	0.90	0.2	A+
11	G	195	2	1	8	253.01	31.63	1.45	-0.9	A-
11	G	196	2	1	8	35.02	4.38	1.13	-0.3	A-
11	G	197	2	1	8	125.38	15.67	1.27	-0.6	A-
11	G	198	2	1	8	14.71	1.84	1.05	-0.1	A-
11	G	199	2	1	8	13.02	1.63	0.93	0.2	A+
11	G	200	2	1	8	74.58	9.32	1.23	-0.5	A-
11	G	201	2	1	8	211.89	26.49	0.61	1.2	B+
11	G	202	2	1	8	49.81	6.23	1.13	-0.3	A-
11	G	203	2	1	8	36.49	4.56	1.00	0.0	A-
11	G	204	2	1	8	86.31	10.79	0.79	0.6	A+
11	G	205	2	1	8	185.69	23.21	0.64	1.0	B+
11	G	206	2	1	8	152.20	19.03	1.55	-1.0	B-
11	G	207	2	1	8	46.85	5.86	1.11	-0.2	A-
11	G	208	2	1	8	312.02	39.00	0.55	1.4	B+
11	G	209	2	1	8	59.61	7.45	1.18	-0.4	A-
11	G	210	2	1	8	18.04	2.25	1.05	-0.1	A-
11	G	211	2	1	8	32.34	4.04	1.15	-0.3	A-
11	G	212	2	1	8	44.95	5.62	0.90	0.2	A+
11	G	213	2	1	8	53.24	6.65	0.82	0.5	A+
11	G	214	2	1	8	39.90	4.99	0.85	0.4	A+
11	G	215	2	1	8	80.49	10.06	1.30	-0.6	A-
11	G	216	2	1	8	96.05	12.01	0.76	0.7	A+
11	G	217	2	1	8	42.64	5.33	1.27	-0.6	A-
11	G	218	2	1	8	36.05	4.51	1.15	-0.3	A-
11	G	219	2	1	8	87.31	10.91	1.25	-0.5	A-
11	G	220	2	1	8	111.92	13.99	1.47	-0.9	A-
11	G	221	2	1	8	27.54	3.44	1.17	-0.4	A-
11	G	222	2	1	8	29.42	3.68	0.90	0.3	A+
11	G	223	2	1	8	44.86	5.61	1.14	-0.3	A-
11	G	224	2	1	8	24.39	3.05	1.08	-0.2	A-
11	G	225	2	1	8	27.13	3.39	0.95	0.1	A+
11	G	226	2	1	8	37.35	4.67	1.09	-0.2	A-
11	G	227	2	1	8	49.59	6.20	1.21	-0.5	A-
11	G	228	2	1	8	22.92	2.86	1.16	-0.4	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	H	189	2	1	8	18.60	2.32	1.04	-0.1	A-
11	H	190	2	1	8	315.72	39.46	1.65	-1.2	B-
11	H	192	2	1	8	10.53	1.32	0.98	0.0	A+
11	H	193	2	1	8	34.25	4.28	1.10	-0.2	A-
11	H	194	2	1	8	19.18	2.40	1.08	-0.2	A-
11	H	195	2	1	8	14.36	1.79	1.05	-0.1	A-
11	H	198	2	1	8	31.82	3.98	1.00	0.0	A-
11	H	199	2	1	8	59.47	7.43	1.14	-0.3	A-
11	H	200	2	1	8	230.54	28.82	1.64	-1.2	B-
11	H	201	2	1	8	449.46	56.18	1.75	-1.3	B-
11	H	204	2	1	8	111.83	13.98	0.86	0.4	A+
11	H	205	2	1	8	22.05	2.76	0.94	0.2	A+
11	H	206	2	1	8	28.20	3.53	0.89	0.3	A+
11	H	208	2	1	8	13.44	1.68	0.94	0.1	A+
11	H	209	2	1	8	359.51	44.94	0.57	1.3	B+
11	H	211	2	1	8	51.41	6.43	1.27	-0.6	A-
11	H	212	2	1	8	281.24	35.16	0.59	1.2	B+
11	H	213	2	1	8	66.34	8.29	1.26	-0.5	A-
11	H	214	2	1	8	10.21	1.28	1.08	-0.2	A-
11	H	215	2	1	8	38.07	4.76	1.01	0.0	A-
11	H	216	2	1	8	70.57	8.82	0.79	0.6	A+
11	H	217	2	1	8	151.05	18.88	0.71	0.8	A+
11	H	218	2	1	8	19.26	2.41	0.97	0.1	A+
11	H	219	2	1	8	112.74	14.09	0.71	0.8	A+
11	H	220	2	1	8	27.24	3.41	0.85	0.4	A+
11	H	221	2	1	8	41.13	5.14	0.83	0.4	A+
11	H	222	2	1	8	246.46	30.81	0.59	1.2	B+
11	H	223	2	1	8	8.90	1.11	0.97	0.1	A+
11	H	224	2	1	8	14.09	1.76	1.04	-0.1	A-
11	H	225	2	1	8	35.53	4.44	1.16	-0.4	A-
11	H	227	2	1	8	14.51	1.81	1.06	-0.1	A-
11	H	228	2	1	8	62.26	7.78	1.10	-0.2	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	I	189	2	1	8	19.11	2.39	0.90	0.3	A+
11	I	190	2	1	8	200.48	25.06	1.43	-0.8	A-
11	I	192	2	1	8	172.38	21.55	0.68	0.9	A+
11	I	193	2	1	8	31.59	3.95	0.89	0.3	A+
11	I	194	2	1	8	38.98	4.87	1.14	-0.3	A-
11	I	195	2	1	8	66.65	8.33	1.35	-0.7	A-
11	I	196	2	1	8	64.55	8.07	1.35	-0.7	A-
11	I	197	2	1	8	12.93	1.62	1.10	-0.2	A-
11	I	198	2	1	8	102.01	12.75	1.16	-0.3	A-
11	I	199	2	1	8	3.13	0.39	1.03	-0.1	A-
11	I	200	2	1	8	12.77	1.60	1.06	-0.1	A-
11	I	201	2	1	8	34.52	4.32	0.88	0.3	A+
11	I	202	2	1	8	40.28	5.03	1.14	-0.3	A-
11	I	203	2	1	8	54.45	6.81	0.80	0.5	A+
11	I	204	2	1	8	45.51	5.69	0.86	0.4	A+
11	I	205	2	1	8	111.52	13.94	0.73	0.7	A+
11	I	206	2	1	8	7.18	0.90	0.98	0.0	A+
11	I	207	2	1	8	24.12	3.01	0.89	0.3	A+
11	I	208	2	1	8	61.60	7.70	1.30	-0.6	A-
11	I	211	2	1	8	37.14	4.64	0.84	0.4	A+
11	I	212	2	1	8	169.06	21.13	0.65	1.0	A+
11	I	213	2	1	8	34.09	4.26	0.91	0.2	A+
11	I	214	2	1	8	27.21	3.40	0.93	0.2	A+
11	I	215	2	1	8	28.34	3.54	0.88	0.3	A+
11	I	216	2	1	8	17.82	2.23	1.07	-0.2	A-
11	I	217	2	1	8	16.80	2.10	1.05	-0.1	A-
11	I	218	2	1	8	67.67	8.46	1.31	-0.6	A-
11	I	219	2	1	8	1628.90	203.61	0.40	2.2	C+
11	I	220	2	1	8	115.36	14.42	1.47	-0.9	A-
11	I	221	2	1	8	13.28	1.66	1.10	-0.2	A-
11	I	222	2	1	8	31.00	3.87	1.10	-0.2	A-
11	I	223	2	1	8	53.64	6.71	1.10	-0.2	A-
11	I	224	2	1	8	50.30	6.29	1.17	-0.4	A-
11	I	226	2	1	8	120.80	15.10	1.43	-0.8	A-
11	I	227	2	1	8	41.55	5.19	1.17	-0.4	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	J	189	2	1	8	6.85	0.86	1.00	0.0	A+
11	J	190	2	1	8	24.80	3.10	1.11	-0.2	A-
11	J	191	2	1	8	20.55	2.57	0.94	0.2	A+
11	J	192	2	1	8	38.74	4.84	1.07	-0.2	A-
11	J	193	2	1	8	50.26	6.28	0.98	0.1	A+
11	J	195	2	1	8	34.88	4.36	0.88	0.3	A+
11	J	196	2	1	8	20.84	2.60	1.07	-0.1	A-
11	J	197	2	1	8	171.22	21.40	1.78	-1.4	B-
11	J	198	2	1	8	16.39	2.05	0.98	0.0	A+
11	J	199	2	1	8	32.19	4.02	0.87	0.3	A+
11	J	200	2	1	8	58.96	7.37	1.15	-0.3	A-
11	J	201	2	1	8	472.81	59.10	1.75	-1.3	B-
11	J	202	2	1	8	74.16	9.27	0.97	0.1	A+
11	J	203	2	1	8	35.29	4.41	0.92	0.2	A+
11	J	204	2	1	8	120.49	15.06	0.67	0.9	A+
11	J	205	2	1	8	132.13	16.52	1.48	-0.9	A-
11	J	206	2	1	8	29.04	3.63	1.01	0.0	A-
11	J	207	2	1	8	18.64	2.33	1.15	-0.3	A-
11	J	208	2	1	8	263.07	32.88	1.77	-1.3	B-
11	J	209	2	1	8	22.44	2.81	0.93	0.2	A+
11	J	210	2	1	8	77.56	9.69	1.26	-0.5	A-
11	J	211	2	1	8	42.40	5.30	0.87	0.3	A+
11	J	212	2	1	8	123.33	15.42	1.33	-0.7	A-
11	J	213	2	1	8	28.26	3.53	0.87	0.3	A+
11	J	214	2	1	8	157.62	19.70	1.48	-0.9	A-
11	J	215	2	1	8	23.09	2.89	1.08	-0.2	A-
11	J	216	2	1	8	44.06	5.51	1.06	-0.1	A-
11	J	217	2	1	8	9.62	1.20	0.99	0.0	A+
11	J	218	2	1	8	27.09	3.39	1.08	-0.2	A-
11	J	219	2	1	8	79.69	9.96	0.75	0.7	A+
11	J	220	2	1	8	54.61	6.83	1.22	-0.5	A-
11	J	221	2	1	8	50.95	6.37	0.85	0.4	A+
11	J	222	2	1	8	13.62	1.70	1.03	-0.1	A-
11	J	223	2	1	8	25.89	3.24	1.05	-0.1	A-
11	J	224	2	1	8	148.89	18.61	0.74	0.7	A+
11	J	225	2	1	8	45.93	5.74	1.03	-0.1	A-
11	J	226	2	1	8	138.04	17.25	0.69	0.9	A+
11	J	227	2	1	8	23.09	2.89	1.09	-0.2	A-
11	J	228	2	1	8	77.94	9.74	1.08	-0.2	A-

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	W	74	2	1	8	121.67	15.21	1.08	-0.2	A-
11	W	75	2	1	8	681.01	85.13	0.80	0.5	A+
11	W	76	2	1	8	882.63	110.33	0.77	0.6	A+
11	W	77	2	1	8	159.73	19.97	0.97	0.1	A+
11	W	78	2	1	8	60.13	7.52	1.04	-0.1	A-
11	W	79	2	1	8	394.53	49.32	0.80	0.5	A+
11	W	80	2	1	8	71.53	8.94	1.05	-0.1	A-
11	W	81	2	1	8	810.38	101.30	0.92	0.2	A+
11	W	82	2	1	8	774.40	96.80	1.20	-0.4	A-
11	W	83	2	1	8	946.33	118.29	1.24	-0.5	A-
11	W	84	2	1	8	1041.41	130.18	0.76	0.7	A+
11	W	85	2	1	8	2000.51	250.06	0.67	0.9	A+
11	W	86	2	1	8	199.08	24.88	0.97	0.1	A+
11	W	87	2	1	8	248.33	31.04	0.88	0.3	A+
11	W	88	2	1	8	175.87	21.98	0.94	0.2	A+
11	W	89	2	1	8	59.53	7.44	0.97	0.1	A+
11	W	90	2	1	8	197.80	24.72	1.11	-0.2	A-
11	W	91	2	1	8	36.75	4.59	1.00	0.0	A+
11	W	92	2	1	8	441.89	55.24	0.82	0.5	A+
11	W	93	2	1	8	725.86	90.73	0.79	0.5	A+
11	W	94	2	1	8	915.28	114.41	0.78	0.6	A+
11	W	95	2	1	8	254.26	31.78	1.14	-0.3	A-
11	W	96	2	1	8	92.99	11.62	0.93	0.2	A+
11	W	97	2	1	8	364.50	45.56	1.20	-0.4	A-
11	W	98	2	1	8	182.91	22.86	1.06	-0.1	A-
11	W	99	2	1	8	1182.36	147.80	0.75	0.7	A+
11	W	100	2	1	8	258.39	32.30	0.89	0.3	A+
11	W	101	2	1	8	2044.72	255.59	1.46	-0.9	A-
11	W	102	2	1	8	259.01	32.38	0.89	0.3	A+
11	W	103	2	1	8	95.88	11.99	0.95	0.1	A+
11	W	104	2	1	8	124.92	15.61	1.14	-0.3	A-
11	W	105	2	1	8	415.40	51.92	0.78	0.6	A+
11	W	106	2	1	8	1455.98	182.00	1.41	-0.8	A-
11	W	107	2	1	8	107.33	13.42	1.07	-0.2	A-
11	W	108	2	1	8	360.27	45.03	0.83	0.4	A+
11	W	109	2	1	8	81.45	10.18	0.92	0.2	A+
11	W	110	2	1	8	303.14	37.89	1.14	-0.3	A-
11	W	111	2	1	8	1114.10	139.26	0.73	0.7	A+
11	W	112	2	1	8	272.56	34.07	0.89	0.3	A+
11	W	113	2	1	8	327.29	40.91	1.21	-0.4	A-
11	W	115	2	1	8	779.92	97.49	1.24	-0.5	A-
11	W	116	2	1	8	440.63	55.08	1.18	-0.4	A-
11	W	117	2	1	8	199.92	24.99	1.05	-0.1	A-
11	W	118	2	1	8	423.78	52.97	0.85	0.4	A+
11	W	119	2	1	8	2953.18	369.15	1.61	-1.1	B-
11	W	120	2	1	8	138.96	17.37	0.95	0.1	A+
11	W	121	2	1	8	171.02	21.38	1.12	-0.3	A-
11	W	122	2	1	8	2845.21	355.65	0.61	1.2	B+
11	W	123	2	1	8	61.07	7.63	0.94	0.1	A+
11	W	124	2	1	8	474.04	59.26	0.80	0.5	A+
11	W	125	2	1	8	563.36	70.42	1.35	-0.7	A-
11	W	126	2	1	8	196.99	24.62	1.03	-0.1	A-
11	W	127	2	1	8	171.60	21.45	0.90	0.2	A+

**Appendix T: 2001 PSSA DIF Analysis
Multiple Choice Reading Items**

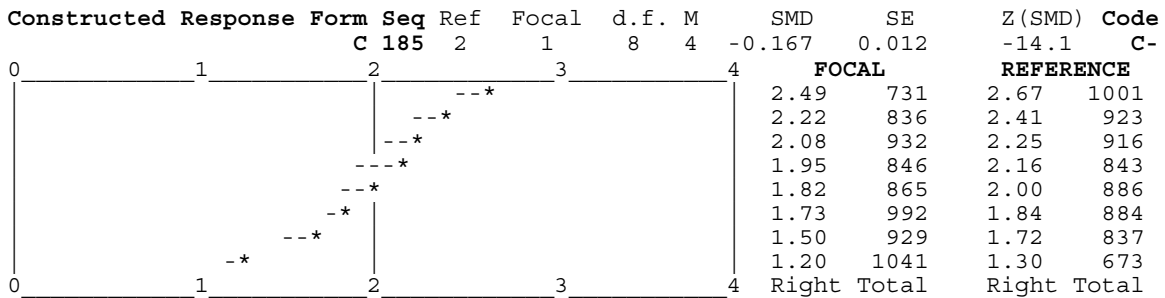
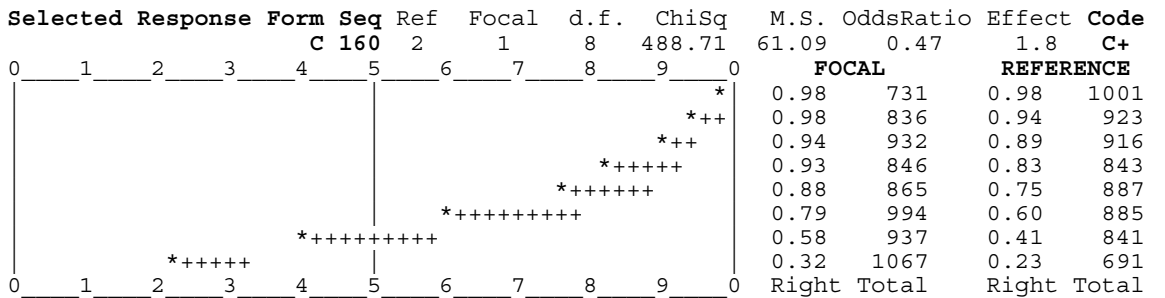
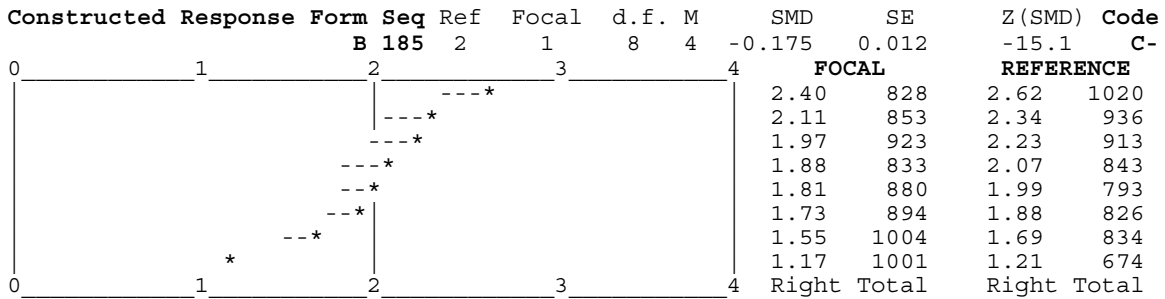
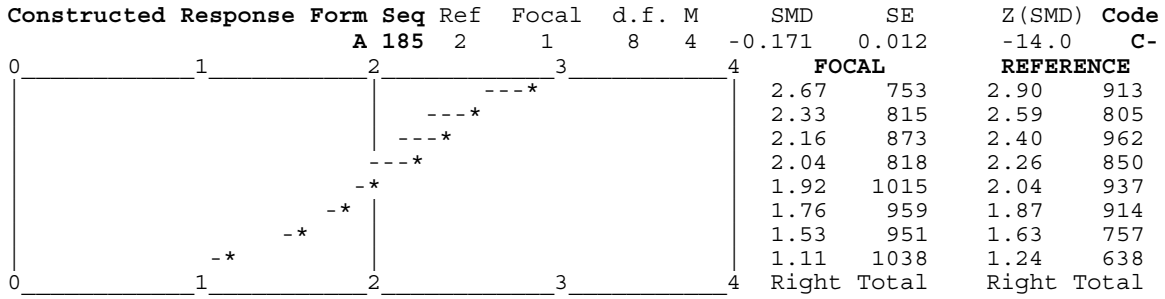
Grade	Form	Seq	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
11	W	128	2	1	8	60.94	7.62	1.03	-0.1	A-
11	W	129	2	1	8	378.10	47.26	1.19	-0.4	A-
11	W	130	2	1	8	86.97	10.87	0.99	0.0	A+
11	W	131	2	1	8	195.28	24.41	1.14	-0.3	A-
11	W	132	2	1	8	267.75	33.47	0.90	0.3	A+
11	W	133	2	1	8	459.93	57.49	1.20	-0.4	A-
11	W	134	2	1	8	56.53	7.07	0.96	0.1	A+
11	W	135	2	1	8	518.24	64.78	0.79	0.6	A+
11	W	136	2	1	8	240.27	30.03	0.91	0.2	A+
11	W	137	2	1	8	61.41	7.68	0.93	0.2	A+
11	W	138	2	1	8	507.40	63.42	0.80	0.5	A+
11	W	139	2	1	8	576.63	72.08	0.78	0.6	A+
11	W	140	2	1	8	1592.58	199.07	1.24	-0.5	A-
11	W	141	2	1	8	1428.37	178.55	0.71	0.8	A+
11	W	142	2	1	8	299.41	37.43	0.91	0.2	A+
11	W	143	2	1	8	88.11	11.01	1.05	-0.1	A-
11	W	144	2	1	8	143.36	17.92	1.13	-0.3	A-
11	W	145	2	1	8	1010.08	126.26	1.29	-0.6	A-
11	W	146	2	1	8	55.25	6.91	0.96	0.1	A+
11	W	147	2	1	8	3874.29	484.29	1.73	-1.3	B-
11	W	148	2	1	8	614.69	76.84	1.25	-0.5	A-
11	W	149	2	1	8	213.73	26.72	1.16	-0.3	A-
11	W	150	2	1	8	473.85	59.23	0.83	0.4	A+
11	W	151	2	1	8	392.81	49.10	0.92	0.2	A+
11	W	152	2	1	8	550.97	68.87	1.16	-0.3	A-
11	W	153	2	1	8	1222.66	152.83	0.71	0.8	A+
11	W	154	2	1	8	277.95	34.74	0.93	0.2	A+

**Appendix U: 2001 PSSA DIF Analysis
Open Ended Reading Items**

Grade	Form	Sequence	Ref	Focal	d.f.	ChiSq	M.S.	OddsRatio	Effect	Code
5	A	185	2	1	8	4	-0.17	0.01	-14.0	C-
5	B	185	2	1	8	4	-0.18	0.01	-15.1	C-
5	C	185	2	1	8	4	-0.17	0.01	-14.1	C-
5	D	185	2	1	8	4	-0.16	0.01	-13.3	C-
5	E	185	2	1	8	4	-0.17	0.01	-14.0	C-
5	F	185	2	1	8	4	-0.12	0.01	-11.4	C-
5	G	185	2	1	8	4	-0.11	0.01	-10.3	C-
5	H	185	2	1	8	4	-0.10	0.01	-9.7	C-
5	I	185	2	1	8	4	-0.15	0.01	-13.4	C-
5	J	185	2	1	8	4	-0.11	0.01	-10.5	C-
5	W	100	2	1	8	4	-0.16	0.00	-46.4	C-
5	W	127	2	1	8	4	-0.11	0.00	-32.9	C-
8	A	215	2	1	8	4	-0.11	0.01	-8.8	C-
8	B	215	2	1	8	4	0.03	0.01	2.2	B+
8	C	215	2	1	8	4	-0.10	0.01	-8.1	C-
8	D	215	2	1	8	4	0.01	0.01	1.1	A+
8	E	215	2	1	8	4	-0.14	0.01	11.6	C-
8	F	215	2	1	8	4	-0.15	0.01	12.4	C-
8	G	215	2	1	8	4	-0.13	0.01	11.0	C-
8	H	215	2	1	8	4	-0.15	0.01	12.1	C-
8	I	215	2	1	8	4	-0.11	0.01	-9.4	C-
8	J	215	2	1	8	4	-0.15	0.01	12.7	C-
8	W	110	2	1	8	4	-0.18	0.00	48.7	C-
8	W	147	2	1	8	4	-0.17	0.00	41.7	C-
11	A	229	2	1	8	4	-0.20	0.02	-12.6	C-
11	B	229	2	1	8	4	-0.28	0.02	-18.0	C-
11	C	229	2	1	8	4	-0.14	0.02	-8.6	C-
11	D	229	2	1	8	4	-0.17	0.02	-10.9	C-
11	E	229	2	1	8	4	-0.28	0.02	-17.6	C-
11	F	229	2	1	8	4	-0.19	0.02	-12.8	C-
11	G	229	2	1	8	4	-0.25	0.02	-15.9	C-
11	H	229	2	1	8	4	-0.17	0.02	-11.7	C-
11	I	229	2	1	8	4	-0.23	0.02	-14.7	C-
11	J	229	2	1	8	4	-0.19	0.02	-12.4	C-
11	W	114	2	1	8	4	-0.20	0.01	-40.7	C-
11	W	155	2	1	8	4	-0.26	0.01	-53.6	C-

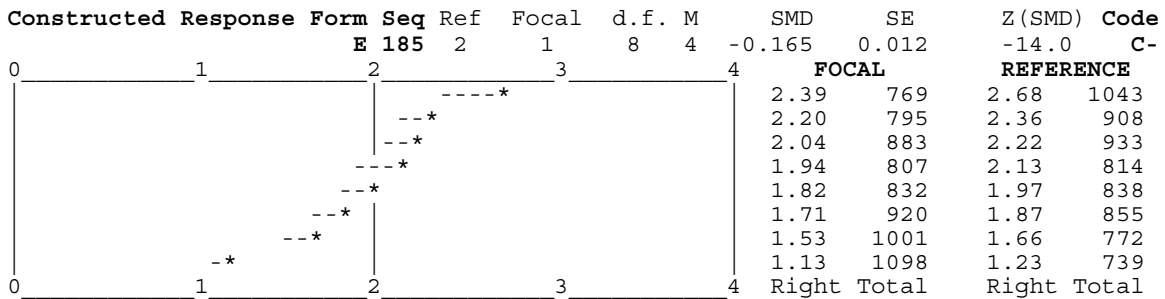
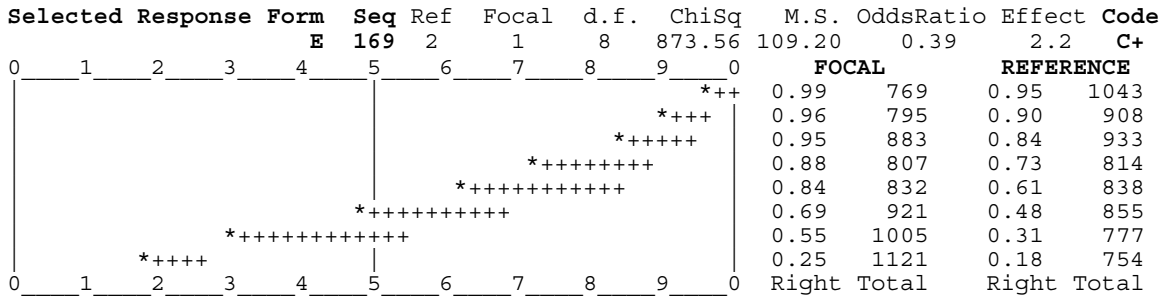
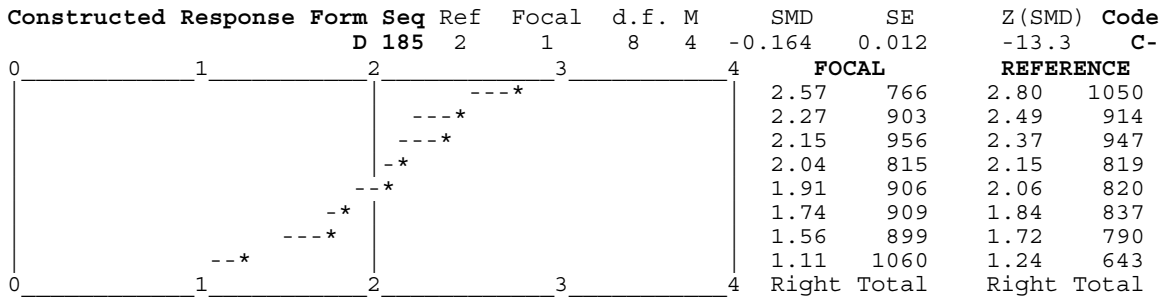
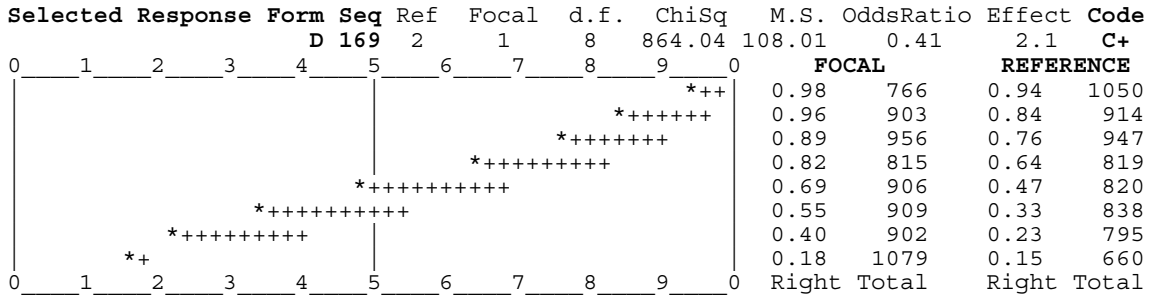
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 5 Reading Items



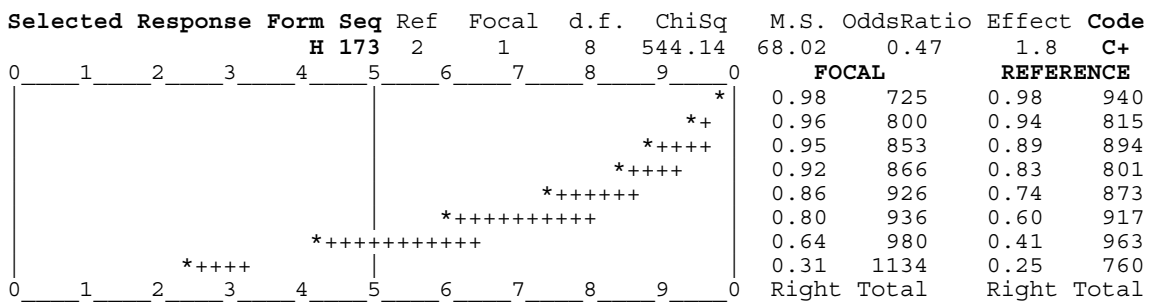
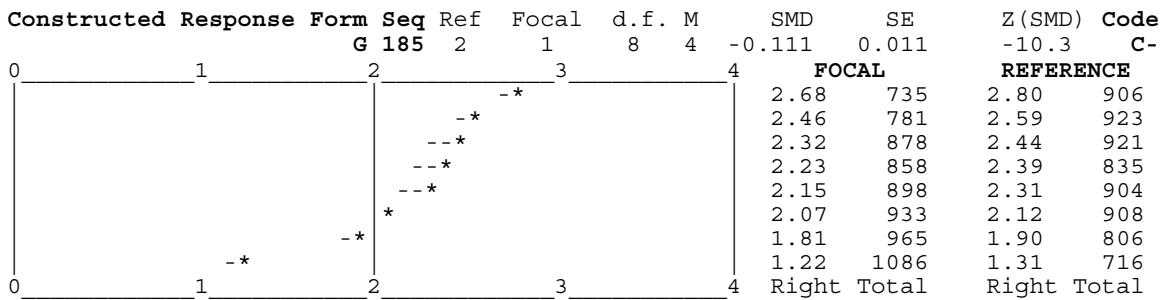
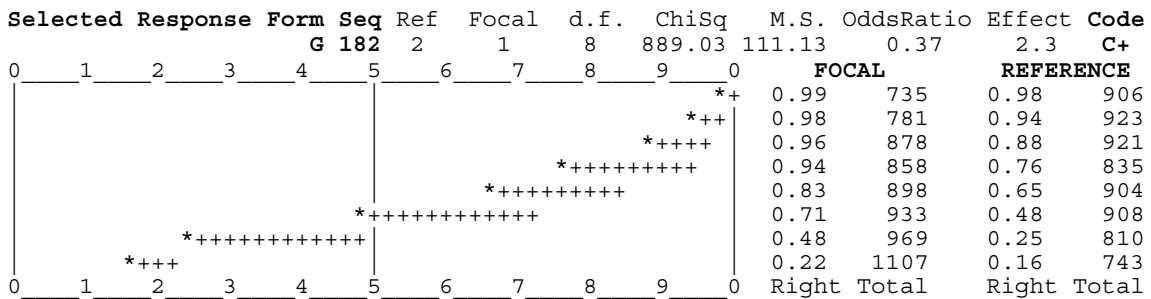
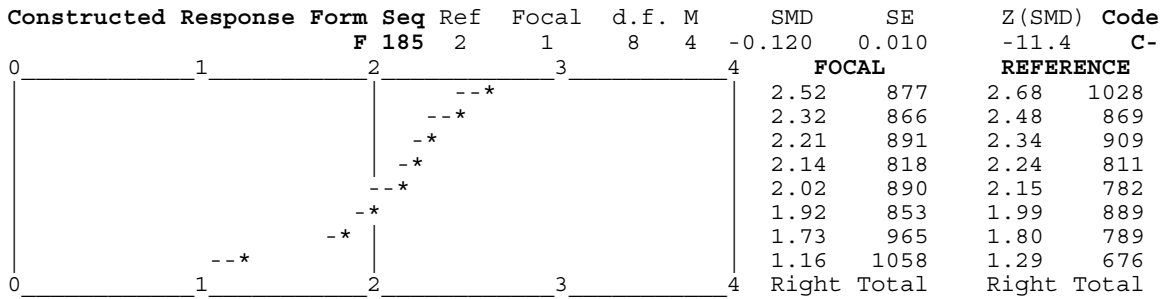
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 5 Reading Items



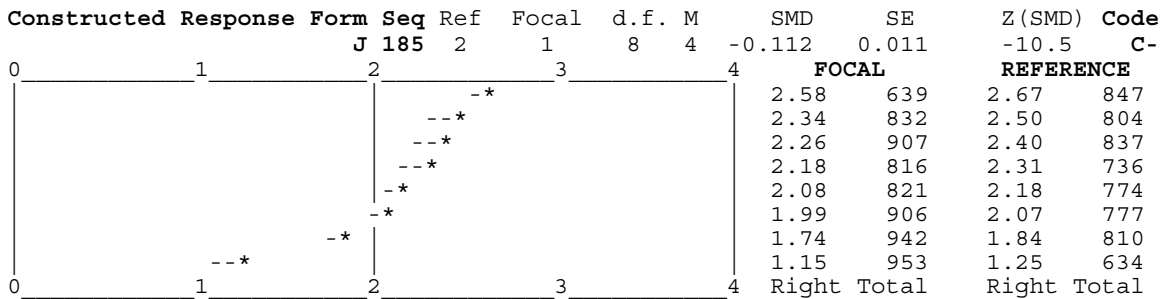
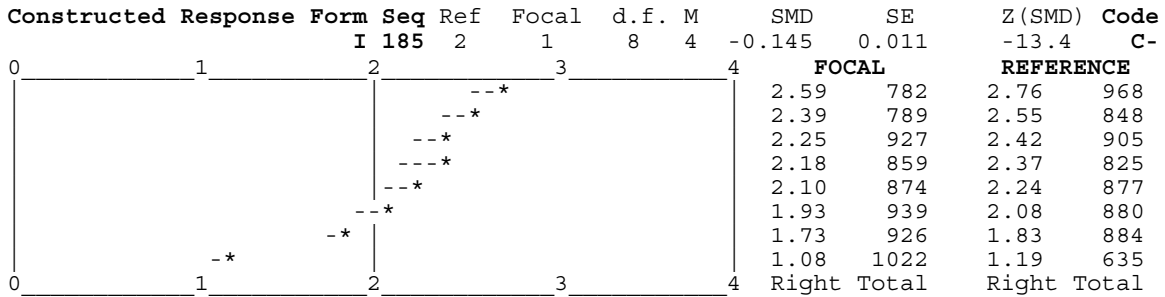
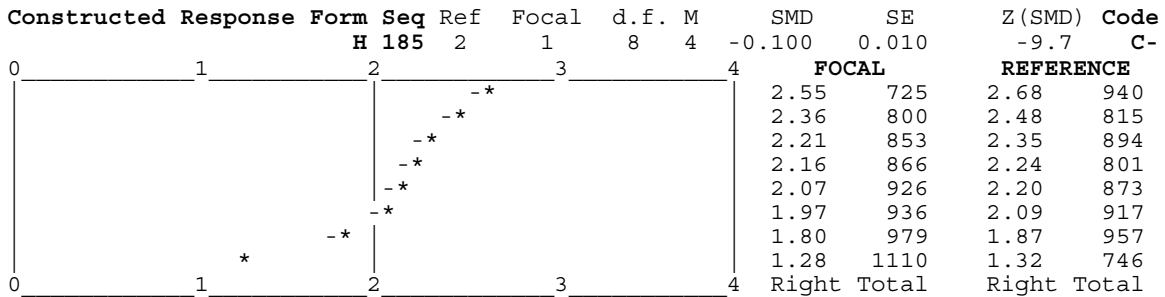
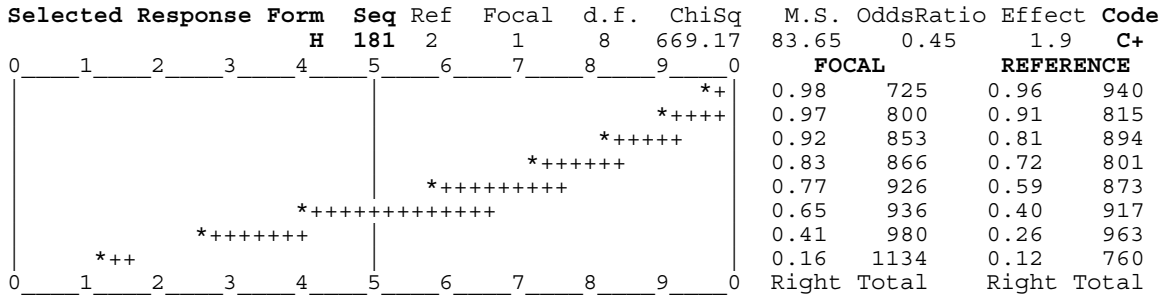
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 5 Reading Items



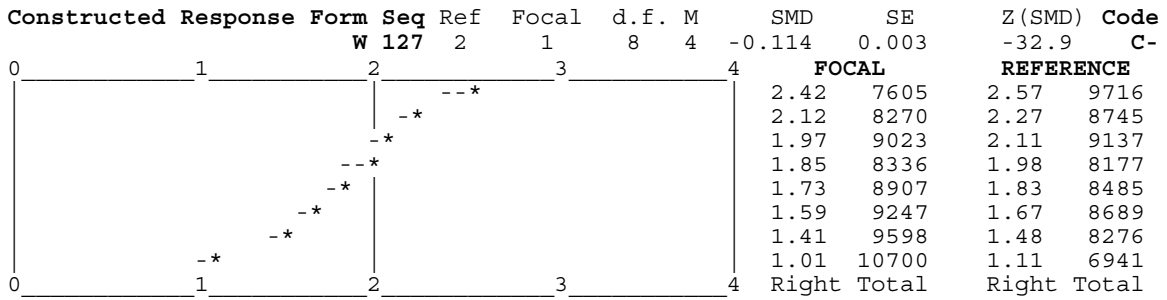
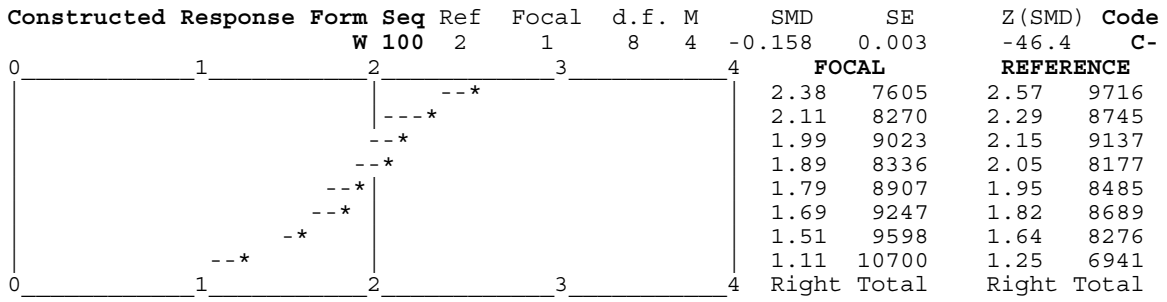
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 5 Reading Items



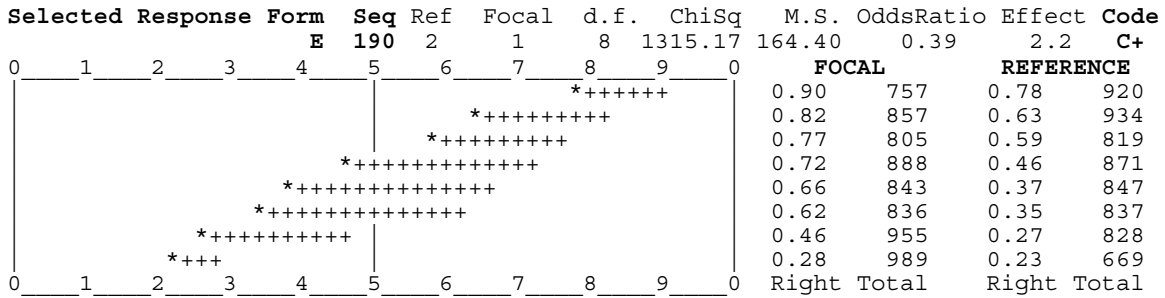
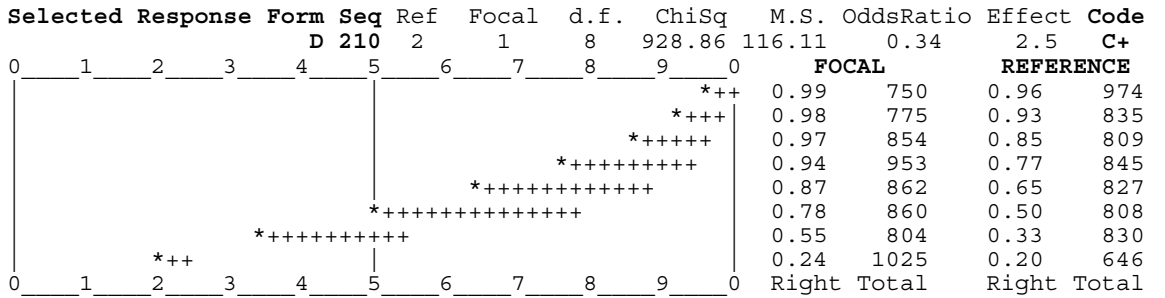
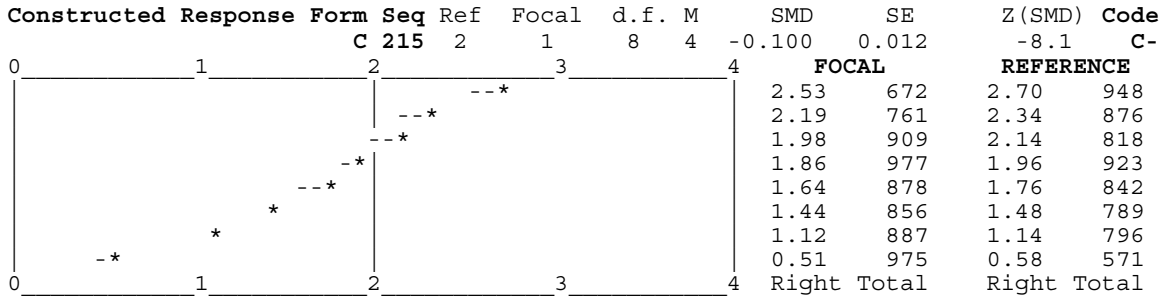
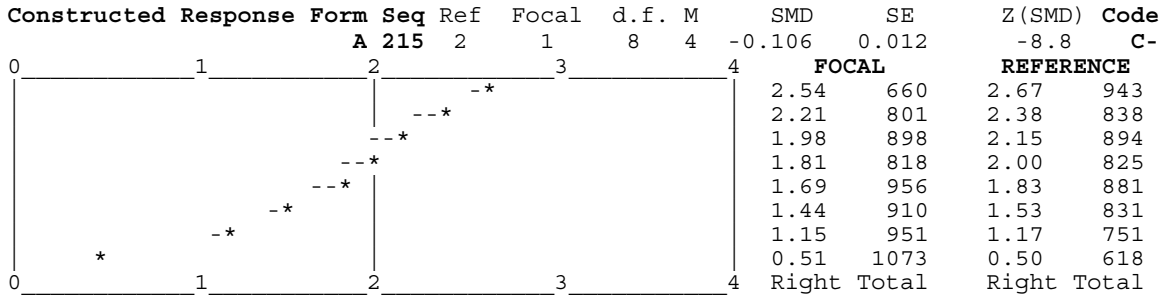
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 5 Reading Items



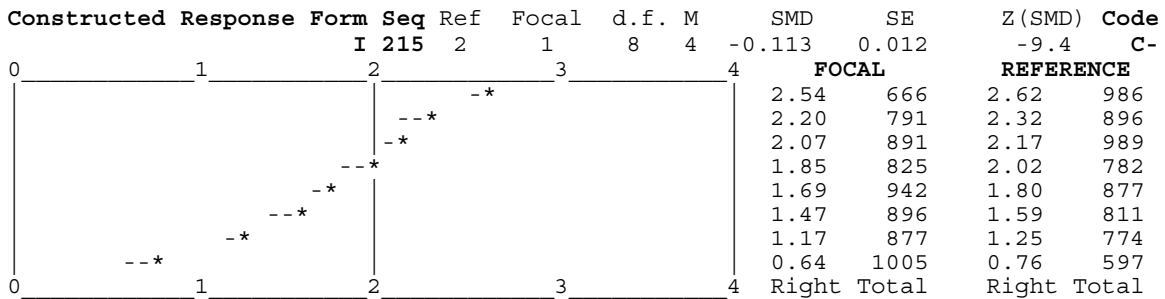
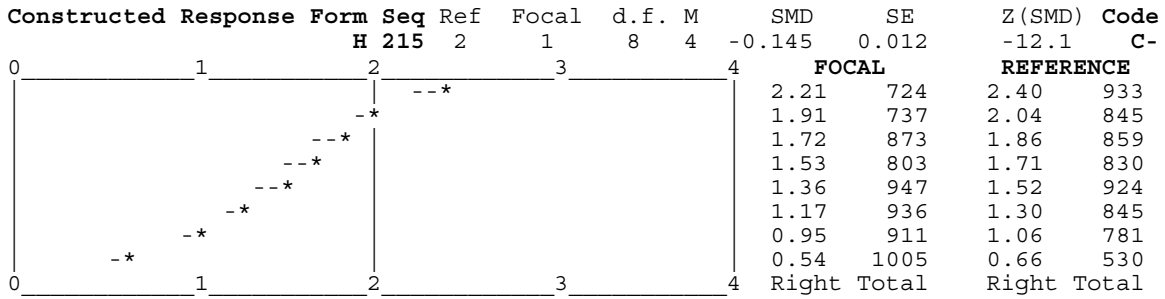
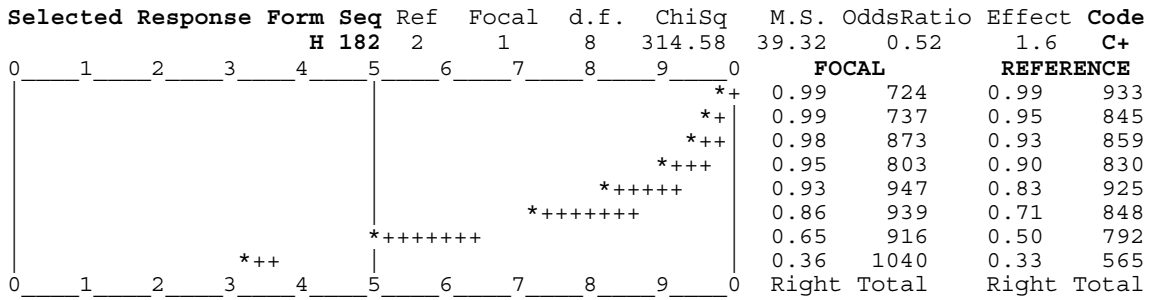
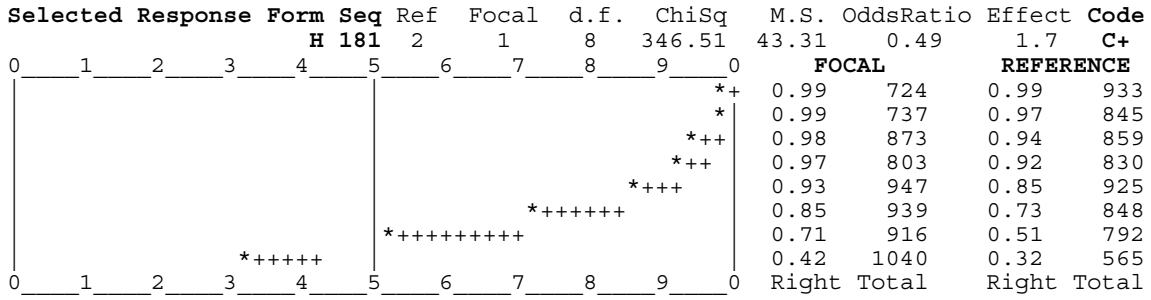
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 8 Reading Items



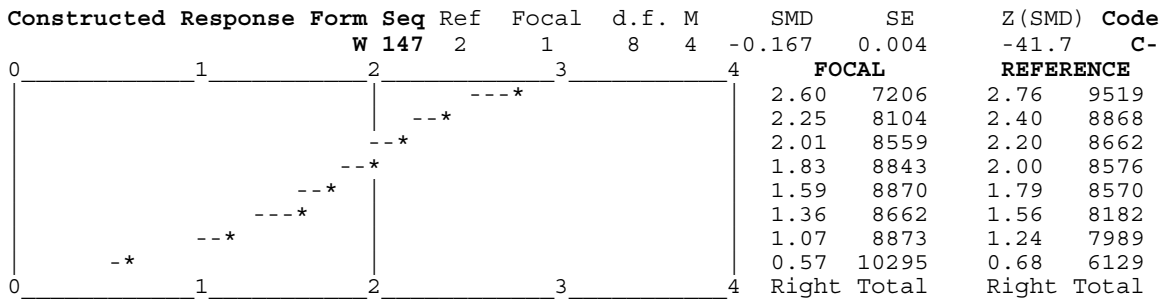
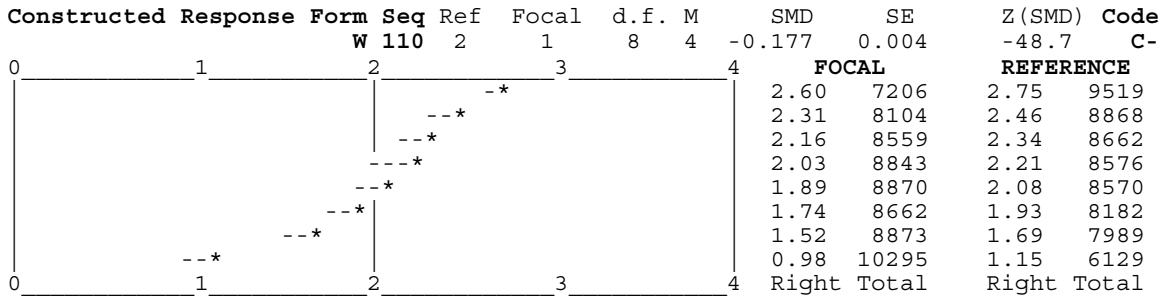
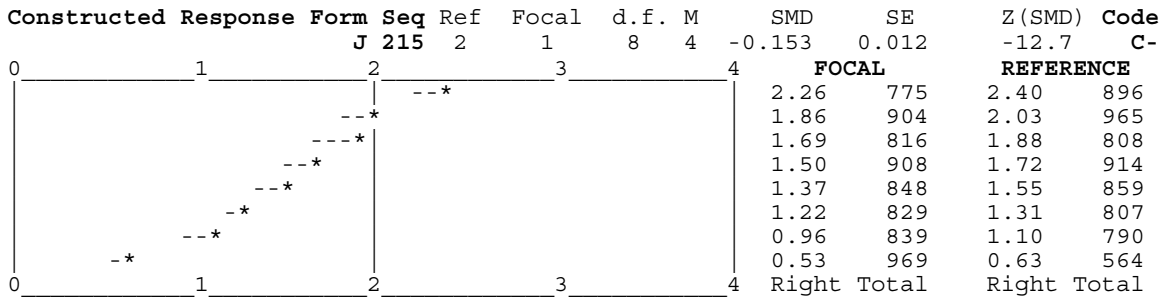
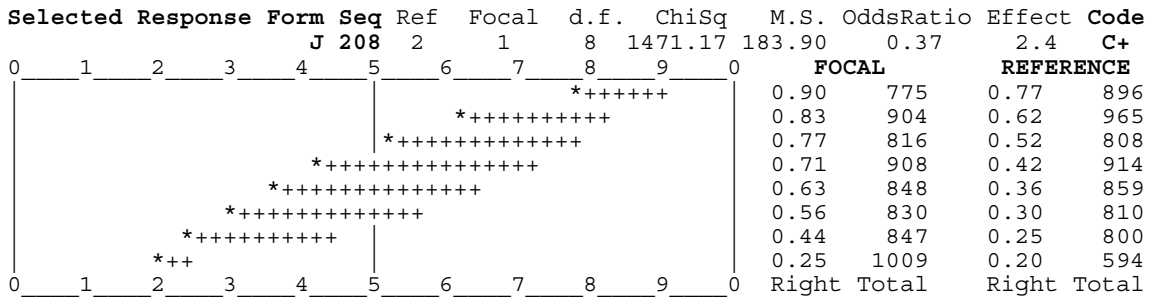
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 8 Reading Items



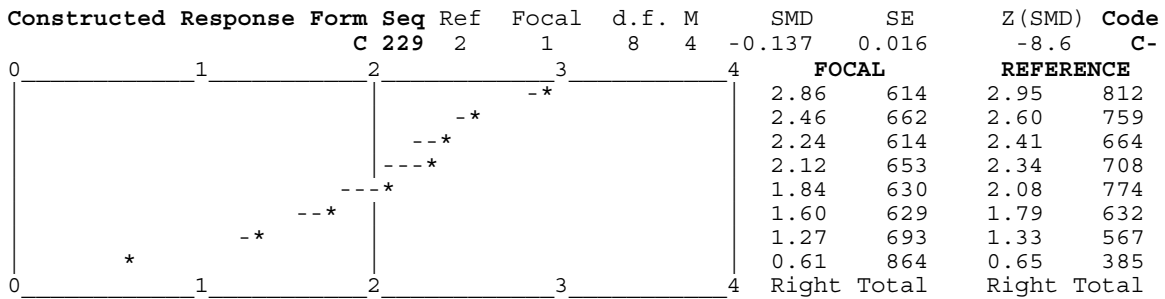
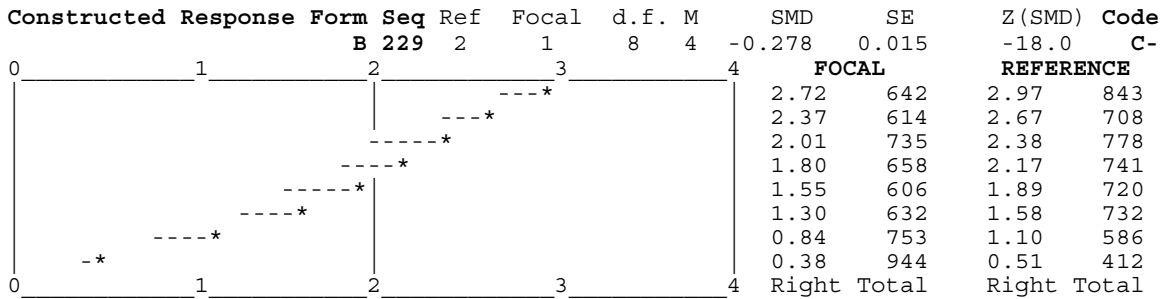
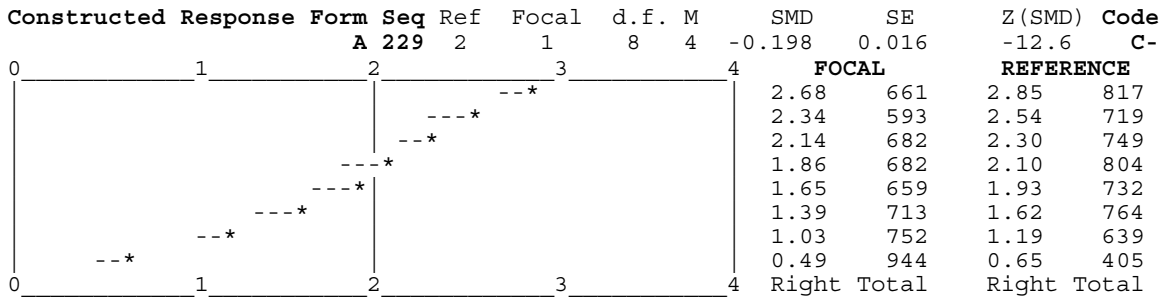
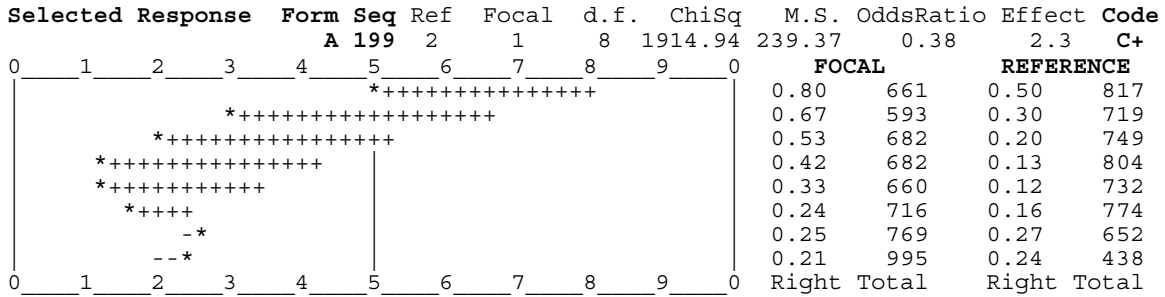
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 8 Reading Items



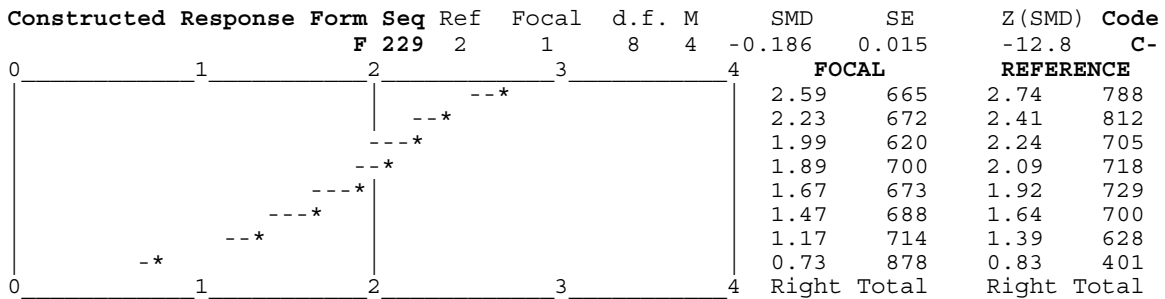
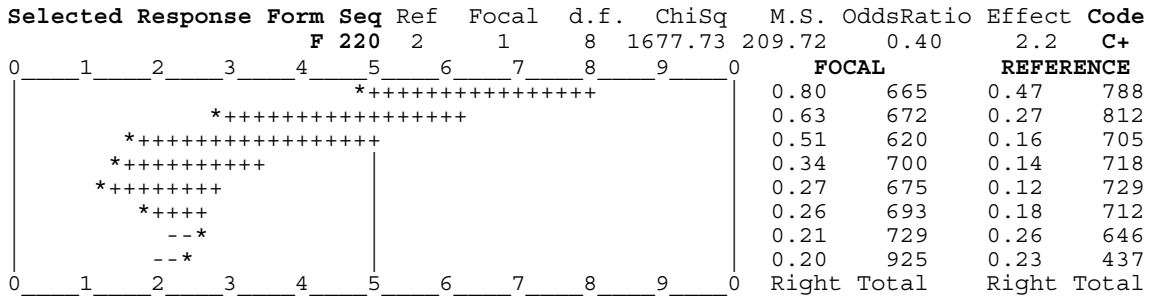
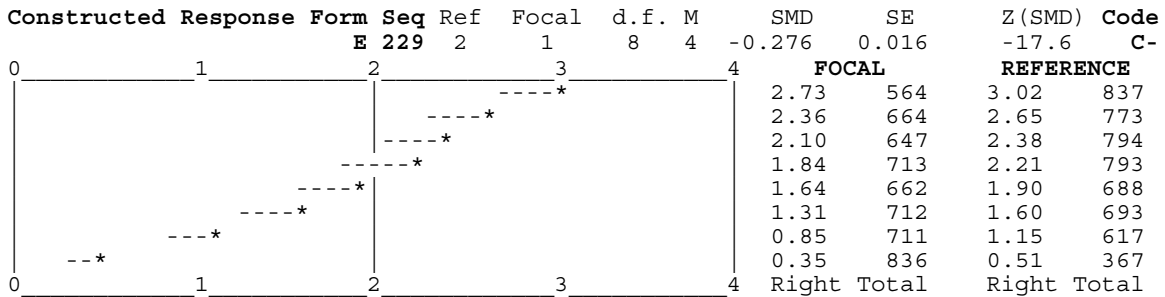
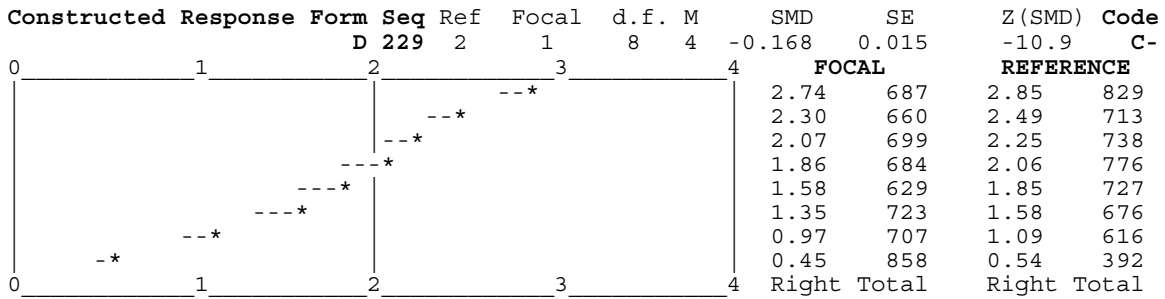
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 11 Reading Items



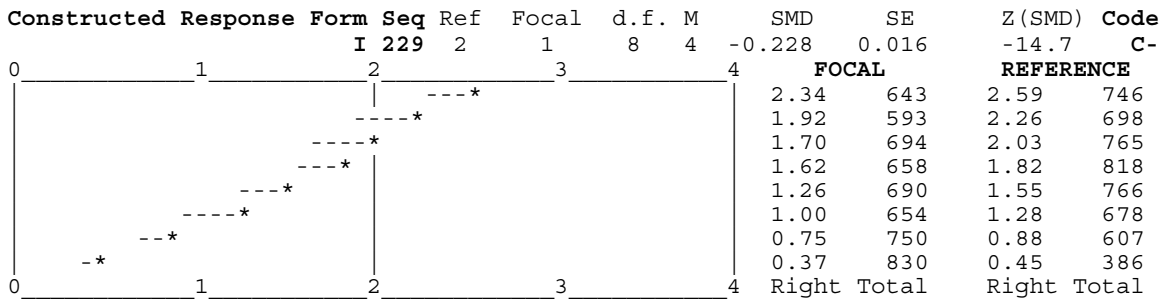
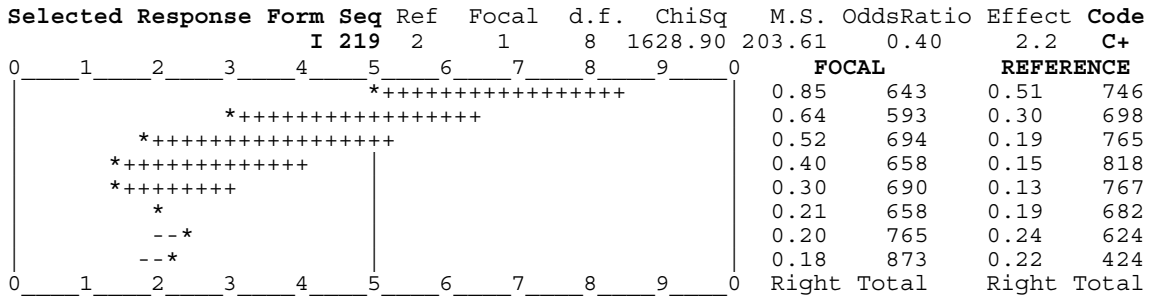
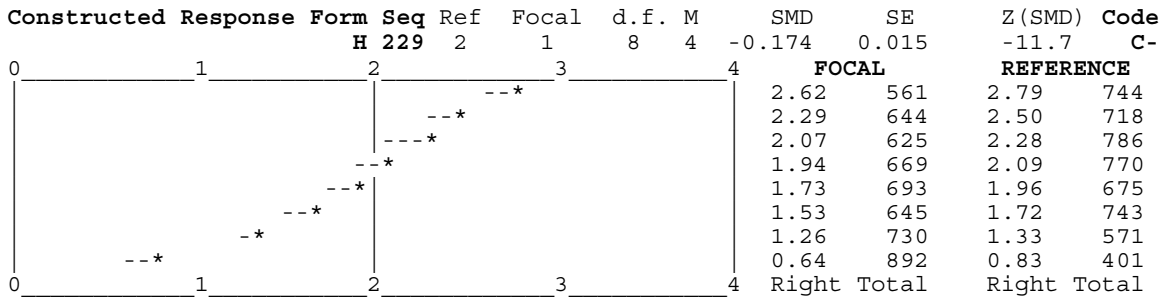
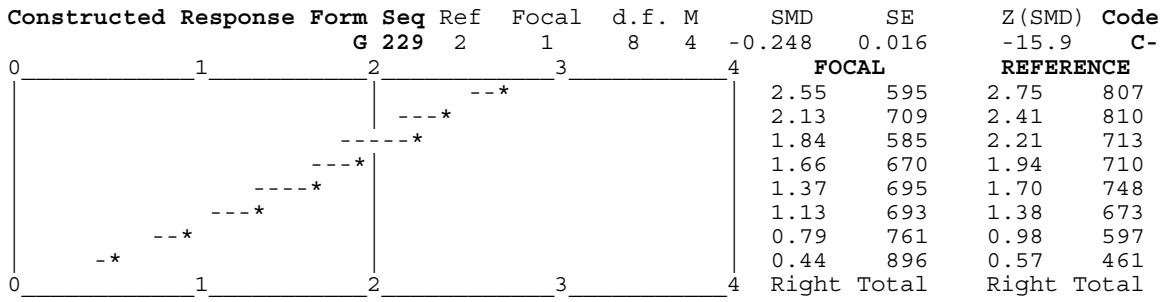
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 11 Reading Items



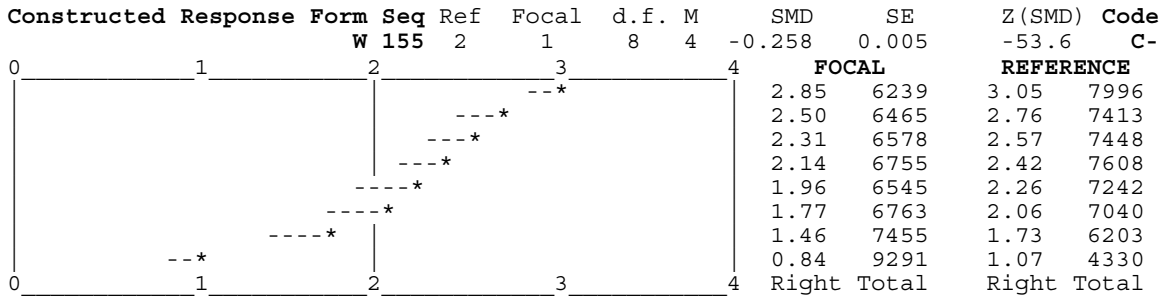
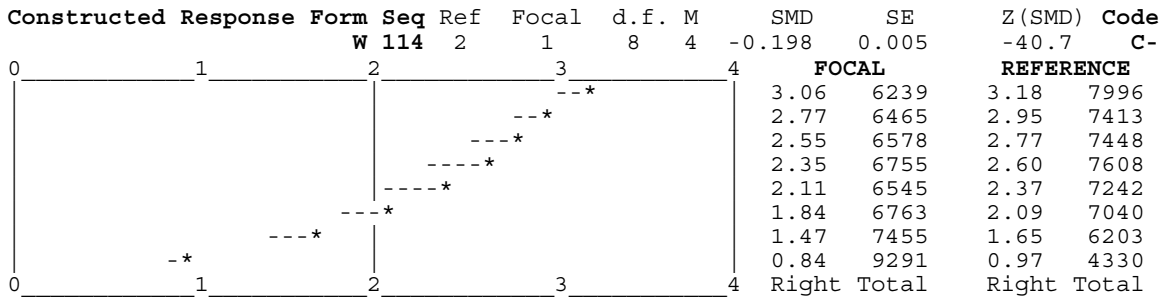
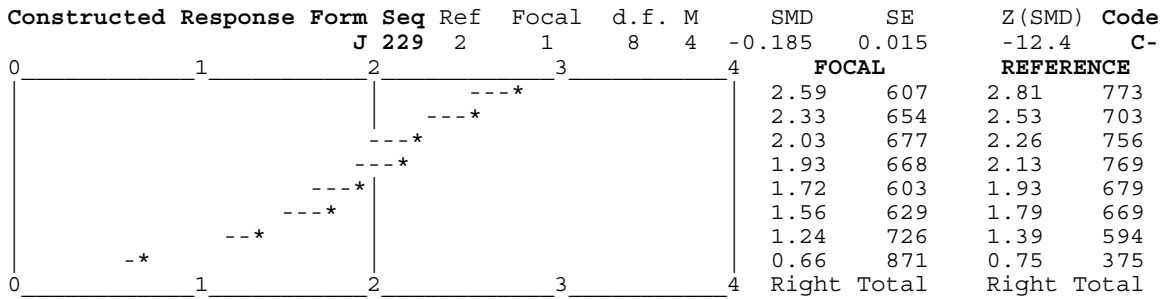
Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 11 Reading Items



Appendix V: 2001 PSSA DIF Plots for Questionable Reading Items

Grade 11 Reading Items



**Appendix W: 2001 PSSA School Level
Percentile Ranks**

Percentile Rank	Reading			Mathematics		
	Grade 5	Grade 8	Grade 11	Grade 5	Grade 8	Grade 11
1	732	724	722	931	848	832
2	971	842	861	1021	990	946
3	1016	892	902	1045	1031	969
4	1045	934	939	1061	1043	990
5	1063	967	954	1074	1050	1020
6	1075	993	988	1090	1056	1034
7	1090	1011	1007	1102	1071	1047
8	1102	1026	1018	1117	1078	1054
9	1114	1047	1027	1131	1085	1061
10	1125	1059	1047	1140	1093	1071
11	1133	1072	1055	1148	1100	1079
12	1143	1081	1072	1156	1108	1083
13	1154	1090	1079	1168	1116	1092
14	1172	1099	1091	1180	1127	1109
15	1181	1109	1103	1191	1137	1116
16	1188	1114	1117	1197	1142	1125
17	1200	1133	1134	1203	1150	1139
18	1208	1146	1150	1211	1155	1147
19	1217	1155	1164	1215	1164	1153
20	1225	1160	1169	1224	1172	1170
21	1231	1166	1177	1228	1182	1177
22	1236	1177	1189	1232	1191	1185
23	1240	1192	1193	1235	1196	1196
24	1248	1199	1200	1239	1203	1203
25	1253	1207	1205	1243	1208	1205
26	1257	1211	1209	1248	1212	1210
27	1261	1218	1217	1252	1216	1217
28	1264	1223	1224	1257	1221	1219
29	1268	1230	1229	1259	1225	1226
30	1270	1238	1233	1264	1230	1230
31	1274	1243	1238	1266	1236	1234
32	1277	1248	1242	1269	1239	1239
33	1280	1252	1245	1272	1244	1241
34	1283	1258	1249	1274	1248	1244
35	1285	1260	1250	1276	1252	1248
36	1288	1262	1255	1278	1256	1250
37	1291	1268	1258	1281	1260	1252
38	1295	1272	1261	1285	1263	1255
39	1298	1275	1263	1289	1268	1258
40	1300	1279	1264	1292	1271	1261
41	1303	1282	1268	1294	1274	1262
42	1305	1283	1271	1296	1277	1264
43	1307	1286	1275	1299	1278	1267
44	1309	1289	1277	1301	1282	1270
45	1312	1292	1279	1304	1285	1272
46	1314	1295	1282	1307	1286	1275
47	1317	1298	1283	1309	1289	1276
48	1318	1300	1285	1311	1292	1278
49	1322	1301	1287	1314	1294	1280
50	1324	1305	1290	1318	1297	1282

Appendix W: 2001 PSSA School Level Percentile Ranks

Percentile Rank	Reading			Mathematics		
	Grade 5	Grade 8	Grade 11	Grade 5	Grade 8	Grade 11
50	1324	1305	1290	1318	1297	1282
51	1326	1308	1292	1319	1299	1283
52	1328	1311	1294	1321	1303	1286
53	1330	1313	1296	1323	1305	1287
54	1331	1315	1298	1325	1307	1288
55	1333	1318	1299	1327	1309	1291
56	1335	1320	1300	1330	1313	1292
57	1337	1323	1303	1332	1316	1294
58	1338	1326	1306	1334	1318	1296
59	1340	1328	1309	1337	1321	1298
60	1343	1331	1310	1339	1322	1302
61	1345	1333	1311	1341	1326	1304
62	1348	1337	1313	1343	1329	1305
63	1350	1339	1314	1345	1333	1307
64	1352	1341	1315	1347	1336	1308
65	1354	1342	1316	1349	1338	1309
66	1356	1344	1319	1352	1341	1313
67	1359	1347	1321	1355	1343	1314
68	1361	1350	1323	1358	1346	1316
69	1364	1351	1325	1360	1348	1318
70	1366	1354	1327	1362	1352	1320
71	1368	1357	1329	1364	1355	1323
72	1370	1359	1330	1367	1357	1324
73	1372	1361	1332	1370	1360	1328
74	1374	1362	1334	1373	1362	1331
75	1377	1365	1338	1375	1366	1333
76	1380	1367	1342	1378	1369	1334
77	1383	1371	1345	1380	1372	1336
78	1386	1375	1347	1383	1377	1338
79	1390	1380	1349	1385	1379	1341
80	1392	1382	1351	1389	1380	1345
81	1395	1385	1353	1392	1382	1349
82	1397	1388	1355	1394	1385	1352
83	1401	1391	1359	1397	1387	1356
84	1403	1395	1362	1402	1391	1359
85	1408	1400	1364	1405	1395	1362
86	1412	1403	1367	1408	1399	1367
87	1415	1407	1372	1412	1405	1371
88	1418	1411	1376	1416	1410	1377
89	1423	1416	1379	1419	1412	1380
90	1426	1422	1385	1426	1416	1387
91	1429	1428	1391	1431	1419	1395
92	1435	1437	1398	1436	1430	1398
93	1441	1443	1401	1441	1436	1404
94	1446	1451	1409	1446	1451	1412
95	1452	1459	1415	1457	1459	1418
96	1458	1468	1425	1465	1468	1428
97	1467	1480	1432	1475	1479	1450
98	1482	1510	1455	1485	1496	1463
99	1504	1553	1492	1501	1518	1516

Appendix X: 2001 PSSA Percentile Rank Conversion Tables for Scaled Scores

Mathematics									
Percentile Rank	Grade 5			Grade 8			Grade 11		
	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score
01	595	5	373	1	100	0			
02	947	22	952	18	922	19			
03	960	23	980	20	938	20			
04	985	25	993	21	954	21			
05	997	26	1005	22	969	22			
06	1021	28	1018	23	984	23			
07	1032	29			998	24			
08	1043	30	1030	24	1012	25			
09	1054	31	1041	25					
10	1065	32	1053	26	1026	26			
11	1076	33	1064	27	1039	27			
12	1087	34							
13			1075	28	1053	28			
14	1097	35	1086	29	1066	29			
15	1108	36							
16	1118	37	1097	30	1079	30			
17			1108	31					
18	1129	38			1091	31			
19	1139	39	1119	32	1104	32			
20	1149	40	1129	33					
21					1117	33			
22	1160	41	1140	34					
23			1150	35	1129	34			
24	1170	42			1141	35			
25	1180	43	1161	36					
26					1154	36			
27	1190	44	1171	37					
28					1166	37			
29	1200	45	1181	38					
30	1210	46	1191	39	1178	38			
31									
32	1221	47	1202	40	1190	39			

Reading									
Percentile Rank	Grade 5			Grade 8			Grade 11		
	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score
01	381	2	100	0					
02	895	15	827	19	825	20			
03	916	16	863	21	859	22			
04	935	17	897	23	890	24			
05	954	18	914	24	906	25			
06	972	19	930	25	921	26			
07	990	20	962	27	935	27			
08	1008	21	977	28	964	29			
09			993	29	978	30			
10	1025	22	1008	30	992	31			
11	1042	23	1023	31	1005	32			
12	1059	24	1037	32	1019	33			
13			1052	33	1032	34			
14	1075	25	1067	34	1046	35			
15	1091	26	1081	35	1058	36			
16					1071	37			
17	1107	27	1095	36	1084	38			
18			1110	37	1097	39			
19	1123	28			1110	40			
20			1124	38					
21	1140	29	1139	39	1123	41			
22					1136	42			
23	1155	30	1153	40	1148	43			
24			1167	41					
25	1172	31			1161	44			
26			1181	42	1174	45			
27	1188	32							
28			1196	43	1187	46			
29	1204	33							
30			1210	44	1200	47			
31					1213	48			
32	1220	34	1225	45					

Appendix X: 2001 PSSA Percentile Rank Conversion Tables for Scaled Scores

Mathematics						
Percentile Rank	Grade 5		Grade 8		Grade 11	
	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score
33						
34	1231	48	1212	41	1202	40
35						
36	1241	49	1222	42	1214	41
37			1233	43		
38	1252	50			1226	42
39			1243	44		
40	1262	51			1238	43
41			1253	45		
42	1273	52			1249	44
43			1264	46		
44	1283	53			1261	45
45			1274	47		
46					1273	46
47	1294	54	1285	48		
48					1285	47
49	1305	55	1295	49		
50					1297	48
51	1316	56	1306	50		
52			1317	51	1309	49
53	1327	57				
54			1328	52	1320	50
56	1338	58	1339	53	1332	51
57						
58	1350	59	1350	54	1344	52
60	1362	60	1361	55	1356	53
61						
62			1372	56	1368	54
63	1374	61			1380	55
64			1383	57		

Reading						
Percentile Rank	Grade 5		Grade 8		Grade 11	
	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score
33					1225	49
34	1237	35				
35			1240	46	1238	50
36						
37	1254	36	1254	47	1252	51
38						
39			1269	48	1265	52
40	1271	37				
41					1278	53
42			1285	49		
43	1288	38				
44					1292	54
45			1300	50		
46					1305	55
47	1306	39				
48			1315	51		
49					1319	56
50	1325	40				
51			1331	52	1333	57
52						
53						
54	1343	41	1347	53	1347	58
56						
57			1363	54	1361	59
58	1363	42				
60					1376	60
61			1380	55		
62						
63	1383	43			1391	61
64			1397	56		

Appendix X: 2001 PSSA Percentile Rank Conversion Tables for Scaled Scores

Mathematics						
Percentile Rank	Grade 5		Grade 8		Grade 11	
	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score
65	1386	62			1392	56
66			1395	58		
67					1405	57
68	1398	63	1406	59		
69					1417	58
70	1411	64	1418	60		
71			1430	61	1430	59
72	1424	65				
73			1441	62	1442	60
75	1437	66	1453	63	1455	61
77	1451	67	1465	64	1469	62
78					1483	63
79	1466	68	1477	65		
80			1490	66	1497	64
81	1481	69				
82			1502	67	1511	65
84	1496	70	1515	68	1527	66
85			1528	69	1542	67
86	1512	71				
87			1542	70	1559	68
88	1529	72	1556	71	1576	69
89						
90	1547	73	1570	72	1594	70
91	1566	74	1585	73	1613	71
92			1601	74	1633	72
93	1586	75				
94	1608	76	1619	75	1655	73
95			1637	76	1678	74
96	1633	77	1658	77	1703	75

Reading						
Percentile Rank	Grade 5		Grade 8		Grade 11	
	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score
65						
66					1406	62
67	1404	44				
68			1414	57		
69					1421	63
70						
71	1426	45	1432	58		
72					1437	64
73						
75	1449	46	1450	59	1454	65
77						
78			1469	60	1471	66
79						
80	1473	47				
81					1488	67
82			1489	61		
84	1499	48			1506	68
85			1509	62		
86					1524	69
87						
88	1527	49	1530	63		
89					1543	70
90			1552	64		
91	1557	50			1563	71
92						
93			1575	65	1584	72
94	1590	51				
95			1599	66	1606	73
96	1627	52	1625	67	1629	74

Appendix X: 2001 PSSA Percentile Rank Conversion Tables for Scaled Scores

Mathematics									
		Grade 5			Grade 8			Grade 11	
Percentile Rank	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	
97	1659	78	1681	78	1731	76	1731	76	
98	1690	79	1708	79	1796	78	1796	78	
99	1769	81	1778	81	1835	79	1835	79	

Reading									
		Grade 5			Grade 8			Grade 11	
Percentile Rank	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	
97	1669	53	1652	68	1653	75	1653	75	
98	1717	54	1681	69	1679	76	1679	76	
99	1774	55	1713	70	1707	77	1707	77	