

World-Class Instructional Design and Assessment



**Annual Technical Report for
ACCESS for ELLs® 2.0
Online English Language Proficiency Test
Series 402, 2017–2018 Administration**

Annual Technical Report No. 14A

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Executive Summary

This is the 14th annual technical report on the ACCESS for ELLs® English Language Proficiency Test and the third report on the ACCESS for ELLs 2.0 assessment as given in Online format. ACCESS for ELLs 2.0 measures the same constructs as ACCESS for ELLs, but the assessment is now offered in an online, multistage adaptive format.

This technical report is produced as a service to members and potential members of the WIDA Consortium. The technical information herein is intended for use by those who have technical knowledge of test construction and measurement procedures, as stated in *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 2014).

ACCESS for ELLs is intended to assess reliably and validly the English language development of English language learners (ELLs) in Grades K–12 according to the WIDA 2012 Amplification of the English Language Development Standards Kindergarten–Grade 12 (WIDA Consortium, 2012). Results on ACCESS for ELLs are used by WIDA Consortium states for monitoring the progress of students, for making decisions about exiting students from language support services, and for accountability. WIDA additionally provides screening instruments for initial identification purposes, however decision processes on how these are incorporated into identification decisions are at individual states' discretion.

ACCESS for ELLs assesses students in the four domains of listening, reading, writing, and speaking, as required by federal law (Elementary and Secondary Education Act of 1965, amended 2015; §1111(b)(1)(F); §1111(b)(2)(G)), and provides composite scores as required by the same statute (§3121).

ACCESS for ELLs 2.0 Series 402 was administered in school year 2017–2018 in 35 states, the Bureau of Indian Education, the District of Columbia, and the Commonwealth of the Northern Marianas, for a total of 38 state entities (henceforth “states”). ACCESS for ELLs 2.0 Series 402 was offered in two administrative formats, an online format (Grades 1–12) and a paper format (Kindergarten–Grade 12). Table 1 summarizes the numbers of students, by state, who participated in the Grades 1–12 assessment online, in the Grades 1–12 assessment on paper, the total number of students who participated in the Grades 1–12 assessment, the total number who participated in the Kindergarten assessment (offered only in the paper format), and the total participants in ACCESS K–12. The current report (WIDA ACCESS Technical Report 14A) provides technical information pertaining to ACCESS for ELLs 2.0 Series 402 Online. A second report (WIDA ACCESS Technical Report 14B) provides technical information for the ACCESS for ELLs 2.0 Series 402 Paper assessment, including the Kindergarten assessment.

Table 1

Participation in ACCESS for ELLs Online and Paper, Series 402

State	Participants in ACCESS for ELLs Grades 1–12			Participants in Kindergarten	Total Participants in ACCESS for ELLs Grades K–12
	Participants in ACCESS for ELLs Online	Participants in ACCESS for ELLs Paper	Total Participants in ACCESS for ELLs		
AK	10,362	3,055	13,417	1,213	14,630
AL	17,000	4,295	21,295	3,522	24,817
BI	787	3,168	3,955	474	4,429
CO	64,431	26,375	90,806	10,152	100,958
DC	6,547	39	6,586	1,078	7,664
DE	10,990	17	11,007	1,745	12,752
FL	0	242,877	242,877	35,236	278,113
GA	91,924	6,761	98,685	16,138	114,823
HI	13,279	7	13,286	1,909	15,195
ID	15,665	17	15,682	2,084	17,766
IL	160,098	21,534	181,632	25,666	207,298
IN	50,755	427	51,182	7,513	58,695
KY	22,841	101	22,942	2,931	25,873
MA	71,194	10,730	81,924	10,927	92,851
MD	69,259	88	69,347	10,324	79,671
ME	4,758	12	4,770	470	5,240
MI	89,998	1,334	91,332	9,848	101,180
MN	61,086	397	61,483	8,206	69,689
MO	29,070	110	29,180	4,672	33,852
MP	1,294	0	1,294	95	1,389
MT	2,687	0	2,687	192	2,879
NC	92,080	731	92,811	11,938	104,749
ND	3,142	47	3,189	426	3,615
NH	4,231	241	4,472	468	4,940
NJ	68,922	939	69,861	12,664	82,525
NM	43,674	76	43,750	4,292	48,042
NV	67,625	36	67,661	6,498	74,159
OK	33,897	10,125	44,022	6,464	50,486
PA	55,092	4,878	59,970	5,269	65,239
RI	11,514	94	11,608	1,110	12,718
SC	40,526	1,128	41,654	3,279	44,933
SD	4,405	157	4,562	770	5,332
TN	39,561	17	39,578	5,732	45,310
UT	40,903	15	40,918	4,533	45,451
VA	82,647	8,810	91,457	14,020	105,477
VT	1,436	14	1,450	205	1,655
WI	46,884	181	47,065	5,468	52,533
WY	2,299	19	2,318	334	2,652
Total	1,432,863	348,852	1,781,715	237,865	2,019,580

Summary Highlights

This report presents a wealth of data documenting the technical properties of ACCESS for ELLs 2.0 Series 402 Online, which cannot be fully summarized here. In addition to information on validity, the report presents information on reliability of test scores and the accuracy and consistency of proficiency level classifications, including information on conditional standard errors of measurement and a separate table highlighting conditional standard errors around the cut scores. Item-level analyses include item difficulty levels, fit of the items to the Rasch measurement model, and differential item functioning (DIF) analyses for each item or assessment task. The annual analyses of the technical properties of ACCESS for ELLs test forms are used in the continual refinement and improvement of ACCESS for ELLs.

Argument-Based Validation Framework for ACCESS for ELLs

The purpose of this report is to provide evidence for the validity of the online version of ACCESS for ELLs 2.0 (hereafter ACCESS 2.0 Online), when used for its intended purposes. This report is structured using a validation approach developed at the Center for Applied Linguistics (CAL) and based on Bachman and Palmer's (2010) assessment use argument, integrated with the Evidence Centered Design principles outlined by Mislevy, Almond, and Lukas (2004). CAL's validation framework, shown in Figure 2 of Part I of this report, consists of seven steps, leading the line of argumentation from *Plan* (Step 7) through *Consequences* (Step 1). Note that there are currently slight differences in the organization of validation argumentation between the ACCESS Online and ACCESS Paper reports. WIDA is working to make validity arguments more consistent and responsive to peer review criteria. Additionally elements of the assessment use argument are being moved to a standalone document.

Part I of this report, *Foundations*, provides details on the validation argument, with cross-references to technical results that support the argument.

Part II, *Technical Results*, presents evidence in the form of tables and figures that present information about the technical qualities of the assessment.

Demographic Data

The Series 402 Online data set included the results of 1,432,863 students. The largest grade was Grade 3 with 193,146 students, while the smallest was Grade 12 with 45,508 students. Of the participating WIDA states, the largest was Illinois with 160,098 students, while the smallest was the Bureau of Indian Education with 787 students.

Reliability and Accuracy Data

For most test users, the Overall Composite proficiency score, based on performances in Listening, Reading, Writing and Speaking, is the major score used for making decisions about gains in student proficiency and exiting from language support services. Therefore, it is

important to ensure that the reliability (stratified Cronbach’s alpha, presented in Part II, Section 3.3) and accuracy of classification (using Livingston & Lewis method, presented in Part II, Section 3.4) of the Overall Composite score is high.

The reliability of the Overall Composite score is very high across all grade-level clusters. For Grade 1 it was .943; for Grades 2–3, .950; for Grades 4–5, .951; for Grades 6–8, .958; and for Grades 9–12, .958.

Likewise, as

Table 2 shows, the accuracy of classification for student placement using the Overall Composite score around the proficiency level cut scores is very high across grade and proficiency levels. Because many WIDA Consortium states use the proficiency level score of 5.0 as a criterion for exiting students from language support services, the column headed 4/5 Cut (the proficiency level score of 5.0) is of particular interest. Specifically, the accuracy of classification indices for the 4/5 cut indicate that the likelihood that students are being correctly classified into Proficiency Level 5 (“Bridging”) using the Overall composite scores is high across grades (all above .92.)

Table 2
Accuracy of Classification Indices of Overall Composite Score at Cut Points (Proficiency Level Score)

Grade	1/2 Cut (2.0)	2/3 Cut (3.0)	3/4 Cut (4.0)	4/5 Cut (5.0)	5/6 Cut (6.0)
1	0.968	0.925	0.958	0.990	0.999
2	0.980	0.943	0.935	0.979	0.999
3	0.982	0.955	0.922	0.961	0.999
4	0.990	0.974	0.933	0.921	0.983
5	0.985	0.967	0.929	0.916	0.987
6	0.976	0.946	0.941	0.985	N/A
7	0.972	0.945	0.940	0.977	N/A
8	0.970	0.946	0.936	0.974	N/A
9	0.968	0.944	0.944	0.979	0.996
10	0.966	0.944	0.945	0.979	0.997
11	0.967	0.942	0.947	0.982	0.998
12	0.964	0.938	0.952	0.985	N/A

Note: N/A indicates that there are insufficient (fewer than 100) test takers to estimate the statistic. In these cases, accuracy of classification conditional on that level either cannot be computed or the software produces estimates that are out of bound.

Part I: Foundations

Contents

1	The Validation Framework for ACCESS 2.0 Online	1
1.1	Development of the Validation Framework for ACCESS 2.0 Online	1
1.2	Description of the Framework	2
2	The Plan for ACCESS 2.0 Online	5
2.1	Purpose Statement: What are the intended decisions and consequences of using ACCESS?	5
2.2	Domain Analysis: What is WIDA’s conceptualization of the development of academic English language proficiency?	6
2.2.1	The WIDA Standards	6
2.2.2	Grade-Level Clusters	7
2.2.3	Language Domains	7
2.2.4	Language Proficiency Levels	7
2.3	Domain Modeling: How are the components of the ACCESS assessment program interrelated?	8
3	The Design of ACCESS 2.0 Online	9
3.1	The Student Model: What knowledge, skills, and abilities does a student possess?	9
3.2	The Task Model: What do assessment tasks for ACCESS 2.0 Online look like?	9
3.2.1	Listening Items	9
3.2.2	Reading Items	10
3.2.3	Writing Tasks	10
3.2.4	Speaking Tasks	10
3.3	The Evidence Model	12
3.3.1	How are student performances on ACCESS 2.0 Online scored?	12
3.3.2	How are measures of student performances on ACCESS 2.0 Online calculated?	16
3.4	The Assembly Model: How are the assessment components for ACCESS put together?	19
3.4.1	Listening	20
3.4.2	Reading	21
3.4.3	Writing	21
3.4.4	Speaking	22
4	Assessment Performance: The Implementation of ACCESS 2.0 Online	24
4.1	How is ACCESS implemented?	24
4.1.1	Listening	24
4.1.2	Reading	25
4.1.3	Writing	27
4.1.4	Speaking	28
4.2	What is the assessment delivery experience for students taking ACCESS 2.0 Online?	30
4.2.1	Listening and Reading	30
4.2.2	Writing	30
4.2.3	Speaking	30
4.3	Assessment performance—interaction between test and student	30

5	Assessment Records for ACCESS 2.0 Online	31
5.1	Claims for the Assessment Records for ACCESS.....	31
5.2	Evidence for Assessment Records Claims of ACCESS 2.0 Online	33
5.3	Summary of Assessment Records Claims, Actions, and Evidence	42

ACCESS for ELLs 2.0 Online is a secure, large-scale English language proficiency assessment administered to students in Grades 1–12 who have been identified as English language learners (ELLs). It is administered annually in WIDA Consortium member states to monitor students’ progress in acquiring academic English. ACCESS 2.0 Online is a standards-based English language proficiency test designed to measure both social and academic language proficiency of ELLs in English in a school context. It assesses social and instructional language, as well as the academic language associated with language arts, mathematics, science, and social studies, across the four language domains (Listening, Reading, Writing, and Speaking).

1 The Validation Framework for ACCESS 2.0 Online

1.1 Development of the Validation Framework for ACCESS 2.0 Online

As with any assessment, an important consideration during the development of ACCESS 2.0 was determining how to establish its validity. Validity is “the degree to which evidence and theory support the interpretations of test scores for proposed uses of tests” (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014, p. 11). Evaluations of test validity consider the evidence that supports the interpretations and decisions made about students on the basis of their performance on a test, and the appropriateness and adequacy of such interpretations. A fully developed validation framework, including an Assessment Use Argument (Bachman & Palmer, 2010), consists of several steps that connect test design and administration to intended and actual score interpretation and consequences. The present section contextualizes the information presented in this Annual Technical Report within an argument-based approach to addressing validity (Bachman & Palmer, 2010; Chapelle, Enright, & Jamieson, 2008; Kane, 2002, 2013; Mislevy, Almond, & Lukas, 2004) for ACCESS 2.0 Online.

An argument-based approach to the ACCESS 2.0 Online validation framework organizes the information in the present report to support claims about Assessment Records (i.e., test scores and proficiency level descriptions collected via ACCESS 2.0 Online). Specifically, tables and figures from this report explicitly address questions related to assessment data. Chapelle, Enright, and Jamieson (2010) support using such a structure for presenting information to assessment users because, “based on an analysis of four points of comparison—framing the intended score interpretation, outlining the essential research, structuring research results into a validity argument, and challenging the validity argument—we conclude that an argument-based approach to validity introduces some new and useful concepts and practices” (p. 3).

The validity argument for ACCESS 2.0 Online shows the path from test design to student performance to the uses and interpretations of test scores and the subsequent consequences of test use. This framework is structured around assertions, or claims, about the assessment. The claims are presented as a series of statements that connect some aspect of the assessment process to the intended purposes of the assessment. Evidence for each claim is then organized by the

action that is used to ensure each claim. Evidence includes results from analyses of test data, outside documentation, and other resources. In the validation argument, this process of identifying evidence to support claims encompasses the entire testing process, from the commencement of test design to the consequences of test use (Bachman & Palmer, 2010; Llosa, 2008). Figure 1 shows the process by which evidence supports validation actions, which are used to establish larger claims about ACCESS 2.0 Online. The figure shows the generic structure of the line of argumentation for validity.

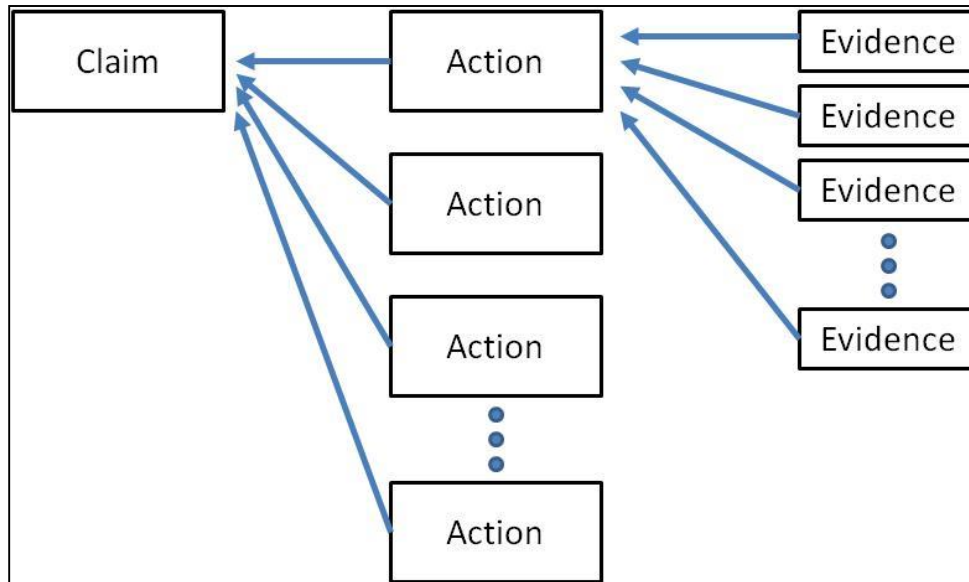


Figure 1. General argument structure for assessment validation (simplified from Toulmin, 2003).

1.2 Description of the Framework

The generic validation framework applied to the entire ACCESS 2.0 Online testing process was developed at the Center for Applied Linguistics (CAL) and is hereafter referred to as CAL’s Validation Framework. CAL’s Validation Framework, shown in Figure 2, combines models for both test development (i.e., Evidence-Centered Design; Mislevy et al., 2004) and assessment validation (i.e., the Assessment Use Argument from Bachman and Palmer [2010]) to cover the assessment development and implementation process from initial conceptualization to score interpretations and consequences of using the assessment. This framework constantly looks both forward and backward, and each subsequent step depends upon the strength of the step below it; for this reason, the steps going from bottom to top are numbered from seven to one. For example, during the initial *Plan* step (Step 7), test developers state the anticipated decisions and consequences of implementing the assessment program, which then drive the development and implementation of the assessment (Steps 6 through 4). Assessment results are then used to formulate Interpretations (Step 3) and to make Decisions (Step 2). Consequences (Step 1)

represents the culmination of all previous steps. This structure highlights the fact that any weakness in a lower step affects the steps above it.

In CAL’s Validation Framework, *Plan* involves an examination of possible decisions that state educational agencies might make and consequences that might result from use of the assessment. This leads to the consideration of several models during *Design*, where specifications that answer such critical questions as “What are we measuring?” and “How do we measure it?” are developed (Mislevy et al., 2004).

The subsequent steps of the validation framework highlight the trialing, implementation, and use of the assessment results, beginning with students’ performance on the assessment (*Assessment Performance*) and continuing through the collection of test scores (*Assessment Records*), interpretations of those test scores (*Interpretations*), decisions made based on the test scores (*Decisions*), and the consequences of test use (*Consequences*).

Part I of this report presents evidence regarding the Planning, Designing, and Operationalization of the test and a description of the claims and evidence related to *Assessment Records*. The technical results associated with those claims are found in Part II.

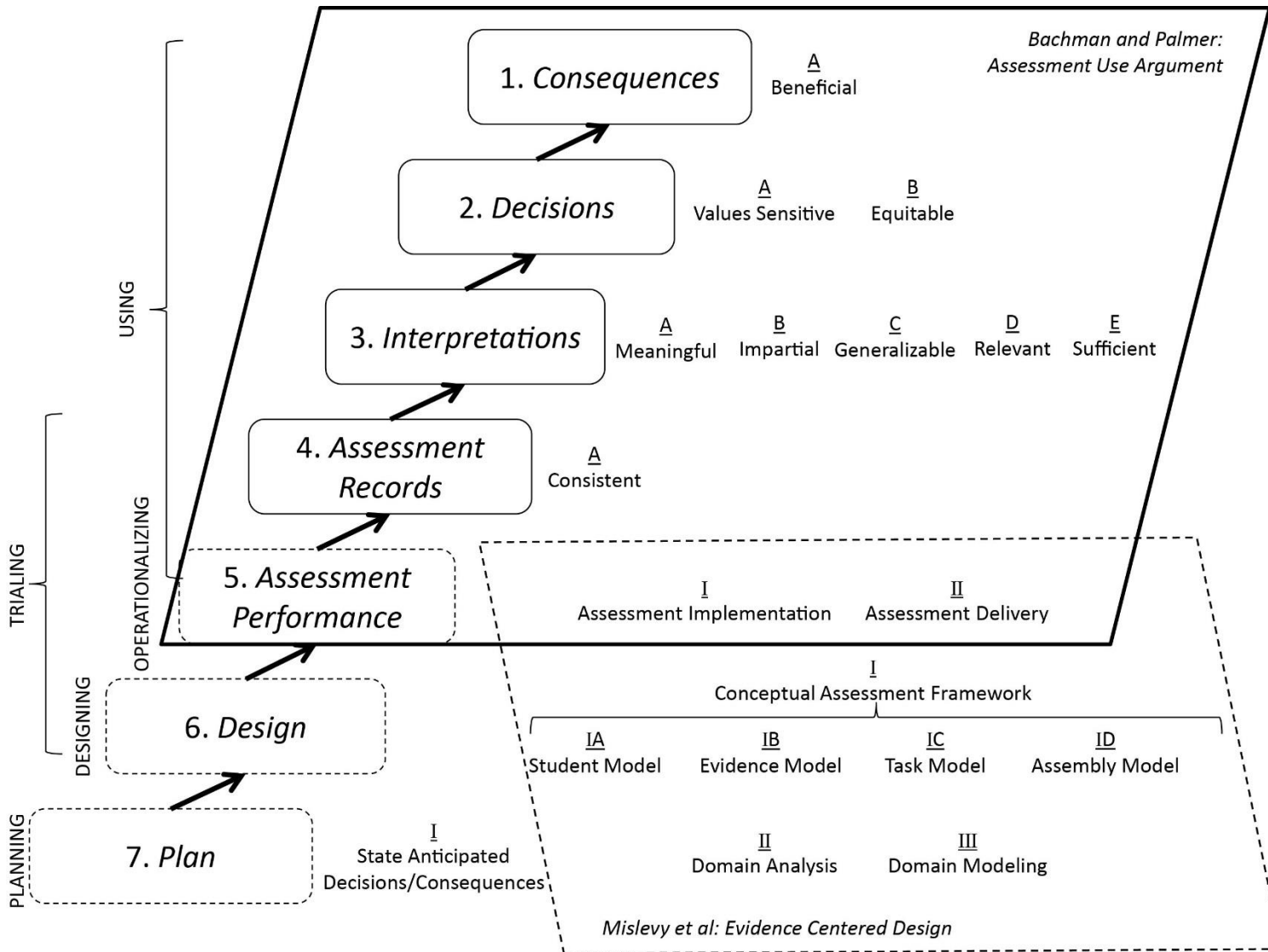


Figure 2. CAL's validation framework (based on Bachman & Palmer, 2010; Mislevy et al., 2004).

2 The Plan for ACCESS 2.0 Online

This section focuses on *Plan* (Step 7) of CAL’s Validation Framework. This section details the decisions that the test is intended to inform, along with the consequences of those decisions. It then describes the domain analysis and modeling that undergirds WIDA’s conceptualization of academic English language proficiency.

2.1 Purpose Statement: What are the intended decisions and consequences of using ACCESS?

The overarching purpose of ACCESS for ELLs 2.0 is to assess the developing English language proficiency of English language learners (ELLs) in Grades K–12 in the United States as defined by the multistate WIDA Consortium, first in the English Language Proficiency Standards (Gottlieb, 2004; WIDA Consortium, 2007) and then in the amplified 2012 English Language Development (ELD) Standards (WIDA Consortium, 2012). The WIDA ELD Standards, which correspond to the academic language identified in state academic content standards, describe six levels of developing English language proficiency and form the core of the WIDA Consortium’s approach to instructing and testing ELLs. ACCESS 2.0 may thus be described as a standards-based English language proficiency test designed to measure the social and academic language proficiency of ELLs in English. It assesses social and instructional English as well as the academic language associated with language arts, mathematics, science, and social studies within the school context across the four language domains (Listening, Reading, Writing, and Speaking).

Other major purposes of ACCESS 2.0 include:

- Identifying the English language proficiency level of students with respect to the WIDA ELD Standards used in all member states of the WIDA Consortium
- Identifying students who have attained English language proficiency
- Assessing annual English language proficiency gains using a standards-based assessment instrument
- Providing districts with information that will help them to evaluate the effectiveness of their language instructional educational programs and determine staffing requirements
- Providing data for meeting federal and state statutory requirements with respect to student assessment
- Providing information that enhances instruction and learning in programs for English language learners

ACCESS 2.0 is offered in two formats: ACCESS 2.0 Online, described in this report, and ACCESS 2.0 Paper, described in a companion report.

2.2 Domain Analysis: What is WIDA’s conceptualization of the development of academic English language proficiency?

The domain analysis aspect of the Plan step in CAL’s Validation Framework defines what ACCESS 2.0 is assessing as a measure of English language proficiency. In Evidence-Centered Design (Mislevy et al., 2004), domain analysis involves compiling and synthesizing all of the relevant information about what will be assessed, namely, academic language proficiency. WIDA’s conceptualization of academic English language proficiency is encapsulated in the 2012 Amplification of the ELD Standards (WIDA Consortium, 2012), which built upon previous editions of the WIDA ELD Standards (Gottlieb, 2004; WIDA Consortium, 2007). The five WIDA ELD Standards form the basis of this conceptualization. In order to capture the language development of ELLs, the Standards include the following layers of organization: Grade-level clusters, Language Domains, and Language Proficiency Levels. Domain analysis therefore also incorporates more granular information about the characteristics of a task and/or response for these various organizational levels.

2.2.1 The WIDA Standards

Five foundational WIDA ELD Standards inform the design, structure, and content of ACCESS 2.0 Online:

- *Standard 1:* ELLs communicate in English for **Social and Instructional** purposes within the school setting.
- *Standard 2:* ELLs communicate information, ideas, and concepts necessary for academic success in the content area of **Language Arts**.
- *Standard 3:* ELLs communicate information, ideas, and concepts necessary for academic success in the content area of **Mathematics**.
- *Standard 4:* ELLs communicate information, ideas, and concepts necessary for academic success in the content area of **Science**.
- *Standard 5:* ELLs communicate information, ideas, and concepts necessary for academic success in the content area of **Social Studies**.

For practical purposes, the five Standards are abbreviated as follows in this report:

- Social and Instructional language: SIL
- Language of Language Arts: LoLA
- Language of Math: LoMA
- Language of Science: LoSC
- Language of Social Studies: LoSS

Every selected response item and every performance-based task on ACCESS 2.0 Online targets at least one of these five Standards. In the cases of some test items and tasks, the Standards are combined as follows:

- Integrated Language of Science (LoSC), Language of Language Arts (LoLA), and Language of Social Studies (LoSS): IT
- Language of Math (LoMA) and Language of Science (LoSC): MS
- Language of Language Arts (LoLA) and Language of Social Studies (LoSS): LS

2.2.2 Grade-Level Clusters

The WIDA ELD Standards describe developing English language proficiency within six grade-level clusters. These are K, 1, 2–3, 4–5, 6–8, and 9–12. Test forms follow this grade-level clustering (note that the Kindergarten [K] form is not administered online and thus is not covered in this report).

2.2.3 Language Domains

The WIDA ELD Standards describe developing English language proficiency for each of the four language domains: Listening, Speaking, Reading, and Writing. Thus, ACCESS 2.0 Online contains four sections, each assessing an individual language domain.

2.2.4 Language Proficiency Levels

The WIDA ELD Standards describe the continuum of language development via five language proficiency levels (PLs) that are fully delineated in the WIDA ELD Standards document (WIDA Consortium, 2012), with scores indicating progression through each level. These levels are *Entering*, *Emerging*, *Developing*, *Expanding*, and *Bridging*. There is also a final stage known as *Reaching*, which is used to describe students who have progressed across the entire WIDA English language proficiency continuum; as such, scores do not indicate progression through this level. The proficiency levels are shown graphically in Figure 3.

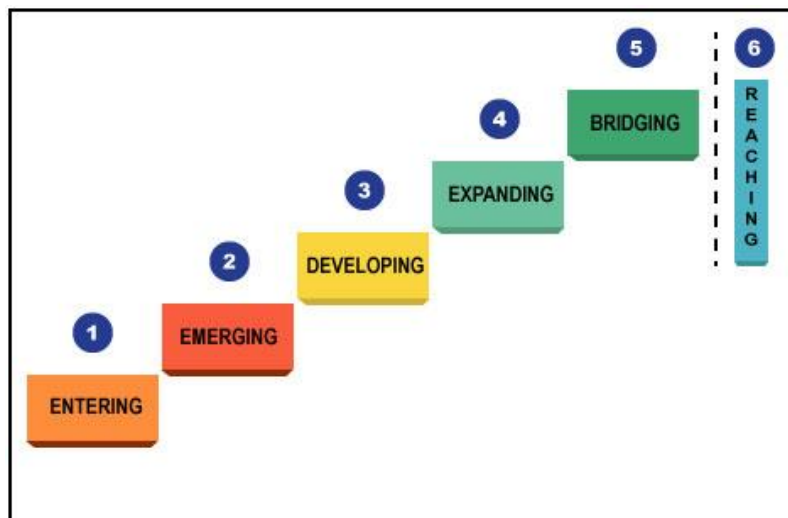


Figure 3. The language proficiency levels of the WIDA ELD Standards.

2.3 Domain Modeling: How are the components of the ACCESS assessment program interrelated?

The Domain Model aspect of the *Plan* step in CAL’s Validation Framework formulates the argument between the evidence collected about test takers and the intended inferences to be made about them. In other words, in the Domain Model, we ask what evidence is necessary and sufficient to make the target inferences. In the case of ACCESS 2.0 Online, evidence is collected in order to make inferences about the test takers’ language proficiency. This argument has been operationalized within ACCESS 2.0 Online in terms of the Model Performance Indicator (MPI). The MPIs convey what the test taker should be able to do with language. Each MPI is mapped to a PL, providing examples of how a test taker at each level would accomplish the task. This Domain Model serves as the basis for the Task Model in the *Design* step (Step 6) of CAL’s Validation Framework, where the characteristics of individual items or tasks are defined. In ACCESS 2.0 Online, therefore, the overall enterprise of mapping evidence to inferences is mediated through the theoretical notion of the MPI in the Domain Model, while specific MPIs for actual test items are developed at a later stage.

3 The Design of ACCESS 2.0 Online

Step 6 in CAL’s Validation Framework is the *Design* step, which has four components, derived from Evidence-Centered Design (Mislevy et al., 2004): The Student Model, the Evidence Model, the Task Model, and the Assembly Model. For the benefit of the reader, the Task Model is presented prior to the Evidence Model in this section, as our description of the evidence derived from scoring is dependent upon a clear understanding of the nature of the tasks.

3.1 The Student Model: What knowledge, skills, and abilities does a student possess?

The Student Model defines the knowledge, skills, and abilities that a student possesses and that are going to be assessed. The Student Model for ACCESS 2.0 is operationalized in terms of the WIDA ELD Standards; the Standards define what ELLs process (in the Reading and Listening domains) or produce (in the Writing and Speaking domains) for a given grade-level cluster and proficiency level.

3.2 The Task Model: What do assessment tasks for ACCESS 2.0 Online look like?

This section describes how items and tasks are designed to reflect the elements of the domain analysis described in Section 2.2 in order to collect the necessary evidence required for later decision-making. Data Recognition Corporation (DRC), the vendor responsible for the online implementation of the assessment, administers the tasks in the online environment and carries out the automated scoring of the Listening and Reading tasks and the hand scoring of the Writing and Speaking tasks. Items and tasks are discussed by language domain.

3.2.1 Listening Items

All Listening items include a prerecorded stimulus passage and question stem. Listening items are selected-response items, with one key and two distractors as answer choices. Answer choices are primarily illustrations; for Grades 2–12, items that test listening proficiency at PLs 3–5 may consist of short written text response options that are written to be about two PLs lower than the targeted PL of the Listening item. Most items on the operational Listening assessment are traditional multiple choice, though some operational items and some items embedded for field-testing purposes involve enhanced item presentations (see Section 4.1.1).

Each item on the Listening test is written to target the language of one of the five WIDA ELD Standards and to test a student’s ability to process language at one of the five fully delineated proficiency levels. *Folders* group together three test items that are written around a common theme, with each item targeting a progressively higher proficiency level. Thematic folders are

targeted as A, B, or C, with A folders encompassing PLs 1–3, B folders encompassing PLs 2–4, and C folders encompassing PLs 3–5.

3.2.2 Reading Items

Reading items are similar in format to Listening items. The stimulus for Reading items is written text, and answer choices primarily are also written text, though for Grades 1–12 response options for items targeting PLs 1 and 2 may be illustrations rather than text. As with Listening items, Reading items are grouped into thematic folders of three test items each. Most items on the operational Reading assessment are traditional multiple choice, though some operational items and some items embedded for field-testing purposes involve enhanced item presentations (see Section 4.1.2). Items have one key and either two or three distractors, depending upon grade-level cluster and targeted proficiency level. For grades 1 and 2–3, all items have a key and two distractors. For grades 4–5, 6–8, and 9–12, items targeting PLs 1 and 2 have a key and two distractors, and items targeting PLs 3, 4, and 5 have a key and three distractors.

3.2.3 Writing Tasks

Writing tasks are designed to elicit language corresponding to one or more of the WIDA ELD Standards. Tasks appearing on the Tier A test form (see Section 3.4.3) are designed to give students the opportunity to produce writing samples that fulfill linguistic expectations up to PL 3, while those appearing on the Tier B/C form are designed to give students the opportunity to produce writing samples that fulfill linguistic expectations up to PL 6.

With the exception of students in Grades 1–3 and those taking the paper-based accommodation, writing prompts appear on the computer screen. In the spirit of providing maximal support and making every provision to ensure that students are given the opportunity to demonstrate the full extent of their English language proficiency, modeling is sometimes used to make task expectations as clear as possible to students. For example, the first of a series of questions may already be partially completed, or a sentence starter may be provided.

Students in Grades 4–5 provide either handwritten or keyboarded responses, with the default response mode determined in advance at the state or district level. For students in Grades 6–12, keyboarding is the default response mode, with a handwriting option offered as an accommodation. For students in Grades 1–3, the test is not administered via computer. For students in these grades, the test administrator reads from a script and the students respond in a printed test booklet.

3.2.4 Speaking Tasks

Stimuli on the Speaking test include graphics, audio, and text. All stimuli are presented by a virtual test administrator (VTA). The VTA serves as a narrator who guides students through the

test and as a virtual interlocutor. The VTA is introduced to students during the test directions in order to establish the testing context.

Task modeling is an essential component of the Speaking test design. In addition to the VTA, students are introduced to a virtual model student during the test directions. Prior to responding to each task, test takers first listen to the model student respond to a parallel task. The purpose of the model is to demonstrate task expectations to both test takers and to DRC raters who score all Speaking task responses.

Students navigate through the Speaking test independently and at their own pace. They must listen to all audio on a screen before the test allows them to advance to the next screen. The amount and complexity of task input varies by grade-level cluster and task level. The purpose of the input is to provide academic content for students to draw on in their responses.

Figure 4 shows the generic screen layout of the Speaking test.

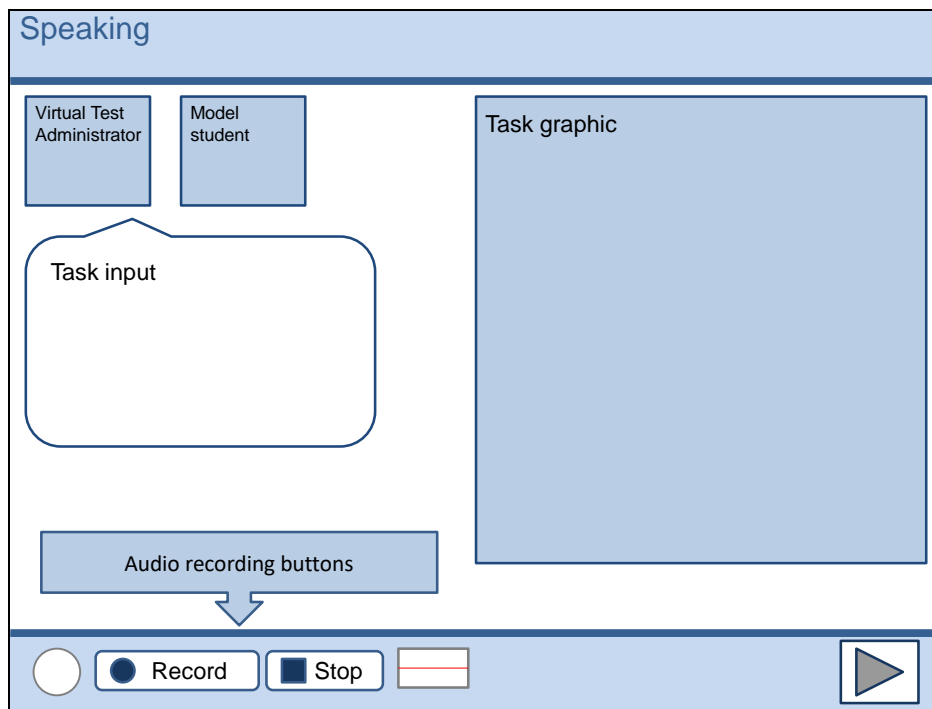


Figure 4. Visualization of the Speaking test screen layout.

Both the VTA and the model student are represented within the testing interface by static images. They are portrayed wearing computer headsets with microphones to reflect the actual testing scenario. Test input and stimuli are presented both aurally and in speech bubbles on the screen. Students respond orally to the tasks, with their responses recorded and transmitted to DRC for later scoring.

3.3 The Evidence Model

In determining what evidence should be sought at the *Design* phase of ACCESS 2.0 Online, two questions were articulated: (a) *How are student performances on ACCESS 2.0 Online scored?* and (b) *How are measures of student performance on ACCESS 2.0 Online calculated?* This section describes the scoring procedures and the methodologies used to score student performances in each domain.

3.3.1 How are student performances on ACCESS 2.0 Online scored?

3.3.1.1 Multiple Choice Scoring: Listening and Reading

Listening and Reading items are scored dichotomously, as correct or incorrect. Scale scores for each domain are calculated based on the items that are administered to the test taker and the number of those items that the student answers correctly. For details on how scale scores for Listening and Reading are calculated, see Section 3.3.2.1 below.

3.3.1.2 Performance-Based Tasks: Writing and Speaking

Performance-based tasks in the domains of Writing and Speaking are scored by trained raters. According to documentation from DRC, raters are well-educated professionals, with at least a 4-year college degree in a relevant field and a demonstrated writing ability. Prior to scoring live student responses, the raters undergo thorough training and qualifying. Training is task-specific in order to ensure that raters understand the nuances of each unique Writing or Speaking task. Team leaders, who are selected based on prior performance as raters and for their leadership skills, are assigned to small groups of raters; there are typically 10 raters per team. The team leaders are responsible for monitoring the performance of their team members and providing ongoing feedback to support accurate scoring. Scoring directors are promoted from within DRC and earn their positions by demonstrating quality work as raters and as team leaders on previous projects. Scoring directors are responsible for a specific set of tasks within a single domain. The scoring directors train and oversee the teams of raters assigned to these tasks. What follows are general scoring procedures utilized by DRC.

Rater Training and Qualifying

- Raters are seated at stations and are assigned unique ID numbers and passwords.
- The scoring director provides detailed directions for use of DRC's computerized scoring system.
- The scoring director trains the raters using task-specific anchor sets and training sets.
- Raters must demonstrate scoring proficiency by scoring at least 70% agreement on a qualifying set before scoring live responses.
- Once raters are qualified, they are further trained for their grade-level cluster on the specific tasks for which they will rate responses.

- Once raters have trained, qualified, and begun live scoring, DRC uses calibration sets to keep the raters calibrated on the actual tasks they are scoring.

Calculating Score Agreement for Scoring Monitoring

- For writing, agreement is defined as two adjacent scores. (See Section 3.3.1.3 for a description of the Writing Scoring Scale.) For example, using the Writing Scoring Scale, scores of 2 and 2+ would be considered agreement, as would scores of 2 and 2 or scores of 2+ and 3. Scores of 2 and 3 on the Writing Scoring Scale would be considered adjacent, and scores of 2 and 3+ would be considered nonadjacent.
- For Speaking, agreement is defined as two scores being exactly the same. (See Section 3.3.1.4 for a description of the Speaking Scoring Scale.)

Routing Responses to Ensure “Blind” Second Ratings

- The DRC scoring system ensures that responses are routed to qualified raters until the prescribed number of ratings is performed for all responses.
- Raters do not know if they are the first or second rater.

Monitoring Scoring (Quality Control)

- Ongoing quality control checks and procedures help monitor and maintain the quality of the scoring sessions. DRC monitors rater reliability with a 20% read-behind protocol. Read-behind data are monitored daily.
- Responses can be retrieved on-demand (e.g., specific grade-level clusters, specific students) should the need arise during or subsequent to the scoring process.
- If needed, responses can be rescored based on task- or response-level information, such as task number, date, score value assigned, or rater ID.
- For Writing, DRC uses both recalibration and validation sets. For each of the first five days that raters score a task, they take one recalibration set of five responses per task. After the raters take the recalibration sets, the scoring director or team leader reviews them using descriptors from the Writing Scoring Scale and the anchor responses to confirm the rationale behind each response’s score. Starting on the sixth day of scoring, DRC uses validity sets to monitor rater performance. These are sets of items seeded into the operational sets that, on a daily basis, monitor how raters are doing when compared to the known ratings of the validity sets. The raters do not know which items are operational and which are from a validation set.
- For Speaking, DRC uses recalibration sets. At the start of the scoring window, raters take these sets every day to ensure that they are calibrated, and raters’ performances on recalibration sets are used for monitoring purposes. Later in the scoring window, recalibration sets are used on a weekly basis to monitor scoring.

Handling Unusual Responses

- Raters can forward responses to team leaders for assistance.
- Responses requiring special attention, including nonscorable responses, are routed to scoring directors for review and resolution.

3.3.1.3 The ACCESS 2.0 Writing Scoring Scale

The Writing Scoring Scale has six whole score points that range from 1 through 6. For responses that fall in between the whole score points, “plus” score points are available (e.g., a response that falls between 3 and 4 is scored as 3+). The scale descriptors include three different yet interrelated dimensions: discourse, sentence, and word/phrase. These scale descriptors guide raters as they consider all three dimensions in order to make holistic judgments about which score point best suits a response. The dimensions are distinguished as follows:

- The descriptors for the discourse dimension focus on the degree of organization and the extent to which the response is tailored to the context (e.g., purpose, situation, and audience).
- The descriptors for the sentence dimension evaluate the complexity and grammatical accuracy of sentence structures used in the response.
- The descriptors for the word/phrase dimension specify the range and appropriateness of the original vocabulary used (i.e., text other than that copied and adapted from the stimulus and prompt).

When assigning a score, a rater makes an initial judgment about which whole score point (1–6) best describes a response and then determines whether the three descriptors for that whole score point suit that response. If all three descriptors suit the response, a whole score point is awarded. If there is clear evidence that one or two descriptors from an adjacent score point are a better fit, a plus score point between the two applicable whole score points is awarded. In addition to scale descriptors, scoring rules address special cases where responses are nonscorable, completely or partially off task, and completely or partially off topic. Both nonscorable and completely off-task responses are scored as 0. Completely off-topic responses receive a maximum score of 2+. Partially off-topic responses are scored in their entirety, while partially off-task responses are scored by ignoring the off-task portion of the response and scoring only the on-task portion.

To calculate a raw score for the Writing test, raters’ scores for each Writing task are converted to whole numbers ranging from 0–9, as shown in Table 1. On Tier A tests, for all grade-level clusters except for Grade 1, the scores from the three tasks are added to calculate a total raw score, which can range from 0–27. The exception to this rule is the Grade 1 Tier A test. On this form, there are four Writing tasks. The first two of these tasks use a modified version of the Scoring Scale and have score ranges of 0–1 and 0–3, respectively. The third and fourth task use the full scoring scale from 0–9; additionally, the last task is weighted as 3. Therefore, the possible final raw scores for Grade 1 Tier A range from 0–40.

On Tier B/C tests for all grade-level clusters, results from the different tasks are given different weights. These weights are specified to reflect intended amounts of time that a student should spend on each task. The first task is given a weight of 1, the second task is given a weight of 2, and the third task is given a weight of 3. Thus, for example, a student with raw scores of 5, 6, and 7 on the three tasks would have a total raw score of 38 ($1 * 5 + 2 * 6 + 3 * 7$), while a student with raw scores of 7, 6, and 5 on the three tasks would have a total raw score of 34 ($1 * 7 + 2 * 6 + 3 * 5$). Raw scores on the Tier B/C tests can range from 0–54.

Table 1
Rating to Raw Score Conversion (Writing)

Rating	Raw score
Nonscorable	0
1	1
1+	2
2	3
2+	4
3	5
3+	6
4	7
4+	8
5	9
5+	9
6	9

The ACCESS 2.0 Writing Scoring Scale is distinct from the WIDA Writing Rubric, which is a tool for evaluating student writing in classrooms and for interpreting student scores from ACCESS 2.0 Online. The Writing Scoring Scale was designed specifically as a scoring tool and is not appropriate for any other purposes.

3.3.1.4 The ACCESS 2.0 Speaking Scoring Scale

The Speaking Scoring Scale defines five score points: *Exemplary*, *Strong*, *Adequate*, *Attempted*, and *No Response*. (The final score point only applies if the rater uses one of three nonscorable codes: R = dead air or white noise; F = foreign language response; I = nonscorable utterance.) These score points are applied based on the proficiency level expectations of each task; that is, the level of language proficiency that each task is designed to elicit. These expectations are exemplified by the model student response (see Section 3.2.4). In this way, the model response serves as a scoring benchmark. Raters listen to the model response and score test taker responses relative to the model. A score of *Exemplary* means that the student response demonstrates English language use that is equal to or beyond the English language use illustrated by the model student’s response.

The Speaking Scoring Scale includes descriptors for overall language use, response sophistication, language delivery, and word choice. As stated above, the scale is applied relative to the proficiency level demands of the task. For tasks targeting language elicitation at PL 1, there are only three possible score points: *No Response*, *Attempted*, and *Adequate and Above*. This is the case because appropriate responses to PL 1 tasks are single words and short chunks of language, so it is not possible to reliably distinguish between *Adequate*, *Strong*, and *Exemplary* performances.

To calculate a raw score for the Speaking test, the five score points are converted to whole numbers, as shown in Table 2. To calculate a total raw score, the raw scores for each task are added together; additionally, in Tier B/C, six points are added to the total raw score, representing a score of *Adequate and Above* for three tasks targeting language at PL 1. Though a Tier B/C student would not be administered any tasks targeting the PL 1 level, it is assumed that a score of *Adequate and Above* would be applicable to such tasks. Thus, on the pre-A test, scores can range from 0–6; on the A test, from 0–18; and on the B/C test, from 6–30.

Table 2
Rating to Raw Score Conversion (Speaking)

Rating	Raw score
No Response (R, F, or I)*	0
Attempted	1
Adequate/Adequate and Above	2
Strong	3
Exemplary	4

*R = Dead air or white noise; F = Foreign language response; I = Nonscorable utterance.

Speaking tasks are scored using the ACCESS 2.0 Speaking Scoring Scale. The Speaking Scoring Scale is distinct from the WIDA Speaking Rubric, which is a tool for classroom use and score interpretation. The Speaking Scoring Scale was designed specifically for test scoring use and is not intended for classroom purposes.

3.3.2 How are measures of student performances on ACCESS 2.0 Online calculated?

The measurement model that forms the basis of the analysis for the development of ACCESS 2.0 Online is the Rasch measurement model (Wright & Stone, 1979). Additional information on its use in the development of the ACCESS assessment program is available in the WIDA Consortium Technical Report No. 1, *Development and Field Test of ACCESS for ELLs* (Kenyon, 2006). The original ACCESS test was developed using Rasch measurement principles, and in that sense, the Rasch model guided all decisions throughout the development of the assessment and was not just a tool for the statistical analysis of the data. Thus, for example, data based on

Rasch fit statistics guided the inclusion, revision, or deletion of items during the development and field testing of the test forms, and will continue to guide the refinement and further development of the test. All Rasch analyses are conducted using the Rasch measurement software program *Winsteps* (Linacre, 2006).

3.3.2.1 Rasch Model for Dichotomous Scoring

For Listening and Reading, the dichotomous Rasch model is used as the measurement model. Mathematically, the measurement model may be presented as

$$\log\left(\frac{P_{ni1}}{P_{ni0}}\right) = B_n - D_i$$

where

P_{ni1} = probability of a correct response “1” by person “n” on item “i”

P_{ni0} = probability of an incorrect response “0” by person “n” on item “i”

B_n = ability of person “n”

D_i = difficulty of item “i”

When the probability of a person getting a correct answer equals the probability of a person getting an incorrect answer (i.e., 50% probability of getting it right and 50% probability of getting it wrong), P_{ni1}/P_{ni0} is equal to 1. The log of 1 is 0. This is the point at which a person’s ability equals the difficulty of an item. For example, a person whose ability is 1.56 on the Rasch logit scale encountering an item whose difficulty is 1.56 on the Rasch logit scale would have a 50% probability of answering that question correctly.

3.3.2.2 Rasch Model for Polytomous Scoring

For the Writing and Speaking tasks, a Rasch-grouped rating scale model is used. Mathematically, this can be represented as

$$\log\left(\frac{P_{ngik}}{1 - P_{ngi(k-1)}}\right) = \beta_n - D_{gi} - F_{gk}$$

where

P_{ngik} = probability of person “n” on task “i” receiving a rating at level “k” on rating scale “g”

$P_{ngi(k-1)}$ = probability of person “n” on task “i” receiving a rating at level “k – 1” on rating scale “g” (i.e., the next lowest rating)

β_n = ability of person “n”

D_{gi} = difficulty of task “i” specific to rating scale “g”

F_{gk} = calibration of step “k” on rating scale “g”

The subscript “g” is a group index specifying the group of tasks to which task “i” belongs. It also identifies the scoring scale that was used for the group of tasks.

As described in Section 3.3.1.3, ratings on the ACCESS 2.0 Writing Scoring Scale range from 0, 1, 1+, ..., 6 and the possible raw scores range from 0–9. All Writing tasks are scored using this scoring scale except for Grade 1 Tier A Task 1 and 2. The profiles of the responses to these two tasks do not fit the generic scoring scale well, so additional task-specific instructions are provided to raters. These instructions guide raters in applying a limited number of score points on the scoring scale to responses elicited by these two tasks. The possible ratings for Grade 1 Tier A Task 1 are 0 or 1 and the possible ratings for Grade 1 Tier A Task 2 are 0, 1, 1+, or 2. To simplify the year-to-year linking process, the Grade 1 Writing Tier A Task 1 is treated as a dichotomously scored task. The Grade 1 Writing Tier A Task 2 is modeled using a rating scale with a possible raw score of 0–3. All other Writing tasks are modeled using a rating scale with possible raw scores of 0–9. Thus, there are a total of two rating scales being modeled for ACCESS Writing. One rating scale is associated with the Grade 1 Writing Tier A Task 2, and the other rating scale is associated with all Writing tasks that are scored using the rating scale with raw score values 0–9.

For Speaking, PL 1 tasks are modeled as a group on a 0–2 scale and PL 3 and PL 5 tasks are modeled as a group on a 0–4 scale (see Section 3.3.1.4).

3.3.2.3 Scale Scores and Proficiency Level Scores

Scale scores are calculated by transforming the person ability estimate via a scaling equation. The scaling equations for each domain are provided in Section 5.2, under Claim 4.3 in the CAL Validation Framework. In the domains of Listening and Reading, the ACCESS scale was maintained through the transition from ACCESS 1.0 to ACCESS 2.0 in Series 400 and is continued to Series 401 and then to Series 402. (Evidence for scale maintenance from ACCESS 1.0 to ACCESS 2.0 can be found in Center for Applied Linguistics [2016].) In the domains of Writing and Speaking, a study was conducted in the summer of 2016 to reconstruct the logit scale (see Center for Applied Linguistics, 2017).

PL scores are interpretations of these scale scores in terms of the PLs described in the WIDA ELD Standards. These interpretations derive from a series of standard setting studies, in which educators reviewed evidence from the test, either in the form of items for the selected response sections (Listening and Reading) or student portfolios for the constructed response sections (Writing and Speaking), to establish cut scores between the PLs. The first standard setting study for ACCESS took place in 2005; it established cut scores for all four domains by grade-level cluster (Kenyon, 2006). The second cut score study took place in 2007; it established cut scores for all four domains by grade level (Kenyon, Ryu, & MacGregor, 2013). These cut scores were used to derive PL scores through Series 400 of ACCESS 2.0 Online. A third cut score study was conducted in summer 2016 (Cook & MacGregor, 2017). The purpose of this study was to re-examine cut scores for each of the PLs on the new ACCESS 2.0 assessment in light of the migration from the paper-and-pencil-only assessment, the revision of the Speaking test, and the influence of college- and career-ready standards.

These new cut scores were first used for ACCESS Series 401. Series 402 is the second series that employed these newly revised proficiency level cut scores.

A PL score consists of a two-digit decimal number (e.g., 4.5). The first digit represents the student's overall PL range based on the student's scale score. The number to the right of the decimal is an indication of the proportion of the range between cut scores that the student's scale score represents. A score of 4.5, for example, tells us that the student is in PL 4 and that his or her scale score is halfway between the cut scores for Levels 4 and 5.

Unlike the scale scores, which form an interval scale and are continuous across grades from Kindergarten to Grade 12, PL scores are dependent upon the grade a student was in when ACCESS 2.0 Online was administered. For example, a score of 350 in Listening would be interpreted as a PL score of 5.8 for a Grade 2 student, a 3.8 for a Grade 5 student, a 3.1 for a Grade 8 student, and a 2.3 for a Grade 12 student.

Because the bands between cut scores on the score scale vary in width, PL scores should not be considered to form an interval scale. That is, the distance between PL scores 1.5 and 2.5 cannot be assumed to be equal to the distance between PL scores 2.5 and 3.5. Only scale scores should be used as interval measures. PL scores are at even intervals within a grade and proficiency level (e.g., in Grade 3, the distance between 3.1 and 3.2 is the same as the distance between 3.7 and 3.8), but they do not form an interval scale across proficiency levels.

3.3.2.4 Composite Scores

Four composite scores are calculated for ACCESS 2.0 Online: Oral Language, Literacy, Comprehension, and Overall. Composite scores are calculated as weighted averages of domain scale scores, as follows:

- Oral Language: 50% Listening + 50% Speaking
- Literacy: 50% Reading + 50% Writing
- Comprehension: 30% Listening + 70% Reading
- Overall Composite: 15% Listening + 15% Speaking + 35% Reading + 35% Writing

3.4 The Assembly Model: How are the assessment components for ACCESS put together?

This section describes how ACCESS 2.0 Online is assembled to ensure that the evidence collected is (a) sufficient to make the intended decisions, and (b) appropriate for the student's level of proficiency. In order to tailor the test closely to student ability levels while still including items and tasks that assess all of the Standards, adaptivity has been built into the test. The Listening and Reading tests both use a multistage adaptive test design. The Writing and Speaking tests are tiered, and placement into the tiers depends on performance on the Listening and Reading tests. Details are presented below.

3.4.1 Listening

The Listening test uses a multistage adaptive design, as illustrated in Figure 5. All students begin the Listening test with two entry folders (with three items each) at Stage 1 and Stage 2, both targeting SIL (see Section 2.2.1 for the WIDA ELD Standards and their abbreviations). At that point, the student’s ability is estimated based on performance on those six items, and that ability estimate is used to determine which of the three leveled LoLA folders in Stage 3 is administered next. Students whose ability estimate predicts a PL score of 5.0 or higher are routed into the folder at the highest level (C in Figure 5); students whose ability estimate predicts a PL score of 2.5 or lower are routed into the folder at the lowest level (A in Figure 5); all others are routed into the B folder.¹ Throughout the test, a student’s underlying measure of ability is re-estimated with the completion of each folder, and the level of the next folder to be administered is chosen accordingly, following the decision rules above. Thus, each student will trace a tailor-made path through the test according to ability level, but the order of the stages is invariant across students. In total, there are eight possible stages, but students whose ability estimate falls below PL 2.5 after the sixth stage end the test at this point. The intent of this design is to ensure coverage of the Standards while delivering a test that closely matches the student’s PL, thus minimizing measurement error.



Figure 5. Format of the Listening test.

¹ Note that although students’ final scores for Series 402 were interpreted in terms of the ACCESS 2.0 proficiency level cuts set at the 2016 Standard setting, the settings to route students through the adaptive test engine are keyed to ACCESS 1.0 proficiency level cuts.

3.4.2 Reading

Figure 6 shows the format of the Reading test. The format and adaptivity are similar to those of the Listening test, but the Reading test consists of 10 stages rather than eight. This reflects the greater weight given to Reading in calculating the composite scores, as well as the view that literacy skills are paramount in developing academic language proficiency. The greater weight afforded to Reading and Writing resulted from a policy decision by the WIDA Board before the first operational administration of ACCESS.

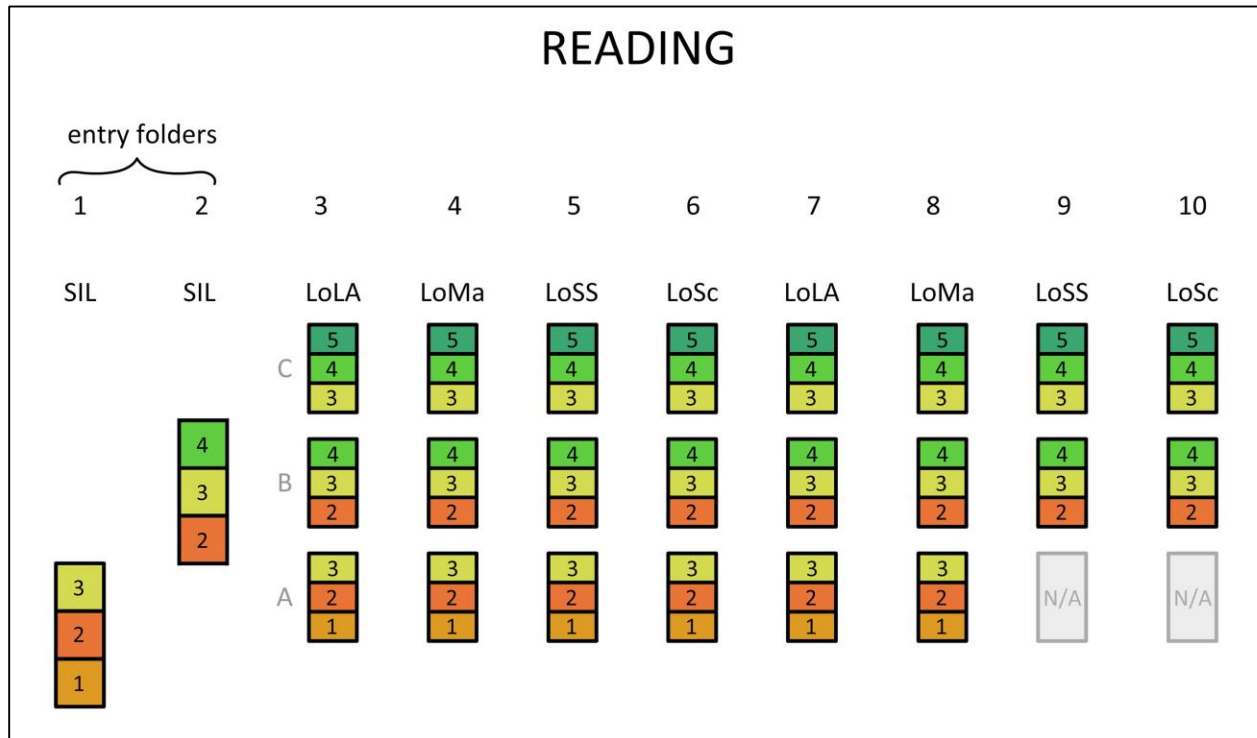


Figure 6. Format of the Reading test.

3.4.3 Writing

Figure 7 shows the format of the Writing test. As shown in the figure, Writing is tiered. Tier A consists of tasks written to elicit language at PLs 1–3, while Tier B/C is designed to elicit language at PLs 4–6. With the exception of Grade 1 Tier A, both tiers consist of three tasks. Both tiers include tasks that target a single standard and tasks that integrate more than one WIDA Standard. For example, in the Tier A forms (except for Grade 1), one task integrates the Language of Math and the Language of Science. On the Tier B/C forms, one task integrates the Language of Math and the Language of Science, while another extended task integrates Social Instructional Language, the Language of Language Arts, and the Language of Social Studies. The ways in which the Standards are targeted by these tasks vary across grade levels and are spelled out in the generative item specifications.

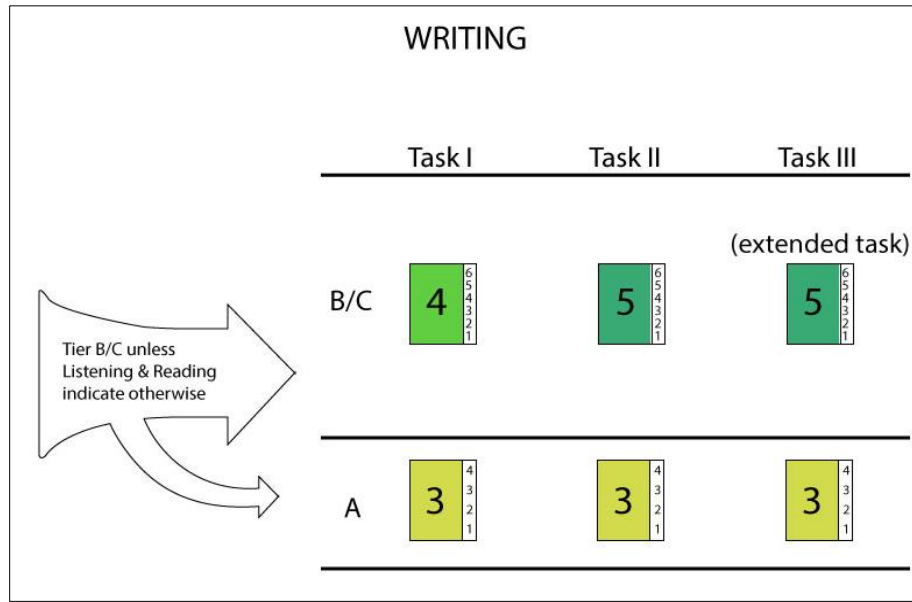


Figure 7. Format of the Writing test. Note: Grade 1 Tier A follows a different model and has four tasks targeting PLs 1, 2, and 3. Numbers inside the boxes represent the targeted proficiency level of the task; the smaller numbers on the right edge of each box represent the range of proficiency levels that a task may elicit.

Placement into tiers on the Writing test depends on how students perform on the Listening and Reading tests, which receive computerized scores. To determine how to best place students into a tier, test data for all students who were administered the assessment in the 2015–2016 operational year (the first year of the ACCESS Online assessment) were analyzed to examine the relationship between how students perform on Listening and Reading and how they perform on Writing, using logistic regression analyses. This information is used to program an algorithm into the ACCESS 2.0 Online test that will be used by the computer to determine which tier of the Writing test will be administered to each student. The purpose of the algorithm is to place students who are predicted to score above PL 3.0, based on their performances in Listening and Reading, into Tier B/C for Writing, and all other students into Tier A.

3.4.4 Speaking

Figure 8 shows the format of the Speaking test. The Speaking test includes tasks that target language elicitation at three PLs: 1, 3, or 5. The tasks are grouped into thematic folders, which are aligned to one or two of the WIDA Standards.

As shown in Figure 8, the Speaking test includes three tiers: Tier Pre-A, Tier A, and Tier B/C. Tier Pre-A includes tasks that target language elicitation at PL 1. Tier A includes tasks that target language elicitation at PLs 1 and 3. Tier B/C includes tasks that target language elicitation at PLs 3 and 5.

A thematic panel refers to the folders across all tiers within a grade-level cluster that relate to a particular WIDA ELD Standard. For example, the Tier B/C, Tier A, and Tier Pre-A folders that

address SIL make up a single thematic panel. Within a thematic panel, tasks at PL 1 and PL 3 are the same across tiers. For example, within a SIL panel, the same PL 3 task appears on both the Tier A and the Tier B/C forms of the test.

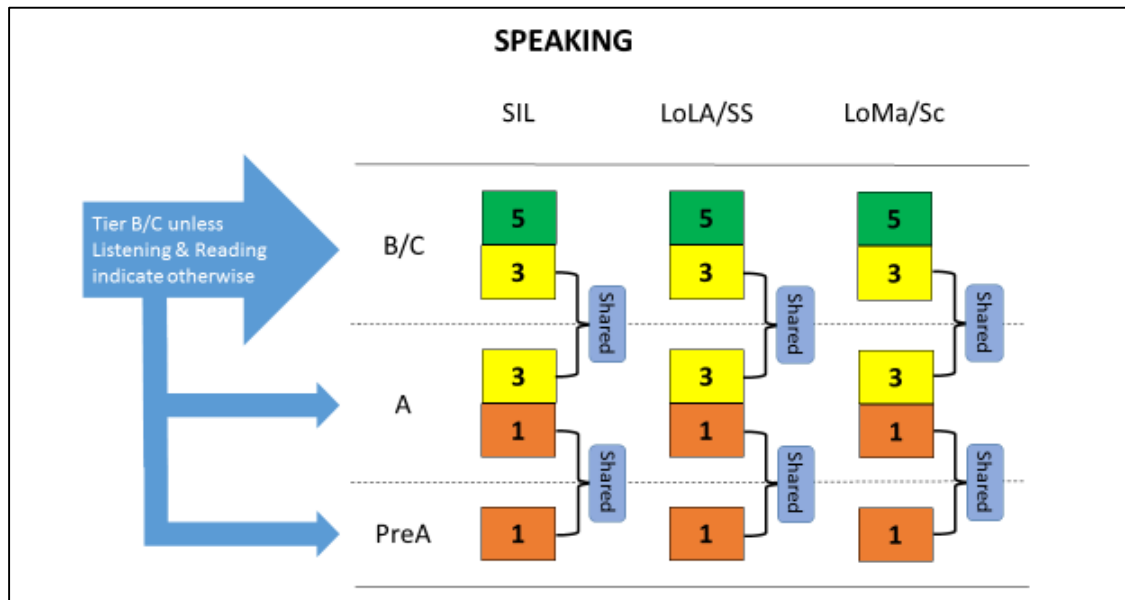


Figure 8. Format of the Speaking test.

As with Writing, placement into the three tiers on the Speaking test shown in Figure 8 depends on performance on the Listening and Reading tests.

Unlike Writing, the Speaking test has one additional tier, Tier Pre-A. Students are placed into Tier Pre-A when their scores on Listening and Reading fall below chance performance. The Speaking Pre-A tier is designed to meet the needs of students in the very early stages of English language development. As noted above, these tasks are targeted to the P1 level and are scored using a modified version of the full Speaking rating scale.

The same method used for Writing is followed to place students into Tiers A and B/C for the Speaking domain. Test data for all students who were administered the assessment in the 2015–2016 operational year (the first year of the ACCESS Online assessment) were analyzed to examine the relationship between how students perform on Listening and Reading and how they perform on Speaking using logistic regression analyses. This information is used to program an algorithm into the ACCESS 2.0 Online test to determine which tier of the Speaking test will be administered to each student. The purpose of the algorithm is to place students who are predicted to score above PL 3.0, based on their performances in Listening and Reading, into Tier B/C for Speaking, and to place all other students into Tier A (except for those students, as noted above, who are routed into Tier Pre-A).

4 Assessment Performance: The Implementation of ACCESS 2.0 Online

This section focuses on *Assessment Performance* (Step 5) in CAL’s Validation Framework. This section reviews how items and tasks for ACCESS 2.0 Online are developed, reviewed, revised, and chosen for inclusion in the operational test. It also describes the interaction between students and the test.

4.1 How is ACCESS implemented?

The ACCESS item development process spans approximately 3 years, beginning with the development of the refreshment plan and the updating of item specifications. Trained item writers work from these specifications to draft items within a thematic folder. After initial development, folders are screened at CAL, and those that are approved for further development undergo a rigorous process of internal development and review, including reviews by standards experts and extensive fact checking. During this phase, images and other ancillary materials, such as scripts and directions, are produced.

At this point, items undergo external bias, sensitivity, and content reviews, after which they undergo further refinement. Items that reach this point then go through a field testing process.

4.1.1 Listening

Listening items are developed so that each item appears on its own screen, with associated graphic support. Audio recording scripts containing the item orientation, stimulus, and question stem are audio recorded with professional voice actors and produced by a professional recording studio. Audio playback of test item content is automatic when students advance to the next screen. Listening test content is played one time for students unless the student has a predetermined accommodation allowing for a single repetition of the item stimulus and question stem.

Series 402 represents the third implementation of ACCESS 2.0. The first operational year for ACCESS 2.0 Online was Series 400. All Listening items on Series 400 were new items developed for ACCESS 2.0 Online. These items were field tested prior to the operational launch of Series 400. For detail on the field testing of these items, see Center for Applied Linguistics (2016).

No refreshment took place between Series 400 and Series 401 in the domain of Listening. During the operational administration of Series 401, students experienced operational Listening items plus embedded Series 402 field test items. The embedded field test items included innovative item formats, including hot spot and drag-and-drop items, where the student either clicked on an area of the screen or dragged an image/text to a specified screen area to respond.

For Series 402, a total of 120 Listening items (40 folders) were field tested, across all five grade-level clusters, embedded into the Series 401 operational assessment. Each student received one Listening field test folder embedded into their operational test. Field test folders are targeted to refresh a specific operational folder on the test, and field test folder specifications include the stage, standard, and tier pool target (A, B, or C) of the folder. Students are administered the embedded field test folder at the stage targeted for refreshment, with administration randomized so that half of the students see the field test folder before the corresponding operational folder, and half see the operational folder before the field test folder. Field test folders are administered to those students who are routed to take the operational folder that is either at the same tier or adjacent to the tier that the field test folder targets. When field test samples are drawn, the sample includes 50% of students at the tier targeted by the field test folder and 50% at adjacent tiers. In cases where the folder to be field tested is to be placed in one of the entry stages, students who receive that field test folder will receive it directly after the pair of operational entry folders. Entry folders do not have a tier pool designation. Field test sample targets in Listening and Reading are set at a minimum of 3,000 responses per folder.

After field test data are drawn, folders of items are analyzed for their psychometric properties, and those that meet established psychometric standards are eligible for selection in the next year’s operational test.

Table 3 provides numbers of continuing and new items, per grade-level cluster. For further detail on item statistics, including a summary of the number of items used as anchors across years, see Part II of this report, Section 2.1.

Table 3
Number of New and Continuing Items on ACCESS Online Series 402 Listening, by Grade-Level Cluster

Grade-level cluster	Number of new items	Number of continuing items	Total number of items
1	9	45	54
2–3	3	51	54
4–5	9	45	54
6–8	15	39	54
9–12	9	45	54

4.1.2 Reading

In the domain of Reading, items for the first operational year of ACCESS 2.0 Online (Series 400) were developed based on operational test items from previous test series, adapted for implementation in the online environment. Item format was adjusted to optimize the items for presentation on computer screens. For example, on the paper test, students might have read a single “theme passage” with multiple items related to the single passage. The test booklet was

laid out so that the student could see the passage and all three items simultaneously. In the online format, the student sees only one item per screen. Therefore, the format was adjusted so that each item has its own passage.

For Series 401, approximately one-sixth of Reading items were targeted for refreshment. During the operational administration of Series 401, students experienced operational Reading items plus embedded Series 402 field test items. The embedded field test items included innovative item formats, including hot spot and drag-and-drop items, where the student either clicked on an area of the screen or dragged an image/text to a specified screen area to respond.

For Series 402, a total of 126 Reading items (42 folders) were field tested, across all five grade-level clusters, embedded into the Series 401 operational assessment. The embedded Reading field test is administered in the same way as the embedded Listening field test. Each student receives one Reading field test folder embedded into their operational test. Field test folders are targeted to refresh a specific operational folder on the test, and field test folder specifications include the stage, standard, and tier pool target (A, B, or C) of the folder. Students are administered the embedded field test folder at the stage targeted for refreshment, with administration randomized so that half of the students see the field test folder before the corresponding operational folder, and half see the operational folder before the field test folder. Field test folders are administered to those students who are routed to take the operational folder that is either at the same tier or adjacent to the tier that the field test folder targets. When field test samples are drawn, the sample includes 50% of students at the tier targeted by the field test folder and 50% at adjacent tiers. In cases where the folder to be field tested is to be placed in one of the entry stages, students who receive that field test folder will receive it directly after the pair of operational entry folders. Entry folders do not have a tier pool designation. Field test sample targets in Listening and Reading are set at a minimum of 3,000 responses per folder.

After field test data are drawn, folders of items are analyzed for their psychometric properties, and those that meet established psychometric standards are eligible for selection in the next year's operational test.

Table 4 provides numbers of continuing and new items, per grade-level cluster. For further detail on item statistics, including a summary of the number of items used as anchors across years, see Part II of this report, Section 2.1.

Table 4

Number of New and Continuing Items on ACCESS Online Series 402 Reading, by Grade-Level Cluster

Grade-level cluster	Number of new items	Number of continuing items	Total number of items
1	12	60	72
2–3	9	63	72
4–5	12	60	72
6–8	6	66	72
9–12	12	60	72

4.1.3 Writing

The development of Writing tasks is similar to that of Listening and Reading items. Writing tasks, however, do not currently undergo large-scale field testing. Instead, after external bias, sensitivity, and content reviews, they are subject to small-scale tryouts, coordinated by CAL staff and conducted by teachers. In these tryouts, candidate folders for Grades 4–12 are administered to students using the online interface, with all students producing a handwritten response; as noted above, students in Grades 1–3 complete the Writing assessment with a traditional paper-and-pencil administration. Student responses, as well as educator observations and comments, inform further revisions to the folders.

Then, a small-scale stand-alone field test of Writing folders is conducted. For Series 402, a total of 20 Writing tasks were field tested. A sample target of 500 students per task was established. The field test uses the online interface where applicable, and the field test is administered under standard testing conditions, with keyboarded responses only when the test is administered online. For the writing field test, responses are double-scored and adjudicated by CAL expert raters, and qualitative analysis of the collected responses is conducted. The main purposes of this small-scale field testing are (a) to confirm that the tasks are working as intended, (b) to identify anchor samples for rater training, and (c) to inform the rating of the tasks when they become operational. Note that the sample target was not met for all clusters and tiers. For Tier A tasks, sample targets were met for Grade 1, but not for other grade-level clusters. For Tier BC tasks, sample targets were met for Grades 2-3 and 6-8, and for one of two tasks field tested at Grades 4-5, but not for other grade-level clusters. Despite not meeting the sample targets, there were sufficient responses to conduct qualitative analyses, review raw score distributions, and to provide evidence for the suitability of tasks for operational testing.

The Writing items on Series 400 were primarily adapted to the computer from operational items from previous test series prior to the launch of Online ACCESS (Series 203, 301, and 302). Series 402 incorporates continuing items from Series 400 as well as items newly developed and field tested for Series 402. Major differences between Series 400 and Series 402 are that the majority of Tier B/C LoMA/LoSC tasks were refreshed on the Tier B/C form, with the introduction of tabbed browsing functionality in the input for Grades 4–12 tasks. In addition, the

extended task was also refreshed on Tier B/C, and two of the three tasks were refreshed on each Tier A form.

Table 5 provides numbers of continuing and new items, per grade-level cluster. For further detail on item statistics, including a summary of the number of items used as anchors across years, see Part II of this report, Section 2.1.

Table 5
Number of New and Continuing Items on ACCESS Online Series 402 Writing, by Grade-Level Cluster

Grade-level cluster	Tier	Number of new items	Number of continuing items	Total number of items
1	A	2	2	4
1	BC	2	1	3
2–3	A	2	1	3
2–3	BC	2	1	3
4–5	A	2	1	3
4–5	BC	2	1	3
6–8	A	2	1	3
6–8	BC	2	1	3
9–12	A	2	1	3
9–12	BC	1	2	3

4.1.4 Speaking

The development of Speaking tasks is similar to that of Writing tasks, but, as with Listening and Reading, all Speaking tasks undergo large-scale field testing. Thus, Speaking tasks undergo both quantitative and qualitative analyses following the field test to determine their appropriateness for inclusion in the following year’s operational test.

Speaking tasks in Series 402 include new tasks for Series 402 and continuing tasks from Series 401. For new tasks on Series 402, all folder content was created specifically for ACCESS 2.0 Online. For tasks continuing from 401, many of the folders were previously field tested as part of Series 400 and then further revised and field tested again for Series 401. Much of the content of the Speaking items on Series 401 was adapted to the computer from both operational items from previous paper-based test series and from materials that were not developed to finality for previous test series. Some folder content was created specifically for ACCESS 2.0 Online.

All Tier A and B/C students are administered a Speaking field test folder appended to their operational Speaking assessment. Tier Pre-A is not included in the field test. A total of 88 tasks (44 folders) were field tested for Series 402, with a target sample size of 300 students per folder. Responses were double-scored by DRC trained raters and adjudicated by CAL raters.

For ACCESS 2.0 Online, folders were designed to target one or two proficiency levels: Tier Pre-A folders include one task that targets only PL 1. Tier A folders include tasks that target PLs 1 and 3. Tier B/C folders include tasks that target PLs 3 and 5. Students are routed into a tier based on their performance in the Reading and Listening sections of the test. The content is presented entirely on the computer, and the responses are recorded by the test engine and are transmitted to DRC for scoring. Students receive a Speaking field test folder in the tier that corresponds to their operational tier.

Table 6 provides numbers of continuing and new tasks, per grade-level cluster. For further detail on item statistics, including a summary of the number of tasks used as anchors across years, see Part II of this report, Section 2.1.

Table 6
Number of New and Continuing Tasks on ACCESS Online Series 402 Speaking, by Grade-Level Cluster

Grade-level cluster	Tier	Number of new tasks	Number of continuing tasks	Total number of tasks
1	Pre-A	2	1	3
1	A	4	2	6
1	BC	4	2	6
2–3	Pre-A	2	1	3
2–3	A	4	2	6
2–3	BC	4	2	6
4–5	Pre-A	2	1	3
4–5	A	4	2	6
4–5	BC	4	2	6
6–8	Pre-A	2	1	3
6–8	A	4	2	6
6–8	BC	4	2	6
9–12	Pre-A	3	0	3
9–12	A	6	0	6
9–12	BC	6	0*	6

*Note that the prior year’s 9-12 BC Speaking form contained tasks that also were included on WIDA Screener. For test security purposes, these tasks were not continued to the Series 402 Online 9-12 BC Speaking form.

4.2 What is the assessment delivery experience for students taking ACCESS 2.0 Online?

4.2.1 Listening and Reading

Listening and Reading are the first domains assessed. Students may take these in either order. Students sit at individual computer monitors and are administered the Listening and Reading tests online. They are issued headsets which are used to listen to directions for the Listening and Reading tests, as well as to the Listening items. Students use the computer interface to select or record their answers.

4.2.2 Writing

Writing tasks are delivered on paper to students in Grades 1–3. All students in Grades 1–3 handwrite a response.

Writing tasks are delivered online to students in Grades 4–12. A student may provide handwritten or keyboarded responses, with the choice depending on a combination of local, state, and consortium-wide policies, as follows:

- Grades 4–5: A decision is made at the local or state level as to whether handwriting or keyboarding is the default response mode. In districts where keyboarding is the default, the option exists to use handwriting as an accommodation.
- Grades 6–12: Keyboarding is the default, with the option to use handwriting as an accommodation.

4.2.3 Speaking

Speaking tasks are delivered online. Students listen to prompts via headsets that are equipped with microphones to capture their responses. Extensive support is provided to the student through illustrations and multimodal (text and audio) input designed to provide sufficient content for the response, as well as a model student response that is intended to provide guidance regarding the level of linguistic complexity required to respond adequately (see Section 3.2.4).

4.3 Assessment performance—interaction between test and student

Administration of ACCESS 2.0 Online takes place between December and April of the academic year, with testing windows determined at the state level. The Reading and Listening tests are administered first (in either order), followed by Writing and Speaking (in either order). The test may be administered in several sessions within 1 day or over a series of days. Student performance on the test forms the basis for developing *Assessment Records*.

5 Assessment Records for ACCESS 2.0 Online

The complete validation framework for the ACCESS for ELLs assessment program, as described in Section 1, contains seven steps. In this section, we present claims related to *Assessment Records*. Evidence to support these claims is also presented in this section, either directly or by referring to evidence in Part II of this report, *Technical Results*. By focusing on Assessment Records (i.e., test scores and proficiency level descriptions), the information here will be used to support claims related to the quality and consistency of the assessment data gathered and analyzed using ACCESS 2.0 Online. The claims in this step of the Assessment Use Argument all pertain to the general question: *How do we know that the reported language domain scores and composite scores on ACCESS 2.0 Online are consistent and dependable?*

5.1 Claims for the Assessment Records for ACCESS

Assessment Records (Step 4) of the CAL Validation Framework is broken down into the following six claims:

- C4.6. All test takers are provided comparable opportunities to demonstrate their English language proficiency.
- C4.5. All tasks and items are scored consistently for all test takers.
- C4.4. Test items/tasks work appropriately together to measure each test taker's English language proficiency.
- C4.3. The same scale scores obtained by test takers in different years retain the same meaning.
- C4.2. ACCESS for ELLs measures English language proficiency for all test takers in a fair and unbiased manner.
- C4.1. Test takers are classified appropriately according to the proficiency levels defined in the WIDA ELD Standards.

As shown in Figure 9, these claims depend upon each other, moving from C4.6 down to C4.1. Within this organizational structure, each successive claim requires that the previous claim be met in order for it to support the validation argument.

The claim that tasks and items are scored consistently (C4.5) does not support the overall validity argument unless the claim that all test takers are provided with comparable opportunities (C4.6) is also met. In other words, tasks and items may be scored consistently for all test takers, but if all test takers are not provided with comparable opportunities, then consistent scoring in and of itself does not support the validity argument. Likewise, support for the claim that test items or tasks work appropriately together to measure English language proficiency (C4.4) requires that those items or tasks be consistently scored (C4.5); otherwise, C4.4 cannot support the validity of the assessment. C4.3 asserts that scale score interpretation remains consistent over time; one requirement for this to be true is that the assessment must be able to measure students across a broad range of English language proficiency abilities (as claimed at C4.4). While comparability

of opportunity is evinced by the steps taken to ensure that the implementation of ACCESS is equitable, C4.2 looks at measurement, or how student performance is translated into a quantifiable outcome. In order for this to be done in a fair and unbiased manner across time, C4.3 must be met. Finally, the appropriate classification of test takers (C4.1) cannot be accomplished unless the performance of all test takers is measured in a fair and unbiased manner (C4.2).

Each prior claim alone does not constitute the entirety of the evidence for the successive claims, however; while each claim requires the evidence from its predecessor, it also requires additional evidence to be supported fully. Section 5.2 below provides a fully fleshed out structure of the line of argumentation for *Assessment Records*, including actions that are taken to ensure the consistency and reliability of the assessment records, and evidence to demonstrate that those actions are taken.

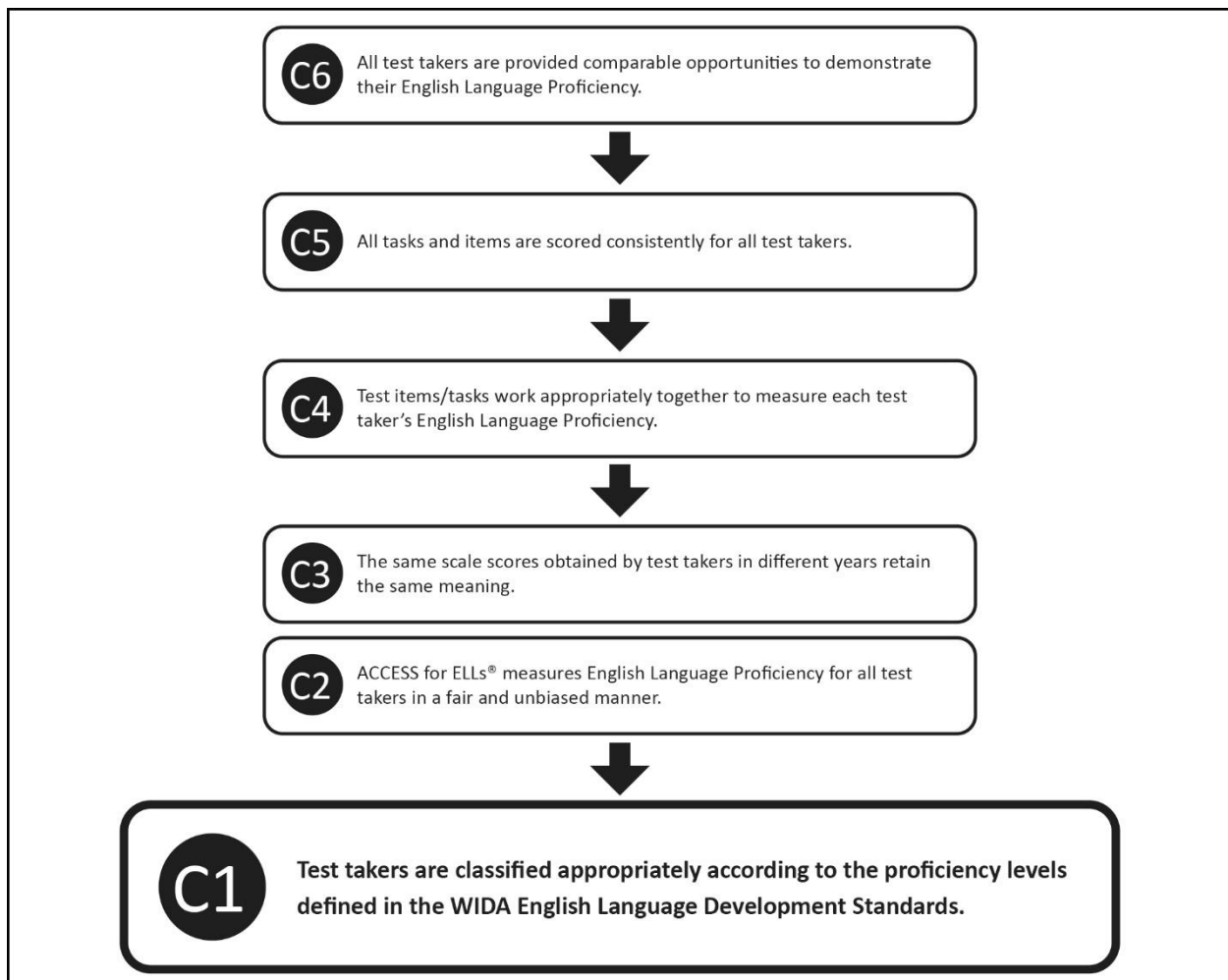


Figure 9. Progression of claims for *Assessment Records* (Step 4).

5.2 Evidence for Assessment Records Claims of ACCESS 2.0 Online

Evidence in the form of data or other sources (e.g., Test Administration Manuals, other information within this report, etc.) is connected to each of the *Assessment Records* claims via the actions taken to support those claims. In what follows, we outline the location within this Annual Technical Report or the external sources that provide evidence related to each action. A summary table of this information is presented in Section 5.3, below.

Because these claims relate to *Assessment Records*, which is Step 4 of the overall validation framework, their numbering begins with 4. The second number (after the decimal) denotes the level of the claim within Step 4. Individual actions to ensure each claim are denoted by the corresponding letter (a, b, c, and so on).

Note that the *Assessment Records* claims are claims for the ACCESS assessment program. The evidence provided for these claims in this report is evidence specific to ACCESS 2.0 Online Series 402.

C4.6. All test takers are provided comparable opportunities to demonstrate their English language proficiency.

Action 4.6a: Test design and student training procedures ensure that all students are able to interact with the technology of the test.

Evidence: CAL conducted extensive cognitive laboratories to ensure that students at all grade levels and at the lowest proficiency levels could successfully manipulate the student test interface.

A test demo video is available for all students to view prior to testing. This video walks the students through all aspects of testing.

The test practice items, which appear in the operational test prior to the operational items, are also available as stand-alone packages for students to familiarize themselves with the computer interface prior to testing.

Procedures for administering the test are documented in the Test Administration Manual.

All test domains contain an audio check prior to administration to ensure that students can hear the audio stimulus. In addition, the Speaking test, which requires that students speak into a microphone to capture their oral responses, contains a check to ensure that the students are speaking loudly enough for the interface to successfully record the response. This check occurs at the beginning of the Speaking section of the test. In addition, as the students record their responses, the interface detects the volume level as students respond and prompts them to try again if they speak too softly. A further measure ensures that if the student does not speak loudly enough a second time, the test pauses and prompts the students to raise their hands for assistance.

Action 4.6b: Procedures are in place to address technical issues and interruptions.

Evidence: Procedures on handling technical issues and interruptions are detailed in the *DRC INSIGHT Technology User Guide* (Data Recognition Corporation, 2016a), as well as in the *WIDA AMS User Guide* (Data Recognition Corporation, 2016b). The *ACCESS for ELLs 2.0 Test Administrator Manual* (WIDA Consortium, 2016) details the steps that test administrators can take during testing and includes a troubleshooting chart, as well as information on how to contact DRC Customer Support. During the testing year, WIDA maintained a webpage specifically dedicated to technology required for administering ACCESS. This webpage includes resources for technology coordinators, such as manuals and guides to help them prepare for and prevent issues, as well as troubleshooting information and information required to address issues that arise during testing. For example, on the ACCESS 2.0 Technology webpage, an Online Testing Network Evaluation document and a Whitelisting Memo provide responses to common questions and concerns.

DRC maintains a customer service email account and phone number for technical issues. DRC also maintains the WIDA System Status Dashboard, which reports current service availability of WIDA AMS, INSIGHT, the Testing Site Manager, and Educator Scoring. Educators can subscribe to email alerts to be notified of interruptions in service.

Should an outage or technical issue occur, DRC notifies state education agencies (SEAs) via email as to when the systemic issue occurs as well as when the issue is resolved, noting which aspects of testing or testing devices were impacted. This process is outlined for SEAs in the *SEA Test Policy Handbook*. Additionally, for extended technical issues, WIDA posts general information pertaining to the outage on the main page of the WIDA website. In the event of extended technical issues, WIDA and DRC provide updates to SEAs via email as follows: (1) broadcast message/announcement of incident; (2) update(s) on the incident (if not resolved after 2 hours); (3) restoration of service message; (4) root cause analysis message; (5) solution confirmation message. In the event that DRC needs to schedule maintenance to fix the underlying issue, a final message is sent out once this maintenance occurs and a solution is implemented.

Action 4.6c: Administration procedures are in place to ensure consistency in test administration.

Evidence: Procedures for administering the test are documented in the Test Administrator Manual.

The test demo and test practice items (see Action 4.6a) are also available for teachers to familiarize themselves with the test prior to administration.

WIDA provides webinars and other training courses on its website to orient new test administrators to test administration procedures. The training courses include certification quizzes to ensure that test administrators properly understand the processes prior to administration.

Action 4.6d: Procedures are in place to ensure that items and tasks do not have issues with bias or sensitivity.

Evidence: As detailed in Sections 4.1.1–4.1.3 of this report, all test items and tasks are subject to bias and sensitivity reviews. These reviews examine items to ensure that they do not favor students from a particular socioeconomic status, geographic area, or educational background or introduce other systematic biases.

Action 4.6e: Test administrators document and report any irregularities that may occur so that appropriate action may be taken.

Evidence: General processes and procedures for test irregularities due to student conditions, testing environment, or other unusual occurrences can be found in the *District and School Test Coordinator Manual*. Specific testing situations, including where to start and stop the test, when breaks can be taken, material management protocols in the case of damaged testing materials, and other detailed guidance can be found in the *Test Administrator Manual*. Both the *District and School Test Coordinator Manual* and the *Test Administrator Manual* can be found on WIDA’s website. States each have a specific policy for test administrators to follow in the case of a testing irregularity, which can include documentation to use or notification procedures to follow. These state-specific steps can be found on the ACCESS for ELLs 2.0 State Checklists, found on the state pages² of the WIDA website and within the training course. Frequently asked questions regarding interruptions can be found in the ACCESS for ELLs 2.0 FAQ section of the WIDA website.³ Additionally, the ACCESS for ELLs 2.0 Training Course highlights common testing irregularities and the resources to use in such circumstances.

Should the test administrator have additional questions about how to proceed in the event of a testing interruption or irregularity, the WIDA Client Services Center can be contacted via email at help@wida.wisc.edu or by phone toll free at 1-866-276-7735.

C4.5. All tasks and items are scored consistently for all test takers.

Action 4.5a: Raters of performance-based tasks undergo thorough training so that they know how to score appropriately.

Evidence: Section 3.3.1.2 specifies the scoring procedure for performance-based tasks in ACCESS 2.0 Online. Raters of performance-based tasks are trained by DRC to appropriately use the Writing and Speaking scoring scales to score performance-based tasks.

Action 4.5b: Listening and Reading items are scored electronically using a carefully checked key.

² WIDA state pages can be found at <https://www.wida.wisc.edu/membership/states/index.aspx>.

³ ACCESS for ELLs 2.0 FAQs can be found at <https://www.wida.wisc.edu/assessment/ACCESS%202.0/administration.aspx#8>.

Evidence: Section 3.3.1.1 specifies the scoring procedure for ACCESS 2.0 Online. Listening and Reading items are dichotomous and are scored electronically by DRC.

Action 4.5c: Raters of performance-based tasks are certified, demonstrating that they can score appropriately.

Evidence: Section 3.3.1.2 specifies the scoring procedure for ACCESS 2.0 Online. Writing and Speaking tasks are centrally scored at DRC, and all raters are prescreened, trained, and subject to qualifying scoring tests before becoming operational raters. Once raters are qualified, they then undergo additional training on the grade-level cluster and specific tasks they will be scoring. Following this more intense training, they rate calibration sets to ensure that they are properly calibrated to the grade-level cluster and task(s).

Action 4.5d: Raters of performance-based tasks are monitored daily to ensure that they are scoring appropriately.

Evidence: DRC provides raters of performance-based tasks with specially prepared calibration sets each day to ensure that the scoring rubric is being applied consistently across scoring sessions (see Section 3.3.1.2). For the Writing test, prerated and vetted validation sets are seeded into the operational items for scoring. The validation sets are utilized to ensure that raters are scoring accurately and consistently and that any drift is identified and promptly corrected. For the Speaking test, prerated and vetted recalibration sets are administered to raters. Raters take these sets every day to ensure that they are calibrated. Due to the nature of the Speaking test structure, validation sets cannot be seeded into the Speaking scoring queues, so the recalibration sets are needed.

Action 4.5e: Scoring data for performance-based tasks are analyzed for rater agreement to understand how closely raters agree.

Evidence: For a sample of 20% of responses to each task, interrater agreement is calculated for each of the Writing and Speaking tasks (see Part II, Section 2.10, for the values for interrater agreement by test form). During operational scoring, these data are monitored daily for quality control purposes.

Action 4.5f: Raters of performance-based tasks are monitored over time to ensure that they apply the scales in a consistent way (internal consistency).

Evidence: Section 3.3.1.2 details the procedures used by DRC to monitor raters. This includes ongoing quality control checks and procedures, and investigation of any irregularities.

For the Writing test, prerated and vetted validation sets are seeded into the operational items for scoring. The validation sets are utilized to ensure that raters are scoring accurately and consistently and that any drift is identified and promptly corrected.

For the Speaking test, prerated and vetted recalibration sets are administered to raters. Raters take these sets every day to ensure that they are calibrated. Due to the nature of the Speaking test

structure, validation sets cannot be seeded into the Speaking scoring queues, so the recalibration sets are needed.

C4.4. Test items/tasks work appropriately together to measure each test taker’s English language proficiency.

Action 4.4a: For each domain and grade-level cluster (e.g., Reading 6–8), item and task analyses are performed and psychometric properties of the items and tasks are evaluated to confirm that scores are internally consistent.

Evidence: Listening and Reading reliability are computed using the reliability coefficient described by Thissen (2000). For the Writing and Speaking domains, Cronbach’s alpha is computed for each tier and also for each grade-level cluster, across tiers. Section 2.10 of Part II, *Technical Results*, describes the ways in which test reliability is computed for the domains.

Action 4.4b: For each composite score, psychometric properties are evaluated to confirm that scores are internally consistent.

Evidence: To compute reliability for the composites, a stratified Cronbach’s alpha is used. Section 3.3 of Part II, *Technical Results*, describes the ways in which test reliability is computed for the composites.

Action 4.4c: Analyses of Rasch model fit statistics are conducted to show that individual items and tasks perform appropriately.

Evidence: Section 2.1 of Part II, *Technical Results*, describes the Rasch fit statistics that are computed for each item; these statistics are provided in the *Complete Item/Task Analysis and Summary* tables in this section.

Action 4.4d: Items and tasks of appropriate difficulty are chosen for each domain.

Evidence: The *Complete Item/Task Analysis and Summary* tables found in Section 2.1 of Part II, *Technical Results*, provide information on the difficulty of each item or task. When the test is assembled, task difficulty is one of several criteria used to select appropriate items for operational assessment from the pool of field tested items.

Action 4.4e: Items in folders aimed at higher proficiency levels within a stage of the multistage adaptive tests (Listening and Reading) are more difficult than items in folders aimed at lower proficiency levels within the same stage.

Evidence: The *Complete Item/Task Analysis and Summary* tables found in Section 2.1 of Part II, *Technical Results*, provide information on the difficulty of each item or task.

Action 4.4f: Routing and placement procedures are in place to ensure that students are administered a test appropriate to their proficiency level.

Evidence: Prior sections of this report describe routing rules for Listening (3.4.1) and Reading (3.4.2), and placement rules for Writing (3.4.3) and Speaking (3.4.4).

Quality control procedures are in place to ensure that routing rules are implemented with fidelity in the computerized assessment.

Placement rules place students into tiers for Writing (A or B/C) and Speaking (pre-A, A, or B/C) tests. Evidence of the effects of these rules can be found in figures and tables that present raw score and scale score distributions by tier and across tiers. Descriptions of the raw score distribution and scale score distribution tables can be found in Section 2.3 and Section 2.4 of Part II, *Technical Results*, respectively.

C4.3. The same scale scores obtained by test takers in different years retain the same meaning.

Action 4.3a: A sufficient number of items and tasks are used as anchor items across adjacent years to maintain a consistent scale from year to year.

Evidence: Each year, while a certain percentage of items on each ACCESS 2.0 Online test form are refreshed, a number of items and tasks are retained from the previous year's assessment for the purpose of scale maintenance. Section 2.7 of Part II, *Technical Results*, describes the equating procedures used, and the tables in this section present item-by-item information, including information on which items or tasks were used as anchor items or tasks.

Action 4.3b: New items and tasks are calibrated with anchor items to ensure that their difficulty measures are on the same consistent scale that is used from year to year.

Evidence:

- i. Section 2.7 of Part II, *Technical Results*, describes the equating procedures implemented.
- ii. Previously used items and tasks (i.e., anchor items) are included on each test form along with new items and tasks.

Action 4.3c: The same scaling equation is applied from year to year to ensure that scale scores are obtained consistently over time.

Evidence: The following scaling equations are used to convert ability measures in logits to scale scores:

- L: (Ability Measure in Logits * 37.571) + 316.637
- R: (Ability Measure in Logits * 26.000) + 323.272
- W: (Ability Measure in Logits * 26.851) + 303.332
- S: (Ability Measure in Logits * 29.248) + 265.076

For Listening and Reading, these equations have been in use from the first operational administration of ACCESS (Series 100). Evidence for scale maintenance in Listening and Reading is detailed in the *ACCESS for ELLs Series 400 Listening and Reading Scale Maintenance: Technical Brief* (Center for Applied Linguistics, 2016).

For Writing and Speaking, scaling equations are new for ACCESS 2.0 Online. A scaling study was conducted in summer 2016 (see Center for Applied Linguistics, 2017). The equations derived from this scaling study were used for the first time in Series 401 (2016–2017 operational year).

C4.2. ACCESS for ELLs measures English language proficiency for all test takers in a fair and unbiased manner.

Action 4.2a: Differential item functioning (DIF) analyses are conducted to determine whether any items or tasks may be biased against certain subgroups.

Evidence: The DIF analysis and summary table provides a summary of the findings of the DIF analyses, which look for measurement bias in test items (see Section 2.2 of Part II, *Technical Results*). Ethnicity (Hispanic vs. non-Hispanic) and gender DIF analyses are conducted. In the domains of Listening and Reading, DIF analyses are conducted prior to operational testing, using data from the previous year’s operational and embedded field test items. In the domains of Writing and Speaking, DIF analyses are conducted using population data, after the conclusion of operational testing.

Action 4.2b: Items that show evidence of DIF are carefully reviewed so that any that indicate bias are not included in the pool of items selected for Listening and Reading, or are removed from future test forms for Speaking and Writing.

Evidence: If an item shows C- or CC-level DIF, a content review panel is convened to examine the content of the item. The panel is composed of diverse members and is chosen carefully so that panelists include male and female members as well as bilingual individuals who speak either English and Spanish or English and another language. The panel then comes to a consensus decision on whether or not the item content is likely to favor or disfavor specific subgroups of students.

C4.1. Test takers are classified appropriately according to the proficiency levels defined in the WIDA ELD Standards.

Action 4.1a: Distributions of scale scores and proficiency levels for each domain are analyzed to confirm that ACCESS 2.0 Online measures the performance of test takers across the range of English language proficiency levels defined by the WIDA ELD Standards. Distributions of raw scores are analyzed where appropriate.

Evidence:

- i. The distribution of test takers’ *raw scores* on ACCESS 2.0 Online for the Writing and Speaking tests, organized by individual test form (e.g., Writing 4–5 B/C), shows the extent to which ACCESS 2.0 Online measures the performance of test takers across the range of ELD abilities that each form was designed to assess (see Section 2.3 of Part II, *Technical Results*).

- ii. The distribution of test takers’ *scale scores* on ACCESS 2.0 Online for each domain, organized by test form, shows that ACCESS 2.0 Online measures the performance of test takers across the range of ELD abilities that each form was designed to assess (see Section 2.4 of Part II, *Technical Results*).
- iii. The *proficiency level* distribution of test takers’ scores on ACCESS 2.0 Online, for each domain, organized by individual test form, shows that ACCESS 2.0 Online measures the performance of test takers across the range of proficiency levels that each form was designed to assess (see Section 2.5 of Part II, *Technical Results*).
- iv. The test characteristic curve graphically shows the relationship between test takers’ ability measures (calculated based on test performance using Rasch modeling) on the horizontal axis and expected raw scores on the vertical axis. Test characteristic curves are provided for each tier for Writing and Speaking (see Section 2.8 of Part II, *Technical Results*). (Note that there is no test characteristic curve for Listening and Reading, as the notion of “expected raw score” is meaningless on the adaptive assessment.)

Action 4.1b: Distributions of scale scores and proficiency levels, for each domain and each composite, organized by grade-level cluster, are analyzed to confirm that ACCESS 2.0 Online measures the performance of test takers across the range of English language proficiency levels as defined by the WIDA ELD Standards.

Evidence:

- i. The distribution of test takers’ scale scores on ACCESS 2.0 Online, for each domain and each composite, organized by grade-level cluster, shows that ACCESS 2.0 Online measures the performance of test takers across the range of ELD abilities as described by the WIDA ELD Standards (see Section 2.4 and Section 3.1 of Part II, *Technical Results*).
- ii. The proficiency level distribution of test takers’ scores on ACCESS 2.0 Online, for each domain and each composite, organized by grade-level cluster, shows that ACCESS 2.0 Online measures the performance of test takers across the range of proficiency levels as defined by the WIDA ELD Standards (see Section 2.5 and Section 3.2 of Part II, *Technical Results*).
- iii. The test characteristic curve graphically shows the relationship between test takers’ ability measures (calculated based on test performance using Rasch modeling) on the horizontal axis and expected raw scores on the vertical axis. Test characteristic curves are provided across each grade-level cluster for Writing and Speaking (see Section 2.8 of Part II, *Technical Results*). (Note that there is no test characteristic curve for Listening and Reading, as the notion of “expected raw score” is meaningless on the adaptive assessment.)

Action 4.1c: For each test form, analyses are run to confirm that English language proficiency is measured with high precision at the cut points pertinent to each grade.

Evidence:

- i. The test information function graphically shows the relationship between ability measure and the accuracy of test scores (see Section 2.9 of Part II, *Technical Results*). Cut points are marked on the test information function figures.
- ii. Tables provide information on the conditional standard error of measurement at the cut scores for Writing and Speaking (Section 2.11 of Part II, *Technical Results*).

Action 4.1d: Classification and accuracy analyses are conducted by grade level to confirm that proficiency level classifications are reliable for all domain and composite scores.

Evidence: Accuracy and consistency statistics are calculated for each domain for the grade-level cluster (see Section 2.12 of Part II, *Technical Results*).

Action 4.1e: Students are placed into the appropriate proficiency level based on their test scores.

Evidence: A 2016 standard setting study established new cut scores for ACCESS 2.0 (Cook & MacGregor, 2017). A short history of ACCESS cut score setting can be found in 3.3.2.3 of this report.

Action 4.1f: Items and tasks are aligned to the WIDA Standards.

Evidence: See Cook (2007) for evidence of alignment between the WIDA Standards and the ACCESS assessment program. Section 3.2 details the continuing development of items and tasks for ACCESS 2.0 Online to maintain alignment.

5.3 Summary of Assessment Records Claims, Actions, and Evidence

Table 7
Summary of Assessment Records Claims, Actions, and Evidence

Claim	Actions	Evidence
6. All test takers are provided comparable opportunities to demonstrate their English language proficiency.	a. Test design and student training procedures ensure that all students are able to interact with the technology of the test.	a. Evidence summarized with claim at 4.6a.
	b. Procedures are in place to address technical issues and interruptions.	b. Evidence summarized with claim at 4.6b.
	c. Administration procedures are in place to ensure consistency in test administration.	c. Test Administration Manual, plus additional evidence summarized with claim at 4.6c.
	d. Procedures are in place to ensure that items and tasks do not have issues with bias or sensitivity.	d. Part I, 4.1.1–4.1.3
	e. Test administrators document and report any irregularities that may occur so that appropriate action may be taken.	e. Evidence summarized with claim at 4.6e.
5. All items and tasks are scored consistently for all test takers.	a. Raters of performance-based tasks undergo thorough training so that they know how to score appropriately.	a. Part I, 3.3.1.2
	b. Listening and Reading items are scored electronically using a carefully checked key.	b. Part I, 3.3.1.1
	c. Raters of performance-based tasks are certified, demonstrating that they can score appropriately.	c. Part I, 3.3.1.2
	d. Raters of performance-based tasks are monitored daily to ensure that they are scoring appropriately.	d. Part I, 3.3.1.2
	e. Scoring data for performance-based tasks are analyzed for rater agreement to understand how closely raters agree.	e. Part II, 2.10
	f. Raters of performance-based tasks are monitored over time to ensure that they apply the scales in a consistent way (internal consistency).	f. Part I, 3.3.1.2
4. Test items/tasks work appropriately together to measure each test taker’s English language proficiency.	a. For each domain and grade-level cluster (e.g., Reading 6–8), item and task analyses are performed and psychometric properties of the items and tasks are evaluated to confirm that scores are internally consistent.	a. Part II, 2.10
	b. For each composite score, psychometric properties are evaluated to confirm that scores are internally consistent.	b. Part II, 3.3
	c. Analyses of Rasch model fit statistics are conducted to show that individual items and tasks perform appropriately.	c. Part II, 2.1
	d. Items and task of appropriate difficulty are chosen for each domain.	d. Part II, 2.1
	e. Items in folders aimed at higher proficiency levels within a stage of the multistage adaptive tests	e. Part II, 2.1

Claim	Actions	Evidence
	(Listening and Reading) are more difficult than items in folders aimed at lower proficiency levels within the same stage.	
	f. Routing and placement procedures are in place to ensure that students are administered a test appropriate to their proficiency level.	f. Part I, 3.4.1–3.4.4, Part II, 2.3–2.4
3. The same scale scores obtained by test takers in different years retain the same meaning.	a. A sufficient number of items and tasks are used as anchor items across adjacent years to maintain a consistent scale from year to year.	a. Part II, 2.7
	b. New items and tasks are calibrated with anchor items to ensure that their difficulty measures are on the same consistent scale that is used from year to year.	b. Part II, 2.7
	c. The same scaling equation is applied from year to year to ensure that scale scores are obtained consistently over time.	c. Evidence summarized with claim at 4.3c.
2. ACCESS for ELLs measures English language proficiency for all test takers in a fair and unbiased manner.	a. Differential item functioning (DIF) analyses are conducted to determine whether any items or tasks may be biased against certain subgroups.	a. Part II, 2.2
	b. Items that show evidence of DIF are carefully reviewed so that any that indicate bias are not included in the pool of items selected for Listening and Reading, or are removed from future test forms for Speaking and Writing.	b. Evidence summarized with claim at 4.2b.
1. Test takers are classified appropriately according to the proficiency levels defined in the WIDA ELD Standards.	a. Distributions of scale scores and proficiency levels for each domain are analyzed to confirm that ACCESS 2.0 Online measures the performance of test takers across the range of English language proficiency levels defined by the WIDA ELD Standards. Distributions of raw scores are analyzed where appropriate.	a. Part II, 2.3–2.5, 2.8
	b. Distributions of scale scores and proficiency levels, for each domain and each composite, organized by grade-level cluster, are analyzed to confirm that ACCESS 2.0 Online measures the performance of test takers across the range of English language proficiency levels as defined by the WIDA ELD Standards.	b. Part II, 2.4–2.5, 2.8, 3.1–3.2
	c. For each test form, analyses are run to confirm that English language proficiency is measured with high precision at the cut points pertinent to each grade.	c. Part II, 2.9, 2.11
	d. Classification and accuracy analyses are conducted by grade level to confirm that proficiency level classifications are reliable for all domain and composite scores.	d. Part II, 2.12
	e. Students are placed into the appropriate proficiency level based on their test scores.	e. Cook & MacGregor (2017) and Part I, 3.3.2.3
	f. Items and tasks are aligned to the WIDA Standards.	f. Cook (2007) and Part I, 3.2

Part II: Technical Results

Contents

1 Student Participation and Performance	5
1.1 Participation	6
1.1.1 Grade-Level Cluster	6
1.1.2 Grade.....	10
1.2 Scale Score Results	15
1.2.1 Mean Scale Scores Across Domain and Composite Scores by Cluster.....	15
1.2.2 Mean Scale Scores Across Domain and Composite Scores by Grade.....	18
1.2.3 Correlations.....	1
1.3 Proficiency Level Results.....	4
1.3.1 Domains	4
1.3.2 Composites.....	12
2 Analysis of Domains.....	20
2.1 Complete Item or Task Analysis and Summary	20
2.1.1 Listening	22
2.1.2 Reading	32
2.1.3 Writing	47
2.1.4 Speaking.....	57
2.2 DIF Analysis and Summary	62
2.2.1 Listening	65
2.2.2 Reading	75
2.2.3 Writing	90
2.2.4 Speaking.....	95
2.3 Raw Score Distribution for Speaking and Writing.....	103
2.3.1 Listening	103
2.3.2 Reading	103
2.3.3 Writing	104
2.3.4 Speaking.....	119
2.4 Scale Score Distribution.....	139
2.4.1 Listening	140
2.4.2 Reading	145
2.4.3 Writing	150
2.4.4 Speaking.....	165
2.5 Proficiency Level Distribution	185
2.5.1 Listening	186
2.5.2 Reading	191
2.5.3 Writing	196
2.5.4 Speaking.....	211
2.6 Raw to Scale Score Conversion for Speaking and Writing.....	231
2.6.1 Listening	231
2.6.2 Reading	231

2.6.3	Writing	232
2.6.4	Speaking.....	242
2.7	Equating Summary	252
2.7.1	Listening	254
2.7.2	Reading	264
2.7.3	Writing	278
2.7.4	Speaking.....	288
2.8	Test Characteristic Curve	293
2.8.1	Listening	293
2.8.2	Reading	293
2.8.3	Writing	294
2.8.4	Speaking.....	301
2.9	Test Information Function.....	312
2.9.1	Listening	313
2.9.2	Reading	315
2.9.3	Writing	318
2.9.4	Speaking.....	325
2.10	Reliability of Domain Scores	336
2.10.1	Listening	339
2.10.2	Reading	340
2.10.3	Writing	341
2.10.4	Speaking.....	346
2.11	Conditional Standard Errors of Measurement at Cut Score	353
2.11.1	Listening	354
2.11.2	Reading	357
2.11.3	Writing	360
2.11.4	Speaking.....	362
2.12	Accuracy and Consistency	366
2.12.1	Listening	368
2.12.2	Reading	375
2.12.3	Writing	381
2.12.4	Speaking.....	388
3	Analyses of Composite Scores.....	395
3.1	Scale Score Distribution for Composites.....	395
3.1.1	Oral	396
3.1.2	Literacy	401
3.1.3	Comprehension	406
3.1.4	Overall	411
3.2	Proficiency Level Distribution for Composites	416
3.2.1	Oral	417
3.2.2	Literacy	422
3.2.3	Comprehension	427
3.2.4	Overall	432

3.3	Reliability of Composites	437
3.3.1	Oral	438
3.3.2	Literacy	439
3.3.3	Comprehension	441
3.3.4	Overall	442
3.4	Accuracy and Consistency of Composites	445
3.4.1	Oral	446
3.4.2	Literacy	452
3.4.3	Comprehension	459
3.4.4	Overall	466
4	References.....	473
5	Acknowledgments	477

1 Student Participation and Performance

This section of the report provides an overview of students' participation, the distribution of students' scale scores, and the distribution of students' proficiency levels. Results are presented, where appropriate, by grade-level cluster, grade, and tier (for Writing and Speaking), and also by state, by gender, and by race and ethnicity.

Following the approach of the Census Bureau, ethnicity is a binary category (Hispanic or Non-Hispanic), with five categories for race (American Indian/Alaskan Native, Asian, Black/African American, Pacific Islander/Hawaiian, and White) that are not mutually exclusive. Thus, for example, Student A may be labeled as Hispanic for ethnicity and Asian for race, while Student B may be labeled as Non-Hispanic for ethnicity and both American Indian/Alaskan Native and Black/African American for race. Students who are labeled as Hispanic are included in the Hispanic (Of Any Race) category, regardless of how many racial categories they are included in. Students who are identified in one racial category (e.g., Asian) who have not been identified as Hispanic are identified in only one racial category; if they are identified in more than one racial category and have not been identified as Hispanic, they are labeled Non-Hispanic Multiracial.

There is a subset of students who are included in the descriptions of student participation and performance but are excluded from subsequent analyses, namely, students who were flagged as potentially having experienced test interruptions. Using telemetry data, three variables were selected which might potentially indicate interruption (that is, testing experiences that are outside of regular testing experiences). The interruption indicators WIDA used are 1) longer than expected testing time, 2) number of appearances (i.e. more than 1) of test items, and 3) number of log-ins. Records are flagged if they fall outside of established criteria for any of these three indicators. Students whose records are flagged as interrupted are included in the tables which describe participation in the assessment but are excluded from all subsequent analyses. Table 1.1 summarizes the numbers of students who are excluded from these analyses.

Table 1.1

Students Excluded from Analysis due to Test Interruptions by Domain and Cluster

Domain	Cluster	No. of Students	Percent
Listening	1	9,509	10.54%
	2-3	21,034	23.31%
	4-5	17,742	19.66%
	6-8	20,746	22.99%
	9-12	21,203	23.50%
	Total	90,234	100.00%
Reading	1	6,329	7.40%
	2-3	18,204	21.28%
	4-5	19,942	23.31%
	6-8	17,978	21.02%
	9-12	23,095	27.00%
	Total	85,548	100.00%
Writing	1	0	0.00%
	2-3	0	0.00%
	4-5	17,383	39.87%
	6-8	14,045	32.22%
	9-12	12,168	27.91%
	Total	43,596	100.00%
Speaking	1	7,589	11.41%
	2-3	19,734	29.66%
	4-5	13,433	20.19%
	6-8	13,206	19.85%
	9-12	12,564	18.89%
	Total	66,526	100.00%

1.1 Participation

Participation in ACCESS 2.0 Online is shown in three ways: by grade-level cluster, by grade, and, for Writing and Speaking only, by tier.

1.1.1 Grade-Level Cluster

Table 1.1.1.1 shows participation across the 37 WIDA states that participated in the ACCESS 2.0 Online operational testing program in 2017–2018. The first row shows the grade-level cluster, the next 37 rows show the number of students in that grade-level cluster who took the test by state, and the final row shows the total number of participants across all 37 states.

Table 1.1.1.2 shows participation by grade-level cluster by gender across all 37 states combined, while Table 1.1.1.3 shows participation by grade-level cluster by ethnicity across all 37 states.

Table 1.1.1.4 shows participation by grade-level cluster and tier for all Writing and Speaking forms.

Table 1.1.1.1

Participation by Cluster by State S402 Online

State	Cluster					Total
	1	2-3	4-5	6-8	9-12	
AK	1,177	2,468	2,223	2,178	2,316	10,362
AL	2,352	5,289	3,808	2,562	2,989	17,000
BI	101	160	132	214	180	787
CO	7,844	16,363	13,190	13,138	13,896	64,431
DC	1,077	1,698	1,254	1,002	1,516	6,547
DE	1,640	3,631	2,596	1,427	1,696	10,990
GA	14,733	27,575	20,700	14,500	14,416	91,924
HI	1,883	3,517	2,776	2,479	2,624	13,279
ID	2,242	4,200	3,265	3,257	2,701	15,665
IL	18,123	46,294	41,971	27,562	26,148	160,098
IN	7,385	14,494	9,971	8,045	10,860	50,755
KY	3,570	6,260	4,441	3,640	4,930	22,841
MA	8,637	17,620	14,034	14,787	16,116	71,194
MD	10,124	19,264	13,371	10,644	15,856	69,259
ME	474	1,001	949	1,092	1,242	4,758
MI	9,903	20,646	17,571	19,613	22,265	89,998
MN	7,839	15,837	12,819	11,859	12,732	61,086
MO	4,235	7,984	6,148	5,530	5,173	29,070
MP	112	217	232	432	301	1,294
MT	208	626	737	664	452	2,687
NC	12,092	26,295	20,955	14,513	18,225	92,080
ND	392	760	559	603	828	3,142
NH	458	1,067	922	809	975	4,231
NJ	10,779	18,707	11,327	11,402	16,707	68,922
NM	4,533	10,574	9,739	9,438	9,390	43,674
NV	7,706	16,589	14,235	14,332	14,763	67,625
OK	4,882	9,718	7,227	5,795	6,275	33,897
PA	5,573	11,771	10,349	12,221	15,178	55,092
RI	1,210	2,796	2,308	2,139	3,061	11,514
SC	3,538	8,084	8,776	9,880	10,248	40,526
SD	657	1,191	911	656	990	4,405
TN	5,572	10,584	8,430	7,264	7,711	39,561
UT	5,324	11,476	9,536	7,370	7,197	40,903
VA	9,877	22,531	16,883	13,707	19,649	82,647
VT	192	388	301	216	339	1,436
WI	5,552	11,804	10,986	9,570	8,972	46,884
WY	329	684	448	386	452	2,299
Total	182,325	380,163	306,080	264,926	299,369	1,432,863

Table 1.1.1.2

Participation by Cluster by Gender S402 Online

Cluster		Gender			Total
		F	M	Missing	
1	Count	85,085	95,901	1,339	182,325
	% within Cluster	46.7%	52.6%	0.7%	100.0%
2-3	Count	177,432	200,518	2,213	380,163
	% within Cluster	47.0%	52.8%	0.6%	100.0%
4-5	Count	136,954	166,956	2,170	306,080
	% within Cluster	44.8%	54.6%	0.7%	100.0%
6-8	Count	114,800	147,979	2,147	264,926
	% within Cluster	43.3%	55.9%	0.8%	100.0%
9-12	Count	130,045	166,458	2,866	299,369
	% within Cluster	43.5%	55.6%	1.0%	100.0%
Total	Count	644,316	777,812	10,735	143,2863
	% within Cluster	45.0%	54.3%	0.8%	100.0%

Table 1.1.1.3

Participation by Cluster by Ethnicity S402 Online

Cluster		Hispanic/Non-Hispanic			Total
		Hispanic	Other	Unknown	
1	Count	115,518	57,480	9,327	182,325
	% within Cluster	63.4%	31.5%	5.1%	100.0%
2-3	Count	251,372	109,663	19,128	380,163
	% within Cluster	66.1%	28.9%	5.0%	100.0%
4-5	Count	205,697	81,442	18,941	306,080
	% within Cluster	67.2%	26.6%	6.2%	100.0%
6-8	Count	170,115	72,641	22,170	264,926
	% within Cluster	64.2%	27.4%	8.4%	100.0%
9-12	Count	188,087	85,361	25,921	299,369
	% within Cluster	62.8%	28.5%	8.7%	100.0%
Total	Count	930,789	406,587	95,487	1,432,863
	% within Cluster	65.0%	28.4%	6.7%	100.0%

Table 1.1.1.4

Participation by Cluster by Tier by Domain S402 Online

Cluster		Domain		
			Writing	Speaking
1	Tier	Pre-A	-	4,464
		A	142,390	61,199
		BC	39,917	116,662
	Total	182,307	182,325	
2-3	Tier	Pre-A	-	13,794
		A	93,478	83,806
		BC	286,610	282,558
	Total	380,088	380,158	
4-5	Tier	Pre-A	-	4,997
		A	44,786	28,766
		BC	261,281	272,305
	Total	306,067	306,068	
6-8	Tier	Pre-A	-	8,793
		A	103,658	60,343
		BC	161,262	195,781
	Total	264,920	264,917	
9-12	Tier	Pre-A	-	18,251
		A	113,895	130,676
		BC	185,403	150,367
	Total	299,298	299,294	

1.1.2 Grade

This section provides tables parallel to the previous section, but broken out by grade rather than by grade-level cluster.

Table 1.1.2.1

Participation by Grade by State S402 Online

State	G												
	1	2	3	4	5	6	7	8	9	10	11	12	
AK	1,177	1,220	1,248	1,236	987	781	715	682	672	632	541	471	10,362
AL	2,352	2,670	2,619	2,299	1,509	881	814	867	1,015	828	693	453	17,000
BI	101	76	84	67	65	58	80	76	71	50	31	28	787
CO	7,844	8,162	8,201	7,332	5,858	4,615	4,384	4,139	4,273	4,081	3,013	2,529	64,431
DC	1,077	899	799	765	489	331	335	336	514	491	274	237	6,547
DE	1,640	1,860	1,771	1,660	936	533	473	421	632	477	364	223	10,990
GA	14,733	14,033	13,542	13,392	7,308	5,027	4,825	4,648	5,664	4,535	2,631	1,586	91,924
HI	1,883	1,951	1,566	1,780	996	822	881	776	945	820	464	395	13,279
ID	2,242	2,365	1,835	1,796	1,469	1,205	1,200	852	801	776	623	501	15,665
IL	18,123	20,147	26,147	26,493	15,478	10,20	9,187	8,167	8,451	7,847	6,040	3,810	160,098
IN	7,385	7,310	7,184	6,267	3,704	2,620	2,497	2,928	3,583	3,284	2,600	1,393	50,755
KY	3,570	3,224	3,036	2,698	1,743	1,242	1,230	1,168	1,662	1,563	1,007	698	22,841
MA	8,637	8,904	8,716	8,126	5,908	4,989	5,026	4,772	5,444	4,437	3,632	2,603	71,194
MD	10,124	9,719	9,545	8,251	5,120	3,646	3,568	3,430	5,683	5,406	2,729	2,038	69,259
ME	474	486	515	500	449	381	375	336	339	338	298	267	4,758
MI	9,903	10,347	10,299	9,949	7,622	6,817	6,484	6,312	7,142	6,366	4,604	4,153	89,998
MN	7,839	7,885	7,952	7,622	5,197	4,032	3,931	3,896	3,950	3,833	2,808	2,141	61,086
MO	4,235	4,019	3,965	3,573	2,575	2,046	1,828	1,656	1,664	1,629	1,099	781	29,070
MP	112	110	107	125	107	144	143	145	119	98	41	43	1,294
MT	208	258	368	406	331	241	198	225	169	136	99	48	2,687
NC	12,092	12,787	13,508	13,928	7,027	4,881	4,615	5,017	6,465	5,775	3,685	2,300	92,080
ND	392	394	366	339	220	223	185	195	260	259	178	131	3,142
NH	458	537	530	549	373	296	264	249	328	302	199	146	4,231
NJ	10,779	10,062	8,645	6,757	4,570	3,738	3,741	3,923	4,996	4,722	4,013	2,976	68,922
NM	4,533	5,085	5,489	5,442	4,297	3,380	2,933	3,125	3,029	2,886	2,023	1,452	43,674
NV	7,706	8,038	8,551	8,543	5,692	4,619	4,963	4,750	4,562	4,392	3,383	2,426	67,625
OK	4,882	4,798	4,920	4,283	2,944	2,064	1,680	2,051	2,173	2,012	1,232	858	33,897
PA	5,573	5,855	5,916	5,643	4,706	4,310	4,037	3,874	4,412	4,182	3,563	3,021	55,092
RI	1,210	1,416	1,380	1,347	961	724	688	727	886	970	711	494	11,514
SC	3,538	4,072	4,012	5,015	3,761	3,171	3,497	3,212	3,708	3,339	2,015	1,186	40,526
SD	657	609	582	585	326	228	220	208	370	292	173	155	4,405
TN	5,572	5,326	5,258	5,186	3,244	2,292	2,548	2,424	2,637	2,367	1,688	1,019	39,561
UT	5,324	5,585	5,891	5,490	4,046	2,886	2,142	2,342	2,344	2,068	1,621	1,164	40,903
VA	9,877	10,490	12,041	10,693	6,190	4,504	4,680	4,523	6,556	5,928	5,026	2,139	82,647
VT	192	198	190	188	113	73	71	72	84	114	70	71	1,436
WI	5,552	5,773	6,031	5,950	5,036	3,638	3,046	2,886	2,812	2,635	2,044	1,481	46,884
WY	329	347	337	289	159	125	145	116	126	153	82	91	2,299
Total	182,325	187,017	193,146	184,564	121,516	91,77	87,629	85,526	98,541	90,02	65,297	45,508	1,432,863

Table 1.1.2.2

Participation by Grade by Gender S402 Online

Grade		Gender			Total
		F	M	Missing	
1	Count	85,085	95,901	1,339	182,325
	% within Grade	46.7%	52.6%	0.7%	100.0%
2	Count	87,376	98,463	1,178	187,017
	% within Grade	46.7%	52.7%	0.6%	100.0%
3	Count	90,056	102,055	1,035	193,146
	% within Grade	46.6%	52.8%	0.5%	100.0%
4	Count	84,191	99,223	1,150	184,564
	% within Grade	45.6%	53.8%	0.6%	100.0%
5	Count	52,763	67,733	1,020	121,516
	% within Grade	43.4%	55.7%	0.8%	100.0%
6	Count	39,580	51,424	767	91,771
	% within Grade	43.1%	56.04%	0.8%	100.0%
7	Count	38,086	48,820	723	87,629
	% within Grade	43.5%	55.7%	0.8%	100.0%
8	Count	37,134	47,735	657	85,526
	% within Grade	43.4%	55.8%	0.8%	100.0%
9	Count	41,520	55,848	1,173	98,541
	% within Grade	42.1%	56.7%	1.2%	100.0%
10	Count	38,912	50,441	670	90,023
	% within Grade	43.2%	56.0%	0.7%	100.0%
11	Count	28,828	35,796	673	65,297
	% within Grade	44.2%	54.8%	1.0%	100.0%
12	Count	20,785	24,373	350	45,508
	% within Grade	45.7%	53.6%	0.8%	100.0%
Total	Count	644,316	777,812	10,735	1,432,863
	% within Grade	45.0%	54.3%	0.8%	100.0%

Table 1.1.2.3

Participation by Grade by Ethnicity S402 Online

Grade		Hispanic/Non-Hispanic			Total
		Hispanic	Other	Unknown	
1	Count	115,518	57,480	9,327	182,325
	% within Grade	63.4%	31.5%	5.1%	100.0%
2	Count	121,544	55,800	9,673	187,017
	% within Grade	65.0%	29.8%	5.2%	100.0%
3	Count	129,828	53,863	9,455	193,146
	% within Grade	67.2%	27.9%	4.9%	100.0%
4	Count	124,637	49,390	10,537	184,564
	% within Grade	67.5%	26.8%	5.7%	100.0%
5	Count	81,060	32,052	8,404	121,516
	% within Grade	66.7%	26.4%	6.9%	100.0%
6	Count	58,933	24,955	7,883	91,771
	% within Grade	64.2%	27.2%	8.6%	100.0%
7	Count	56,183	24,091	7,355	87,629
	% within Grade	64.1%	27.5%	8.4%	100.0%
8	Count	54,999	23,595	6,932	85,526
	% within Grade	64.3%	27.6%	8.1%	100.0%
9	Count	63,626	26,403	8,512	98,541
	% within Grade	64.6%	26.8%	8.6%	100.0%
10	Count	58,002	25,005	7,016	90,023
	% within Grade	64.4%	27.8%	7.8%	100.0%
11	Count	40,393	19,022	5,882	65,297
	% within Grade	61.9%	29.1%	9.0%	100.0%
12	Count	26,066	14,931	4,511	45,508
	% within Grade	57.3%	32.8%	9.9%	100.0%
Total	Count	930,789	406,587	95,487	1,432,863
	% within Grade	65.0%	28.4%	6.7%	100.0%

Table 1.1.2.4

Participation by Grade by Tier by Domain S402 Online

Grade			Domain	
			Writing	Speaking
1	Tier	Pre-A	-	4,464
		A	142,390	61,199
		BC	39,917	116,662
	Total		182,307	182,325
2	Tier	Pre-A	-	5,169
		A	55,679	43,626
		BC	131,299	138,220
	Total		186,978	187,015
3	Tier	Pre-A	-	8,625
		A	37,799	40,180
		BC	155,311	144,338
	Total		193,110	193,143
4	Tier	Pre-A	-	1,848
		A	22,965	16,643
		BC	161,591	166,065
	Total		184,556	184,556
5	Tier	Pre-A	-	3,149
		A	21,821	12,123
		BC	99,690	106,240
	Total		121,511	121,512
6	Tier	Pre-A	-	2,078
		A	31,977	19,309
		BC	59,793	70,381
	Total		91,770	91,768
7	Tier	Pre-A	-	2,618
		A	36,059	15,427
		BC	51,568	69,581
	Total		87,627	87,626
8	Tier	Pre-A	-	4,097
		A	35,622	25,607
		BC	49,901	55,819
	Total		85,523	85,523

Grade			Domain	
			Writing	Speaking
9	Tier	Pre-A	-	3,894
		A	42,589	56,203
		BC	55,927	38,422
	Total		98,516	98,519
10	Tier	Pre-A	-	5,809
		A	33,559	37,702
		BC	56,453	46,498
	Total		90,012	90,009
11	Tier	Pre-A	-	4,823
		A	23,114	14,473
		BC	42,162	45,979
	Total		65,276	65,275
12	Tier	Pre-A	-	3,725
		A	14,633	22,298
		BC	30,861	19,468
	Total		45,494	45,491

1.2 Scale Score Results

This section provides information on students' scale score results.

1.2.1 Mean Scale Scores Across Domain and Composite Scores by Cluster

This section shows mean (average) scale scores by grade-level cluster across the eight scores awarded, first for the four domains (Listening, Reading, Writing, and Speaking) and then for the four composites (Oral Language, Literacy, Comprehension, and Overall Composite). The mean scale scores are expected to increase as grade increases, as ACCESS is on a vertical scale, however there is also an intersection between this principle and the population of test-takers. In this section, under each average, the number of students in each group is also given.

Additional tables show this information by gender, and by race and ethnicity.

Table 1.2.1.1

Mean Scale Scores by Cluster S402 Online

Cluster		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
1	Mean	328.79	293.56	259.94	254.00	291.49	276.86	304.16	280.99
	N	172,661	175,793	182,144	174,598	165,934	175,741	167,530	161,137
2-3	Mean	341.44	325.35	311.02	267.04	304.20	318.31	330.27	313.71
	N	358,910	361,623	379,847	360,245	341,202	361,485	344,624	327,893
4-5	Mean	416.80	355.19	338.48	309.53	363.40	346.90	373.78	351.58
	N	288,136	285,821	288,346	292,465	276,409	271,754	272,356	249,938
6-8	Mean	396.07	348.95	327.91	316.16	356.30	338.38	363.32	343.53
	N	243,851	246,585	250,529	251,465	233,124	236,369	231,022	213,648
9-12	Mean	393.34	378.58	360.35	307.12	350.40	369.49	383.30	363.50
	N	277,596	275,639	286,552	286,315	267,115	266,811	259,887	243,762

Table 1.2.1.2

Mean Scale Scores by Cluster by Gender S402 Online

Cluster	Gender		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
1	F	Mean	332.16	295.50	264.23	258.53	295.44	279.96	306.52	284.36
		N	80,650	81,767	85,012	81,521	77,557	81,753	78,044	75,123
	M	Mean	326.07	291.94	256.38	250.26	288.26	274.29	302.21	278.20
		N	90,746	92,726	95,793	91,787	87,156	92,688	88,253	84,822
	Missing	Mean	308.95	287.25	243.34	233.73	271.23	265.39	293.93	267.14
		N	1,265	1,300	1,339	1,290	1,221	1,300	1,233	1,192
2-3	F	Mean	343.28	327.56	316.82	270.42	306.80	322.33	332.36	317.26
		N	167,754	168,081	177,299	167,922	159,275	168,037	160,530	152,543
	M	Mean	340.09	323.52	306.12	264.34	302.19	314.96	328.59	310.78
		N	189,041	191,434	200,336	190,215	179,902	191,341	182,068	173,406
	Missing	Mean	315.33	315.11	290.84	242.63	278.84	303.10	315.25	295.66
		N	2,115	2,108	2,212	2,108	2,025	2,107	2,026	1,944
4-5	F	Mean	416.51	356.53	343.85	312.57	364.75	350.28	374.62	354.34
		N	129,022	127,356	129,009	130,699	123,635	121,166	121,520	111,527
	M	Mean	417.40	354.26	334.37	307.33	362.62	344.38	373.32	349.60
		N	157,059	156,411	157,322	159,702	150,811	148,675	148,882	136,663
	Missing	Mean	390.07	343.10	315.66	287.15	338.54	329.03	356.94	330.49
		N	2055	2054	2015	2064	1,963	1,913	1,954	1,748
6-8	F	Mean	395.94	351.99	333.15	316.19	356.23	342.55	365.35	346.35
		N	106,179	106,659	108,457	108,814	101,394	102,220	100,415	92,808
	M	Mean	396.30	346.73	324.07	316.39	356.55	335.34	361.87	341.51
		N	135,727	137,928	140,053	140,639	129,894	132,246	128,768	119,171
	Missing	Mean	387.00	339.70	313.34	298.82	342.85	326.19	354.02	330.47
		N	1,945	1,998	2,019	2,012	1,836	1,903	1,839	1,669
9-12	F	Mean	394.34	381.80	366.46	309.08	351.87	374.18	385.83	367.17
		N	120,836	119,276	124,080	124,292	116,260	115,257	112,775	105,631
	M	Mean	392.82	376.28	355.96	305.88	349.52	366.15	381.55	360.92
		N	154,127	153,809	159,730	159,284	148,324	149,073	144,724	135,878
	Missing	Mean	377.88	366.06	339.56	290.53	334.38	352.43	369.89	347.08
		N	2,633	2,554	2,742	2,739	2,531	2,481	2,388	2,253

Table 1.2.1.3

Mean Scale Scores by Cluster by Ethnicity S402 Online

Cluster	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
1	Non-Hispanic Asian	Mean	338.36	309.00	272.75	260.81	299.64	290.99	317.88	293.34
		N	24,460	24,740	25,713	24,658	23,533	24,738	23,691	22,825
	Non-Hispanic Pacific Islander	Mean	310.26	287.68	258.70	247.15	278.92	273.19	294.41	274.69
		N	1,519	1,541	1,621	1,565	1,467	1,540	1,456	1,407
	Non-Hispanic Black	Mean	322.56	294.34	259.38	263.15	292.91	276.94	302.85	281.40
		N	9,257	9,492	9,927	9,433	8,834	9,489	8,914	8,511
	Hispanic (Of Any Race)	Mean	326.96	289.39	256.69	251.48	289.33	273.17	300.67	277.74
		N	109,630	111,707	115,422	110,677	105,355	111,670	106,567	102,478
	Non-Hispanic American Indian	Mean	329.04	288.31	256.45	250.91	289.98	272.61	300.65	277.38
		N	1,510	1,519	1,574	1,504	1,444	1,519	1,461	1,395
	Non-Hispanic Multi-racial	Mean	342.74	303.46	267.08	262.73	302.97	285.50	315.59	290.97
		N	796	800	831	813	780	800	768	754
	Non-Hispanic White	Mean	338.08	300.63	266.80	261.58	299.95	283.75	311.99	288.43
		N	18,398	18,679	19,446	18,695	17,736	18,674	17,803	17,186
	Unknown	Mean	316.48	290.26	252.71	243.57	280.04	271.52	298.05	273.71
		N	8,723	8,951	9,312	8,919	8,385	8,947	8,442	8,125
2-3	Non-Hispanic Asian	Mean	353.89	337.84	320.83	271.55	312.69	329.50	342.69	324.03
		N	43,840	44,168	46,158	43,818	41,733	44,158	42,297	40,295
	Non-Hispanic Pacific Islander	Mean	326.76	318.95	309.28	260.37	293.75	314.24	321.44	307.84
		N	2,876	2,939	3,078	2,944	2,762	2,939	2,761	2,655
	Non-Hispanic Black	Mean	336.76	323.09	306.86	272.07	304.39	315.04	327.24	311.33
		N	18,922	19,078	20,145	19,017	17,915	19,069	18,061	17,121
	Hispanic (Of Any Race)	Mean	339.06	322.82	309.58	265.80	302.40	316.33	327.77	311.78
		N	237,490	239,431	251,195	238,458	225,901	239,330	228,200	217,220
	Non-Hispanic American Indian	Mean	341.59	319.79	307.73	266.10	303.90	313.85	326.45	310.71
		N	3,587	3,577	3,753	3,598	3,438	3,572	3,429	3,287
	Non-Hispanic Multi-racial	Mean	356.85	333.94	315.76	275.60	316.36	324.98	340.99	322.45
		N	1,510	1,498	1,588	1,502	1,437	1,497	1,438	1,367
	Non-Hispanic White	Mean	351.99	332.37	316.37	273.26	312.60	324.49	338.40	320.56
		N	35,912	35,940	38,076	35,921	33,988	35,934	34,256	32,465
	Unknown	Mean	329.93	319.74	301.45	256.90	293.22	310.61	322.96	305.09
		N	17,865	18,059	19,105	18,059	16,967	18,051	17,127	16,280

Cluster	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
4-5	Non-Hispanic Asian	Mean	425.23	366.66	347.34	316.90	371.21	357.06	384.30	360.99
		N	29,431	29,088	29,319	29,684	28,216	27,730	27,894	25,684
	Non-Hispanic Pacific Islander	Mean	404.04	347.24	335.80	302.84	353.81	341.55	364.34	344.98
		N	2,308	2,320	2,265	2,360	2,229	2,154	2,190	1,973
	Non-Hispanic Black	Mean	410.62	350.12	328.85	312.40	361.66	339.45	368.35	345.76
		N	16,051	15,807	15,980	16,192	15,296	14,965	15,039	13,669
	Hispanic (Of Any Race)	Mean	416.70	353.99	338.73	308.60	362.91	346.46	372.90	351.15
		N	193,787	192,442	193,880	196,787	186,014	182,917	183,379	168,298
	Non-Hispanic American Indian	Mean	416.82	351.33	333.98	304.29	360.97	342.81	371.16	348.42
		N	3,504	3,499	3,488	3,527	3,336	3,320	3,328	3,035
	Non-Hispanic Multi-racial	Mean	426.26	362.28	339.67	316.68	371.65	350.96	381.44	356.97
		N	934	912	930	942	897	875	874	814
	Non-Hispanic White	Mean	423.38	361.43	342.33	317.45	370.65	351.97	380.15	357.29
		N	26,460	26,020	26,060	26,843	25,373	24,465	24,815	22,529
Unknown	Mean	401.74	346.95	325.94	295.47	348.62	336.16	363.46	339.48	
	N	17,592	17,624	18,349	18,081	16,902	17,141	16,646	15,618	
6-8	Non-Hispanic Asian	Mean	409.19	362.92	338.80	327.59	368.46	350.84	376.93	355.80
		N	24,222	24,131	24,399	24,607	23,048	23,035	22,889	21,061
	Non-Hispanic Pacific Islander	Mean	386.53	341.97	324.73	311.22	349.26	333.41	355.66	337.75
		N	1,957	2,038	2,114	2,149	1,844	1,915	1,815	1,638
	Non-Hispanic Black	Mean	393.37	345.13	320.85	321.87	357.69	332.83	359.84	339.91
		N	16,262	16,473	16,629	16,842	15,473	15,588	15,307	13,951
	Hispanic (Of Any Race)	Mean	394.34	347.59	327.97	314.35	354.58	337.75	361.85	342.59
		N	157,222	159,322	161,727	162,062	150,636	153,116	149,533	138,772
	Non-Hispanic American Indian	Mean	398.88	349.28	330.96	319.68	360.08	340.53	364.95	346.94
		N	3,239	3,383	3,432	3,431	3,119	3,257	3,099	2,885
	Non-Hispanic Multi-racial	Mean	409.34	359.95	334.98	327.01	368.49	347.68	374.65	353.67
		N	629	626	647	644	605	607	591	555
	Non-Hispanic White	Mean	405.91	355.39	332.67	325.45	365.79	344.05	370.70	350.27
		N	21,442	21,336	21,947	22,094	20,383	20,376	19,940	18,278
Unknown	Mean	386.37	340.33	315.45	302.64	344.50	327.69	354.36	332.39	
	N	20,159	20,551	20,952	20,948	19,248	19,711	19,052	17,638	

Cluster	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
9-12	Non-Hispanic	Mean	404.05	392.97	376.24	323.80	364.05	384.78	396.54	378.24
		N	29,816	29,290	30,209	30,316	28,582	28,189	27,890	25,938
	Asian	Mean	386.60	376.84	365.22	306.03	346.32	371.08	379.73	363.30
		N	2,088	2,089	2,148	2,195	2,005	1,973	1,936	1,781
	Non-Hispanic Pacific Islander	Mean	386.70	377.43	357.20	313.67	350.08	367.26	380.23	361.54
		N	21,316	20,811	21,864	22,022	20,423	19,966	19,547	18,142
	Black	Mean	391.87	376.27	358.88	303.56	347.91	367.60	381.23	361.43
		N	174,954	174,642	181,063	180,421	168,599	169,618	164,802	155,169
	Hispanic (Of Any Race)	Mean	400.31	380.14	365.44	307.51	354.13	372.92	386.26	366.89
		N	3,245	3,332	3,402	3,372	3,127	3,243	3,111	2,937
	Non-Hispanic American Indian	Mean	406.49	388.71	368.80	319.35	363.49	378.56	393.94	373.43
		N	593	582	597	607	578	562	557	526
	Non-Hispanic Multi-racial	Mean	404.39	386.00	366.02	316.86	360.86	376.09	391.96	371.39
		N	23,443	23,169	24,028	24,069	22,597	22,391	21,940	20,568
	White	Mean	385.58	371.50	347.91	297.61	341.65	359.40	376.03	353.80
		N	23,361	22,922	24,470	24,562	22,394	22,027	21,251	19,786
Unknown	Mean	385.58	371.50	347.91	297.61	341.65	359.40	376.03	353.80	
	N	23,361	22,922	24,470	24,562	22,394	22,027	21,251	19,786	

1.2.2 Mean Scale Scores Across Domain and Composite Scores by Grade

This section provides parallel information to the prior section, with mean scale scores broken down by grade rather than by grade-level cluster.

Table 1.2.2.1

Mean Scale Scores by Grade S402 Online

Grade		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
1	Mean	328.79	293.56	259.95	254.00	291.49	276.86	304.16	280.99
	N	172,661	175,793	182,144	174,598	165,934	175,741	167,530	161,137
2	Mean	330.26	317.23	301.08	261.45	295.82	309.24	321.18	304.81
	N	176,135	178,000	186,848	176,882	167,167	177,928	169,156	160,695
3	Mean	352.2061	333.23	320.65	272.44	312.27	327.11	339.03	322.26
	N	182,775	183,623	192,999	183,363	174,035	183,557	175,468	167,198
4	Mean	415.45	355.02	336.46	310.08	363.03	345.83	373.27	350.76
	N	173,775	172,339	173,336	176,329	166,703	163,340	164,217	150,177
5	Mean	418.86	355.45	341.54	308.69	363.97	348.51	374.58	352.83
	N	114,361	113,482	115,010	116,136	109,706	108,414	108,139	99,761
6	Mean	388.97	341.47	322.99	314.65	352.03	332.16	355.95	337.93
	N	84,101	85,542	86,418	87,028	80,286	81,680	79,762	73,410
7	Mean	397.12	348.71	327.62	315.69	356.64	338.11	363.47	343.42
	N	80,770	81,622	82,975	83,098	77,188	78,291	76,553	70,787
8	Mean	402.56	357.24	333.47	318.27	360.50	345.32	371.03	349.56
	N	78,980	79,421	81,136	81,339	75,650	76,398	74,707	69,451
9	Mean	388.85	371.78	352.56	301.43	345.38	362.17	377.21	356.95
	N	91,179	90,985	94,390	94,472	87,923	88,074	85,615	80,406
10	Mean	394.57	379.60	360.88	307.81	351.33	370.30	384.39	364.32
	N	83,559	82,923	86,089	86,167	80,457	80,252	78,259	73,439
11	Mean	396.49	383.41	366.50	311.59	354.21	374.98	387.62	368.46
	N	60,655	59,922	62,441	62,036	58,010	57,978	56,589	52,807
12	Mean	396.05	384.40	367.36	311.73	353.97	375.96	388.17	369.04
	N	42,203	41,809	43,632	43,640	40,725	40,507	39,424	37,110

Table 1.2.2.2

Mean Scale Scores by Grade by Gender S402 Online

Grade	Gender		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
1	F	Mean	332.16	295.50	264.22	258.53	295.44	279.97	306.53	284.356
		N	80,650	81,767	85,012	81,521	77,557	81,753	78,044	75,123
	M	Mean	326.07	291.94	256.38	250.26	288.26	274.29	302.21	278.20
		N	90,746	92,726	95,793	91,787	87,156	92,688	88,253	84,822
	Missing	Mean	308.95	287.25	243.34	233.73	271.23	265.39	293.93	267.14
		N	1,265	1,300	1,339	1,290	1,221	1,300	1,233	1,192
2	F	Mean	332.69	319.24	306.59	264.87	298.72	313.00	323.28	308.28
		N	82,395	82,784	87,308	82,589	78,152	82,763	78,828	74,838
	M	Mean	328.37	315.54	296.38	258.67	293.50	306.07	319.46	301.93
		N	92,614	94,098	98,362	93,178	87,945	94,047	89,254	84,834
	Missing	Mean	308.31	310.43	285.02	240.21	274.05	297.58	309.69	290.14
		N	1,126	1,118	1,178	1,115	1,070	1,118	1,074	1,023
3	F	Mean	353.51	335.64	326.74	275.78	314.58	331.38	341.12	325.92
		N	85,359	85,297	89,991	85,333	81,123	85,274	81,702	77,705
	M	Mean	351.35	331.24	315.51	269.79	310.51	323.55	337.38	319.27
		N	96,427	97,336	10,1974	97,037	91,957	97,294	92,814	88,572
	Missing	Mean	323.32	320.40	297.49	245.36	284.22	309.34	321.52	301.79
		N	989	990	1,034	993	955	989	952	921
4	F	Mean	415.70	356.34	341.83	313.66	364.93	349.20	374.26	353.68
		N	79,361	78,289	79,087	80,345	76,053	74,262	74,703	68,337
	M	Mean	415.58	354.07	332.20	307.31	361.72	343.23	372.65	348.57
		N	93,325	92,963	93,180	94,882	89,603	88,065	88,476	80,907
	Missing	Mean	386.32	341.61	309.38	287.16	336.95	325.25	354.71	327.26
		N	1,089	1,087	1,069	1,102	1,047	1,013	1,038	933
5	F	Mean	417.79	356.84	347.06	310.81	364.47	352.01	375.21	355.40
		N	49,661	49,067	49,922	50,354	47,582	46,904	46,817	43,190
	M	Mean	420.06	354.53	337.52	307.36	363.92	346.03	374.30	351.11
		N	63,734	63,448	64,142	64,820	61,208	60,610	60,406	55,756
	Missing	Mean	394.30	344.78	322.76	287.14	340.37	333.29	359.48	334.20
		N	966	967	946	962	916	900	916	815

Grade	Gender		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
6	F	Mean	388.44	344.37	328.36	314.23	351.47	336.33	357.73	340.58
		N	36,462	36,866	37,262	37,517	34,795	35,198	34,567	31,815
	M	Mean	389.48	339.32	319.02	315.17	352.60	329.08	354.64	336.00
		N	46,931	47,960	48,445	48,800	44,832	45,808	44,529	41,006
	Missing	Mean	382.57	336.39	312.17	301.77	341.81	324.15	350.40	328.96
		N	708	716	711	711	659	674	666	589
7	F	Mean	396.99	351.81	332.79	315.53	356.52	342.25	365.55	346.24
		N	35,233	35,366	35,994	36,074	33,643	33,908	33,289	30,778
	M	Mean	397.31	346.43	323.83	316.05	356.90	335.08	361.97	341.40
		N	44,872	45,579	46,295	46,334	42,908	43,736	42,635	39,428
	Missing	Mean	390.85	340.37	312.15	299.78	345.74	325.75	355.70	331.18
		N	665	677	686	690	637	647	629	581
8	F	Mean	402.80	360.33	338.61	318.98	360.97	349.47	373.23	352.55
		N	34,484	34,427	35,201	35,223	32,956	33,114	32,559	30,215
	M	Mean	402.55	355.04	329.71	318.04	360.39	342.33	369.49	347.46
		N	43,924	44,389	45,313	45,505	42,154	42,702	41,604	38,737
	Missing	Mean	388.01	342.87	315.90	294.30	340.73	329.04	356.50	331.42
		N	572	605	622	611	540	582	544	499
9	F	Mean	389.96	375.27	359.26	303.34	346.89	367.29	379.97	360.91
		N	38,491	38,139	39,659	39,798	37,127	36,875	35,982	33,770
	M	Mean	388.45	369.53	348.18	300.50	344.68	358.85	375.50	354.44
		N	51,607	51,779	53,601	53,542	49,751	50,154	48,638	45,684
	Missing	Mean	368.43	356.43	325.02	280.53	324.93	340.48	360.46	336.63
		N	1,081	1,067	1,130	1,132	1,045	1,045	995	952
10	F	Mean	395.71	382.67	366.59	309.54	352.72	374.73	386.86	367.76
		N	36,159	35,745	37,067	37,157	34,770	34,543	33,820	31,643
	M	Mean	393.87	377.38	356.71	306.67	350.44	367.10	382.64	361.85
		N	46,782	46,592	48,380	48,366	45,091	45,139	43,889	41,276
	Missing	Mean	381.81	368.55	345.10	293.66	338.01	356.14	373.02	350.63
		N	618	586	642	644	596	570	550	520
11	F	Mean	397.00	386.22	371.91	313.28	355.28	379.09	389.68	371.61
		N	26,846	26,384	27,497	27,407	25,693	25,482	25,003	23,332
	M	Mean	396.32	381.33	362.46	310.46	353.57	371.92	386.15	366.15
		N	33,187	32,942	34,299	33,995	31,725	31,915	31,021	28,946
	Missing	Mean	384.34	374.35	350.69	299.58	342.13	362.73	377.50	356.06
		N	622	596	645	634	592	581	565	529
12	F	Mean	396.83	387.11	373.07	313.91	355.47	380.19	390.28	372.45
		N	19,340	19,008	19,857	19,930	18,670	18,357	17,970	16,886
	M	Mean	395.47	382.19	362.68	310.02	352.81	372.51	386.46	366.26
		N	22,551	22,496	23,450	23,381	21,757	21,865	21,176	19,972
	Missing	Mean	389.98	378.77	357.10	301.32	344.89	367.85	381.97	360.373
		N	312	305	325	329	298	285	278	252

Table 1.2.2.3

Mean Scale Scores by Grade by Ethnicity S402 Online

Grade	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
1	Non-Hispanic Asian	Mean	338.37	309.00	272.75	260.81	299.64	291.008	317.887	293.34
		N	24,460	24,740	25,713	24,658	23,533	24,738	23,691	22,825
	Non-Hispanic Pacific Islander	Mean	310.26	287.68	258.70	247.15	278.92	273.19	294.42	274.69
		N	1,519	1,541	1,621	1,565	1,467	1,540	1,456	1,407
	Non-Hispanic Black	Mean	322.56	294.34	259.38	263.15	292.91	276.95	302.86	281.40
		N	9,257	9,492	9,927	9,433	8,834	9,489	8,914	8,511
	Hispanic (Of Any Race)	Mean	326.96	289.39	256.69	251.48	289.33	273.17	300.67	277.74
		N	109,630	111,707	115,422	110,677	105,355	111,670	106,567	102,478
	Non-Hispanic American Indian	Mean	329.04	288.31	256.46	250.91	289.98	272.61	300.65	277.38
		N	1,510	1,519	1,574	1,504	1,444	1,519	1,461	1,395
	Non-Hispanic Multi-racial	Mean	342.74	303.46	267.08	262.73	302.97	285.50	315.59	290.97
		N	796	800	831	813	780	800	768	754
	Non-Hispanic White	Mean	338.08	300.63	266.80	261.59	299.95	283.75	311.99	288.43
		N	18,398	18,679	19,446	18,695	17,736	18,674	17,803	17,186
Unknown	Mean	316.48	290.26	252.71	243.57	280.04	271.52	298.05	273.71	
	N	8,723	8,951	9,312	8,919	8,385	8,947	8,442	8,125	
2	Non-Hispanic Asian	Mean	343.60	329.46	312.27	266.08	304.79	321.01	333.69	315.69
		N	22,609	22,829	23,854	22,614	21,491	22,823	21,798	20,745
	Non-Hispanic Pacific Islander	Mean	314.93	312.12	299.85	253.92	284.38	306.06	313.19	299.21
		N	1,497	1,541	1,615	1,535	1,427	1,541	1,437	1,371
	Non-Hispanic Black	Mean	326.81	315.90	298.31	268.56	297.71	307.19	319.24	303.89
		N	9,406	9,513	10,018	9,427	8,883	9,510	8,998	8,511
	Hispanic (Of Any Race)	Mean	327.12	314.29	298.90	259.80	293.43	306.68	318.16	302.29
		N	114,549	115,781	121,455	115,103	108,820	115,728	110,050	104,622
	Non-Hispanic American Indian	Mean	328.98	312.50	297.07	259.87	294.31	304.87	317.65	301.50
		N	1,630	1,647	1,710	1,640	1,563	1,644	1,574	1,507
	Non-Hispanic Multi-racial	Mean	347	324.82	306.98	270.76	309.00	315.92	331.73	313.74
		N	783	771	821	769	735	770	741	694
	Non-Hispanic White	Mean	342.25	324.37	307.43	268.28	305.22	315.96	329.83	312.37
		N	18,224	18,297	19,380	18,242	17,208	18,292	17,390	16,448
Unknown	Mean	320.45	313.37	292.50	252.12	286.10	302.94	315.62	297.57	
	N	9,028	9,187	9,662	9,108	8,528	9,184	8,674	8,203	

Grade	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
3	Non-Hispanic Asian	Mean	364.84	346.80	329.98	277.39	321.07	338.59	352.26	332.89
		N	21,231	21,339	22,304	21,204	20,242	21,335	20,499	19,550
	Non-Hispanic Pacific Islander	Mean	339.61	326.48	319.69	267.40	303.77	323.26	330.39	317.05
		N	1,379	1,398	1,463	1,409	1,335	1,398	1,324	1,284
	Non-Hispanic Black	Mean	346.61	330.25	315.31	275.52	310.96	322.85	335.18	318.69
		N	9,516	9,565	10,127	9,590	9,032	9,559	9,063	8,610
	Hispanic (Of Any Race)	Mean	350.19	330.80	319.58	271.40	310.74	325.36	336.73	320.59
		N	122,941	123,650	129,740	123,355	117,081	123,602	118,150	112,598
	Non-Hispanic American Indian	Mean	352.09	326.01	316.65	271.32	311.90	321.51	333.93	318.50
		N	1,957	1,930	2,043	1,958	1,875	1,928	1,855	1,780
	Non-Hispanic Multi-racial	Mean	367.45	343.62	325.16	280.69	324.08	334.58	350.85	331.42
		N	727	727	767	733	702	727	697	673
	Non-Hispanic White	Mean	362.02	340.68	325.63	278.41	320.16	333.33	347.24	328.98
		N	17,688	17,643	18,696	17,679	16,780	17,642	16,866	16,017
	Unknown	Mean	339.63	326.34	310.62	261.77	300.42	318.56	330.49	312.73
		N	8,837	8,872	9,443	8,951	8,439	8,867	8,453	8,077
4	Non-Hispanic Asian	Mean	424.79	366.42	345.63	317.27	371.20	356.07	384.02	360.34
		N	18,274	18,074	18,159	18,419	17,515	17,181	17,300	15,884
	Non-Hispanic Pacific Islander	Mean	402.38	347.08	334.56	303.36	353.42	340.89	363.68	344.50
		N	1,410	1,416	1,377	1,446	1,366	1,307	1,337	1,202
	Non-Hispanic Black	Mean	409.86	350.43	327.61	313.11	361.63	338.98	368.28	345.45
		N	9,248	9,101	9,183	9,318	8,780	8,590	8,656	7,813
	Hispanic (Of Any Race)	Mean	415.01	353.73	336.45	309.10	362.34	345.23	372.21	350.13
		N	117,441	116,591	117,169	119,270	112,767	110,490	111,084	101,647
	Non-Hispanic American Indian	Mean	413.49	350.22	329.53	304.55	359.61	340.00	369.48	346.17
		N	1,970	1,973	1,966	2,000	1,886	1,873	1,866	1,709
	Non-Hispanic Multi-racial	Mean	424.79	360.78	336.39	317.34	371.66	348.44	380.16	355.32
		N	595	572	589	603	577	549	550	517
	Non-Hispanic White	Mean	422.52	361.19	340.89	317.81	370.43	351.13	379.74	356.69
		N	16,279	16,003	15,896	16,458	15,596	14,962	15,307	13,793
	Unknown	Mean	399.71	346.04	322.84	295.54	347.72	334.23	362.31	337.95
		N	9,783	9,789	10,212	10,060	9,405	9,521	9,250	8,678

Grade	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall	
5	Non-Hispanic Asian	Mean	425.97	367.05	350.13	316.29	371.23	358.67	384.75	362.03	
		N	11,157	11,014	11,160	11,265	10,701	10,549	10,594	9,800	
	Non-Hispanic Pacific Islander	Mean	406.66	347.49	337.72	302.03	354.43	342.57	365.38	345.75	
		N	898	904	888	914	863	847	853	771	
	Non-Hispanic Black	Mean	411.66	349.70	330.52	311.43	361.69	340.08	368.44	346.18	
		N	6,803	6,706	6,797	6,874	6,516	6,375	6,383	5,856	
	Hispanic (Of Any Race)	Mean	419.31	354.38	342.21	307.83	363.79	348.34	373.96	352.69	
		N	76,346	75,851	76,711	77,517	73,247	72,427	72,295	66,651	
	Non-Hispanic American Indian	Mean	421.09	352.77	339.73	303.95	362.74	346.44	373.30	351.33	
		N	1534	1,526	1,522	1,527	1,450	1,447	1,462	1,326	
	Non-Hispanic Multi-racial	Mean	428.83	364.81	345.33	315.52	371.63	355.19	383.62	359.84	
		N	339	340	341	339	320	326	324	297	
	Non-Hispanic White	Mean	424.76	361.82	344.58	316.86	371.01	353.28	380.80	358.22	
		N	10181	10,017	10,164	10,385	9,777	9,503	9,508	8,736	
	Unknown	Mean	404.28	348.08	329.83	295.39	349.75	338.56	364.90	341.39	
		N	7,809	7,835	8,137	8,021	7,497	7,620	7,396	6,940	
	6	Non-Hispanic Asian	Mean	400.05	353.59	331.21	321.46	360.82	342.24	367.75	347.68
			N	8,206	8,207	8,320	8,403	7,827	7,836	7,749	7,156
Non-Hispanic Pacific Islander		Mean	379.08	335.09	320.02	310.39	345.32	327.74	348.07	332.38	
		N	708	708	706	741	668	652	655	579	
Non-Hispanic Black		Mean	386.18	337.84	314.66	318.74	352.57	326.26	352.60	333.80	
		N	5,320	5,504	5,509	5,603	5,072	5,209	5,045	4,606	
Hispanic (Of Any Race)		Mean	387.49	340.26	323.41	313.49	350.79	331.80	354.67	337.35	
		N	54,162	55,282	55,734	56,039	51,784	52,898	51,635	47,630	
Non-Hispanic American Indian		Mean	393.05	342.40	327.72	321.96	357.47	335.27	357.64	342.05	
		N	1,147	1,192	1,222	1,219	1,097	1,142	1,074	985	
Non-Hispanic Multi-racial		Mean	402.54	353.99	329.10	322.67	363.42	341.86	368.72	348.28	
		N	230	229	235	236	221	221	215	199	
Non-Hispanic White		Mean	397.14	346.71	326.93	322.88	360.09	336.73	361.87	343.20	
		N	7,638	7,571	7,754	7,837	7,248	7,205	7,068	6,452	
Unknown		Mean	381.57	335.17	312.29	303.42	342.49	323.40	349.30	328.84	
		N	7,161	7,317	7,418	7,433	6,822	6,968	6,761	6,210	

Grade	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
7	Non-Hispanic Asian	Mean	409.77	362.78	338.93	327.11	368.49	350.88	376.90	355.62
		N	8,054	8,068	8,114	8,155	7,649	7,707	7,665	7,034
	Non-Hispanic Pacific Islander	Mean	388.05	341.18	324.64	309.17	348.87	332.87	356.04	337.73
		N	672	721	746	753	631	675	629	569
	Non-Hispanic Black	Mean	394.36	344.40	320.73	322.08	358.35	332.41	359.67	339.96
		N	5,498	5,532	5,608	5,648	5,239	5,248	5,168	4,718
	Hispanic (Of Any Race)	Mean	395.25	347.19	327.48	313.71	354.75	337.27	361.83	342.27
		N	52,026	52,579	53,486	53,455	49,805	50,559	49,414	45,826
	Non-Hispanic American Indian	Mean	399.03	348.67	329.77	316.11	358.86	339.62	364.93	346.21
		N	996	1,064	1,060	1,069	964	1,021	971	909
	Non-Hispanic Multi-racial	Mean	416.48	363.66	338.69	332.61	374.14	351.04	379.65	357.67
		N	230	230	238	236	225	225	219	212
	Non-Hispanic White	Mean	408.60	356.87	333.70	326.27	367.57	345.38	372.70	351.98
		N	7,077	7,074	7,268	7,327	6,759	6,766	6,613	6,096
	Unknown	Mean	387.86	340.13	315.01	302.34	345.23	327.36	354.59	332.28
		N	6,682	6,820	6,937	6,933	6,371	6,546	6,317	5,852
8	Non-Hispanic Asian	Mean	418.03	372.81	346.59	334.48	376.33	359.78	386.48	364.46
		N	7,962	7,856	7,965	8,049	7,572	7,492	7,475	6,871
	Non-Hispanic Pacific Islander	Mean	393.89	350.92	329.87	314.52	354.53	340.30	364.57	344.13
		N	577	609	662	655	545	588	531	490
	Non-Hispanic Black	Mean	399.39	353.26	327.15	324.80	362.05	339.93	367.17	345.94
		N	5,444	5,437	5,512	5,591	5,162	5,131	5,094	4,627
	Hispanic (Of Any Race)	Mean	400.68	355.89	333.31	315.92	358.41	344.57	369.51	348.42
		N	51,034	51,461	52,507	52,568	49,047	49,659	48,484	45,316
	Non-Hispanic American Indian	Mean	404.84	357.14	335.51	320.60	363.89	346.86	372.42	352.47
		N	1,096	1,127	1,150	1,143	1,058	1,094	1,054	991
	Non-Hispanic Multi-racial	Mean	408.87	363.03	337.84	325.29	367.54	350.99	375.78	355.24
		N	169	167	174	172	159	161	157	144
	Non-Hispanic White	Mean	413.04	363.65	338.00	327.48	370.40	350.89	378.56	356.41
		N	6,727	6,691	6,925	6,930	6,376	6,405	6,259	5,730
	Unknown	Mean	390.22	346.44	319.46	302.07	346.01	332.87	359.83	336.44
		N	6,316	6,414	6,597	6,582	6,055	6,197	5,974	5,576

Grade	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
9	Non-Hispanic Asian	Mean	402.36	388.57	370.83	319.37	360.93	379.93	392.98	373.94
		N	8,847	8,721	8,973	9,033	8,478	8,369	8,283	7,679
	Non-Hispanic Pacific Islander	Mean	384.70	371.70	359.45	301.83	343.67	366.03	376.21	359.81
		N	677	687	694	713	650	644	635	583
	Non-Hispanic Black	Mean	382.99	370.57	348.11	308.05	345.50	359.29	374.38	354.70
		N	6,430	6,262	6,609	6,669	6,192	6,016	5,884	5,488
	Hispanic (Of Any Race)	Mean	387.78	369.84	351.65	298.66	343.48	360.75	375.48	355.39
		N	59,016	59,262	61,313	61,138	56,966	57,573	55,820	52,624
	Non-Hispanic American Indian	Mean	393.39	373.70	359.79	302.48	348.02	366.95	379.58	360.98
		N	1,057	1,084	1,120	1,121	1,032	1,058	1,009	962
	Non-Hispanic Multi-racial	Mean	401.55	383.00	363.65	316.19	359.11	373.39	388.64	368.46
		N	192	185	194	198	190	181	179	173
	Non-Hispanic White	Mean	397.89	378.82	358.91	311.38	354.94	368.86	385.02	364.60
		N	7,674	7,520	7,821	7,892	7,411	7,235	7,119	6,652
	Unknown	Mean	377.45	361.82	335.29	287.32	332.59	348.07	366.89	343.21
		N	7,678	7,642	8,062	8,112	7,392	7,368	7,052	6,599
10	Non-Hispanic Asian	Mean	407.36	395.09	376.95	325.66	366.65	386.25	399.13	380.14
		N	8,668	8,489	8,750	8,798	8,311	8,162	8,094	7,515
	Non-Hispanic Pacific Islander	Mean	387.40	378.57	367.71	306.24	346.75	372.85	380.67	364.17
		N	639	648	669	690	617	608	591	542
	Non-Hispanic Black	Mean	386.22	376.31	356.16	312.46	349.22	366.10	379.27	360.43
		N	6,409	6,239	6,557	6,631	6,166	6,004	5,897	5,509
	Hispanic (Of Any Race)	Mean	393.10	377.47	359.52	304.31	348.89	368.55	382.47	362.37
		N	54,016	53,826	55,760	55,676	52,087	52,260	50,835	47,871
	Non-Hispanic American Indian	Mean	402.03	380.93	365.35	308.66	355.28	373.55	387.54	367.67
		N	964	1,006	1,015	994	921	983	934	881
	Non-Hispanic Multi-racial	Mean	412.12	389.10	369.53	322.20	368.67	378.88	396.69	375.57
		N	204	198	204	210	199	190	189	176
	Non-Hispanic White	Mean	405.93	387.29	366.51	318.09	362.21	377.12	393.25	372.45
		N	6,768	6,711	6,956	6,968	6,530	6,485	6,362	5,974
	Unknown	Mean	386.05	372.01	348.64	298.47	342.12	360.10	376.36	354.27
		N	6,311	6,213	6,598	6,632	6,036	5,951	5,746	5,334

Grade	Ethnicity		Listening	Reading	Writing	Speaking	Oral	Literacy	Comprehension	Overall
11	Non-Hispanic Asian	Mean	403.84	395.29	380.04	326.75	365.49	387.81	398.01	380.75
		N	6,869	6,731	6,946	6,967	6,574	6,472	6,413	5,954
	Non-Hispanic Pacific Islander	Mean	389.38	380.95	366.54	309.77	349.82	373.80	383.66	366.39
		N	426	421	435	428	401	404	398	362
	Non-Hispanic Black	Mean	391.17	383.50	364.84	318.86	354.89	374.21	385.96	368.01
		N	4,713	4,604	4,820	4,845	4,478	4,388	4,300	3,944
	Hispanic (Of Any Race)	Mean	394.75	381.00	364.96	307.71	351.37	372.97	385.38	366.16
		N	37,663	37,402	38,844	38,500	36,074	36,315	35,345	33,116
	Non-Hispanic American Indian	Mean	403.94	385.47	372.63	313.10	358.93	378.75	390.85	372.42
		N	723	726	734	722	686	701	696	645
	Non-Hispanic Multi-racial	Mean	406.80	398.51	378.57	321.94	364.58	388.26	400.35	380.76
		N	111	109	108	108	104	103	106	96
	Non-Hispanic White	Mean	408.81	390.69	371.16	320.54	364.99	380.87	396.70	376.08
		N	5,081	5,034	5,217	5,173	4,861	4,879	4,766	4,450
	Unknown	Mean	392.16	378.43	356.86	304.93	348.80	367.67	382.95	361.81
		N	5,299	5,122	5,562	5,518	5,048	4,931	4,785	4,440
12	Non-Hispanic Asian	Mean	401.76	393.84	379.09	324.36	363.15	386.54	396.35	379.07
		N	5,432	5,349	5,540	5,518	5,219	5,186	5,100	4,790
	Non-Hispanic Pacific Islander	Mean	385.45	378.89	370.30	309.44	346.48	374.49	380.10	364.80
		N	346	333	350	364	337	317	312	294
	Non-Hispanic Black	Mean	388.27	383.33	364.96	318.92	353.48	374.14	384.71	367.20
		N	3,764	3,706	3,878	3,877	3,587	3,558	3,466	3,201
	Hispanic (Of Any Race)	Mean	394.63	382.05	365.72	307.45	351.16	373.96	386.15	366.84
		N	24,259	24,152	25,146	25,107	23,472	23,470	22,802	21,558
	Non-Hispanic American Indian	Mean	406.34	384.61	367.56	308.36	358.13	376.16	391.25	370.06
		N	501	516	533	535	488	501	472	449
	Non-Hispanic Multi-racial	Mean	403.77	387.73	366.54	316.57	359.82	377.16	390.92	370.69
		N	86	90	91	91	85	88	83	81
	Non-Hispanic White	Mean	408.73	391.53	372.33	320.76	364.81	381.97	396.98	376.50
		N	3,920	3,904	4,034	4,036	3,795	3,792	3,693	3,492
	Unknown	Mean	391.64	380.44	358.98	306.33	348.80	369.59	384.08	363.15
		N	4,073	3,945	4,248	4,300	3,918	3,777	3,668	3,413

1.2.3 Correlations

Tables in this section show correlations among the four domain scale scores by grade-level cluster across all tiers, as well as the number of students included in each correlation.

Table 1.2.3.1

Correlations Among Scale Scores: 1 S402 Online

		Listening	Reading	Writing	Speaking
Listening	Pearson Correlation	1	0.411	0.510	0.520
	N	172,661	167,530	172,608	165,934
Reading	Pearson Correlation		1	0.530	0.320
	N			175,741	168,867
Writing	Pearson Correlation			1	0.413
	N				174,548
Speaking	Pearson Correlation				1
	N				174,598

Table 1.2.3.2

Correlations Among Scale Scores: 2–3 S402 Online

		Listening	Reading	Writing	Speaking
Listening	Pearson Correlation	1	0.587	0.620	0.504
	N		344,624	358,781	341,202
Reading	Pearson Correlation		1	0.654	0.419
	N			361,485	343,744
Writing	Pearson Correlation			1	0.500
	N				360,117
Speaking	Pearson Correlation				1
	N				360,245

Table 1.2.3.3

Correlations Among Scale Scores: 4–5 S402 Online

		Listening	Reading	Writing	Speaking
Listening	Pearson Correlation	1	0.640	0.616	0.569
	N		272,356	273,096	276,409
Reading	Pearson Correlation		1	0.627	0.507
	N			271,754	274,341
Writing	Pearson Correlation			1	0.568
	N				276,392
Speaking	Pearson Correlation				1
	N				292,465

Table 1.2.3.4

Correlations Among Scale Scores: 6–8 S402 Online

		Listening	Reading	Writing	Speaking
Listening	Pearson Correlation	1	0.689	0.641	0.549
	N		231,022	233,195	233,124
Reading	Pearson Correlation		1	0.738	0.516
	N			236,369	235,811
Writing	Pearson Correlation			1	0.599
	N				239,239
Speaking	Pearson Correlation				1
	N				251,465

Table 1.2.3.5

Correlations Among Scale Scores: 9–12 S402 Online

		Listening	Reading	Writing	Speaking
Listening	Pearson Correlation	1	0.701	0.554	0.532
	N		259,887	267,570	267,115
Reading	Pearson Correlation		1	0.660	0.580
	N			266,811	265,566
Writing	Pearson Correlation			1	0.614
	N				275,389
Speaking	Pearson Correlation				1
	N				286,315

1.3 Proficiency Level Results

This section covers results by proficiency level and shows the distribution of students falling into the six language proficiency levels defined in the WIDA ELD Standards. Results are provided for the four domains and the four composites.

Within each section, results are presented first by grade-level cluster, then by grade. For both, the first table shows the number of students classified into each language proficiency level (count), while the second table shows the results in terms of percentages within each row.

1.3.1 Domains

1.3.1.1 Listening

1.3.1.1.1 By Cluster

Table 1.3.1.1.1

Proficiency Level by Cluster (Count): Listening S402 Online

Cluster	Listening Proficiency Range						Total
	1	2	3	4	5	6	
1	14,094	7,614	21,934	9,700	17,188	102,131	172,661
2–3	27,793	36,807	64,380	20,919	51,071	157,940	358,910
4–5	7,431	6,351	14,864	11,038	30,168	218,284	288,136
6–8	8,732	15,228	47,427	45,587	39,993	86,884	243,851
9–12	25,734	42,572	74,940	48,798	27,544	58,008	277,596

Table 1.3.1.1.2

Proficiency Level by Cluster (Percent): Listening S402 Online

Cluster	Listening Proficiency Range						Total
	1	2	3	4	5	6	
1	8.2%	4.4%	12.7%	5.6%	10.0%	59.2%	100.0%
2–3	7.7%	10.3%	17.9%	5.8%	14.2%	44.0%	100.0%
4–5	2.6%	2.2%	5.2%	3.8%	10.5%	75.8%	100.0%
6–8	3.6%	6.2%	19.4%	18.7%	16.4%	35.6%	100.0%
9–12	9.3%	15.3%	27.0%	17.6%	9.9%	20.9%	100.0%

1.3.1.1.2 By Grade

Table 1.3.1.1.2.1

Proficiency Level by Grade (Count): Listening S402 Online

Grade	Listening Proficiency Range						Total
	1	2	3	4	5	6	
1	14,094	7,614	21,934	9,700	17,188	102,131	172,661
2	13,586	20,599	34,223	9,456	21,583	76,688	176,135
3	14,207	16,208	30,157	11,463	29,488	81,252	182,775
4	3,444	3,455	8,255	6,506	17,159	134,956	173,775
5	3,987	2,896	6,609	4,532	13,009	83,328	114,361
6	2,115	5,286	15,293	16,384	16,463	28,560	84,101
7	2,567	4,512	16,910	14,747	12,510	29,524	80,770
8	4,050	5,430	15,224	14,456	11,020	28,800	78,980
9	5,058	15,708	24,250	17,691	8,577	19,895	91,179
10	7,765	13,159	22,257	13,495	8,582	18,301	83,559
11	7,249	7,010	16,572	11,219	5,814	12,791	60,655
12	5,662	6,695	11,861	6,393	4,571	7,021	42,203

Table 1.3.1.1.2.2

Proficiency Level by Grade (Percent): Listening S402 Online

Grade	Listening Proficiency Range						Total
	1	2	3	4	5	6	
1	8.2%	4.4%	12.7%	5.6%	10.0%	59.2%	100.0%
2	7.7%	11.7%	19.4%	5.4%	12.3%	43.5%	100.0%
3	7.8%	8.9%	16.5%	6.3%	16.1%	44.5%	100.0%
4	2.0%	2.0%	4.8%	3.7%	9.9%	77.7%	100.0%
5	3.5%	2.5%	5.8%	4.0%	11.4%	72.9%	100.0%
6	2.5%	6.3%	18.2%	19.5%	19.6%	34.0%	100.0%
7	3.2%	5.6%	20.9%	18.3%	15.5%	36.6%	100.0%
8	5.1%	6.9%	19.3%	18.3%	14.0%	36.5%	100.0%
9	5.5%	17.2%	26.6%	19.4%	9.4%	21.8%	100.0%
10	9.3%	15.7%	26.6%	16.2%	10.3%	21.9%	100.0%
11	12.0%	11.6%	27.3%	18.5%	9.6%	21.1%	100.0%
12	13.4%	15.9%	28.1%	15.1%	10.8%	16.6%	100.0%

1.3.1.2 Reading

1.3.1.2.1 By Cluster

Table 1.3.1.2.1.1

Proficiency Level by Cluster (Count): Reading S402 Online

Cluster	Reading Proficiency Range						Total
	1	2	3	4	5	6	
1	29,055	52,145	31,001	16,847	26,956	19,789	175,793
2-3	47,326	99,027	68,663	40,270	58,018	48,319	361,623
4-5	27,804	60,485	52,796	32,123	65,365	47,248	28,5821
6-8	80,944	62,637	45,538	14,538	23,286	19,642	246,585
9-12	60,268	81,348	43,408	14,608	35,594	40,413	275,639

Table 1.3.1.2.1.2

Proficiency Level by Cluster (Percent): Reading S402 Online

Cluster	Reading Proficiency Range						Total
	1	2	3	4	5	6	
1	16.5%	29.7%	17.6%	9.6%	15.3%	11.3%	100.0%
2-3	13.1%	27.4%	19.0%	11.1%	16.0%	13.4%	100.0%
4-5	9.7%	21.2%	18.5%	11.2%	22.9%	16.5%	100.0%
6-8	32.8%	25.4%	18.5%	5.9%	9.4%	8.0%	100.0%
9-12	21.9%	29.5%	15.7%	5.3%	12.9%	14.7%	100.0%

1.3.1.2.2 By Grade

Table 1.3.1.2.2.1

Proficiency Level by Grade (Count): Reading S402 Online

Grade	Reading Proficiency Range						Total
	1	2	3	4	5	6	
1	29,055	52,145	31,001	16,847	26,956	19,789	175,793
2	21,032	50,164	36,473	25,026	25,118	20,187	178,000
3	26,294	48,863	32,190	15,244	32,900	28,132	183,623
4	12,309	33,322	30,924	19,432	45,137	31,215	172,339
5	15,495	27,163	21,872	12,691	20,228	16,033	113,482
6	28,841	22,072	16,701	5,146	8,265	4,517	85,542
7	27,326	20,488	15,262	4,901	7,069	6,576	81,622
8	24,777	20,077	13,575	4,491	7,952	8,549	79,421
9	21,102	26,005	16,374	4,200	10,478	12,826	90,985
10	17,865	22,261	13,724	4,286	11,326	13,461	82,923
11	12,161	19,105	7,903	3,443	8,221	9,089	59,922
12	9,140	13,977	5,407	2,679	5,569	5,037	41,809

Table 1.3.1.2.2.2

Proficiency Level by Grade (Percent): Reading S402 Online

Grade	Reading Proficiency Range						Total
	1	2	3	4	5	6	
1	16.5%	29.7%	17.6%	9.6%	15.3%	11.3%	100.0%
2	11.8%	28.2%	20.5%	14.1%	14.1%	11.3%	100.0%
3	14.3%	26.6%	17.5%	8.3%	17.9%	15.3%	100.0%
4	7.1%	19.3%	17.9%	11.3%	26.2%	18.1%	100.0%
5	13.7%	23.9%	19.3%	11.2%	17.8%	14.1%	100.0%
6	33.7%	25.8%	19.5%	6.0%	9.7%	5.3%	100.0%
7	33.5%	25.1%	18.7%	6.0%	8.7%	8.1%	100.0%
8	31.2%	25.3%	17.1%	5.7%	10.0%	10.8%	100.0%
9	23.2%	28.6%	18.0%	4.6%	11.5%	14.1%	100.0%
10	21.5%	26.8%	16.6%	5.2%	13.7%	16.2%	100.0%

11	20.3%	31.9%	13.2%	5.7%	13.7%	15.2%	100.0%
12	21.9%	33.4%	12.9%	6.4%	13.3%	12.0%	100.0%

1.3.1.3 Writing

1.3.1.3.1 By Cluster

Table 1.3.1.3.1.1

Proficiency Level by Cluster (Count): Writing S402 Online

Cluster	Writing Proficiency Range						Total
	1	2	3	4	5	6	
1	33,238	105,120	40,835	2,933	17	1	182,144
2-3	20,502	54,862	238,793	64,286	1,339	65	379,847
4-5	11,991	18,720	147,877	103,561	5,741	456	288,346
6-8	25,641	39,579	144,339	40,746	219	5	250,529
9-12	25,094	44,906	127,721	82,334	6,361	136	286,552

Table 1.3.1.3.1.2

Proficiency Level by Cluster (Percent): Writing S402 Online

Cluster	Writing Proficiency Range						Total
	1	2	3	4	5	6	
1	18.2%	57.7%	22.4%	1.6%	0.0%	0.0%	100.0%
2-3	5.4%	14.4%	62.9%	16.9%	0.4%	0.0%	100.0%
4-5	4.2%	6.5%	51.3%	35.9%	2.0%	0.2%	100.0%
6-8	10.2%	15.8%	57.6%	16.3%	0.1%	0.0%	100.0%
9-12	8.8%	15.7%	44.6%	28.7%	2.2%	0.0%	100.0%

1.3.1.3.2 By Grade

Table 1.3.1.3.2.1

Proficiency Level by Grade (Count): Writing S402 Online

Grade	Writing Proficiency Range						Total
	1	2	3	4	5	6	
1	33,238	105,120	40,835	2,933	17	1	182,144
2	12,319	35,572	118,118	20,437	392	10	186,848
3	8,183	19,290	120,675	43,849	947	55	192,999
4	6,594	11,117	90,778	61,575	2,990	282	173,336
5	5,397	7,603	57,099	41,986	2,751	174	115,010
6	8,219	12,514	51,912	13,722	49	2	86,418
7	7,586	16,129	46,153	13,045	61	1	82,975
8	9,836	10,936	46,274	13,979	109	2	81,136
9	7,675	14,640	41,325	28,030	2,633	87	94,390
10	6,859	13,269	36,112	27,934	1,885	30	86,089
11	4,992	10,179	29,639	16,373	1,248	10	62,441
12	5,568	6,818	20,645	9,997	595	9	43,632

Table 1.3.1.3.2.2

Proficiency Level by Grade (Percent): Writing S402 Online

Grade	Writing Proficiency Range						Total
	1	2	3	4	5	6	
1	18.2%	57.7%	22.4%	1.6%	0.0%	0.0%	100.0%
2	6.6%	19.0%	63.2%	10.9%	0.2%	0.0%	100.0%
3	4.2%	10.0%	62.5%	22.7%	0.5%	0.0%	100.0%
4	3.8%	6.4%	52.4%	35.5%	1.7%	0.2%	100.0%
5	4.7%	6.6%	49.6%	36.5%	2.4%	0.2%	100.0%
6	9.5%	14.5%	60.1%	15.9%	0.1%	0.0%	100.0%
7	9.1%	19.4%	55.6%	15.7%	0.1%	0.0%	100.0%
8	12.1%	13.5%	57.0%	17.2%	0.1%	0.0%	100.0%
9	8.1%	15.5%	43.8%	29.7%	2.8%	0.1%	100.0%
10	8.0%	15.4%	41.9%	32.4%	2.2%	0.0%	100.0%
11	8.0%	16.3%	47.5%	26.2%	2.0%	0.0%	100.0%
12	12.8%	15.6%	47.3%	22.9%	1.4%	0.0%	100.0%

1.3.1.4 Speaking

1.3.1.4.1 By Cluster

Table 1.3.1.4.1.1

Proficiency Level by Cluster (Count): Speaking S402 Online

Cluster	Speaking Proficiency Range						Total
	1	2	3	4	5	6	
1	25,701	52,937	79,873	15,760	322	5	174,598
2–3	52,602	143,409	140,236	23,551	355	92	360,245
4–5	27,912	58,093	131,723	73,664	1,017	56	292,465
6–8	38,872	69,203	113,166	29,624	578	22	251,465
9–12	93,178	100,294	87,993	4,777	63	10	286,315

Table 1.3.1.4.1.2

Proficiency Level by Cluster (Percent): Speaking S402 Online

Cluster	Speaking Proficiency Range						Total
	1	2	3	4	5	6	
1	14.7%	30.3%	45.7%	9.0%	0.2%	0.0%	100.0%
2–3	14.6%	39.8%	38.9%	6.5%	0.1%	0.0%	100.0%
4–5	9.5%	19.9%	45.0%	25.2%	0.3%	0.0%	100.0%
6–8	15.5%	27.5%	45.0%	11.8%	0.2%	0.0%	100.0%
9–12	32.5%	35.0%	30.7%	1.7%	0.0%	0.0%	100.0%

1.3.1.4.2 By Grade

Table 1.3.1.4.2.1

Proficiency Level by Grade (Count): Speaking S402 Online

Grade	Speaking Proficiency Range						Total
	1	2	3	4	5	6	
1	25,701	52,937	79,873	15,760	322	5	174,598
2	27,685	71,087	65,989	11,977	117	27	176,882
3	24,917	72,322	74,247	11,574	238	65	183,363
4	12,942	31,803	79,539	51,485	512	48	176,329
5	14,970	26,290	52,184	22,179	505	8	116,136
6	10,082	21,726	41,153	13,753	311	3	87,028
7	14,383	25,591	34,099	8,846	165	14	83,098
8	14,407	21,886	37,914	7,025	102	5	81,339
9	32,351	31,865	28,111	2,110	32	3	94,472
10	25,757	34,433	24,317	1,647	10	3	86,167
11	18,825	21,795	20,827	577	9	3	62,036
12	16,245	12,201	14,738	443	12	1	43,640

Table 1.3.1.4.2.2

Proficiency Level by Grade (Percent): Speaking S402 Online

Grade	Speaking Proficiency Range						Total
	1	2	3	4	5	6	
1	14.7%	30.3%	45.7%	9.0%	0.2%	0.0%	100.0%
2	15.7%	40.2%	37.3%	6.8%	0.1%	0.0%	100.0%
3	13.6%	39.4%	40.5%	6.3%	0.1%	0.0%	100.0%
4	7.3%	18.0%	45.1%	29.2%	0.3%	0.0%	100.0%
5	12.9%	22.6%	44.9%	19.1%	0.4%	0.0%	100.0%
6	11.6%	25.0%	47.3%	15.8%	0.4%	0.0%	100.0%
7	17.3%	30.8%	41.0%	10.6%	0.2%	0.0%	100.0%
8	17.7%	26.9%	46.6%	8.6%	0.1%	0.0%	100.0%
9	34.2%	33.7%	29.8%	2.2%	0.0%	0.0%	100.0%
10	29.9%	40.0%	28.2%	1.9%	0.0%	0.0%	100.0%
11	30.3%	35.1%	33.6%	0.9%	0.0%	0.0%	100.0%
12	37.2%	28.0%	33.8%	1.0%	0.0%	0.0%	100.0%

1.3.2 Composites

1.3.2.1 Oral Composite

1.3.2.1.1 By Cluster

Table 1.3.2.1.1.1

Proficiency Level by Cluster (Count): Oral S402 Online

Cluster	Oral Language Proficiency Range						Total
	1	2	3	4	5	6	
1	14,372	21,915	47,285	49,174	30,207	2,981	165,934
2–3	28,117	62,853	126,502	103,351	19,748	631	341,202
4–5	10,111	15,579	47,937	103,550	81,689	17,543	276,409
6–8	18,012	31,129	84,253	79,767	17,631	2,332	233,124
9–12	49,265	66,949	100,008	44,115	6,048	730	267,115

Table 1.3.2.1.1.2

Proficiency Level by Cluster (Percent): Oral S402 Online

Cluster	Oral Language Proficiency Range						Total
	1	2	3	4	5	6	
1	8.7%	13.2%	28.5%	29.6%	18.2%	1.8%	100.0%
2–3	8.2%	18.4%	37.1%	30.3%	5.8%	0.2%	100.0%
4–5	3.7%	5.6%	17.3%	37.5%	29.6%	6.3%	100.0%
6–8	7.7%	13.4%	36.1%	34.2%	7.6%	1.0%	100.0%
9–12	18.4%	25.1%	37.4%	16.5%	2.3%	0.3%	100.0%

1.3.2.1.2 By Grade

Table 1.3.2.1.2.1

Proficiency Level by Grade (Count): Oral S402 Online

Grade	Oral Language Proficiency Range						Total
	1	2	3	4	5	6	
1	14,372	21,915	47,285	49,174	30,207	2,981	165,934
2	14,005	33,526	63,721	45,581	9,949	385	167,167
3	14,112	29,327	62,781	57,770	9,799	246	174,035
4	4,651	8,480	26,867	59,983	54,250	12,472	166,703
5	5,460	7,099	21,070	43,567	27,439	5,071	109,706
6	4,565	9,273	30,836	28,690	6,268	654	80,286
7	5,954	10,860	27,687	26,117	5,699	871	77,188
8	7,493	10,996	25,730	24,960	5,664	807	75,650
9	14,777	23,298	31,755	15,834	2,013	246	87,923
10	14,580	19,367	29,788	14,278	2,161	283	80,457
11	11,073	14,146	22,520	8,923	1,218	130	58,010
12	8,835	10,138	15,945	5,080	656	71	40,725

Table 1.3.2.1.2.2

Proficiency Level by Grade (Percent): Oral S402 Online

Grade	Oral Language Proficiency Range						Total
	1	2	3	4	5	6	
1	8.7%	13.2%	28.5%	29.6%	18.2%	1.8%	100.0%
2	8.4%	20.1%	38.1%	27.3%	6.0%	0.2%	100.0%
3	8.1%	16.9%	36.1%	33.2%	5.6%	0.1%	100.0%
4	2.8%	5.1%	16.1%	36.0%	32.5%	7.5%	100.0%
5	5.0%	6.5%	19.2%	39.7%	25.0%	4.6%	100.0%
6	5.7%	11.5%	38.4%	35.7%	7.8%	0.8%	100.0%
7	7.7%	14.1%	35.9%	33.8%	7.4%	1.1%	100.0%
8	9.9%	14.5%	34.0%	33.0%	7.5%	1.1%	100.0%
9	16.8%	26.5%	36.1%	18.0%	2.3%	0.3%	100.0%
10	18.1%	24.1%	37.0%	17.7%	2.7%	0.4%	100.0%
11	19.1%	24.4%	38.8%	15.4%	2.1%	0.2%	100.0%
12	21.7%	24.9%	39.2%	12.5%	1.6%	0.2%	100.0%

1.3.2.2 Literacy Composite

1.3.2.2.1 By Cluster

Table 1.3.2.2.1.1

Proficiency Level by Cluster (Count): Literacy S402 Online

Cluster	Literacy Proficiency Range						Total
	1	2	3	4	5	6	
1	26,650	80,699	52,594	12,994	2,462	342	175,741
2–3	25,027	66,954	167,635	86,120	14,119	1,630	361,485
4–5	16,359	26,425	107,383	94,158	23,077	4,352	271,754
6–8	42,421	52,424	98,416	39,373	3,482	253	236,369
9–12	31,778	57,490	97,379	58,244	20,145	1,775	266,811

Table 1.3.2.2.1.2

Proficiency Level by Cluster (Percent): Literacy S402 Online

Cluster	Literacy Proficiency Range						Total
	1	2	3	4	5	6	
1	15.2%	45.9%	29.9%	7.4%	1.4%	0.2%	100.0%
2–3	6.9%	18.5%	46.4%	23.8%	3.9%	0.5%	100.0%
4–5	6.0%	9.7%	39.5%	34.6%	8.5%	1.6%	100.0%
6–8	17.9%	22.2%	41.6%	16.7%	1.5%	0.1%	100.0%
9–12	11.9%	21.5%	36.5%	21.8%	7.6%	0.7%	100.0%

1.3.2.2.2 By Grade

Table 1.3.2.2.1

Proficiency Level by Grade (Count): Literacy S402 Online

Grade	Literacy Proficiency Range						Total
	1	2	3	4	5	6	
1	26,650	80,699	52,594	12,994	2,462	342	175,741
2	12,959	39,318	86,399	34,441	4,266	545	177,928
3	12,068	27,636	81,236	51,679	9,853	1,085	183,557
4	8,306	14,339	64,893	58,590	14,439	2,773	163,340
5	8,053	12,086	42,490	35,568	8,638	1,579	108,414
6	14,024	17,670	36,923	12,248	744	71	81,680
7	14,133	18,167	32,229	12,415	1,241	106	78,291
8	14,264	16,587	29,264	14,710	1,497	76	76,398
9	11,164	18,021	32,172	19,480	6,449	788	88,074
10	9,002	16,549	28,596	18,478	6,977	650	80,252
11	6,408	12,694	21,404	12,862	4,343	267	57,978
12	5,204	10,226	15,207	7,424	2,376	70	40,507

Table 1.3.2.2.2

Proficiency Level by Grade (Percent): Literacy S402 Online

Grade	Literacy Proficiency Range						Total
	1	2	3	4	5	6	
1	15.2%	45.9%	29.9%	7.4%	1.4%	0.2%	100.0%
2	7.3%	22.1%	48.6%	19.4%	2.4%	0.3%	100.0%
3	6.6%	15.1%	44.3%	28.2%	5.4%	0.6%	100.0%
4	5.1%	8.8%	39.7%	35.9%	8.8%	1.7%	100.0%
5	7.4%	11.1%	39.2%	32.8%	8.0%	1.5%	100.0%
6	17.2%	21.6%	45.2%	15.0%	0.9%	0.1%	100.0%
7	18.1%	23.2%	41.2%	15.9%	1.6%	0.1%	100.0%
8	18.7%	21.7%	38.3%	19.3%	2.0%	0.1%	100.0%
9	12.7%	20.5%	36.5%	22.1%	7.3%	0.9%	100.0%
10	11.2%	20.6%	35.6%	23.0%	8.7%	0.8%	100.0%
11	11.1%	21.9%	36.9%	22.2%	7.5%	0.5%	100.0%
12	12.8%	25.2%	37.5%	18.3%	5.9%	0.2%	100.0%

1.3.2.3 Comprehension Composite

1.3.2.3.1 By Cluster

Table 1.3.2.3.1.1

Proficiency Level by Cluster (Count): Comprehension S402 Online

Cluster	Comprehension Proficiency Range						Total
	1	2	3	4	5	6	
1	11,571	25,718	39,404	22,288	32,763	35,786	167,530
2-3	28,485	63,446	77,770	45,142	62,680	67,101	344,624
4-5	9,972	22,602	37,704	36,044	64,407	101,627	272,356
6-8	35,210	53,091	52,779	30,566	31,154	28,222	231,022
9-12	37,520	69,187	54,199	28,036	33,181	37,764	259,887

Table 1.3.2.3.1.2

Proficiency Level by Cluster (Percent): Comprehension S402 Online

Cluster	Comprehension Proficiency Range						Total
	1	2	3	4	5	6	
1	6.9%	15.4%	23.5%	13.3%	19.6%	21.4%	100.0%
2-3	8.3%	18.4%	22.6%	13.1%	18.2%	19.5%	100.0%
4-5	3.7%	8.3%	13.8%	13.2%	23.6%	37.3%	100.0%
6-8	15.2%	23.0%	22.8%	13.2%	13.5%	12.2%	100.0%
9-12	14.4%	26.6%	20.9%	10.8%	12.8%	14.5%	100.0%

1.3.2.3.2 By Grade

Table 1.3.2.3.2.1

Proficiency Level by Grade (Count): Comprehension S402 Online

Grade	Comprehension Proficiency Range						Total
	1	2	3	4	5	6	
1	11,571	25,718	39,404	22,288	32,763	35,786	167,530
2	12,348	33,426	39,957	24,106	31,268	28,051	169,156
3	16,137	30,020	37,813	21,036	31,412	39,050	175,468
4	4,021	12,012	21,233	19,990	39,850	67,111	164,217
5	5,951	10,590	16,471	16,054	24,557	34,516	108,139
6	10,709	19,819	19,977	10,930	10,904	7,423	79,762
7	12,109	17,615	17,199	10,164	9,862	9,604	76,553
8	12,392	15,657	15,603	9,472	10,388	11,195	74,707
9	11,386	23,309	18,651	9,126	11,190	11,953	85,615
10	11,279	19,349	16,145	8,561	9,892	13,033	78,259
11	8,372	15,088	11,507	5,922	7,540	8,160	56,589
12	6483	11,441	7,896	4,427	4,559	4,618	39,424

Table 1.3.2.3.2.2

Proficiency Level by Grade (Percent): Comprehension S402 Online

Grade	Comprehension Proficiency Range						Total
	1	2	3	4	5	6	
1	6.9%	15.4%	23.5%	13.3%	19.6%	21.4%	100.0%
2	7.3%	19.8%	23.6%	14.3%	18.5%	16.6%	100.0%
3	9.2%	17.1%	21.5%	12.0%	17.9%	22.3%	100.0%
4	2.4%	7.3%	12.9%	12.2%	24.3%	40.9%	100.0%
5	5.5%	9.8%	15.2%	14.8%	22.7%	31.9%	100.0%
6	13.4%	24.8%	25.0%	13.7%	13.7%	9.3%	100.0%
7	15.8%	23.0%	22.5%	13.3%	12.9%	12.5%	100.0%
8	16.6%	21.0%	20.9%	12.7%	13.9%	15.0%	100.0%
9	13.3%	27.2%	21.8%	10.7%	13.1%	14.0%	100.0%
10	14.4%	24.7%	20.6%	10.9%	12.6%	16.7%	100.0%
11	14.8%	26.7%	20.3%	10.5%	13.3%	14.4%	100.0%
12	16.4%	29.0%	20.0%	11.2%	11.6%	11.7%	100.0%

1.3.2.4 Overall Composite

1.3.2.4.1 By Cluster

Table 1.3.2.4.1.1

Proficiency Level by Cluster (Count): Overall S402 Online

Cluster	Overall Proficiency Range						Total
	1	2	3	4	5	6	
1	14,446	47,874	76,064	19,099	3,407	247	161,137
2–3	22,114	60,188	151,760	83,543	10,009	279	327,893
4–5	10,950	19,962	78,226	106,744	30,191	3,865	249,938
6–8	25,669	45,047	90,825	47,558	4,289	260	213,648
9–12	33,740	53,610	96,132	49,315	10,281	684	243,762

Table 1.3.2.4.1.2

Proficiency Level by Cluster (Percent): Overall S402 Online

Cluster	Overall Proficiency Range						Total
	1	2	3	4	5	6	
1	9.0%	29.7%	47.2%	11.9%	2.1%	0.2%	100.0%
2–3	6.7%	18.4%	46.3%	25.5%	3.1%	0.1%	100.0%
4–5	4.4%	8.0%	31.3%	42.7%	12.1%	1.5%	100.0%
6–8	12.0%	21.1%	42.5%	22.3%	2.0%	0.1%	100.0%
9–12	13.8%	22.0%	39.4%	20.2%	4.2%	0.3%	100.0%

1.3.2.4.2 By Grade

Table 1.3.2.4.2.1

Proficiency Level by Grade (Count): Overall S402 Online

Grade	Overall Proficiency Range						Total
	1	2	3	4	5	6	
1	14,446	47,874	76,064	19,099	3,407	247	161,137
2	10,664	35,400	77,001	33,875	3,622	133	160,695
3	11,450	24,788	74,759	49,668	6,387	146	167,198
4	5,296	10,539	46,014	66,082	19,632	2,614	150,177
5	5,654	9,423	32,212	40,662	10,559	1,251	99,761
6	7,255	15,658	34,112	15,266	1,041	78	73,410
7	8,827	15,424	29,400	15,531	1,507	98	70,787
8	9,587	13,965	27,313	16,761	1,741	84	69,451
9	10,976	17,014	31,992	16,703	3,427	294	80,406
10	10,035	15,326	28,150	16,068	3,607	253	73,439
11	7,164	11,647	21,179	10,557	2,156	104	52,807
12	5,565	9,623	14,811	5,987	1,091	33	37,110

Table 1.3.2.4.2.2

Proficiency Level by Grade (Percent): Overall S402 Online

Grade	Overall Proficiency Range						Total
	1	2	3	4	5	6	
1	9.0%	29.7%	47.2%	11.9%	2.1%	0.2%	100.0%
2	6.6%	22.0%	47.9%	21.1%	2.3%	0.1%	100.0%
3	6.8%	14.8%	44.7%	29.7%	3.8%	0.1%	100.0%
4	3.5%	7.0%	30.6%	44.0%	13.1%	1.7%	100.0%
5	5.7%	9.4%	32.3%	40.8%	10.6%	1.3%	100.0%
6	9.9%	21.3%	46.5%	20.8%	1.4%	0.1%	100.0%
7	12.5%	21.8%	41.5%	21.9%	2.1%	0.1%	100.0%
8	13.8%	20.1%	39.3%	24.1%	2.5%	0.1%	100.0%
9	13.7%	21.2%	39.8%	20.8%	4.3%	0.4%	100.0%
10	13.7%	20.9%	38.3%	21.9%	4.9%	0.3%	100.0%
11	13.6%	22.1%	40.1%	20.0%	4.1%	0.2%	100.0%
12	15.0%	25.9%	39.9%	16.1%	2.9%	0.1%	100.0%

2 Analysis of Domains

2.1 Complete Item or Task Analysis and Summary

The tables in this section provide a summary of the analyses of the items (for Listening and Reading) or tasks (for Writing and Speaking), along with analyses of each item or task. These tables have either two parts (in the case of Listening and Reading) or three parts (in the case of Writing and Speaking). The first part of the table gives a summary of the total set of items or tasks on the form. The second part provides statistics pertaining to the individual items or tasks, and the third part (for Writing and Speaking only) expresses raw score distributions by task.

Statistics included across these three parts include item or task difficulties in logits, the number of items or tasks on the form, the average p value (for forms with selected-response items), and the Rasch model fit statistics. For further detail on the Rasch measurement model as applied to ACCESS, see Section 3.3.2 of Part I of this report.

For Listening and Reading, items form a pool for the multistage adaptive tests, and tables in this section provide information on every item in the grade-level cluster. For Writing, separate tables are provided for Tier A and Tier B/C forms, by grade-level cluster. For Speaking, which has tasks that are shared between Tier A and Tier B/C, there is one table for each grade-level cluster, which provides information on every task in the grade-level cluster.

All Rasch analyses were conducted using the Rasch measurement software program *Winsteps* (Linacre, 2006). When speaking of the measure of person ability, we use the term *ability measure* (rather than *theta*, used commonly when discussing models based on item response theory). When speaking of the measure of how hard an item was, we use the term *item difficulty measure* (rather than *b parameter*, used commonly when discussing models based on item response theory). *Step measures* refer to the calibration of the steps in the Rasch rating scale model presented above. All three measures (ability, difficulty, and step) are expressed in terms of Rasch logits, which then are converted into scores on the ACCESS score scale for reporting purposes.

Fit statistics for the Rasch model are calculated by comparing the observed empirical data with the data that would be expected to be produced by the Rasch model if the data fit the model perfectly. Outfit mean square statistics are influenced by outliers. For example, a difficult item that some low-ability examinees get correct—for reasons unknown—will have a high outfit mean square statistic. Infit mean square statistics are influenced by unexpected patterns of observations by persons on items that are roughly targeted for them and generally indicate a more serious measurement problem. The expectation for both of these statistics is 1.00, and values near 1.00 are not of great concern. Values less than 1.00 indicate that the observations are too predictable and thus redundant, but are not of great concern. High values are of greater concern.

Linacre (2002) provides more guidance on how to interpret these statistics for dichotomous items. He writes:

- Values greater than 2.0 “distort or degrade the measurement system.”
- Values between 1.5 and 2.0 are “unproductive for construction of measurement, but not degrading.”
- Values between 0.5 and 1.5 should be considered “productive for measurement.”
- Values below 0.5 are “less productive for measurement, but not degrading.”

Linacre also states in his guidance that infit problems are more serious to the construction of measurement than are outfit problems.

Because conservative guidelines were followed in the development of ACCESS for ELLs, the vast majority of dichotomous items on the test forms have mean square fit statistics in the range of 0.5 and 1.5; thus, they fit the range that is “productive for measurement” according to the guidelines above.

Since performance tasks are constructed and scored very differently from dichotomous items, it is not as straightforward to apply this same guidance to interpret these fit statistics to performance tasks that were scored polytomously. Some performance tasks that were designed to elicit a restricted range of performances (for example, it is expected that most students will get the highest score on a very easy task) can cause the model to predict the data too well (overfitting). Conversely, when performance tasks are scored using a very wide rubric scale such as the case with ACCESS for ELL Writing tasks, sometimes unmodeled noise or other sources of variance in the data will cause the model to underpredict the data (underfitting). Overall, for ACCESS for ELL performance tasks, overfitting is more common than underfitting. Underfitting indicates that the task is less productive for measurement, but it is not degrading to the measurement of student performance.

The first section of the Complete Item/Task Analysis and Summary table provides information about the total set of items or tasks, and includes the item type (selected response or constructed response), the average item difficulty (in logits), the number of items, the average *p* value (for Listening and Reading only), the average infit mean square, and the average outfit mean square.

The second section of these tables presents results of the analyses of all of the items or tasks on the test form. The first column provides the unique item name. The second column in this section presents the item difficulty in logits. The third column provides information of whether the item or task served as an anchor item or task. For dichotomously scored items (Listening and Reading), the fourth column shows the *p* value (percentage of correct answers on that item). The next two columns show the Rasch fit statistics for the item or task.

The final section of these tables applies to Writing and Speaking only. This portion of the table provides raw score distributions by task.

2.1.1 Listening

2.1.1.1 Grade 1

Table 2.1.1.1

Complete Item Analysis and Summary: List 1 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	-1.25	54	0.65	0.97	0.98
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
1.L01A_SL_GoingHome_P100_Screen_2_I2445	-4.38	Yes	0.97	0.91	0.88
2.L01A_SL_GoingHome_P100_Screen_3_I2446	-2.54	Yes	0.87	1.19	1.80
3.L01A_SL_GoingHome_P100_Screen_4_I2447	1.15	Yes	0.38	1.28	2.03
4.L01B_SL_MorningMeeting_402_Screen_2_I4897	-1.70		0.77	1.19	1.44
5.L01B_SL_MorningMeeting_402_Screen_3_I4898	-2.25		0.83	1.15	1.16
6.L01B_SL_MorningMeeting_402_Screen_4_I4899	-1.50		0.77	0.93	0.82
7.L01A_LA_OutdoorFun_P100_Screen_2_I2690	-3.39	Yes	0.65	0.88	0.83
8.L01A_LA_OutdoorFun_P100_Screen_3_I2691	-2.96	Yes	0.58	0.99	0.99
9.L01A_LA_OutdoorFun_P100_Screen_4_I2692	-3.17	Yes	0.64	0.92	0.87
10.L01A_MA_DrawingaRobot_P100_A202_Screen_2_I3889	-3.27	Yes	0.65	0.92	0.88
11.L01A_MA_DrawingaRobot_P100_A202_Screen_3_I3890	-2.23	Yes	0.42	0.97	0.96
12.L01A_MA_DrawingaRobot_P100_A202_Screen_4_I3891	-2.55	Yes	0.50	1.01	1.01
13.L01C_SS_CampingTrip_P100_A30IFT_Screen_2_I3808	-2.41	Yes	0.46	1.03	1.04
14.L01C_SS_CampingTrip_P100_A30IFT_Screen_3_I3809	-1.90	Yes	0.34	0.96	0.98
15.L01C_SS_CampingTrip_P100_A30IFT_Screen_4_I3810	-2.97	Yes	0.59	0.93	0.91
16.L01B_SC_PropertiesOfObjects_402_Screen_2_I4951	-1.39		0.39	0.92	0.91
17.L01B_SC_PropertiesOfObjects_402_Screen_3_I4952	-3.03		0.65	0.92	0.88
18.L01B_SC_PropertiesOfObjects_402_Screen_4_I4953	-0.89		0.27	0.94	0.97
19.L01C_LA_WindyDay_402_Screen_2_I4836	-0.79		0.61	0.91	0.85
20.L01C_LA_WindyDay_402_Screen_3_I4837	-2.11		0.80	0.96	0.93
21.L01C_LA_WindyDay_402_Screen_4_I4838	-0.88		0.64	0.97	0.93
22.L01C_MA_RainyDay_P100_A202_Screen_2_I3898	-0.94	Yes	0.57	1.00	0.98
23.L01C_MA_RainyDay_P100_A202_Screen_3_I3899	-1.15	Yes	0.59	0.93	0.90
24.L01C_MA_RainyDay_P100_A202_Screen_4_I3900	-1.82	Yes	0.70	0.95	0.89
25.L01B_SS_ConstructionWorker_P100_A30IFT_alt1_Screen_2_I3802	-2.40	Yes	0.81	0.92	0.85

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.L0IB_SS_ConstructionWorker_P100_A30IFT_alt1_Screen_3_13803	-1.67	Yes	0.74	0.92	0.87
27.L0IB_SS_ConstructionWorker_P100_A30IFT_alt1_Screen_4_13804	-1.03	Yes	0.50	0.91	0.89
28.L0IC_SC_ForestHabitat_P100_Screen_2_11667	0.44	Yes	0.26	0.94	0.92
29.L0IC_SC_ForestHabitat_P100_Screen_3_11668	-0.81	Yes	0.52	0.96	0.95
30.L0IC_SC_ForestHabitat_P100_Screen_4_11671	-2.02	Yes	0.77	0.95	0.90
31.L0IB_LA_LauraIngallsWilder_P100_A30IFT_Screen_2_13883	-2.09	Yes	0.77	0.95	0.90
32.L0IB_LA_LauraIngallsWilder_P100_A30IFT_Screen_3_13884	-1.78	Yes	0.68	0.94	0.91
33.L0IB_LA_LauraIngallsWilder_P100_A30IFT_Screen_4_13885	-0.28	Yes	0.39	0.93	0.92
34.L0IB_MA_Subtraction_P100_Screen_2_12457	-2.08	Yes	0.74	0.94	0.91
35.L0IB_MA_Subtraction_P100_Screen_3_12458	-1.86	Yes	0.71	0.94	0.92
36.L0IB_MA_Subtraction_P100_Screen_4_12459	-0.22	Yes	0.38	0.97	0.96
37.L0IB_LA_ASpecialDay_P100_alt1_Screen_2_13814	-1.56	Yes	0.87	0.96	0.90
38.L0IB_LA_ASpecialDay_P100_alt1_Screen_3_13815	-0.38	Yes	0.75	1.04	1.06
39.L0IB_LA_ASpecialDay_P100_alt1_Screen_4_13816	-1.89	Yes	0.94	0.95	0.80
40.L0IC_MA_ShapeRiddles_P100_Screen_2_12846	0.58	Yes	0.59	1.06	1.07
41.L0IC_MA_ShapeRiddles_P100_Screen_3_12847	0.02	Yes	0.70	0.99	0.98
42.L0IC_MA_ShapeRiddles_P100_Screen_4_12848	0.10	Yes	0.69	0.96	0.92
43.L0IB_SS_SchoolCommunity_P100_Screen_2_12745	-1.35	Yes	0.89	0.99	0.99
44.L0IB_SS_SchoolCommunity_P100_Screen_3_12746	-0.86	Yes	0.86	0.95	0.88
45.L0IB_SS_SchoolCommunity_P100_Screen_4_12754	-0.47	Yes	0.81	0.95	0.92
46.L0IB_SC_Solids_P100_alt1_Screen_2_13877	1.34	Yes	0.49	0.96	0.95
47.L0IB_SC_Solids_P100_alt1_Screen_3_13878	0.31	Yes	0.69	0.92	0.89
48.L0IB_SC_Solids_P100_alt1_Screen_4_13879	-0.64	Yes	0.84	0.96	0.93
49.L0IB_LA_TheWind_P100_Screen_2_12460	1.09	Yes	0.56	0.95	0.94
50.L0IB_LA_TheWind_P100_Screen_3_12461	0.79	Yes	0.64	0.95	0.93
51.L0IB_LA_TheWind_P100_Screen_4_12462	-1.14	Yes	0.90	0.95	0.84
52.L0IB_MA_ShapeRiddles_P100_Screen_2_12843	0.21	Yes	0.73	0.94	0.91
53.L0IB_MA_ShapeRiddles_P100_Screen_3_12844	1.46	Yes	0.45	1.02	1.02
54.L0IB_MA_ShapeRiddles_P100_Screen_4_12845	-0.16	Yes	0.80	1.00	1.02

2.1.1.2 Grades 2–3

Table 2.1.1.2

Complete Item Analysis and Summary: List 2-3 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	-1.15	54	0.68	0.97	1.03
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
11.L23B_SL_ArtClass_P100_Screen_2_I2825	-3.26	Yes	0.95	1.08	2.41
2.L23B_SL_ArtClass_P100_Screen_3_I2828	-2.29	Yes	0.90	1.11	1.98
3.L23B_SL_ArtClass_P100_Screen_4_I2830	-1.17		0.79	1.05	1.14
4.L23A_SL_ThankYouCards_P100_Screen_2_I3788	-3.85	Yes	0.97	1.09	3.23
5.L23A_SL_ThankYouCards_P100_Screen_3_I3789	-0.32	Yes	0.73	1.18	1.36
6.L23A_SL_ThankYouCards_P100_Screen_4_I3790	-2.68	Yes	0.93	0.94	1.25
7.L23A_LA_MinaAndGinger_jc_P100_A202_Screen_2_I3797	-3.68	Yes	0.76	0.85	0.71
8.L23A_LA_MinaAndGinger_jc_P100_A202_Screen_3_I3798	-2.72	Yes	0.60	0.88	0.82
9.L23A_LA_MinaAndGinger_jc_P100_A202_Screen_4_I3799	-2.87	Yes	0.63	0.91	0.83
10.L23B_MA_TellingTime_P100_Screen_2_I3904	-3.24	Yes	0.69	0.93	0.85
11.L23B_MA_TellingTime_P100_Screen_3_I3905	-3.26	Yes	0.67	0.94	0.87
12.L23B_MA_TellingTime_P100_Screen_4_I3906	-2.24	Yes	0.50	0.92	0.88
13.L23A_SS_AMapOfOakValley_P100_Screen_2_I2730	-2.07	Yes	0.45	0.99	0.99
14.L23A_SS_AMapOfOakValley_P100_Screen_3_I2731	-3.89	Yes	0.81	0.91	0.79
15.L23A_SS_AMapOfOakValley_P100_Screen_4_I2732	-2.36	Yes	0.49	0.98	0.98
16.L23C_SC_BirdAdaptations_P100_Screen_2_I1544	-3.56	Yes	0.78	0.93	0.85
17.L23C_SC_BirdAdaptations_P100_Screen_3_I1545	-1.90		0.46	0.99	1.02
18.L23C_SC_BirdAdaptations_P100_Screen_4_I1546	-1.50		0.39	1.05	1.12
19.L23C_LA_Emily'sBall_402_Screen_2_I4879	-3.66		0.96	0.95	0.83
20.L23C_LA_Emily'sBall_402_Screen_3_I4883	0.97		0.36	0.91	0.94
21.L23C_LA_Emily'sBall_402_Screen_4_I4884	-2.64		0.88	0.82	0.58
22.L23C_MA_GettingToSchool_P100_Screen_2_I2956	-3.09	Yes	0.92	0.95	0.81
23.L23C_MA_GettingToSchool_P100_Screen_3_I2957	-1.12	Yes	0.63	0.95	0.90
24.L23C_MA_GettingToSchool_P100_Screen_4_I2971	0.35	Yes	0.33	1.01	1.05
25.L23C_SS_AMapOfOakValley_P100_Screen_2_I2813	-1.83	Yes	0.80	0.93	0.86

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.L23C_SS_AMapOfOakValley_P100_Screen_3_12814	-1.26	Yes	0.68	0.93	0.88
27.L23C_SS_AMapOfOakValley_P100_Screen_4_12815	-0.47	Yes	0.51	0.93	0.91
28.L23B_SC_WaterCycle_P100_A202_Screen_2_13910	-2.33	Yes	0.85	0.96	0.89
29.L23B_SC_WaterCycle_P100_A202_Screen_3_13911	-0.87	Yes	0.55	0.98	0.97
30.L23B_SC_WaterCycle_P100_A202_Screen_4_13912	-0.24	Yes	0.46	0.94	0.93
31.L23B_LA_TheEmptyPot_P100_Screen_2_12580	-0.54		0.54	1.02	1.01
32.L23B_LA_TheEmptyPot_P100_Screen_3_12582	-1.01	Yes	0.64	0.97	0.95
33.L23B_LA_TheEmptyPot_P100_Screen_4_12584	-1.52	Yes	0.75	0.94	0.89
34.L23B_MA_LinearMeasurement_P100_Screen_2_12988	-1.07	Yes	0.68	0.95	0.92
35.L23B_MA_LinearMeasurement_P100_Screen_3_12990	0.29	Yes	0.31	0.98	0.97
36.L23B_MA_LinearMeasurement_P100_Screen_4_12991	-0.07	Yes	0.39	0.97	0.97
37.L23C_LA_CrownAndTheCoins_P100_Screen_2_12705	-0.17	Yes	0.79	1.02	1.04
38.L23C_LA_CrownAndTheCoins_P100_Screen_3_12706	-1.64	Yes	0.93	0.99	0.96
39.L23C_LA_CrownAndTheCoins_P100_Screen_4_12707	-0.30	Yes	0.78	0.94	0.87
40.L23B_MA_GettingToSchool_P100_Screen_2_12953	0.13	Yes	0.76	1.09	1.19
41.L23B_MA_GettingToSchool_P100_Screen_3_12954	-1.97		0.96	0.99	0.99
42.L23B_MA_GettingToSchool_P100_Screen_4_12955	1.23	Yes	0.54	1.03	1.04
43.L23B_SS_AMapOfOakValley_P100_Screen_2_12733	-1.69	Yes	0.95	0.97	0.80
44.L23B_SS_AMapOfOakValley_P100_Screen_3_12734	0.26	Yes	0.79	1.01	1.02
45.L23B_SS_AMapOfOakValley_P100_Screen_4_12735	1.28	Yes	0.54	1.02	1.02
46.L23B_SC_Habitats_P100_Screen_2_12785	0.00	Yes	0.81	0.96	0.92
47.L23B_SC_Habitats_P100_Screen_3_12786	1.56	Yes	0.52	0.92	0.90
48.L23B_SC_Habitats_P100_Screen_4_12787	-0.11	Yes	0.83	0.95	0.90
49.L23C_LA_TheEmptyPot_P100_Screen_2_12586	-0.24	Yes	0.82	0.96	0.93
50.L23C_LA_TheEmptyPot_P100_Screen_3_12587	1.82	Yes	0.47	0.97	0.96
51.L23C_LA_TheEmptyPot_P100_Screen_4_12588	0.80	Yes	0.71	0.95	0.95
52.L23C_MA_MetricMeasurement_P100_Screen_2_12992	1.62	Yes	0.46	0.99	0.98
53.L23C_MA_MetricMeasurement_P100_Screen_3_12993	0.63	Yes	0.65	1.01	1.02
54.L23C_MA_MetricMeasurement_P100_Screen_4_12994	1.84	Yes	0.43	0.99	0.98

2.1.1.3 Grades 4–5

Table 2.1.1.3

Complete Item Analysis and Summary: List 4-5 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	0.45	54	0.62	0.98	1.00
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
11.L45A_SL_MorningArrivalAtClass_P100_Screen_2_I2413	-1.91	Yes	0.96	1.23	2.13
2.L45A_SL_MorningArrivalAtClass_P100_Screen_3_I2415	-2.76	Yes	0.98	0.96	1.44
3.L45A_SL_MorningArrivalAtClass_P100_Screen_4_I2416	-1.40	Yes	0.95	0.97	1.07
4.L45B_SL_SchoolClubs_P100_Screen_2_I2386	-1.45	Yes	0.95	0.99	0.99
5.L45B_SL_SchoolClubs_P100_Screen_3_I2394	-0.89	Yes	0.93	1.20	1.63
6.L45B_SL_SchoolClubs_P100_Screen_4_I2396	1.26	Yes	0.74	0.97	0.95
7.L45B_LA_BookDiscussion_P100_Screen_2_I2571	-1.61	Yes	0.58	0.88	0.85
8.L45B_LA_BookDiscussion_P100_Screen_3_I2572	-1.25	Yes	0.60	0.89	0.85
9.L45B_LA_BookDiscussion_P100_Screen_4_I2573	0.54	Yes	0.38	1.07	1.09
10.L45B_MA_TheSchoolMascot_P100_Screen_2_I2917	-0.39		0.30	0.90	0.89
11.L45B_MA_TheSchoolMascot_P100_Screen_3_I2918	-0.47	Yes	0.29	0.99	1.00
12.L45B_MA_TheSchoolMascot_P100_Screen_4_I2919	-2.65	Yes	0.75	0.94	0.90
13.L45A_SS_RomanToolsArtifacts_P100_Screen_2_I3024	-1.78	Yes	0.57	0.97	0.97
14.L45A_SS_RomanToolsArtifacts_P100_Screen_3_I3025	-0.38	Yes	0.26	0.96	0.95
15.L45A_SS_RomanToolsArtifacts_P100_Screen_4_I3026	-0.76	Yes	0.34	0.95	0.95
16.L45A_SC_WindSpeed_P100_Screen_2_I2792	-1.97		0.63	0.96	0.94
17.L45A_SC_WindSpeed_P100_Screen_3_I2793	-2.36	Yes	0.67	0.99	0.98
18.L45A_SC_WindSpeed_P100_Screen_4_I2794	-0.22	Yes	0.25	0.99	1.00
19.L45C_LA_BookDiscussion_P100_Screen_2_I2581	-1.90	Yes	0.88	0.87	0.74
20.L45C_LA_BookDiscussion_P100_Screen_3_I2583	1.38	Yes	0.44	0.96	0.93
21.L45C_LA_BookDiscussion_P100_Screen_4_I2585	0.89	Yes	0.54	1.02	0.97
22.L45B_MA_Garden_P100_Screen_2_I2596	-1.12	Yes	0.79	0.93	0.89
23.L45B_MA_Garden_P100_Screen_3_I2597	0.43	Yes	0.53	1.00	0.98
24.L45B_MA_Garden_P100_Screen_4_I2598	1.98	Yes	0.34	1.11	1.15
25.L45B_SS_FarmingInAncientEgypt_402_Screen_2_I4945	0.10		0.68	0.90	0.84

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.L45B_SS_FarmingInAncientEgypt_402_Screen_3_4946	1.98		0.44	0.94	0.92
27.L45B_SS_FarmingInAncientEgypt_402_Screen_4_4947	0.38		0.65	0.90	0.85
28.L45B_SC_DynamicDunes_402_Screen_2_4940	1.47		0.51	0.94	0.93
29.L45B_SC_DynamicDunes_402_Screen_3_4939	3.44		0.17	1.00	1.05
30.L45B_SC_DynamicDunes_402_Screen_4_4941	0.77		0.55	0.92	0.90
31.L45B_LA_EarlyLife_P100_Alt1_Screen_2_4224	-0.77	Yes	0.73	0.95	0.90
32.L45B_LA_EarlyLife_P100_Alt1_Screen_3_4225	-0.27	Yes	0.74	0.96	0.94
33.L45B_LA_EarlyLife_P100_Alt1_Screen_4_4226	-1.35	Yes	0.80	0.91	0.82
34.L45C_MA_3DShapes_P100_Screen_2_4215	-1.42	Yes	0.85	0.97	0.92
35.L45C_MA_3DShapes_P100_Screen_3_4216	1.40	Yes	0.24	0.95	0.92
36.L45C_MA_3DShapes_P100_Screen_4_4217	0.98	Yes	0.49	1.00	1.00
37.L45C_LA_GardenMystery_402_Screen_2_4833	-0.21		0.93	0.97	0.88
38.L45C_LA_GardenMystery_402_Screen_3_4845	0.17		0.91	0.92	0.81
39.L45C_LA_GardenMystery_402_Screen_4_4846	3.22		0.43	1.01	1.05
40.L45C_MA_TheSchoolMascot_P100_Screen_2_42942	1.44	Yes	0.75	1.01	1.04
41.L45C_MA_TheSchoolMascot_P100_Screen_3_42943	3.60	Yes	0.34	0.93	0.91
42.L45C_MA_TheSchoolMascot_P100_Screen_4_42946	1.46	Yes	0.77	0.95	0.90
43.L45B_SS_RomanToolsArtifacts_P100_Screen_2_43027	3.33	Yes	0.47	1.04	1.06
44.L45B_SS_RomanToolsArtifacts_P100_Screen_3_43028	3.20	Yes	0.51	1.12	1.15
45.L45B_SS_RomanToolsArtifacts_P100_Screen_4_43029	1.83	Yes	0.74	0.96	0.93
46.L45C_SC_FromRocksToSoil_P100_Screen_2_4212	2.49	Yes	0.61	1.02	1.01
47.L45C_SC_FromRocksToSoil_P100_Screen_3_4213	1.13	Yes	0.83	0.94	0.86
48.L45C_SC_FromRocksToSoil_P100_Screen_4_4214	4.50	Yes	0.27	1.04	1.11
49.L45B_LA_EarlyLife_P100_Screen_2_42923	0.31	Yes	0.92	0.99	0.93
50.L45B_LA_EarlyLife_P100_Screen_3_42925	1.42	Yes	0.83	1.02	1.08
51.L45B_LA_EarlyLife_P100_Screen_4_42928	1.69	Yes	0.79	0.97	0.94
52.L45B_MA_RunTime_P100_Alt1_Screen_2_43069	2.71	Yes	0.59	0.98	0.98
53.L45B_MA_RunTime_P100_Alt1_Screen_3_43070	3.09	Yes	0.52	1.00	1.01
54.L45B_MA_RunTime_P100_Alt1_Screen_4_43071	0.77	Yes	0.87	0.97	0.90

2.1.1.4 Grades 6–8

Table 2.1.1.4

Complete Item Analysis and Summary: List 6-8 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	1.16	54	0.58	0.99	0.98
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
1.L68A_SL_TalentShow_P100_Screen_2_I2454	-0.49	Yes	0.87	0.97	0.96
2.L68A_SL_TalentShow_P100_Screen_3_I2455	-0.01	Yes	0.81	1.00	0.99
3.L68A_SL_TalentShow_P100_Screen_4_I2456	1.26	Yes	0.63	1.02	1.02
4.L68B_SL_AuthorProject_P100_Screen_2_I2380	-0.74		0.89	0.95	0.95
5.L68B_SL_AuthorProject_P100_Screen_3_I2381	1.30	Yes	0.63	1.09	1.19
6.L68B_SL_AuthorProject_P100_Screen_4_I2382	2.70	Yes	0.40	1.16	1.64
7.L68A_LA_RemoteControl_P100_Screen_2_I2849	-0.68	Yes	0.59	0.89	0.84
8.L68A_LA_RemoteControl_P100_Screen_3_I2850	0.90	Yes	0.28	1.08	1.15
9.L68A_LA_RemoteControl_P100_Screen_4_I2922	-0.51	Yes	0.50	1.07	1.08
10.L68B_MA_ClassPresidentSurvey_P100_Screen_2_I3039	0.20	Yes	0.46	0.97	0.97
11.L68B_MA_ClassPresidentSurvey_P100_Screen_3_I3040	-0.35		0.53	0.91	0.89
12.L68B_MA_ClassPresidentSurvey_P100_Screen_4_I3041	1.00	Yes	0.41	1.10	1.11
13.L68A_SS_TypesOfGovernment_P100_Screen_2_I3060	-0.69	Yes	0.52	0.88	0.86
14.L68A_SS_TypesOfGovernment_P100_Screen_3_I3061	-0.79	Yes	0.51	0.89	0.87
15.L68A_SS_TypesOfGovernment_P100_Screen_4_I3062	-0.13	Yes	0.40	1.02	1.02
16.L68A_SC_NatureTrail_P100_Screen_2_I2884	-2.40	Yes	0.83	0.96	0.88
17.L68A_SC_NatureTrail_P100_Screen_3_I2885	-0.67	Yes	0.49	0.92	0.91
18.L68A_SC_NatureTrail_P100_Screen_4_I2886	0.11	Yes	0.32	0.90	0.89
19.L68B_LA_Eastwood_402_Screen_2_I4850	0.79		0.71	1.06	1.14
20.L68B_LA_Eastwood_402_Screen_3_I4851	2.08		0.44	1.06	1.07
21.L68B_LA_Eastwood_402_Screen_4_I4852	2.38		0.40	1.05	1.07
22.L68B_MA_WaterCooler_402_Screen_2_I4915	1.08		0.58	0.88	0.84
23.L68B_MA_WaterCooler_402_Screen_3_I4916	2.14		0.40	1.00	1.00
24.L68B_MA_WaterCooler_402_Screen_4_I4917	1.05		0.58	0.99	0.98
25.L68B_SS_BillsOfRights_402_Screen_2_I4858	2.13		0.45	0.97	0.95

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.L68B_SS_BillsOfRights_402_Screen_3_14859	1.90		0.46	1.00	0.99
27.L68B_SS_BillsOfRights_402_Screen_4_14863	1.43		0.53	0.94	0.92
28.L68B_SC_LeafClassification_P100_Screen_2_11467	0.84	Yes	0.56	0.99	0.98
29.L68B_SC_LeafClassification_P100_Screen_3_11472	1.61	Yes	0.40	0.97	0.96
30.L68B_SC_LeafClassification_P100_Screen_4_11474	1.71	Yes	0.45	1.03	1.03
31.L68B_LA_WritingAboutReading_P100_Screen_2_12526	-0.95	Yes	0.88	0.93	0.79
32.L68B_LA_WritingAboutReading_P100_Screen_3_12528	0.23	Yes	0.66	0.91	0.87
33.L68B_LA_WritingAboutReading_P100_Screen_4_12529	1.42	Yes	0.40	0.96	0.96
34.L68B_MA_SchoolGarden_P100_Screen_2_12481	-0.65	Yes	0.81	0.98	0.94
35.L68B_MA_SchoolGarden_P100_Screen_3_12482	-0.38	Yes	0.78	0.95	0.91
36.L68B_MA_SchoolGarden_P100_Screen_4_12483	1.17	Yes	0.48	1.03	1.03
37.L68B_LA_Steinman_402_Screen_2_14855	1.87		0.63	1.00	0.99
38.L68B_LA_Steinman_402_Screen_3_14856	2.91		0.42	1.05	1.06
39.L68B_LA_Steinman_402_Screen_4_14857	2.79		0.37	1.12	1.18
40.L68C_MA_MediaGrowth_402_Screen_2_14921	2.07		0.60	1.07	1.10
41.L68C_MA_MediaGrowth_402_Screen_3_14922	2.38		0.54	1.07	1.10
42.L68C_MA_MediaGrowth_402_Screen_4_14923	2.95		0.41	1.04	1.06
43.L68C_SS_ThailandMap_P100_A30IFT_Screen_2_13838	2.51	Yes	0.65	0.99	0.98
44.L68C_SS_ThailandMap_P100_A30IFT_Screen_3_13839	2.15	Yes	0.70	0.99	1.00
45.L68C_SS_ThailandMap_P100_A30IFT_Screen_4_13840	2.02	Yes	0.73	0.92	0.86
46.L68C_SC_NatureTrail_P100_Screen_2_12899	2.09	Yes	0.74	0.95	0.93
47.L68C_SC_NatureTrail_P100_Screen_3_12901	2.25	Yes	0.70	0.93	0.90
48.L68C_SC_NatureTrail_P100_Screen_4_12905	2.50	Yes	0.65	0.93	0.91
49.L68C_LA_WritingAboutReading_P100_Screen_2_12531	2.46	Yes	0.69	0.92	0.89
50.L68C_LA_WritingAboutReading_P100_Screen_3_12532	3.95	Yes	0.38	0.95	0.94
51.L68C_LA_WritingAboutReading_P100_Screen_4_12533	1.47	Yes	0.84	0.94	0.87
52.L68C_MA_SchoolGarden_P100_Screen_2_12484	0.33	Yes	0.92	0.97	0.84
53.L68C_MA_SchoolGarden_P100_Screen_3_12485	2.93		0.56	1.00	1.00
54.L68C_MA_SchoolGarden_P100_Screen_4_12486	2.93	Yes	0.62	0.95	0.93

2.1.1.5 Grades 9–12

Table 2.1.1.5

Complete Item Analysis and Summary: List 9-12 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	1.46	54	0.61	0.98	0.97
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
11.L91A_SL_ArtContest_P100_Screen_2_12360	-0.42	Yes	0.86	0.99	1.13
2.L91A_SL_ArtContest_P100_Screen_3_12361	2.15	Yes	0.45	1.12	1.26
3.L91A_SL_ArtContest_P100_Screen_4_12441	1.47	Yes	0.57	1.16	1.31
4.L91B_SL_RenewableEnergy_P100_Screen_2_12442	1.10	Yes	0.64	1.14	1.29
5.L91B_SL_RenewableEnergy_P100_Screen_3_12443	2.22	Yes	0.47	1.27	1.50
6.L91B_SL_RenewableEnergy_P100_Screen_4_12444	0.11	Yes	0.80	0.98	0.99
7.L91B_LA_FreeVerse_P100_Screen_2_12887	-0.46	Yes	0.72	0.88	0.79
8.L91B_LA_FreeVerse_P100_Screen_3_12889	0.57	Yes	0.54	0.93	0.91
9.L91B_LA_FreeVerse_P100_Screen_4_12890	1.50	Yes	0.43	0.99	0.99
10.L91B_MA_WaterSale_P100_Screen_2_12714	1.14	Yes	0.51	0.98	0.98
11.L91B_MA_WaterSale_P100_Screen_3_12715	1.89	Yes	0.29	0.98	1.00
12.L91B_MA_WaterSale_P100_Screen_4_12716	0.41	Yes	0.60	1.01	1.00
13.L91B_SS_GlobalCarProduction_P100_Screen_2_12869	-0.48	Yes	0.61	0.94	0.92
14.L91B_SS_GlobalCarProduction_P100_Screen_3_12870	0.37	Yes	0.44	0.94	0.93
15.L91B_SS_GlobalCarProduction_P100_Screen_4_12871	1.19	Yes	0.26	1.01	1.04
16.L91A_SC_DesertPlants_P100_Screen_2_11034	-0.40	Yes	0.60	0.93	0.91
17.L91A_SC_DesertPlants_P100_Screen_3_11035	-0.52	Yes	0.62	0.93	0.91
18.L91A_SC_DesertPlants_P100_Screen_4_11036	0.51	Yes	0.40	0.96	0.95
19.L91C_LA_SoniaAtWork_402_Screen_2_14885	2.16		0.44	1.00	0.99
20.L91C_LA_SoniaAtWork_402_Screen_3_14886	1.96		0.46	0.91	0.88
21.L91C_LA_SoniaAtWork_402_Screen_4_14888	1.28		0.63	0.99	0.99
22.L91B_MA_SchoolMarket_402_Screen_2_15649	0.54		0.70	0.94	0.91
23.L91B_MA_SchoolMarket_402_Screen_3_15650	1.23		0.56	0.94	0.91
24.L91B_MA_SchoolMarket_402_Screen_4_15651	2.46		0.36	1.03	1.04
25.L91B_SS_CostaRica_402_Screen_2_14954	0.53		0.71	0.91	0.88

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.L9IB_SS_CostaRica_402_Screen_3_4955	1.98		0.43	0.95	0.94
27.L9IB_SS_CostaRica_402_Screen_4_4956	1.86		0.46	0.97	0.96
28.L9IB_SC_GrasshopperLifeCycle_P100_Screen_2_1198	1.98	Yes	0.45	1.05	1.05
29.L9IB_SC_GrasshopperLifeCycle_P100_Screen_3_1199	0.40	Yes	0.76	0.86	0.79
30.L9IB_SC_GrasshopperLifeCycle_P100_Screen_4_11215	1.44	Yes	0.54	0.95	0.94
31.L9IB_LA_CharacterDev_P100_alt1_Screen_2_13844	0.10	Yes	0.79	0.96	0.93
32.L9IB_LA_CharacterDev_P100_alt1_Screen_3_13845	1.12	Yes	0.65	0.90	0.87
33.L9IB_LA_CharacterDev_P100_alt1_Screen_4_13846	1.21	Yes	0.57	0.95	0.94
34.L9IB_MA_RunnersVelocity_P100_Screen_2_12525	0.40	Yes	0.72	0.98	0.97
35.L9IB_MA_RunnersVelocity_P100_Screen_3_12527	0.26	Yes	0.73	0.95	0.93
36.L9IB_MA_RunnersVelocity_P100_Screen_4_12530	2.24	Yes	0.36	1.01	1.02
37.L9IC_LA_Poetry_P100_Screen_2_12893	0.07	Yes	0.94	0.97	0.99
38.L9IC_LA_Poetry_P100_Screen_3_12894	2.82	Yes	0.57	0.96	0.95
39.L9IC_LA_Poetry_P100_Screen_4_12895	2.83	Yes	0.59	1.06	1.08
40.L9IC_MA_WaterSale_P100_Screen_2_12720	1.60	Yes	0.81	0.96	0.89
41.L9IC_MA_WaterSale_P100_Screen_3_12903	1.40	Yes	0.84	0.91	0.79
42.L9IC_MA_WaterSale_P100_Screen_4_12907	2.18	Yes	0.73	0.93	0.87
43.L9IC_SS_GlobalCoffeeProduction_P100_Screen_2_13036	1.07	Yes	0.88	0.95	0.87
44.L9IC_SS_GlobalCoffeeProduction_P100_Screen_3_13037	2.66	Yes	0.69	0.95	0.93
45.L9IC_SS_GlobalCoffeeProduction_P100_Screen_4_13038	3.60	Yes	0.49	1.04	1.04
46.L9IB_SC_PlantLifeCycle_P100_Screen_2_11245	1.21	Yes	0.89	0.94	0.85
47.L9IB_SC_PlantLifeCycle_P100_Screen_3_11343	2.65	Yes	0.69	0.92	0.88
48.L9IB_SC_PlantLifeCycle_P100_Screen_4_11344	3.91	Yes	0.46	0.99	0.98
49.L9IC_LA_EagleFlies_301_P100_A301_Screen_2_13862	2.18	Yes	0.79	0.91	0.84
50.L9IC_LA_EagleFlies_301_P100_A301_Screen_3_13863	3.10	Yes	0.66	0.96	0.96
51.L9IC_LA_EagleFlies_301_P100_A301_Screen_4_13864	1.80	Yes	0.85	0.91	0.80
52.L9IC_MA_angles_joga_P100_A202_Screen_2_13865	2.68	Yes	0.73	0.98	0.99
53.L9IC_MA_angles_joga_P100_A202_Screen_3_13866	3.49		0.52	0.98	0.98
54.L9IC_MA_angles_joga_P100_A202_Screen_4_13867	3.88	Yes	0.49	0.95	0.94

2.1.2 Reading

2.1.2.1 Grade 1

Table 2.1.2.1

Complete Item Analysis and Summary: Read 1 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	-0.95	72	0.41	0.99	0.98
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
1.R01A_SL_GettingReady_P100_A203_Screen_2_B193	-2.11	Yes	0.66	0.93	0.83
2.R01A_SL_GettingReady_P100_A203_Screen_3_B194	-2.06	Yes	0.65	0.98	0.88
3.R01A_SL_GettingReady_P100_A203_Screen_4_B195	-1.52	Yes	0.57	1.09	1.13
4.R01B_SL_MorningMessage_P100_A203_Screen_2_B196	-1.11	Yes	0.48	1.06	1.13
5.R01B_SL_MorningMessage_P100_A203_Screen_3_B197	-1.54	Yes	0.56	1.08	1.08
6.R01B_SL_MorningMessage_P100_A203_Screen_4_B198	-0.64	Yes	0.41	1.29	1.46
7.R01A_LA_CatAdventure_203_P100_A301_Screen_2_B3211	-2.30	Yes	0.35	0.98	0.98
8.R01A_LA_CatAdventure_203_P100_A301_Screen_3_B3212	-1.67	Yes	0.29	0.98	0.98
9.R01A_LA_CatAdventure_203_P100_A301_Screen_4_B3213	-2.28	Yes	0.38	1.01	1.01
10.R01A_MA_CountBalloons_301_P100_A301FT_Screen_2_B3274	-4.07		0.75	1.05	1.10
11.R01A_MA_CountBalloons_301_P100_A301FT_Screen_3_B3275	-1.10	Yes	0.14	1.00	1.03
12.R01A_MA_CountBalloons_301_P100_A301FT_Screen_4_B3276	-1.13	Yes	0.15	0.98	0.96
13.R01C_SS_PetStore_P100_A202_Screen_2_B313	-4.46		0.83	1.00	1.00
14.R01C_SS_PetStore_P100_A202_Screen_3_B314	-2.42	Yes	0.34	0.99	0.99
15.R01C_SS_PetStore_P100_A202_Screen_4_B315	-2.58	Yes	0.37	0.99	0.99
16.R01B_SC_MoonCharacteristics_402_V1_Screen_2_B5680	-3.30		0.77	0.98	0.96
17.R01B_SC_MoonCharacteristics_402_V1_Screen_3_B5681	-1.45		0.44	0.98	0.97
18.R01B_SC_MoonCharacteristics_402_V1_Screen_4_B5682	-2.05		0.44	0.96	0.95
19.R01A_LA_AVisitToThePond_P100_A203_Screen_2_B3199	-1.94	Yes	0.25	0.96	0.95
20.R01A_LA_AVisitToThePond_P100_A203_Screen_3_B3200	-2.17		0.35	0.91	0.90
21.R01A_LA_AVisitToThePond_P100_A203_Screen_4_B3201	-1.09		0.17	0.95	0.89
22.R01A_MA_FamilyGatheringatBeach_jc_P100_A203_Screen_2_B3202	-1.81		0.26	0.93	0.90
23.R01A_MA_FamilyGatheringatBeach_jc_P100_A203_Screen_3_B3203	-1.75		0.26	0.99	1.01
24.R01A_MA_FamilyGatheringatBeach_jc_P100_A203_Screen_4_B3204	-2.19		0.33	0.97	0.96
25.R01B_LA_ThankYou_402_V1_Screen_2_B6039	-1.61		0.50	0.96	0.94

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.R0IB_LA_ThankYou_402_V1_Screen_3_16040	-0.61		0.34	0.99	0.98
27.R0IB_LA_ThankYou_402_V1_Screen_4_16041	-0.42		0.38	1.02	1.01
28.R0IB_MA_EstimatingMoney_ShLoGiPe_P100_A203_Screen_2_13220	-0.83	Yes	0.32	0.98	0.97
29.R0IB_MA_EstimatingMoney_ShLoGiPe_P100_A203_Screen_3_13221	-1.02		0.33	1.01	1.00
30.R0IB_MA_EstimatingMoney_ShLoGiPe_P100_A203_Screen_4_13222	-1.04	Yes	0.35	0.97	0.96
31.R0IA_SS_VisitMyTown_402_V2_Screen_2_16035	-1.29		0.35	0.95	0.93
32.R0IA_SS_VisitMyTown_402_V2_Screen_3_16036	-1.05		0.31	0.95	0.92
33.R0IA_SS_VisitMyTown_402_V2_Screen_4_16037	-1.77		0.43	0.99	0.98
34.R0IB_SC_AnimalCoverings_dode_P100_A301_Screen_2_13238	-1.58	Yes	0.48	0.96	0.95
35.R0IB_SC_AnimalCoverings_dode_P100_A301_Screen_3_13239	-0.60	Yes	0.26	0.98	0.96
36.R0IB_SC_AnimalCoverings_dode_P100_A301_Screen_4_13240	-0.95	Yes	0.36	1.00	0.99
37.R0IB_LA_Lunchtime_P100_A202_Screen_2_13283	-1.23	Yes	0.38	0.96	0.95
38.R0IB_LA_Lunchtime_P100_A202_Screen_3_13284	-1.71	Yes	0.57	0.97	0.97
39.R0IB_LA_Lunchtime_P100_A202_Screen_4_13285	-0.62	Yes	0.28	0.98	0.96
40.R0IC_MA_KeCreamAtThePark_AmEtPaAg_P100_A203_Screen_2_13244	-0.80	Yes	0.31	1.00	0.99
41.R0IC_MA_KeCreamAtThePark_AmEtPaAg_P100_A203_Screen_3_13245	-0.81	Yes	0.35	0.98	0.98
42.R0IC_MA_KeCreamAtThePark_AmEtPaAg_P100_A203_Screen_4_13246	-0.45	Yes	0.31	1.00	1.00
43.R0IA_SS_HomesOfThePast_203_P100_A301_Screen_2_13205	-0.34	Yes	0.22	0.99	0.98
44.R0IA_SS_HomesOfThePast_203_P100_A301_Screen_3_13206	-1.82	Yes	0.52	0.98	0.98
45.R0IA_SS_HomesOfThePast_203_P100_A301_Screen_4_13207	-0.32	Yes	0.24	1.01	1.01
46.R0IC_SC_Cotton_P100_A201_Screen_2_13316	-0.61	Yes	0.31	1.00	1.00
47.R0IC_SC_Cotton_P100_A201_Screen_3_13317	-0.63	Yes	0.30	1.00	1.00
48.R0IC_SC_Cotton_P100_A201_Screen_4_13318	-0.81	Yes	0.34	1.01	1.01
49.R0IB_LA_ZooTrip_203_P100_A301_Screen_2_13217	-1.03	Yes	0.65	0.80	0.74
50.R0IB_LA_ZooTrip_203_P100_A301_Screen_3_13218	-0.45	Yes	0.51	0.95	0.91
51.R0IB_LA_ZooTrip_203_P100_A301_Screen_4_13219	0.05	Yes	0.39	0.99	0.97
52.R0IC_MA_BalanceScale_401_V2_Screen_2_14619	-0.44	Yes	0.47	1.04	1.03
53.R0IC_MA_BalanceScale_401_V2_Screen_3_14620	0.03	Yes	0.40	1.16	1.21
54.R0IC_MA_BalanceScale_401_V2_Screen_4_14621	-0.16	Yes	0.42	1.10	1.12
55.R0IB_SS_FarmersMarket_401_V2_Screen_2_14721	-0.08		0.50	1.07	1.10
56.R0IB_SS_FarmersMarket_401_V2_Screen_3_14722	0.08		0.46	0.95	0.93
57.R0IB_SS_FarmersMarket_401_V2_Screen_4_14723	0.10		0.46	1.00	1.01
58.R0IC_SC_Recycling_402_V2_Screen_2_16053	0.64		0.30	1.00	0.99
59.R0IC_SC_Recycling_402_V2_Screen_3_16054	-0.09		0.44	0.93	0.90
60.R0IC_SC_Recycling_402_V2_Screen_4_16055	-0.58		0.54	1.05	1.10

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
61.R01C_LA_GrowingTaller_203_P100_A301_Screen_2_B241	0.50	Yes	0.42	0.82	0.78
62.R01C_LA_GrowingTaller_203_P100_A301_Screen_3_B242	0.57	Yes	0.39	0.84	0.79
63.R01C_LA_GrowingTaller_203_P100_A301_Screen_4_B243	0.47	Yes	0.43	1.05	1.04
64.R01C_MA_PuppetShow_dode_P100_A203_Screen_2_B256	0.57	Yes	0.43	1.02	1.01
65.R01C_MA_PuppetShow_dode_P100_A203_Screen_3_B257	0.61	Yes	0.43	0.99	0.97
66.R01C_MA_PuppetShow_dode_P100_A203_Screen_4_B258	0.14	Yes	0.53	0.94	0.91
67.R01C_SS_UrbanNeighborhood_203_P100_A301_Screen_2_B259	0.79	Yes	0.38	1.06	1.05
68.R01C_SS_UrbanNeighborhood_203_P100_A301_Screen_3_B260	-0.12	Yes	0.58	0.93	0.90
69.R01C_SS_UrbanNeighborhood_203_P100_A301_Screen_4_B261	0.24	Yes	0.50	0.85	0.81
70.R01C_SC_Leaves_mika_P100_A301_Screen_2_B262	0.73		0.37	1.02	1.01
71.R01C_SC_Leaves_mika_P100_A301_Screen_3_B263	0.24	Yes	0.51	1.06	1.09
72.R01C_SC_Leaves_mika_P100_A301_Screen_4_B264	0.73	Yes	0.40	1.01	1.01

2.1.2.2 Grades 2–3

Table 2.1.2.2

Complete Item Analysis and Summary: Read 2-3 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	-0.44	72	0.51	0.98	0.97
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
1.R23A_SL_Getting_Ready_P100_A203_Screen_2_B3325	-2.62	Yes	0.89	0.88	0.65
2.R23A_SL_Getting_Ready_P100_A203_Screen_3_B3326	-1.25	Yes	0.74	1.08	1.30
3.R23A_SL_Getting_Ready_P100_A203_Screen_4_B3327	-1.01	Yes	0.70	1.05	1.04
4.R23B_SL_RunningClub_401_V2_Screen_2_H4589	-0.34		0.55	1.48	1.81
5.R23B_SL_RunningClub_401_V2_Screen_3_H4590	-0.21	Yes	0.55	1.09	1.20
6.R23B_SL_RunningClub_401_V2_Screen_4_H4591	0.81		0.34	1.27	1.62
7.R23A_LA_BenFranklin_203_P100_A301_Screen_2_B3331	-1.45	Yes	0.47	0.85	0.81
8.R23A_LA_BenFranklin_203_P100_A301_Screen_3_B3332	-0.43	Yes	0.23	0.97	1.01
9.R23A_LA_BenFranklin_203_P100_A301_Screen_4_B3333	-0.34		0.25	1.06	1.11
10.R23A_MA_BuyingSchoolSupplies_P100_A201_Screen_2_B3392	-1.78	Yes	0.44	0.97	0.96
11.R23A_MA_BuyingSchoolSupplies_P100_A201_Screen_3_B3393	-1.25		0.39	1.01	1.01
12.R23A_MA_BuyingSchoolSupplies_P100_A201_Screen_4_B3394	-1.25	Yes	0.33	0.97	0.97
13.R23A_SS_HomesofthePast_203_P100_A301_Screen_2_B277	-1.42	Yes	0.39	0.91	0.89
14.R23A_SS_HomesofthePast_203_P100_A301_Screen_3_B278	-2.72	Yes	0.64	0.94	0.91
15.R23A_SS_HomesofthePast_203_P100_A301_Screen_4_B279	-0.51		0.25	1.02	1.04
16.R23B_SC_AnimalMovement_dode_P100_A301_Screen_2_B3292	-2.99	Yes	0.72	0.94	0.90
17.R23B_SC_AnimalMovement_dode_P100_A301_Screen_3_B293	-2.03		0.56	0.96	0.95
18.R23B_SC_AnimalMovement_dode_P100_A301_Screen_4_B294	-1.88	Yes	0.47	0.98	0.98
19.R23B_LA_IvanAtTheMarket_P100_A202_Screen_2_B353	-2.97		0.77	0.97	0.92
20.R23B_LA_IvanAtTheMarket_P100_A202_Screen_3_B354	-1.20	Yes	0.30	0.95	0.94
21.R23B_LA_IvanAtTheMarket_P100_A202_Screen_4_B355	-0.57		0.26	0.99	1.00
22.R23B_MA_Cupcakes_P100_A201_Screen_2_B401	-1.23		0.40	0.98	0.98
23.R23B_MA_Cupcakes_P100_A201_Screen_3_B402	-1.31		0.43	0.99	0.98
24.R23B_MA_Cupcakes_P100_A201_Screen_4_B403	-0.92		0.33	0.98	0.97
25.R23B_LA_TreasureHunt_402_v1_Screen_2_B5700	-0.83		0.52	0.91	0.89

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.R23B_LA_TreasureHunt_402_v1_Screen_3_15715	0.16		0.39	1.04	1.04
27.R23B_LA_TreasureHunt_402_v1_Screen_4_15716	0.36		0.33	1.02	1.02
28.R23B_MA_RecyclingProject_402_v1_Screen_2_15626	-1.69		0.71	0.92	0.87
29.R23B_MA_RecyclingProject_402_v1_Screen_3_15628	-0.79		0.52	0.96	0.94
30.R23B_MA_RecyclingProject_402_v1_Screen_4_15629	0.90		0.27	1.08	1.10
31.R23C_SS_UrbanNeighborhood_P100_A301_Screen_2_13371	-0.21	Yes	0.36	1.02	1.02
32.R23C_SS_UrbanNeighborhood_P100_A301_Screen_3_13372	-1.27	Yes	0.64	0.90	0.86
33.R23C_SS_UrbanNeighborhood_P100_A301_Screen_4_13373	-0.63	Yes	0.51	0.85	0.83
34.R23B_SC_TempClimate_401_V1_Screen_2_13932	-0.08	Yes	0.38	1.01	1.00
35.R23B_SC_TempClimate_401_V1_Screen_3_13936	0.45	Yes	0.24	1.04	1.06
36.R23B_SC_TempClimate_401_V1_Screen_4_13937	0.42	Yes	0.26	1.07	1.12
37.R23B_LA_ZebraStripes_203_P100_A301_alt1_Screen_2_13410	-0.34	Yes	0.43	0.95	0.94
38.R23B_LA_ZebraStripes_203_P100_A301_alt1_Screen_3_13411	0.21	Yes	0.31	1.00	1.00
39.R23B_LA_ZebraStripes_203_P100_A301_alt1_Screen_4_13412	-0.11	Yes	0.40	0.93	0.92
40.R23B_MA_Library_P100_A201_alt1_Screen_2_13413	-0.47	Yes	0.51	0.89	0.88
41.R23B_MA_Library_P100_A201_alt1_Screen_3_13414	-0.76	Yes	0.49	0.94	0.93
42.R23B_MA_Library_P100_A201_alt1_Screen_4_13415	-0.14	Yes	0.44	0.99	0.99
43.R23B_SS_OurNeighborhood_203_P100_A203_Screen_2_13350	-0.32	Yes	0.42	0.97	0.97
44.R23B_SS_OurNeighborhood_203_P100_A203_Screen_3_13351	-0.24	Yes	0.42	0.98	0.98
45.R23B_SS_OurNeighborhood_203_P100_A203_Screen_4_13352	0.05	Yes	0.33	1.03	1.04
46.R23A_SC_Birds_dode_P100_A301_Screen_2_13280	-3.26	Yes	0.91	0.96	0.80
47.R23A_SC_Birds_dode_P100_A301_Screen_3_13281	-0.62	Yes	0.45	0.90	0.89
48.R23A_SC_Birds_dode_P100_A301_Screen_4_13282	-0.23	Yes	0.39	0.85	0.83
49.R23A_LA_KittenFable_203_P100_A203FT_Screen_2_13338	0.80	Yes	0.50	1.15	1.21
50.R23A_LA_KittenFable_203_P100_A203FT_Screen_3_13339	0.38	Yes	0.56	0.86	0.82
51.R23A_LA_KittenFable_203_P100_A203FT_Screen_4_13340	-0.25	Yes	0.70	0.83	0.73
52.R23C_MA_ReadingProject_402_v2_Screen_2_16092	0.89		0.42	1.07	1.09
53.R23C_MA_ReadingProject_402_v2_Screen_3_16094	0.42		0.50	1.04	1.04
54.R23C_MA_ReadingProject_402_v2_Screen_4_16095	0.24		0.54	1.06	1.06
55.R23B_SS_BoatsLongAgo_401_V2_Screen_2_14583	0.05	Yes	0.68	0.90	0.85
56.R23B_SS_BoatsLongAgo_401_V2_Screen_3_14584	0.92		0.52	1.10	1.12
57.R23B_SS_BoatsLongAgo_401_V2_Screen_4_14585	0.64	Yes	0.53	0.98	0.97
58.R23B_SC_AnimalMovement_dode_P100_A301_alt1_Screen_2_13419	-1.67	Yes	0.93	0.93	0.74
59.R23B_SC_AnimalMovement_dode_P100_A301_alt1_Screen_3_13420	-0.90	Yes	0.83	0.92	0.84
60.R23B_SC_AnimalMovement_dode_P100_A301_alt1_Screen_4_13421	0.70	Yes	0.62	0.94	0.92

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
61.R23B_LA_ZebraStripes_203_P100_A301_Screen_2_13344	0.33	Yes	0.69	0.93	0.91
62.R23B_LA_ZebraStripes_203_P100_A301_Screen_3_13345	1.24		0.47	0.91	0.89
63.R23B_LA_ZebraStripes_203_P100_A301_Screen_4_13346	0.60	Yes	0.66	0.89	0.84
64.R23B_MA_Library_P100_A201_Screen_2_13356	0.07	Yes	0.69	0.90	0.85
65.R23B_MA_Library_P100_A201_Screen_3_13357	-0.13	Yes	0.73	0.90	0.82
66.R23B_MA_Library_P100_A201_Screen_4_13358	0.54	Yes	0.64	0.97	0.94
67.R23B_SS_OurNeighborhood_203_P100_A203_alt1_Screen_2_13416	0.46	Yes	0.66	0.89	0.84
68.R23B_SS_OurNeighborhood_203_P100_A203_alt1_Screen_3_13417	0.67	Yes	0.64	0.90	0.85
69.R23B_SS_OurNeighborhood_203_P100_A203_alt1_Screen_4_13418	1.24	Yes	0.55	0.94	0.92
70.R23C_SC_Insects_dode_P100_A301_Screen_2_13374	-0.30	Yes	0.78	0.93	0.89
71.R23C_SC_Insects_dode_P100_A301_Screen_3_13375	1.34	Yes	0.51	0.96	0.95
72.R23C_SC_Insects_dode_P100_A301_Screen_4_13376	0.66	Yes	0.63	1.06	1.07

2.1.2.3 Grades 4–5

Table 2.1.2.3

Complete Item Analysis and Summary: Read 4-5 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	0.77	69	0.48	0.99	0.99
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
1.R45A_SL_WatchingTV_P100_A30IFT_Screen_2_B3509	-3.19	Yes	0.98	0.88	0.47
2.R45A_SL_WatchingTV_P100_A30IFT_Screen_3_B3510	-1.06	Yes	0.86	0.96	1.02
3.R45A_SL_WatchingTV_P100_A30IFT_Screen_4_B3511	1.08	Yes	0.55	1.06	1.12
4.R45B_SL_PhotoContest_P100_A30IFT_Screen_2_B449	0.25	Yes	0.68	0.95	0.96
5.R45B_SL_PhotoContest_P100_A30IFT_Screen_3_B450	1.77	Yes	0.40	1.21	1.54
6.R45B_SL_PhotoContest_P100_A30IFT_Screen_4_B451	-0.11	Yes	0.75	1.05	1.25
7.R45A_LA_RecycleOrCompost_402_V2_Screen_2_B5991	-1.81		0.69	0.92	0.87
8.R45A_LA_RecycleOrCompost_402_V2_Screen_3_B5992	0.27		0.38	1.09	1.12
9.R45A_LA_RecycleOrCompost_402_V2_Screen_4_B5993	0.01		0.35	0.93	0.92
10.R45A_MA_Supermarket_pasz_P100_A203_Screen_2_B3464	-1.61	Yes	0.63	0.95	0.91
11.R45A_MA_Supermarket_pasz_P100_A203_Screen_3_B3465	-0.93	Yes	0.47	0.95	0.94
12.R45A_MA_Supermarket_pasz_P100_A203_Screen_4_B3466	-0.43	Yes	0.39	0.97	0.97
13.R45A_SS_ShoppingCart_401_V2_Screen_2_B4714	-0.37	Yes	0.34	0.90	0.88
14.R45A_SS_ShoppingCart_401_V2_Screen_3_B4715	-0.75	Yes	0.39	1.05	1.07
15.R45A_SS_ShoppingCart_401_V2_Screen_4_B4716	0.20	Yes	0.22	0.99	0.98
16.R45B_SC_Geysers_P100_A301_45_Screen_2_B3407	-0.72	Yes	0.45	0.97	0.97
17.R45B_SC_Geysers_P100_A301_45_Screen_3_B3408	0.06	Yes	0.23	1.03	1.11
18.R45B_SC_Geysers_P100_A301_45_Screen_4_B3409	-0.17	Yes	0.28	0.98	0.99
19.R45B_LA_OntheTrain_P100_A202_Screen_2_B3467	0.47		0.43	1.06	1.13
20.R45B_LA_OntheTrain_P100_A202_Screen_3_B3468	1.31	Yes	0.26	1.08	1.31
21.R45B_LA_OntheTrain_P100_A202_Screen_4_B3469	1.15	Yes	0.34	1.07	1.20
22.R45A_MA_BuyingSchoolSupplies_P100_A201_Screen_2_B3518	-1.94	Yes	0.69	0.93	0.89
23.R45A_MA_BuyingSchoolSupplies_P100_A201_Screen_3_B3519	-1.12	Yes	0.50	0.92	0.91
24.R45A_MA_BuyingSchoolSupplies_P100_A201_Screen_4_B3520	-0.31	Yes	0.34	0.94	0.93
25.R45C_LA_CookingWithGrandpa_402_V1_Screen_2_B6009	-0.10		0.62	0.87	0.82

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.R45C_LA_CookingWithGrandpa_402_V1_Screen_3_16010	1.67		0.32	1.03	1.07
27.R45C_LA_CookingWithGrandpa_402_V1_Screen_4_16011	0.12		0.59	0.92	0.88
28.R45A_MA_ClassroomCleanup_401_V2_Screen_2_14625	-0.08	Yes	0.53	1.02	1.03
29.R45A_MA_ClassroomCleanup_401_V2_Screen_3_14626	-0.26	Yes	0.61	0.95	0.94
30.R45A_MA_ClassroomCleanup_401_V2_Screen_4_14627	1.59	Yes	0.23	1.00	1.01
31.R45B_SS_LewisAndClark_402_V1_Screen_2_16017	0.09		0.60	0.95	0.93
32.R45B_SS_LewisAndClark_402_V1_Screen_3_16018	1.28		0.35	1.01	1.01
33.R45B_SS_LewisAndClark_402_V1_Screen_4_16019	1.59		0.31	1.02	1.02
34.R45B_SC_KelpForests_402_V1_Screen_2_15706	0.21		0.61	0.89	0.86
35.R45B_SC_KelpForests_402_V1_Screen_3_15707	1.23		0.36	0.90	0.88
36.R45B_SC_KelpForests_402_V1_Screen_4_15708	1.38		0.35	1.02	1.03
37.R45B_MA_ClassSchedule_jc_P100_A201_Screen_2_13479	-0.69	Yes	0.78	0.93	0.87
38.R45B_MA_ClassSchedule_jc_P100_A201_Screen_3_13480	0.75	Yes	0.48	0.94	0.93
39.R45B_MA_ClassSchedule_jc_P100_A201_Screen_4_13481	1.68	Yes	0.25	0.99	0.99
40.R45B_SS_Declaration_P100_A203FT_Screen_2_13527	1.08	Yes	0.38	1.01	1.01
41.R45B_SS_Declaration_P100_A203FT_Screen_3_13528	1.64	Yes	0.27	1.02	1.04
42.R45B_SS_Declaration_P100_A203FT_Screen_4_13529	0.98	Yes	0.35	1.01	1.02
43.R45C_SC_Tides_P100_A301_Screen_2_13497	1.99	Yes	0.20	1.01	1.03
44.R45C_SC_Tides_P100_A301_Screen_3_13498	-0.05	Yes	0.64	0.98	0.98
45.R45C_SC_Tides_P100_A301_Screen_4_13499	1.17	Yes	0.34	1.01	1.02
46.R45C_LA_BrunelDavinci_203_P100_A301_Screen_2_13488	0.40	Yes	0.75	1.02	1.04
47.R45C_LA_BrunelDavinci_203_P100_A301_Screen_3_13489	1.33	Yes	0.59	0.96	0.94
48.R45C_LA_BrunelDavinci_203_P100_A301_Screen_4_13490	2.11	Yes	0.37	1.04	1.07
49.R45C_MA_SoccerInThePark_401_V1_Screen_2_13926	1.50	Yes	0.53	1.02	1.02
50.R45C_MA_SoccerInThePark_401_V1_Screen_3_13927	2.35	Yes	0.32	1.27	1.41
51.R45C_MA_SoccerInThePark_401_V1_Screen_4_13928	2.86	Yes	0.24	1.22	1.40
52.R45B_SS_NativeAmericanShelters_namo_P100_A202_Screen_2_13482	2.46	Yes	0.39	0.94	0.93
53.R45B_SS_NativeAmericanShelters_namo_P100_A202_Screen_3_13483	2.13	Yes	0.43	0.95	0.94
54.R45B_SS_NativeAmericanShelters_namo_P100_A202_Screen_4_13484	2.41	Yes	0.42	1.02	1.01
55.R45B_SC_Geyers_P100_A301_Alt1_Screen_2_13539	-0.63	Yes	0.92	0.89	0.63
56.R45B_SC_Geyers_P100_A301_Alt1_Screen_3_13540	1.92	Yes	0.55	0.94	0.91
57.R45B_SC_Geyers_P100_A301_Alt1_Screen_4_13541	2.13	Yes	0.46	0.97	0.95
58.R45B_LA_OntheTrain_P100_A202_Alt1_Screen_2_13530	1.35	Yes	0.66	1.00	1.03
59.R45B_LA_OntheTrain_P100_A202_Alt1_Screen_3_13531	2.11	Yes	0.50	0.92	0.89
60.R45B_LA_OntheTrain_P100_A202_Alt1_Screen_4_13532	1.51	Yes	0.61	0.92	0.89

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
61.R45B_MA_ClassSchedule_jc_P100_A201_Alt1_Screen_2_B3533	1.43	Yes	0.68	0.94	0.90
62.R45B_MA_ClassSchedule_jc_P100_A201_Alt1_Screen_3_B3534	0.99	Yes	0.71	0.96	0.96
63.R45B_MA_ClassSchedule_jc_P100_A201_Alt1_Screen_4_B3535	2.38	Yes	0.45	0.93	0.91
64.R45C_SS_EleanorRoosevelt_203_P100_A301_Screen_2_B3503	2.15	Yes	0.48	0.96	0.95
65.R45C_SS_EleanorRoosevelt_203_P100_A301_Screen_3_B3504	2.57	Yes	0.44	0.98	0.97
66.R45C_SS_EleanorRoosevelt_203_P100_A301_Screen_4_B3505	1.96	Yes	0.57	0.93	0.92
67.R45C_SC_Glaciers_pasz_P100_A301_Screen_2_B3506	1.88	Yes	0.56	0.98	0.97
68.R45C_SC_Glaciers_pasz_P100_A301_Screen_3_B3507	1.55	Yes	0.63	0.95	0.92
69.R45C_SC_Glaciers_pasz_P100_A301_Screen_4_B3508	3.18	Yes	0.30	0.99	1.00

2.1.2.4 Grades 6–8

Table 2.1.2.4

Complete Item Analysis and Summary: Read 6-8 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	1.10	72	0.52	0.98	0.98
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
1.R68A_SLProperConduct_P100_A203_Screen_2_I3554	-2.04	Yes	0.90	0.81	0.46
2.R68A_SLProperConduct_P100_A203_Screen_3_I3555	-1.30	Yes	0.85	0.86	0.67
3.R68A_SLProperConduct_P100_A203_Screen_4_I3556	-0.09	Yes	0.68	0.95	0.92
4.R68B_SLSportsEquipment_301_P100_A30IFT_Screen_2_I3629	0.78	Yes	0.56	1.25	1.46
5.R68B_SLSportsEquipment_301_P100_A30IFT_Screen_3_I3630	1.84	Yes	0.39	1.26	1.64
6.R68B_SLSportsEquipment_301_P100_A30IFT_Screen_4_I3631	0.84	Yes	0.55	1.30	1.65
7.R68A_LA_ScavengerHunt_401_V2_Screen_2_I4640	-0.55	Yes	0.46	0.98	0.97
8.R68A_LA_ScavengerHunt_401_V2_Screen_3_I4641	-1.23	Yes	0.62	0.89	0.84
9.R68A_LA_ScavengerHunt_401_V2_Screen_4_I4642	0.52	Yes	0.25	1.04	1.10
10.R68A_MA_Closet_rize_P100_A203_Screen_2_I3563	-0.52	Yes	0.46	0.98	0.97
11.R68A_MA_Closet_rize_P100_A203_Screen_3_I3564	-0.98	Yes	0.54	1.02	1.02
12.R68A_MA_Closet_rize_P100_A203_Screen_4_I3565	-1.25	Yes	0.59	1.02	1.02
13.R68A_SS_Uruguay_203_P100_A301_Screen_2_I3566	-1.37	Yes	0.67	0.92	0.88
14.R68A_SS_Uruguay_203_P100_A301_Screen_3_I3567	-0.34	Yes	0.42	0.96	0.96
15.R68A_SS_Uruguay_203_P100_A301_Screen_4_I3568	0.15	Yes	0.28	1.04	1.09
16.R68A_SC_LeafInsects_402_V1_Screen_2_I5712	0.11		0.44	1.05	1.06
17.R68A_SC_LeafInsects_402_V1_Screen_3_I5713	-1.16		0.65	0.93	0.88
18.R68A_SC_LeafInsects_402_V1_Screen_4_I5714	0.78		0.32	1.01	1.04
19.R68A_LA_Collage_203_P100_A301_Screen_2_I3572	-0.68	Yes	0.49	0.91	0.89
20.R68A_LA_Collage_203_P100_A301_Screen_3_I3573	-1.03	Yes	0.59	0.95	0.92
21.R68A_LA_Collage_203_P100_A301_Screen_4_I3574	-0.52	Yes	0.47	0.95	0.94
22.R68A_MA_soccerfield_DeRoSaJa_P100_A203_Screen_2_I3575	-1.58	Yes	0.72	0.93	0.89
23.R68A_MA_soccerfield_DeRoSaJa_P100_A203_Screen_3_I3576	-0.48	Yes	0.45	1.08	1.09
24.R68A_MA_soccerfield_DeRoSaJa_P100_A203_Screen_4_I3577	-0.09	Yes	0.35	1.09	1.14
25.R68C_LA_TeamLeader_402_V2_Screen_2_I6022	0.19		0.66	0.93	0.90

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.R68C_LA_TeamLeader_402_V2_Screen_3_16023	0.24		0.65	0.94	0.95
27.R68C_LA_TeamLeader_402_V2_Screen_4_16024	-0.03		0.68	0.88	0.85
28.R68C_MA_Ratios_401_V1_Screen_2_13962	1.39	Yes	0.48	0.97	0.96
29.R68C_MA_Ratios_401_V1_Screen_3_13963	1.94	Yes	0.37	1.01	1.02
30.R68C_MA_Ratios_401_V1_Screen_4_13964	2.02		0.30	1.05	1.09
31.R68B_SS_RockAndRoll_203_P100_A301_Screen_2_13584	1.26	Yes	0.44	1.04	1.03
32.R68B_SS_RockAndRoll_203_P100_A301_Screen_3_13585	0.57	Yes	0.67	0.90	0.86
33.R68B_SS_RockAndRoll_203_P100_A301_Screen_4_13586	0.61	Yes	0.61	0.96	0.94
34.R68B_SC_CellDivision_diab_P100_A301_Screen_2_13587	0.31		0.73	0.95	0.93
35.R68B_SC_CellDivision_diab_P100_A301_Screen_3_13588	0.78	Yes	0.63	0.95	0.94
36.R68B_SC_CellDivision_diab_P100_A301_Screen_4_13589	1.93	Yes	0.36	1.02	1.02
37.R68C_LA_SolarOven_203_P100_A203_Screen_2_13602	1.09	Yes	0.52	0.95	0.94
38.R68C_LA_SolarOven_203_P100_A203_Screen_3_13603	1.01	Yes	0.55	0.92	0.90
39.R68C_LA_SolarOven_203_P100_A203_Screen_4_13604	1.87	Yes	0.41	0.92	0.90
40.R68B_MA_newroom_diab_P100_A203_alt1_Screen_2_13650	1.09	Yes	0.57	0.95	0.94
41.R68B_MA_newroom_diab_P100_A203_alt1_Screen_3_13651	2.53	Yes	0.24	0.98	0.97
42.R68B_MA_newroom_diab_P100_A203_alt1_Screen_4_13652	2.41	Yes	0.25	1.05	1.10
43.R68B_SS_GreatInventions_203_P100_A301_Screen_2_13596	0.44	Yes	0.72	0.92	0.87
44.R68B_SS_GreatInventions_203_P100_A301_Screen_3_13597	1.01	Yes	0.57	0.90	0.88
45.R68B_SS_GreatInventions_203_P100_A301_Screen_4_13598	1.80	Yes	0.36	0.95	0.94
46.R68C_SC_Butterflies_mabr_P100_A301_Screen_2_13611	1.15	Yes	0.52	1.02	1.02
47.R68C_SC_Butterflies_mabr_P100_A301_Screen_3_13612	1.23	Yes	0.48	0.99	0.99
48.R68C_SC_Butterflies_mabr_P100_A301_Screen_4_13613	1.15	Yes	0.52	0.97	0.97
49.R68C_LA_MyPenPal_P100_A202_Screen_2_13659	1.26	Yes	0.68	0.96	0.97
50.R68C_LA_MyPenPal_P100_A202_Screen_3_13660	1.89		0.54	1.00	1.00
51.R68C_LA_MyPenPal_P100_A202_Screen_4_13661	1.22	Yes	0.67	1.08	1.19
52.R68C_MA_Ratios_401_V2_Screen_2_14616	2.52	Yes	0.45	0.94	0.92
53.R68C_MA_Ratios_401_V2_Screen_3_14617	3.34	Yes	0.26	1.02	1.04
54.R68C_MA_Ratios_401_V2_Screen_4_14618	2.75		0.43	0.98	0.98
55.R68C_SS_NileRiver_401_V1_Screen_2_14491	1.72	Yes	0.71	0.94	0.91
56.R68C_SS_NileRiver_401_V1_Screen_3_14492	1.78	Yes	0.65	1.02	1.06
57.R68C_SS_NileRiver_401_V1_Screen_4_14493	2.61	Yes	0.48	0.98	0.98
58.R68B_SC_RockCycle_DeRoSaJa_P100_A301_alt1_Screen_2_13656	2.35	Yes	0.59	0.97	0.96
59.R68B_SC_RockCycle_DeRoSaJa_P100_A301_alt1_Screen_3_13657	1.62	Yes	0.76	1.01	1.05
60.R68B_SC_RockCycle_DeRoSaJa_P100_A301_alt1_Screen_4_13658	3.59	Yes	0.34	1.06	1.09

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
61.R68C_LA_Prodigy_203_P100_A301_Screen_2_13614	1.95	Yes	0.69	0.86	0.79
62.R68C_LA_Prodigy_203_P100_A301_Screen_3_13615	2.21	Yes	0.63	0.87	0.83
63.R68C_LA_Prodigy_203_P100_A301_Screen_4_13616	2.67	Yes	0.53	0.94	0.92
64.R68C_MA_FoodCollection_RaObAmSc_P100_A203_Screen_2_13617	3.33	Yes	0.40	1.02	1.02
65.R68C_MA_FoodCollection_RaObAmSc_P100_A203_Screen_3_13618	3.13	Yes	0.47	0.98	0.97
66.R68C_MA_FoodCollection_RaObAmSc_P100_A203_Screen_4_13619	3.03	Yes	0.43	1.00	0.99
67.R68C_SS_StudentCouncil_203_P100_A301_Screen_2_13620	1.82	Yes	0.72	0.90	0.84
68.R68C_SS_StudentCouncil_203_P100_A301_Screen_3_13621	3.33	Yes	0.41	0.99	0.98
69.R68C_SS_StudentCouncil_203_P100_A301_Screen_4_13622	3.78	Yes	0.32	1.01	1.00
70.R68C_SC_Vaporization_RaObAmSc_P100_A301_Screen_2_13623	2.40	Yes	0.62	0.98	0.98
71.R68C_SC_Vaporization_RaObAmSc_P100_A301_Screen_3_13624	3.54	Yes	0.36	0.98	0.97
72.R68C_SC_Vaporization_RaObAmSc_P100_A301_Screen_4_13625	3.31	Yes	0.41	1.00	0.99

2.1.2.5 Grades 9–12

Table 2.1.2.5

Complete Item Analysis and Summary: Read 9-12 S402 Online

Item Type	Average Item Difficulty (in logits)	No. of Items	Average P-value	Average Infit Mean Square	Average Outfit Mean Square
Selected Response	1.91	72	0.55	0.98	0.99
Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
1.R91A_SL_JobSearch_301_P100_A30IFT_Screen_2_B3743	0.26	Yes	0.78	1.14	1.62
2.R91A_SL_JobSearch_301_P100_A30IFT_Screen_3_B3744	0.60	Yes	0.76	0.87	0.80
3.R91A_SL_JobSearch_301_P100_A30IFT_Screen_4_B3745	1.04	Yes	0.68	1.14	1.30
4.R91B_SL_ChoosingCollege_401_V1_Screen_2_B3950	1.41	Yes	0.65	1.13	1.45
5.R91B_SL_ChoosingCollege_401_V1_Screen_3_B3951	2.69	Yes	0.40	1.14	1.37
6.R91B_SL_ChoosingCollege_401_V1_Screen_4_B3952	1.92	Yes	0.53	1.22	1.37
7.R91A_LA_CharlesSchulz_203_P100_A301_Screen_2_B3674	-1.77	Yes	0.90	0.91	0.64
8.R91A_LA_CharlesSchulz_203_P100_A301_Screen_3_B3675	0.12	Yes	0.57	0.99	0.99
9.R91A_LA_CharlesSchulz_203_P100_A301_Screen_4_B3676	1.32	Yes	0.37	1.02	1.04
10.R91A_MA_DrawingShapes_kaje_P100_A203_Screen_2_B3677	-0.32	Yes	0.67	0.96	0.95
11.R91A_MA_DrawingShapes_kaje_P100_A203_Screen_3_B3678	0.16	Yes	0.54	1.00	1.01
12.R91A_MA_DrawingShapes_kaje_P100_A203_Screen_4_B3679	0.86	Yes	0.43	0.89	0.88
13.R91A_SS_AviationHistory_P100_A203_Screen_2_B3680	-0.46	Yes	0.73	0.96	0.92
14.R91A_SS_AviationHistory_P100_A203_Screen_3_B3681	0.55	Yes	0.50	1.00	1.00
15.R91A_SS_AviationHistory_P100_A203_Screen_4_B3682	0.77	Yes	0.41	1.01	1.01
16.R91B_SC_MusicMemory_402_V2_Screen_2_B6062	0.53		0.52	0.97	0.95
17.R91B_SC_MusicMemory_402_V2_Screen_3_B6063	0.98		0.43	0.94	0.94
18.R91B_SC_MusicMemory_402_V2_Screen_4_B6064	1.45		0.34	1.03	1.06
19.R91B_LA_Auntie_203_P100_A301_Screen_2_B3692	0.12	Yes	0.61	0.90	0.86
20.R91B_LA_Auntie_203_P100_A301_Screen_3_B3693	1.19	Yes	0.40	0.96	0.95
21.R91B_LA_Auntie_203_P100_A301_Screen_4_B3694	1.14	Yes	0.35	0.92	0.91
22.R91A_MA_RoadSigns_P100_A203_Screen_2_B3689	0.26	Yes	0.60	0.95	0.93
23.R91A_MA_RoadSigns_P100_A203_Screen_3_B3690	0.10	Yes	0.60	0.93	0.90
24.R91A_MA_RoadSigns_P100_A203_Screen_4_B3691	1.49	Yes	0.27	1.08	1.16
25.R91B_LA_Fiction_402_V2_Screen_2_B6058	0.62		0.75	0.87	0.79

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
26.R9IB_LA_Fiction_402_V2_Screen_3_16059	0.67		0.73	0.87	0.79
27.R9IB_LA_Fiction_402_V2_Screen_4_16060	2.00		0.41	1.05	1.10
28.R9IB_MA_CakeMaking_JaGeKaKo_P100_A203_alt1_Screen_2_13767	-0.89	Yes	0.91	0.93	0.80
29.R9IB_MA_CakeMaking_JaGeKaKo_P100_A203_alt1_Screen_3_13768	2.02	Yes	0.44	1.00	0.99
30.R9IB_MA_CakeMaking_JaGeKaKo_P100_A203_alt1_Screen_4_13769	2.14	Yes	0.45	1.01	1.00
31.R9IB_SS_Reading_203_P100_A301_Screen_2_13698	1.20	Yes	0.63	1.02	1.03
32.R9IB_SS_Reading_203_P100_A301_Screen_3_13699	1.48	Yes	0.61	0.93	0.91
33.R9IB_SS_Reading_203_P100_A301_Screen_4_13700	2.04	Yes	0.45	0.97	0.95
34.R9IC_SC_PlantsInSpace_402_V2_Screen_2_16070	2.65		0.37	0.96	0.95
35.R9IC_SC_PlantsInSpace_402_V2_Screen_3_16071	2.36		0.42	0.95	0.94
36.R9IC_SC_PlantsInSpace_402_V2_Screen_4_16072	3.26		0.27	1.01	1.02
37.R9IB_LA_Mattie_203_P100_A301_Screen_2_13704	0.80	Yes	0.72	0.90	0.84
38.R9IB_LA_Mattie_203_P100_A301_Screen_3_13705	1.29	Yes	0.62	0.91	0.89
39.R9IB_LA_Mattie_203_P100_A301_Screen_4_13706	1.94	Yes	0.47	0.96	0.95
40.R9IB_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_2_13707	1.60	Yes	0.57	0.93	0.92
41.R9IB_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_3_13708	2.16	Yes	0.48	0.94	0.94
42.R9IB_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_4_13709	2.72	Yes	0.33	0.99	0.99
43.R9IB_SS_Recycling_203_P100_A301_alt1_Screen_2_13770	2.46	Yes	0.41	0.99	0.99
44.R9IB_SS_Recycling_203_P100_A301_alt1_Screen_3_13771	2.32	Yes	0.42	0.94	0.93
45.R9IB_SS_Recycling_203_P100_A301_alt1_Screen_4_13772	1.83	Yes	0.51	0.94	0.93
46.R9IC_SC_Diffusion_elle_P100_A301_Screen_2_13728	1.59	Yes	0.59	0.96	0.95
47.R9IC_SC_Diffusion_elle_P100_A301_Screen_3_13729	2.63		0.35	0.97	0.97
48.R9IC_SC_Diffusion_elle_P100_A301_Screen_4_13730	2.86	Yes	0.29	1.02	1.04
49.R9IC_LA_Drama_402_V1_Screen_2_14975	1.87		0.79	0.95	0.94
50.R9IC_LA_Drama_402_V1_Screen_3_14976	2.47		0.59	1.03	1.04
51.R9IC_LA_Drama_402_V1_Screen_4_14977	3.09		0.39	1.22	1.36
52.R9IC_MA_Functions_401_V1_Screen_2_13968	2.61	Yes	0.68	1.03	1.07
53.R9IC_MA_Functions_401_V1_Screen_3_13969	3.47	Yes	0.53	1.01	1.01
54.R9IC_MA_Functions_401_V1_Screen_4_13970	2.85	Yes	0.62	1.07	1.10
55.R9IC_SS_Mesopotamia_401_V2_Screen_2_14634	2.09	Yes	0.76	0.95	0.93
56.R9IC_SS_Mesopotamia_401_V2_Screen_3_14635	3.35	Yes	0.56	0.90	0.87
57.R9IC_SS_Mesopotamia_401_V2_Screen_4_14636	3.11	Yes	0.61	0.98	0.96
58.R9IC_SC_pHScale_P100_A201_Screen_2_13785	2.54	Yes	0.69	0.94	0.92
59.R9IC_SC_pHScale_P100_A201_Screen_3_13786	4.30	Yes	0.39	0.97	0.97
60.R9IC_SC_pHScale_P100_A201_Screen_4_13787	3.69	Yes	0.50	1.01	1.01

Name	Item Difficulty (in logits)	Anchored?	P-value	Fit Statistics	
				Infit Mnsq	Outfit Mnsq
61.R9IC_LA_Malta_203_P100_A301L_Screen_2_13731	3.95	Yes	0.46	1.04	1.04
62.R9IC_LA_Malta_203_P100_A301L_Screen_3_13732	2.92	Yes	0.66	0.91	0.88
63.R9IC_LA_Malta_203_P100_A301L_Screen_4_13733	2.87	Yes	0.74	0.95	0.92
64.R9IC_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_2_13722	2.50	Yes	0.78	0.92	0.86
65.R9IC_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_3_13723	2.82	Yes	0.73	0.91	0.86
66.R9IC_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_4_13724	3.96	Yes	0.46	0.99	0.98
67.R9IC_SS_SongDynasty_401_V1_Screen_2_13956	3.92	Yes	0.48	0.97	0.95
68.R9IC_SS_SongDynasty_401_V1_Screen_3_13957	4.58	Yes	0.36	1.03	1.02
69.R9IC_SS_SongDynasty_401_V1_Screen_4_13958	4.25	Yes	0.42	1.01	1.00
70.R9IC_SC_PolymerBall_kaje_P100_A301_Screen_2_13740	2.76	Yes	0.74	0.94	0.89
71.R9IC_SC_PolymerBall_kaje_P100_A301_Screen_3_13741	3.30	Yes	0.64	0.92	0.88
72.R9IC_SC_PolymerBall_kaje_P100_A301_Screen_4_13742	3.87	Yes	0.53	0.94	0.93

2.1.3 Writing

2.1.3.1 Grade 1

Table 2.1.3.1.1

Complete Task Analysis and Summary: Writ 1 A S402 Online

Task Type	Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square	
Constructed Response	-2.17	4	0.69	0.91	
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics		
			Infit Mnsq	Outfit Mnsq	
1.W01A_SI_PartAH8_202_P100_A302_14245	-7.22		1.33	2.24	
2.W01A_SI_GoingToSchoolPartB_402_14775	-1.11		0.76	0.75	
3.W01A_SI_GoingToSchoolPartC_402_15919	-0.07		0.59	0.57	
4.W01A_SI_PartDSentencesAboutMe_P100_A302_14248	-0.27	Yes	0.08	0.08	
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3	Task 4
	0	2.34%	5.37%	7.64%	5.34%
	1	97.66%	91.72%	7.30%	6.15%
	2	N/A	1.44%	12.71%	15.98%
	3	N/A	1.47%	23.39%	21.87%
	4	N/A	N/A	47.62%	45.03%
	5	N/A	N/A	1.22%	5.11%
	6	N/A	N/A	0.11%	0.52%
	7	N/A	N/A	0.00%	0.00%
	8	N/A	N/A	0.00%	0.00%
9	N/A	N/A	0.00%	0.00%	

Table 2.1.3.1.2

Complete Task Analysis and Summary: Writ 1 B/C S402 Online

Task Type		Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response		0.12	3	0.58	0.57
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics		
			Infit Mnsq	Outfit Mnsq	
1.W01B_SI_Centers_P100_14241	0.52	Yes	0.81	0.82	
2.W01C_MS_FlowerFruit_402_14960	0.25		0.60	0.57	
3.W01C_IT_BirdFeeder_401_14475	-0.40		0.34	0.32	
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3	
	0	0.32%	1.08%	0.70%	
	1	0.49%	1.33%	0.46%	
	2	3.31%	3.16%	1.87%	
	3	11.33%	8.68%	4.26%	
	4	53.70%	34.71%	28.90%	
	5	24.27%	34.64%	39.56%	
	6	5.86%	14.71%	20.19%	
	7	0.67%	1.63%	3.54%	
	8	0.04%	0.06%	0.45%	
9	0.01%	0.00%	0.07%		

2.1.3.2 Grades 2–3

Table 2.1.3.2.1

Complete Task Analysis and Summary: Writ 2-3 A S402 Online

Task Type	Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response	-0.02	3	0.40	0.39
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics	
			Infit Mnsq	Outfit Mnsq
1.W23A_SI_WritingTime_P100_14257	-0.10	Yes	0.48	0.48
2.W23A_LA_FamilyTrip_402_14789	-0.23		0.33	0.33
3.W23A_MS_AnimalHomes_402_14792	0.27		0.38	0.37
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3
	0	3.64%	4.27%	5.66%
	1	10.88%	7.54%	9.03%
	2	11.31%	5.93%	9.28%
	3	12.45%	14.41%	24.14%
	4	34.77%	50.52%	40.34%
	5	23.97%	14.61%	10.45%
	6	2.98%	2.61%	1.04%
	7	0.00%	0.11%	0.06%
	8	0.00%	0.00%	0.00%
9	0.00%	0.00%	0.00%	

Table 2.1.3.2.2

Complete Task Analysis and Summary: Writ 2-3 B/C S402 Online

Task Type		Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response		1.02	3	0.49	0.48
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics		
			Infit Mnsq	Outfit Mnsq	
1.W23B_SI_GrownUpJobs_203_P100_A302_14260	0.95	Yes	0.76	0.75	
2.W23C_MS_HeartRateChanges_402_15549	0.94		0.46	0.45	
3.W23C_IT_Arctic_401_11921	1.19		0.26	0.25	
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3	
	0	0.17%	0.33%	0.57%	
	1	0.30%	0.43%	0.62%	
	2	1.40%	2.46%	1.54%	
	3	5.53%	5.52%	7.41%	
	4	27.97%	32.56%	39.17%	
	5	40.06%	42.20%	36.00%	
	6	19.88%	15.05%	12.47%	
	7	4.13%	1.39%	1.94%	
	8	0.53%	0.05%	0.25%	
9	0.03%	0.00%	0.03%		

2.1.3.3 Grades 4–5

Table 2.1.3.3.1

Complete Task Analysis and Summary: Writ 4-5 A S402 Online

Task Type	Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response	1.31	3	0.41	0.44
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics	
			Infit Mnsq	Outfit Mnsq
1.W45A_SI_DismissalRules_kawo_P100_A301_KB_Screen_3_14658_14266	1.41	Yes	0.45	0.46
2.W45A_LA_CityGarden_402_Screen_4_15384_17217	1.19		0.38	0.41
3.W45A_MS_RobinandAlbatross_402_Screen_4_15397_17212	1.34		0.41	0.43
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3
	0	18.78%	9.15%	15.87%
	1	10.41%	13.48%	5.47%
	2	16.33%	17.99%	16.90%
	3	22.05%	22.41%	35.45%
	4	22.43%	23.92%	21.17%
	5	8.07%	10.23%	4.33%
	6	1.74%	2.44%	0.77%
	7	0.15%	0.31%	0.04%
	8	0.03%	0.06%	0.01%
9	0.00%	0.01%	0.00%	

Table 2.1.3.3.2

Complete Task Analysis and Summary: Writ 4-5 B/C S402 Online

Task Type		Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response		1.81	3	0.63	0.62
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics		
			Infit Mnsq	Outfit Mnsq	
1.W45B_SI_FieldTripRules_MaEsSaNa_P100_A301_KB_Screen_2_14646_14272	1.51	Yes	0.96	0.94	
2.W45C_MS_TulipGrowth_402_Screen_4_15416_17207	2.00		0.59	0.58	
3.W45C_IT_MaliEmpire_401_Screen_6_14730_17200	1.93		0.35	0.33	
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3	
	0	0.53%	1.05%	1.21%	
	1	0.49%	0.64%	0.62%	
	2	2.09%	2.72%	2.51%	
	3	4.86%	9.51%	10.82%	
	4	17.84%	38.86%	29.97%	
	5	32.11%	32.85%	32.78%	
	6	34.70%	12.75%	17.71%	
	7	6.82%	1.41%	3.65%	
	8	0.54%	0.19%	0.62%	
9	0.02%	0.01%	0.11%		

2.1.3.4 Grades 6–8

Table 2.1.3.4.1

Complete Task Analysis and Summary: Writ 6-8 A S402 Online

Task Type	Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response	0.97	3	0.44	0.47
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics	
			Infit Mnsq	Outfit Mnsq
1.W68A_SI_Clubs_P100_A301_Screen_4_14663_14284	0.85	Yes	0.44	0.45
2.W68A_LA_LibraryScript_402_Screen_4_15371_17193	0.64		0.46	0.46
3.W68A_MS_HeightComparison_402_Screen_4_14786_17188	1.41		0.43	0.50
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3
	0	5.08%	4.04%	7.89%
	1	5.64%	6.83%	12.23%
	2	9.28%	6.68%	14.21%
	3	18.98%	12.16%	30.17%
	4	28.37%	23.89%	27.18%
	5	25.85%	33.45%	7.28%
	6	6.02%	11.36%	0.95%
	7	0.71%	1.42%	0.09%
	8	0.06%	0.14%	0.01%
9	0.01%	0.02%	0.00%	

Table 2.1.3.4.2

Complete Task Analysis and Summary: Writ 6-8 B/C S402 Online

Task Type		Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response		1.30	3	0.52	0.49
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics		
			Infit Mnsq	Outfit Mnsq	
1.W68B_SI_SchoolElectronics_P100_A301_Screen_2_14276_14655	1.10	Yes	0.67	0.64	
2.W68C_MS_FishpH_402_Screen_5_15418_17176	1.49		0.60	0.56	
3.W68C_IT_Electives_401_Screen_5_14482_17182	1.32		0.28	0.26	
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3	
	0	0.13%	0.45%	0.40%	
	1	0.14%	1.01%	0.26%	
	2	0.87%	2.01%	1.04%	
	3	1.77%	3.52%	2.78%	
	4	9.79%	15.25%	13.57%	
	5	46.97%	47.15%	47.81%	
	6	34.64%	26.80%	30.00%	
	7	5.08%	3.39%	3.46%	
	8	0.53%	0.34%	0.58%	
	9	0.06%	0.06%	0.10%	

2.1.3.5 Grades 9–12

Table 2.1.3.5.1

Complete Task Analysis and Summary: Writ 9-12 A S402 Online

Task Type	Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response	2.07	3	0.53	0.58
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics	
			Infit Mnsq	Outfit Mnsq
1.W91A_SI_TeacherStudent_402_Screen_3_15474_17170	2.36		0.52	0.56
2.W91A_LA_Toaster_P100_A301_Screen_4_14665_14290	1.68	Yes	0.52	0.55
3.W91A_MS_WaterTemp_402_Screen_5_15555_17166	2.17		0.57	0.62
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3
	0	6.57%	3.75%	4.12%
	1	6.44%	5.38%	6.88%
	2	12.79%	7.18%	11.31%
	3	22.32%	16.00%	21.53%
	4	24.23%	21.86%	24.83%
	5	18.87%	27.06%	20.56%
	6	6.73%	14.42%	8.21%
	7	1.86%	3.81%	2.26%
	8	0.17%	0.50%	0.28%
9	0.01%	0.04%	0.02%	

Table 2.1.3.5.2

Complete Task Analysis and Summary: Writ 9-12 B/C S402 Online

Task Type		Average Task Difficulty (in logits)	No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square
Constructed Response		2.03	3	0.88	0.86
Name	Task Difficulty (in logits)	Anchored?	Fit Statistics		
			Infit Mnsq	Outfit Mnsq	
1.W91B_SI_BestTeacher_P100_A301_Screen_2_14280_14653	1.84	Yes	1.29	1.28	
2.W91B_MS_Viscosity_P100_A203_Screen_2_14281_14652	1.83	Yes	0.84	0.81	
3.W91C_IT_TeslaLatimer_401_Screen_4_14474_17159	2.43		0.51	0.49	
Raw Score Distribution by Task	Raw Score	Task 1	Task 2	Task 3	
	0	0.24%	0.81%	1.67%	
	1	0.14%	0.17%	0.49%	
	2	1.06%	1.21%	2.22%	
	3	4.46%	2.71%	6.67%	
	4	12.52%	10.35%	17.72%	
	5	26.83%	30.93%	31.31%	
	6	30.19%	35.08%	24.86%	
	7	17.50%	14.78%	10.43%	
	8	5.56%	3.54%	3.46%	
	9	1.48%	0.43%	1.16%	

2.1.4 Speaking

2.1.4.1 Grade 1

Table 2.1.4.1

Complete Task Analysis and Summary: Spek 1 S402 Online

Task Type	Average Task Difficulty (in logits)		No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square	
Constructed Response	-1.30		15	0.76	0.59	
Name	Tier	Task Difficulty (in logits)	Anchored?	Fit Statistics		
				Infit Mnsq	Outfit Mnsq	
1.S01A_SI_ClassroomDesk_401_V1_14494	A**	-4.43	Yes	0.94	0.49	
2.S01A_SI_ClassroomDesk_401_V1_14495	A*	-0.14	Yes	0.69	0.69	
3.S01A_LS_ParkRanger_402_15201	A**	-3.90	Yes	0.80	0.26	
4.S01A_LS_ParkRanger_402_15214	A*	0.24	Yes	0.58	0.61	
5.S01A_MS_Elephants_402_15004	A**	-4.02	Yes	0.88	0.33	
6.S01A_MS_Elephants_402_15011	A*	-0.07	Yes	0.76	0.77	
7.S01C_SI_ClassroomDesk_401_V2_14603	B/C*	-0.14	Yes	0.69	0.69	
8.S01C_SI_ClassroomDesk_401_V2_14604	B/C	0.11	Yes	0.57	0.55	
9.S01C_LS_ParkRanger_402_15214	B/C*	0.24	Yes	0.58	0.61	
10.S01C_LS_ParkRanger_402_15233	B/C	0.35	Yes	0.81	0.82	
11.S01C_MS_Elephants_402_15011	B/C*	-0.07	Yes	0.76	0.77	
12.S01C_MS_Elephants_402_15019	B/C	0.13	Yes	0.81	0.80	
13.S01P_SI_ClassroomDesk_401_14494	Pre-A**	-4.43	Yes	0.94	0.49	
14.S01P_LS_ParkRanger_402_15201	Pre-A**	-3.90	Yes	0.80	0.26	
15.S01P_MS_Elephants_402_15004	Pre-A**	-4.02	Yes	0.88	0.33	
Raw Score Distribution by Task	Task	Raw Score				
		0	1	2	3	4
	Task 1	8.62%	7.42%	83.96%	N/A	N/A
	Task 2	5.64%	11.80%	58.78%	22.34%	1.44%
	Task 3	8.60%	5.34%	86.06%	N/A	N/A
	Task 4	6.02%	25.52%	58.28%	9.65%	0.54%
	Task 5	8.60%	6.39%	85.01%	N/A	N/A
	Task 6	6.09%	17.15%	52.09%	20.10%	4.58%
	Task 7	5.64%	11.80%	58.78%	22.34%	1.44%
	Task 8	2.09%	10.36%	65.95%	19.89%	1.72%
	Task 9	6.02%	25.52%	58.28%	9.65%	0.54%
	Task 10	5.85%	20.60%	47.37%	24.90%	1.27%
	Task 11	6.09%	17.15%	52.09%	20.10%	4.58%
	Task 12	4.78%	15.75%	54.79%	21.14%	3.54%
	Task 13	8.62%	7.42%	83.96%	N/A	N/A
	Task 14	8.60%	5.34%	86.06%	N/A	N/A
Task 15	8.60%	6.39%	85.01%	N/A	N/A	

** This task is shared between Pre-A and A.

* This task is shared between A and B/C.

2.1.4.2 Grades 2–3

Table 2.1.4.2

Complete Task Analysis and Summary: Spek 2-3 S402 Online

Task Type	Average Task Difficulty (in logits)		No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square	
Constructed Response	-1.90		15	0.81	0.66	
Name	Tier	Task Difficulty (in logits)	Anchored?	Fit Statistics		
				Infit Mnsq	Outfit Mnsq	
1.S23A_SI_Playground_401_14579	A**	-4.87		0.89	0.44	
2.S23A_SI_Playground_401_14580	A*	-0.93	Yes	0.81	0.82	
3.S23A_LS_PlaygroundAide_402_15143	A**	-5.24	Yes	0.82	0.30	
4.S23A_LS_PlaygroundAide_402_15149	A*	-0.98	Yes	0.71	0.71	
5.S23A_MS_RampHeight_402_15085	A**	-5.23	Yes	0.89	0.44	
6.S23A_MS_RampHeight_402_15092	A*	-0.31	Yes	0.70	0.71	
7.S23C_SI_Playground_401_V2_14569	B/C*	-0.93	Yes	0.81	0.82	
8.S23C_SI_Playground_401_V2_14570	B/C	0.48	Yes	0.72	0.74	
9.S23C_LS_PlaygroundAide_402_15149	B/C*	-0.98	Yes	0.71	0.71	
10.S23C_LS_PlaygroundAide_402_15157	B/C	-0.67	Yes	0.80	0.80	
11.S23C_MS_RampHeight_402_15092	B/C*	-0.31	Yes	0.70	0.71	
12.S23C_MS_RampHeight_402_15102	B/C	0.66	Yes	0.94	0.97	
13.S23P_SI_Playground_401_14579	Pre-A**	-4.87		0.89	0.44	
14.S23P_LS_PlaygroundAide_402_15143	Pre-A**	-5.24	Yes	0.82	0.30	
15.S23P_MS_RampHeight_402_15085	Pre-A**	-5.23	Yes	0.89	0.44	
Raw Score Distribution by Task	Task	Raw Score				
		0	1	2	3	4
	Task 1	4.70%	4.16%	91.14%	N/A	N/A
	Task 2	1.39%	3.92%	34.64%	47.58%	12.46%
	Task 3	4.28%	3.00%	92.71%	N/A	N/A
	Task 4	2.85%	4.71%	46.13%	39.22%	7.09%
	Task 5	4.74%	4.63%	90.63%	N/A	N/A
	Task 6	2.78%	6.43%	51.69%	35.57%	3.54%
	Task 7	1.39%	3.92%	34.64%	47.58%	12.46%
	Task 8	0.99%	22.13%	56.62%	17.27%	2.98%
	Task 9	2.85%	4.71%	46.13%	39.22%	7.09%
	Task 10	2.97%	5.82%	42.23%	41.65%	7.33%
	Task 11	2.78%	6.43%	51.69%	35.57%	3.54%
	Task 12	2.64%	24.17%	46.81%	23.33%	3.05%
	Task 13	4.70%	4.16%	91.14%	N/A	N/A
Task 14	4.28%	3.00%	92.71%	N/A	N/A	
Task 15	4.74%	4.63%	90.63%	N/A	N/A	

** This task is shared between Pre-A and A.

* This task is shared between A and B/C.

2.1.4.3 Grades 4–5

Table 2.1.4.3

Complete Task Analysis and Summary: Spek 4-5 S402 Online

Task Type	Average Task Difficulty (in logits)		No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square	
Constructed Response	-0.25		15	0.75	0.54	
Name	Tier	Task Difficulty (in logits)	Anchored?	Fit Statistics		
				Infit Mnsq	Outfit Mnsq	
1.S45A_SI_NewStudent_401_14500	A**	-4.04	Yes	0.84	0.18	
2.S45A_SI_NewStudent_401_14501	A*	0.75	Yes	0.77	0.81	
3.S45A_LS_ShoeTech_402_15444	A**	-3.49	Yes	0.76	0.12	
4.S45A_LS_ShoeTech_402_15450	A*	2.20		0.63	0.69	
5.S45A_MS_Circuits_402_15077	A**	-3.76	Yes	0.79	0.13	
6.S45A_MS_Circuits_402_15174	A*	0.74	Yes	0.68	0.70	
7.S45C_SI_NewStudent_401_14502	B/C*	0.75	Yes	0.77	0.81	
8.S45C_SI_NewStudent_401_14503	B/C	2.12	Yes	0.74	0.75	
9.S45C_LS_ShoeTech_402_15450	B/C*	2.20		0.63	0.69	
10.S45C_LS_ShoeTech_402_15457	B/C	1.72	Yes	0.69	0.70	
11.S45C_MS_Circuits_402_15174	B/C*	0.74	Yes	0.68	0.70	
12.S45C_MS_Circuits_402_15254	B/C	1.52		0.81	0.82	
13.S45P_SI_NewStudent_401_14500	Pre-A**	-4.04	Yes	0.84	0.18	
14.S45P_LS_ShoeTech_402_15444	Pre-A**	-3.49	Yes	0.76	0.12	
15.S45P_MS_Circuits_402_15077	Pre-A**	-3.76	Yes	0.79	0.13	
Raw Score Distribution by Task	Task	Raw Score				
		0	1	2	3	4
	Task 1	7.26%	5.62%	87.12%	N/A	N/A
	Task 2	3.04%	10.73%	38.80%	45.18%	2.25%
	Task 3	7.77%	6.82%	85.41%	N/A	N/A
	Task 4	3.27%	26.57%	57.11%	12.30%	0.76%
	Task 5	7.17%	5.17%	87.67%	N/A	N/A
	Task 6	2.81%	7.22%	43.75%	40.28%	5.94%
	Task 7	3.04%	10.73%	38.80%	45.18%	2.25%
	Task 8	3.10%	18.70%	52.86%	23.17%	2.17%
	Task 9	3.27%	26.57%	57.11%	12.30%	0.76%
	Task 10	2.86%	18.52%	50.82%	25.73%	2.07%
	Task 11	2.81%	7.22%	43.75%	40.28%	5.94%
	Task 12	3.62%	16.17%	47.21%	29.34%	3.66%
	Task 13	7.26%	5.62%	87.12%	N/A	N/A
	Task 14	7.77%	6.82%	85.41%	N/A	N/A
Task 15	7.17%	5.17%	87.67%	N/A	N/A	

** This task is shared between Pre-A and A.

* This task is shared between A and B/C.

2.1.4.4 Grades 6–8

Table 2.1.4.4

Complete Task Analysis and Summary: Spek 6-8 S402 Online

Task Type	Average Task Difficulty (in logits)		No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square	
Constructed Response	0.33		15	0.78	0.61	
Name	Tier	Task Difficulty (in logits)	Anchored?	Fit Statistics		
				Infit Mnsq	Outfit Mnsq	
1.S68A_SI_PeerReviewing_401_14510	A**	-3.54	Yes	0.96	0.53	
2.S68A_SI_PeerReviewing_401_14511	A*	2.10	Yes	0.83	0.84	
3.S68A_LS_Dart_402_15192	A**	-3.42	Yes	0.86	0.24	
4.S68A_LS_Dart_402_15208	A*	1.25	Yes	0.72	0.73	
5.S68A_MS_Radar_402_15319	A**	-3.73		0.86	0.29	
6.S68A_MS_Radar_402_15326	A*	1.86	Yes	0.66	0.69	
7.S68C_SI_PeerReviewing_401_14504	B/C*	2.10	Yes	0.83	0.84	
8.S68C_SI_PeerReviewing_401_14505	B/C	2.84	Yes	0.66	0.66	
9.S68C_LS_Dart_402_15208	B/C*	1.25	Yes	0.72	0.73	
10.S68C_LS_Dart_402_15219	B/C	2.60	Yes	0.74	0.76	
11.S68C_MS_Radar_402_15326	B/C*	1.86	Yes	0.66	0.69	
12.S68C_MS_Radar_402_15340	B/C	3.02	Yes	0.75	0.77	
13.S68P_SI_PeerReviewing_401_14510	Pre-A**	-3.54	Yes	0.96	0.53	
14.S68P_LS_Dart_402_15192	Pre-A**	-3.42	Yes	0.86	0.24	
15.S68P_MS_Radar_402_15319	Pre-A**	-3.73		0.86	0.29	
Raw Score Distribution by Task	Task	Raw Score				
		0	1	2	3	4
	Task 1	4.78%	3.75%	91.47%	N/A	N/A
	Task 2	4.77%	8.77%	55.32%	27.67%	3.48%
	Task 3	6.83%	5.39%	87.78%	N/A	N/A
	Task 4	5.61%	8.16%	41.21%	39.66%	5.36%
	Task 5	6.05%	4.15%	89.80%	N/A	N/A
	Task 6	5.29%	15.41%	53.89%	23.57%	1.85%
	Task 7	4.77%	8.77%	55.32%	27.67%	3.48%
	Task 8	5.71%	24.75%	58.10%	10.22%	1.23%
	Task 9	5.61%	8.16%	41.21%	39.66%	5.36%
	Task 10	4.80%	30.55%	47.26%	15.53%	1.86%
	Task 11	5.29%	15.41%	53.89%	23.57%	1.85%
	Task 12	6.27%	29.28%	50.25%	12.58%	1.61%
	Task 13	4.78%	3.75%	91.47%	N/A	N/A
	Task 14	6.83%	5.39%	87.78%	N/A	N/A
Task 15	6.05%	4.15%	89.80%	N/A	N/A	

** This task is shared between Pre-A and A.

* This task is shared between A and B/C.

2.1.4.5 Grades 9–12

Table 2.1.4.5

Complete Task Analysis and Summary: Spek 9-12 S402 Online

Task Type	Average Task Difficulty (in logits)		No. of Tasks	Average Infit Mean Square	Average Outfit Mean Square	
Constructed Response	0.71		15	0.74	0.53	
Name	Tier	Task Difficulty (in logits)	Anchored?	Fit Statistics		
				Infit Mnsq	Outfit Mnsq	
1.S91A_SI_ClassSchedules_402_15500	A**	-2.54	Yes	1.02	0.46	
2.S91A_SI_ClassSchedules_402_15506	A*	1.97		0.61	0.63	
3.S91A_LS_WPA_402_15535	A**	-2.57	Yes	0.90	0.28	
4.S91A_LS_WPA_402_15541	A*	2.07	Yes	0.56	0.57	
5.S91A_MS_Carbon_402_15479	A**	-2.61	Yes	0.94	0.30	
6.S91A_MS_Carbon_402_15487	A*	2.42		0.58	0.60	
7.S91C_SI_ClassSchedules_402_15506	B/C*	1.97		0.61	0.63	
8.S91C_SI_ClassSchedules_402_15514	B/C	2.19		0.68	0.66	
9.S91C_LS_WPA_402_15541	B/C*	2.07	Yes	0.56	0.57	
10.S91C_LS_WPA_402_15548	B/C	2.66		0.56	0.53	
11.S91C_MS_Carbon_402_15487	B/C*	2.42		0.58	0.60	
12.S91C_MS_Carbon_402_15495	B/C	2.84	Yes	0.79	0.78	
13.S91P_SI_ClassSchedules_402_15500	Pre-A**	-2.54	Yes	1.02	0.46	
14.S91P_LS_WPA_402_15535	Pre-A**	-2.57	Yes	0.90	0.28	
15.S91P_MS_Carbon_402_15479	Pre-A**	-2.61	Yes	0.94	0.30	
Raw Score Distribution by Task	Task	Raw Score				
		0	1	2	3	4
	Task 1	6.33%	3.18%	90.49%	N/A	N/A
	Task 2	6.88%	18.62%	56.62%	16.73%	1.15%
	Task 3	6.30%	2.34%	91.36%	N/A	N/A
	Task 4	8.25%	15.31%	59.84%	15.44%	1.16%
	Task 5	6.29%	2.42%	91.29%	N/A	N/A
	Task 6	10.29%	18.75%	58.82%	11.56%	0.57%
	Task 7	6.88%	18.62%	56.62%	16.73%	1.15%
	Task 8	5.03%	10.77%	57.00%	24.43%	2.77%
	Task 9	8.25%	15.31%	59.84%	15.44%	1.16%
	Task 10	5.73%	12.65%	64.55%	15.95%	1.12%
	Task 11	10.29%	18.75%	58.82%	11.56%	0.57%
	Task 12	9.06%	18.86%	52.21%	18.65%	1.23%
	Task 13	6.33%	3.18%	90.49%	N/A	N/A
	Task 14	6.30%	2.34%	91.36%	N/A	N/A
Task 15	6.29%	2.42%	91.29%	N/A	N/A	

** This task is shared between Pre-A and A.

* This task is shared between A and B/C.

2.2 DIF Analysis and Summary

Differential item analysis (DIF) attempts to investigate whether performances on items were influenced by factors extraneous to English language proficiency (i.e., the construct being measured on the test). In other words, DIF attempts to find items that may be functioning differently for different groups based on criteria irrelevant to what is being tested. The performance of students on ACCESS for ELLs items and tasks is compared by dividing students into two different groupings: first, males versus females; second, students of Hispanic ethnic background versus students of all other backgrounds. Students for whom gender or ethnicity¹ was unknown were excluded from both analyses. Two commonly used procedures for detecting DIF were used: one for dichotomously scored items (Listening and Reading), conducted prior to operational testing, and one for polytomously scored items (Writing and Speaking), conducted on population data subsequent to the close of operational testing.

Dichotomous Items

Following procedures that were originally proposed by Educational Testing Service (ETS), the Mantel-Haenszel (M-H) chi-square statistic (Mantel & Haenszel, 1959) was used for dichotomous items. This procedure compares item-level performances of students in the two groups (e.g., males versus females) who are divided into subgroups based on their performance on the total test. It is assumed that, if there is no DIF, a similar percentage of students in each group should get the item correct at any ability level (based on performance on the total test). The Mantel-Haenszel chi-square statistic is used to check the probability that the two groups performed comparably on each item across the ability groupings. The statistic is transformed into the “M-H delta” scale. This scale is symmetrical around zero, with a delta zero interpreted as indicating that neither group is favored. A positive result indicates that one group is favored; a negative result indicates that the other group is favored.

The existing Mantel-Haenszel procedure was designed for fixed forms, where all test takers take exactly the same set of items; therefore, the test takers can be matched on the number-correct score when computing the M-H statistic. In the multistage computerized adaptive test (CAT) condition, however, not all students take exactly the same set of items; thus, it is not possible to match students on the number-correct score. Instead, a CAT M-H DIF procedure (Zwick, Thayer, & Wingersky, 1993) was used to examine DIF for the Listening and Reading domains. First, the examinee’s expected true score for the entire item pool is derived. To derive the expected true score, each examinee’s Rasch ability estimate is transformed into the expected true score metric by calculating the sum of the item response functions in the operational item pool, which is evaluated at the estimated ability level of the test taker. The expected true score of the

¹ In the dataset, Hispanic ethnicity, as well as each of the race categories, is coded as a binary variable (Y/blank). Ethnicity information is counted as “Unknown” in cases where the student is recorded as blank for Hispanic ethnicity and also blank for every race category.

examinees is used as the matching variable for the M-H DIF procedure. Once examinees are matched on the expected true score, the ordinary M-H DIF procedure and the ETS evaluation criterion for severity of M-H DIF can be applied. In CAL's implementation of this method, examinees are matched for M-H DIF analysis on the basis of this expected true score using two-unit intervals, as recommended by Zwick and Bridgeman (2014). A two-step purification process was used in conducting the DIF analysis; that is, items with C-level DIF in the first pass were removed from the matching variable in the second stage, and the DIF was then recalculated for the remaining items.

Because DIF is measured on a continuous scale, and because most items are likely to show some degree of DIF, it is useful to have guidelines to determine when the level of DIF requires further review of the item. We follow the guidance provided by ETS to classify items into DIF levels as follows:

- A (no DIF), when the absolute value of delta is less than 1.0
- B (weak DIF), when the absolute value of delta is between 1.0 and 1.5
- C (strong DIF), when the absolute value of the delta is greater than 1.5

Polytomous Items

For polytomous items (i.e., Writing and Speaking tasks), a similar approach is used. It is based on the Mantel-Haenszel chi-square statistic and the standardized mean difference following procedures again developed by ETS (Zwick, Donoghue, & Grima, 1993; Allen, Carlson, & Zalanak, 1999). The DIF procedures developed by ETS for polytomous items were used to identify tasks that exhibit DIF. JMetrik (Meyer, 2018), an open source computer program for psychometric analysis, was used in conducting the analyses. The procedures implemented in JMetrik first calculate the Cochran-Mantel-Haenszel chi-square statistic for testing statistical significance. This statistic gives an indication of the probability that observed differences are the result of chance but does not indicate how significant that difference is. To indicate how significant the difference is, the standardized mean difference (SMD) between the performances of the two groups being compared is calculated. The SMD compares the means of the two groups, adjusting for differences in the distribution of the groups across the values of the total raw scores. To standardize the outcome, this difference is divided by the item score range and serves as an effect size measure for the Cochran-Mantel-Haenszel chi-square statistic. This effect size measure (reported as standardized P-DIF in JMetrik) ranges from -1 to 1, which may present some interpretation challenges. To mitigate this, the absolute value is taken in JMetrik (Meyer, 2018), thereby restricting the range of the rescaled effect size (standardized P-DIF*) to fall between 0 and 1. The effect size flagging criterion for polytomous items, proposed by ETS (Allen et al., 1999), is also rescaled to the standardized P-DIF* metric (Meyer, 2018).

Following guidance proposed by ETS for the NAEP assessment (Allen et al., 1999), ACCESS for ELLs Writing and Speaking tasks are classified into three DIF levels as follows:

- AA (no DIF), when the Cochran-Mantel-Haenszel chi-square statistic is not significant or when it is significant and standardized P-DIF* is less than 0.05
- BB (weak DIF), when the Cochran-Mantel-Haenszel chi-square statistic is significant and standardized P-DIF* is greater than or equal to 0.05 but less than 0.10
- CC (strong DIF), when the Cochran-Mantel-Haenszel chi-square statistic is significant and standardized P-DIF* is greater than or equal to 0.10

The tables in this section provide a summary of the findings of the DIF analyses at the top, followed by detailed information for each item or task. The first column gives the DIF level: A, B, or C for dichotomous items or AA, BB, or CC for polytomous tasks (i.e., Writing and Speaking tasks). The next columns show the contrasting groups in the DIF analyses: either male versus female or Hispanic versus non-Hispanic other ethnicities. Even though DIF may be negligible (category A or AA), this table shows the number of items that favored one group or the other at all levels of DIF. Optimally, even when items are all in category A or AA, there should be roughly an even number of items favoring each of the two groups to ensure that there is no systematic biasing test effect across items.

Items and tasks which show C-level (or CC-level) DIF are investigated by a team of content experts to determine if any construct-irrelevant factors can be identified that may contribute to DIF. For dichotomous items, DIF analysis is conducted prior to operational testing, and the content of any items that show C-level DIF is reviewed prior to item selection. Items of concern are removed from the item selection process. For polytomous items, if content experts identify concerning construct-irrelevant factors, the task will be removed from the test for the next operational year.

2.2.1 Listening

2.2.1.1 Grade 1

Table 2.2.1.1

DIF Analysis and Summary: List 1 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	29	23	28	26
B	1	1	0	0
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.L01A_SI_GoingHome_P100_Screen_2_12445	A	M	A	O
2.L01A_SI_GoingHome_P100_Screen_3_12446	A	M	A	O
3.L01A_SI_GoingHome_P100_Screen_4_12447	A	M	A	O
4.L01B_SI_MorningMeeting_402_Screen_2_14897	A	F	A	H
5.L01B_SI_MorningMeeting_402_Screen_3_14898	A	M	A	O
6.L01B_SI_MorningMeeting_402_Screen_4_14899	A	M	A	H
7.L01A_LA_OutdoorFun_P100_Screen_2_12690	A	M	A	H
8.L01A_LA_OutdoorFun_P100_Screen_3_12691	A	M	A	H
9.L01A_LA_OutdoorFun_P100_Screen_4_12692	A	M	A	O
10.L01A_MA_DrawingaRobot_P100_A202_Screen_2_13889	A	M	A	O
11.L01A_MA_DrawingaRobot_P100_A202_Screen_3_13890	A	F	A	H
12.L01A_MA_DrawingaRobot_P100_A202_Screen_4_13891	A	F	A	H
13.L01C_SS_CampingTrip_P100_A301FT_Screen_2_13808	A	M	A	O
14.L01C_SS_CampingTrip_P100_A301FT_Screen_3_13809	A	M	A	H
15.L01C_SS_CampingTrip_P100_A301FT_Screen_4_13810	A	F	A	O
16.L01B_SC_PropertiesOfObjects_402_Screen_2_14951	A	F	A	O
17.L01B_SC_PropertiesOfObjects_402_Screen_3_14952	B	M	A	H
18.L01B_SC_PropertiesOfObjects_402_Screen_4_14953	A	M	A	H
19.L01C_LA_WindyDay_402_Screen_2_14836	A	F	A	O
20.L01C_LA_WindyDay_402_Screen_3_14837	A	F	A	H
21.L01C_LA_WindyDay_402_Screen_4_14838	A	M	A	O
22.L01C_MA_RainyDay_P100_A202_Screen_2_13898	A	F	A	O
23.L01C_MA_RainyDay_P100_A202_Screen_3_13899	A	F	A	H
24.L01C_MA_RainyDay_P100_A202_Screen_4_13900	A	M	A	O
25.L01B_SS_ConstructionWorker_P100_A301FT_alt1_Screen_2_13802	A	M	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.L01B_SS_ConstructionWorker_P100_A301FT_alt1_Screen_3_13803	A	M	A	O
27.L01B_SS_ConstructionWorker_P100_A301FT_alt1_Screen_4_13804	A	F	A	H
28.L01C_SC_ForestHabitat_P100_Screen_2_11667	A	M	A	H
29.L01C_SC_ForestHabitat_P100_Screen_3_11668	A	M	A	H
30.L01C_SC_ForestHabitat_P100_Screen_4_11671	A	F	A	O
31.L01B_LA_LauraIngallsWilder_P100_A301FT_Screen_2_13883	A	M	A	O
32.L01B_LA_LauraIngallsWilder_P100_A301FT_Screen_3_13884	A	F	A	H
33.L01B_LA_LauraIngallsWilder_P100_A301FT_Screen_4_13885	A	F	A	O
34.L01B_MA_Subtraction_P100_Screen_2_12457	A	F	A	H
35.L01B_MA_Subtraction_P100_Screen_3_12458	A	M	A	H
36.L01B_MA_Subtraction_P100_Screen_4_12459	A	F	A	H
37.L01B_LA_ASpecialDay_P100_alt1_Screen_2_13814	A	M	A	O
38.L01B_LA_ASpecialDay_P100_alt1_Screen_3_13815	A	F	A	O
39.L01B_LA_ASpecialDay_P100_alt1_Screen_4_13816	A	M	A	O
40.L01C_MA_ShapeRiddles_P100_Screen_2_12846	A	F	A	H
41.L01C_MA_ShapeRiddles_P100_Screen_3_12847	A	F	A	O
42.L01C_MA_ShapeRiddles_P100_Screen_4_12848	A	M	A	H
43.L01B_SS_SchoolCommunity_P100_Screen_2_12745	A	M	A	O
44.L01B_SS_SchoolCommunity_P100_Screen_3_12746	A	F	A	H
45.L01B_SS_SchoolCommunity_P100_Screen_4_12754	A	M	A	O
46.L01B_SC_Solids_P100_alt1_Screen_2_13877	A	F	A	H
47.L01B_SC_Solids_P100_alt1_Screen_3_13878	A	M	A	H
48.L01B_SC_Solids_P100_alt1_Screen_4_13879	A	M	A	H
49.L01B_LA_TheWind_P100_Screen_2_12460	A	F	A	H
50.L01B_LA_TheWind_P100_Screen_3_12461	A	M	A	H
51.L01B_LA_TheWind_P100_Screen_4_12462	B	F	A	O
52.L01B_MA_ShapeRiddles_P100_Screen_2_12843	A	M	A	H
53.L01B_MA_ShapeRiddles_P100_Screen_3_12844	A	F	A	O
54.L01B_MA_ShapeRiddles_P100_Screen_4_12845	A	F	A	H

2.2.1.2 Grades 2–3

Table 2.2.1.2

DIF Analysis and Summary: List 2-3 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	29	24	26	27
B	0	0	1	0
C	1	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.L23B_SI_ArtClass_P100_Screen_2_12825	A	M	A	H
2.L23B_SI_ArtClass_P100_Screen_3_12828	A	M	A	O
3.L23B_SI_ArtClass_P100_Screen_4_12830	A	M	A	O
4.L23A_SI_ThankYouCards_P100_Screen_2_13788	C	M	A	O
5.L23A_SI_ThankYouCards_P100_Screen_3_13789	A	F	A	H
6.L23A_SI_ThankYouCards_P100_Screen_4_13790	A	M	A	O
7.L23A_LA_MinaAndGinger_jc_P100_A202_Screen_2_13797	A	F	A	O
8.L23A_LA_MinaAndGinger_jc_P100_A202_Screen_3_13798	A	M	A	H
9.L23A_LA_MinaAndGinger_jc_P100_A202_Screen_4_13799	A	M	A	O
10.L23B_MA_TellingTime_P100_Screen_2_13904	A	F	A	H
11.L23B_MA_TellingTime_P100_Screen_3_13905	A	M	A	H
12.L23B_MA_TellingTime_P100_Screen_4_13906	A	F	A	H
13.L23A_SS_AMapOfOakValley_P100_Screen_2_12730	A	F	A	H
14.L23A_SS_AMapOfOakValley_P100_Screen_3_12731	A	F	A	H
15.L23A_SS_AMapOfOakValley_P100_Screen_4_12732	A	M	A	O
16.L23C_SC_BirdAdaptations_P100_Screen_2_11544	A	F	A	O
17.L23C_SC_BirdAdaptations_P100_Screen_3_11545	A	M	A	O
18.L23C_SC_BirdAdaptations_P100_Screen_4_11546	A	F	A	H
19.L23C_LA_Emily'sBall_402_Screen_2_14879	A	M	B	H
20.L23C_LA_Emily'sBall_402_Screen_3_14883	A	F	A	O
21.L23C_LA_Emily'sBall_402_Screen_4_14884	A	F	A	H
22.L23C_MA_GettingToSchool_P100_Screen_2_12956	A	M	A	O
23.L23C_MA_GettingToSchool_P100_Screen_3_12957	A	M	A	O
24.L23C_MA_GettingToSchool_P100_Screen_4_12971	A	M	A	H
25.L23C_SS_AMapOfOakValley_P100_Screen_2_12813	A	F	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.L23C_SS_AMapOfOakValley_P100_Screen_3_12814	A	F	A	H
27.L23C_SS_AMapOfOakValley_P100_Screen_4_12815	A	F	A	H
28.L23B_SC_WaterCycle_P100_A202_Screen_2_13910	A	F	A	O
29.L23B_SC_WaterCycle_P100_A202_Screen_3_13911	A	M	A	H
30.L23B_SC_WaterCycle_P100_A202_Screen_4_13912	A	F	A	O
31.L23B_LA_TheEmptyPot_P100_Screen_2_12580	A	F	A	H
32.L23B_LA_TheEmptyPot_P100_Screen_3_12582	A	M	A	O
33.L23B_LA_TheEmptyPot_P100_Screen_4_12584	A	M	A	O
34.L23B_MA_LinearMeasurement_P100_Screen_2_12988	A	F	A	H
35.L23B_MA_LinearMeasurement_P100_Screen_3_12990	A	F	A	H
36.L23B_MA_LinearMeasurement_P100_Screen_4_12991	A	M	A	O
37.L23C_LA_CrownAndTheCoins_P100_Screen_2_12705	A	M	A	H
38.L23C_LA_CrownAndTheCoins_P100_Screen_3_12706	A	M	A	O
39.L23C_LA_CrownAndTheCoins_P100_Screen_4_12707	A	M	A	H
40.L23B_MA_GettingToSchool_P100_Screen_2_12953	A	M	A	O
41.L23B_MA_GettingToSchool_P100_Screen_3_12954	A	M	A	H
42.L23B_MA_GettingToSchool_P100_Screen_4_12955	A	F	A	O
43.L23B_SS_AMapOfOakValley_P100_Screen_2_12733	A	M	A	O
44.L23B_SS_AMapOfOakValley_P100_Screen_3_12734	A	M	A	O
45.L23B_SS_AMapOfOakValley_P100_Screen_4_12735	A	F	A	O
46.L23B_SC_Habitats_P100_Screen_2_12785	A	F	A	H
47.L23B_SC_Habitats_P100_Screen_3_12786	A	F	A	H
48.L23B_SC_Habitats_P100_Screen_4_12787	A	F	A	O
49.L23C_LA_TheEmptyPot_P100_Screen_2_12586	A	M	A	O
50.L23C_LA_TheEmptyPot_P100_Screen_3_12587	A	M	A	H
51.L23C_LA_TheEmptyPot_P100_Screen_4_12588	A	M	A	H
52.L23C_MA_MetricMeasurement_P100_Screen_2_12992	A	M	A	H
53.L23C_MA_MetricMeasurement_P100_Screen_3_12993	A	F	A	O
54.L23C_MA_MetricMeasurement_P100_Screen_4_12994	A	M	A	H

2.2.1.3 Grades 4–5

Table 2.2.1.3

DIF Analysis and Summary: List 4-5 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	34	17	26	27
B	2	1	0	1
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.L45A_SI_MorningArrivalAtClass_P100_Screen_2_12413	A	M	A	O
2.L45A_SI_MorningArrivalAtClass_P100_Screen_3_12415	A	M	A	O
3.L45A_SI_MorningArrivalAtClass_P100_Screen_4_12416	A	F	A	O
4.L45B_SI_SchoolClubs_P100_Screen_2_12386	A	M	A	O
5.L45B_SI_SchoolClubs_P100_Screen_3_12394	A	F	A	O
6.L45B_SI_SchoolClubs_P100_Screen_4_12396	A	F	A	H
7.L45B_LA_BookDiscussion_P100_Screen_2_12571	A	M	A	H
8.L45B_LA_BookDiscussion_P100_Screen_3_12572	A	M	A	H
9.L45B_LA_BookDiscussion_P100_Screen_4_12573	A	M	A	O
10.L45B_MA_TheSchoolMascot_P100_Screen_2_12917	A	M	A	H
11.L45B_MA_TheSchoolMascot_P100_Screen_3_12918	A	M	A	H
12.L45B_MA_TheSchoolMascot_P100_Screen_4_12919	A	F	B	O
13.L45A_SS_RomanToolsArtifacts_P100_Screen_2_13024	A	M	A	H
14.L45A_SS_RomanToolsArtifacts_P100_Screen_3_13025	A	M	A	H
15.L45A_SS_RomanToolsArtifacts_P100_Screen_4_13026	A	F	A	O
16.L45A_SC_WindSpeed_P100_Screen_2_12792	A	F	A	H
17.L45A_SC_WindSpeed_P100_Screen_3_12793	A	F	A	O
18.L45A_SC_WindSpeed_P100_Screen_4_12794	A	F	A	H
19.L45C_LA_BookDiscussion_P100_Screen_2_12581	A	M	A	O
20.L45C_LA_BookDiscussion_P100_Screen_3_12583	A	M	A	O
21.L45C_LA_BookDiscussion_P100_Screen_4_12585	A	M	A	O
22.L45B_MA_Garden_P100_Screen_2_12596	A	M	A	H
23.L45B_MA_Garden_P100_Screen_3_12597	A	F	A	H
24.L45B_MA_Garden_P100_Screen_4_12598	A	M	A	H
25.L45B_SS_FarmingInAncientEgypt_402_Screen_2_14945	A	M	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.L45B_SS_FarmingInAncientEgypt_402_Screen_3_14946	B	M	A	O
27.L45B_SS_FarmingInAncientEgypt_402_Screen_4_14947	A	M	A	O
28.L45B_SC_DynamicDunes_402_Screen_2_14940	A	M	A	H
29.L45B_SC_DynamicDunes_402_Screen_3_14939	B	M	A	O
30.L45B_SC_DynamicDunes_402_Screen_4_14941	A	M	A	O
31.L45B_LA_EarlyLife_P100_Alt1_Screen_2_14224	A	M	A	O
32.L45B_LA_EarlyLife_P100_Alt1_Screen_3_14225	A	F	A	H
33.L45B_LA_EarlyLife_P100_Alt1_Screen_4_14226	A	M	A	O
34.L45C_MA_3DShapes_P100_Screen_2_14215	A	M	A	O
35.L45C_MA_3DShapes_P100_Screen_3_14216	A	M	A	O
36.L45C_MA_3DShapes_P100_Screen_4_14217	A	M	A	H
37.L45C_LA_GardenMystery_402_Screen_2_14833	A	F	A	O
38.L45C_LA_GardenMystery_402_Screen_3_14845	A	M	A	H
39.L45C_LA_GardenMystery_402_Screen_4_14846	A	F	A	O
40.L45C_MA_TheSchoolMascot_P100_Screen_2_12942	A	M	A	H
41.L45C_MA_TheSchoolMascot_P100_Screen_3_12943	A	M	A	O
42.L45C_MA_TheSchoolMascot_P100_Screen_4_12946	A	F	A	H
43.L45B_SS_RomanToolsArtifacts_P100_Screen_2_13027	A	M	A	H
44.L45B_SS_RomanToolsArtifacts_P100_Screen_3_13028	A	M	A	H
45.L45B_SS_RomanToolsArtifacts_P100_Screen_4_13029	A	F	A	H
46.L45C_SC_FromRocksToSoil_P100_Screen_2_14212	B	F	A	O
47.L45C_SC_FromRocksToSoil_P100_Screen_3_14213	A	F	A	H
48.L45C_SC_FromRocksToSoil_P100_Screen_4_14214	A	F	A	O
49.L45B_LA_EarlyLife_P100_Screen_2_12923	A	M	A	H
50.L45B_LA_EarlyLife_P100_Screen_3_12925	A	M	A	O
51.L45B_LA_EarlyLife_P100_Screen_4_12928	A	M	A	H
52.L45B_MA_RunTime_P100_Alt1_Screen_2_13069	A	F	A	O
53.L45B_MA_RunTime_P100_Alt1_Screen_3_13070	A	M	A	H
54.L45B_MA_RunTime_P100_Alt1_Screen_4_13071	A	M	A	H

2.2.1.4 Grades 6–8

Table 2.2.1.4

DIF Analysis and Summary: List 6-8 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	28	25	36	17
B	1	0	0	1
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.L68A_SI_TalentShow_P100_Screen_2_12454	A	M	A	H
2.L68A_SI_TalentShow_P100_Screen_3_12455	A	M	A	O
3.L68A_SI_TalentShow_P100_Screen_4_12456	A	M	A	O
4.L68B_SI_AuthorProject_P100_Screen_2_12380	A	M	A	O
5.L68B_SI_AuthorProject_P100_Screen_3_12381	A	M	A	H
6.L68B_SI_AuthorProject_P100_Screen_4_12382	A	M	A	H
7.L68A_LA_RemoteControl_P100_Screen_2_12849	A	F	A	H
8.L68A_LA_RemoteControl_P100_Screen_3_12850	A	F	A	H
9.L68A_LA_RemoteControl_P100_Screen_4_12922	A	F	B	O
10.L68B_MA_ClassPresidentSurvey_P100_Screen_2_13039	A	M	A	H
11.L68B_MA_ClassPresidentSurvey_P100_Screen_3_13040	A	M	A	O
12.L68B_MA_ClassPresidentSurvey_P100_Screen_4_13041	A	M	A	H
13.L68A_SS_TypesOfGovernment_P100_Screen_2_13060	A	M	A	H
14.L68A_SS_TypesOfGovernment_P100_Screen_3_13061	A	M	A	H
15.L68A_SS_TypesOfGovernment_P100_Screen_4_13062	A	F	A	H
16.L68A_SC_NatureTrail_P100_Screen_2_12884	A	F	A	O
17.L68A_SC_NatureTrail_P100_Screen_3_12885	A	F	A	H
18.L68A_SC_NatureTrail_P100_Screen_4_12886	A	F	A	O
19.L68B_LA_Eastwood_402_Screen_2_14850	A	M	A	H
20.L68B_LA_Eastwood_402_Screen_3_14851	A	M	A	H
21.L68B_LA_Eastwood_402_Screen_4_14852	A	F	A	H
22.L68B_MA_WaterCooler_402_Screen_2_14915	A	F	A	O
23.L68B_MA_WaterCooler_402_Screen_3_14916	A	M	A	O
24.L68B_MA_WaterCooler_402_Screen_4_14917	A	F	A	H
25.L68B_SS_BillsOfRights_402_Screen_2_14858	A	M	A	H

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.L68B_SS_BillsOfRights_402_Screen_3_14859	A	F	A	O
27.L68B_SS_BillsOfRights_402_Screen_4_14863	A	F	A	H
28.L68B_SC_LeafClassification_P100_Screen_2_11467	A	M	A	O
29.L68B_SC_LeafClassification_P100_Screen_3_11472	A	F	A	H
30.L68B_SC_LeafClassification_P100_Screen_4_11474	A	F	A	O
31.L68B_LA_WritingAboutReading_P100_Screen_2_12526	A	M	A	H
32.L68B_LA_WritingAboutReading_P100_Screen_3_12528	A	F	A	O
33.L68B_LA_WritingAboutReading_P100_Screen_4_12529	A	M	A	H
34.L68B_MA_SchoolGarden_P100_Screen_2_12481	A	M	A	H
35.L68B_MA_SchoolGarden_P100_Screen_3_12482	A	M	A	H
36.L68B_MA_SchoolGarden_P100_Screen_4_12483	A	F	A	H
37.L68B_LA_Steinman_402_Screen_2_14855	A	M	A	H
38.L68B_LA_Steinman_402_Screen_3_14856	A	M	A	H
39.L68B_LA_Steinman_402_Screen_4_14857	A	M	A	H
40.L68C_MA_MediaGrowth_402_Screen_2_14921	A	F	A	H
41.L68C_MA_MediaGrowth_402_Screen_3_14922	A	M	A	H
42.L68C_MA_MediaGrowth_402_Screen_4_14923	A	M	A	O
43.L68C_SS_ThailandMap_P100_A301FT_Screen_2_13838	A	F	A	H
44.L68C_SS_ThailandMap_P100_A301FT_Screen_3_13839	A	F	A	H
45.L68C_SS_ThailandMap_P100_A301FT_Screen_4_13840	A	F	A	O
46.L68C_SC_NatureTrail_P100_Screen_2_12899	A	F	A	O
47.L68C_SC_NatureTrail_P100_Screen_3_12901	A	F	A	H
48.L68C_SC_NatureTrail_P100_Screen_4_12905	A	F	A	H
49.L68C_LA_WritingAboutReading_P100_Screen_2_12531	A	F	A	O
50.L68C_LA_WritingAboutReading_P100_Screen_3_12532	A	F	A	H
51.L68C_LA_WritingAboutReading_P100_Screen_4_12533	B	M	A	O
52.L68C_MA_SchoolGarden_P100_Screen_2_12484	A	M	A	H
53.L68C_MA_SchoolGarden_P100_Screen_3_12485	A	M	A	H
54.L68C_MA_SchoolGarden_P100_Screen_4_12486	A	M	A	H

2.2.1.5 Grades 9–12

Table 2.2.1.5

DIF Analysis and Summary: List 9-12 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	25	29	28	23
B	0	0	1	2
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.L91A_SI_ArtContest_P100_Screen_2_12360	A	M	A	O
2.L91A_SI_ArtContest_P100_Screen_3_12361	A	M	A	O
3.L91A_SI_ArtContest_P100_Screen_4_12441	A	F	A	H
4.L91B_SI_RenewableEnergy_P100_Screen_2_12442	A	M	A	O
5.L91B_SI_RenewableEnergy_P100_Screen_3_12443	A	F	A	O
6.L91B_SI_RenewableEnergy_P100_Screen_4_12444	A	M	A	H
7.L91B_LA_FreeVerse_P100_Screen_2_12887	A	M	A	H
8.L91B_LA_FreeVerse_P100_Screen_3_12889	A	M	A	H
9.L91B_LA_FreeVerse_P100_Screen_4_12890	A	M	A	H
10.L91B_MA_WaterSale_P100_Screen_2_12714	A	M	A	O
11.L91B_MA_WaterSale_P100_Screen_3_12715	A	F	A	H
12.L91B_MA_WaterSale_P100_Screen_4_12716	A	M	A	O
13.L91B_SS_GlobalCarProduction_P100_Screen_2_12869	A	F	A	H
14.L91B_SS_GlobalCarProduction_P100_Screen_3_12870	A	F	A	O
15.L91B_SS_GlobalCarProduction_P100_Screen_4_12871	A	F	A	O
16.L91A_SC_DesertPlants_P100_Screen_2_11034	A	F	A	H
17.L91A_SC_DesertPlants_P100_Screen_3_11035	A	M	A	O
18.L91A_SC_DesertPlants_P100_Screen_4_11036	A	F	A	O
19.L91C_LA_SoniaAtWork_402_Screen_2_14885	A	M	A	H
20.L91C_LA_SoniaAtWork_402_Screen_3_14886	A	M	A	H
21.L91C_LA_SoniaAtWork_402_Screen_4_14888	A	F	A	H
22.L91B_MA_SchoolMarket_402_Screen_2_15649	A	F	A	O
23.L91B_MA_SchoolMarket_402_Screen_3_15650	A	F	A	O
24.L91B_MA_SchoolMarket_402_Screen_4_15651	A	F	A	O
25.L91B_SS_CostaRica_402_Screen_2_14954	A	M	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.L91B_SS_CostaRica_402_Screen_3_14955	A	F	A	H
27.L91B_SS_CostaRica_402_Screen_4_14956	A	M	A	O
28.L91B_SC_GrasshopperLifeCycle_P100_Screen_2_11198	A	F	A	O
29.L91B_SC_GrasshopperLifeCycle_P100_Screen_3_11199	A	F	A	H
30.L91B_SC_GrasshopperLifeCycle_P100_Screen_4_11215	A	F	A	H
31.L91B_LA_CharacterDev_P100_alt1_Screen_2_13844	A	M	A	O
32.L91B_LA_CharacterDev_P100_alt1_Screen_3_13845	A	M	A	O
33.L91B_LA_CharacterDev_P100_alt1_Screen_4_13846	A	M	A	H
34.L91B_MA_RunnersVelocity_P100_Screen_2_12525	A	F	A	H
35.L91B_MA_RunnersVelocity_P100_Screen_3_12527	A	F	A	H
36.L91B_MA_RunnersVelocity_P100_Screen_4_12530	A	M	A	H
37.L91C_LA_Poetry_P100_Screen_2_12893	A	F	B	O
38.L91C_LA_Poetry_P100_Screen_3_12894	A	M	A	H
39.L91C_LA_Poetry_P100_Screen_4_12895	A	F	A	O
40.L91C_MA_WaterSale_P100_Screen_2_12720	A	F	A	O
41.L91C_MA_WaterSale_P100_Screen_3_12903	A	M	A	H
42.L91C_MA_WaterSale_P100_Screen_4_12907	A	F	A	H
43.L91C_SS_GlobalCoffeeProduction_P100_Screen_2_13036	A	F	A	H
44.L91C_SS_GlobalCoffeeProduction_P100_Screen_3_13037	A	M	A	H
45.L91C_SS_GlobalCoffeeProduction_P100_Screen_4_13038	A	M	A	H
46.L91B_SC_PlantLifeCycle_P100_Screen_2_11245	A	F	A	O
47.L91B_SC_PlantLifeCycle_P100_Screen_3_11343	A	F	A	H
48.L91B_SC_PlantLifeCycle_P100_Screen_4_11344	A	F	A	O
49.L91C_LA_EagleFlies_301_P100_A301_Screen_2_13862	A	F	A	H
50.L91C_LA_EagleFlies_301_P100_A301_Screen_3_13863	A	M	A	H
51.L91C_LA_EagleFlies_301_P100_A301_Screen_4_13864	A	M	A	O
52.L91C_MA_angles_joga_P100_A202_Screen_2_13865	A	F	B	O
53.L91C_MA_angles_joga_P100_A202_Screen_3_13866	A	M	A	H
54.L91C_MA_angles_joga_P100_A202_Screen_4_13867	A	F	B	H

2.2.2 Reading

2.2.2.1 Grade 1

Table 2.2.2.1

DIF Analysis and Summary: Read 1 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	34	38	33	38
B	0	0	1	0
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.R01A_SI_GettingReady_P100_A203_Screen_2_13193	A	M	A	O
2.R01A_SI_GettingReady_P100_A203_Screen_3_13194	A	M	A	O
3.R01A_SI_GettingReady_P100_A203_Screen_4_13195	A	M	A	O
4.R01B_SI_MorningMessage_P100_A203_Screen_2_13196	A	M	A	H
5.R01B_SI_MorningMessage_P100_A203_Screen_3_13197	A	M	A	H
6.R01B_SI_MorningMessage_P100_A203_Screen_4_13198	A	M	A	O
7.R01A_LA_CatAdventure_203_P100_A301_Screen_2_13211	A	F	A	O
8.R01A_LA_CatAdventure_203_P100_A301_Screen_3_13212	A	F	A	H
9.R01A_LA_CatAdventure_203_P100_A301_Screen_4_13213	A	M	A	O
10.R01A_MA_CountBalloons_301_P100_A301FT_Screen_2_13274	A	M	A	H
11.R01A_MA_CountBalloons_301_P100_A301FT_Screen_3_13275	A	F	A	O
12.R01A_MA_CountBalloons_301_P100_A301FT_Screen_4_13276	A	F	A	O
13.R01C_SS_PetStore_P100_A202_Screen_2_13313	A	M	B	H
14.R01C_SS_PetStore_P100_A202_Screen_3_13314	A	F	A	O
15.R01C_SS_PetStore_P100_A202_Screen_4_13315	A	F	A	O
16.R01B_SC_MoonCharacteristics_402_V1_Screen_2_15680	A	M	A	H
17.R01B_SC_MoonCharacteristics_402_V1_Screen_3_15681	A	M	A	O
18.R01B_SC_MoonCharacteristics_402_V1_Screen_4_15682	A	M	A	O
19.R01A_LA_AVisitToThePond_P100_A203_Screen_2_13199	A	F	A	O
20.R01A_LA_AVisitToThePond_P100_A203_Screen_3_13200	A	M	A	H
21.R01A_LA_AVisitToThePond_P100_A203_Screen_4_13201	A	F	A	O
22.R01A_MA_FamilyGatheringatBeach_jc_P100_A203_Screen_2_13202	A	M	A	H
23.R01A_MA_FamilyGatheringatBeach_jc_P100_A203_Screen_3_13203	A	F	A	O
24.R01A_MA_FamilyGatheringatBeach_jc_P100_A203_Screen_4_13204	A	F	A	H
25.R01B_LA_ThankYou_402_V1_Screen_2_16039	A	F	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.R01B_LA_ThankYou_402_V1_Screen_3_16040	A	M	A	O
27.R01B_LA_ThankYou_402_V1_Screen_4_16041	A	F	A	H
28.R01B_MA_EstimatingMoney_ShLoGiPe_P100_A203_Screen_2_13220	A	F	A	O
29.R01B_MA_EstimatingMoney_ShLoGiPe_P100_A203_Screen_3_13221	A	M	A	H
30.R01B_MA_EstimatingMoney_ShLoGiPe_P100_A203_Screen_4_13222	A	F	A	O
31.R01A_SS_VisitMyTown_402_V2_Screen_2_16035	A	M	A	O
32.R01A_SS_VisitMyTown_402_V2_Screen_3_16036	A	M	A	O
33.R01A_SS_VisitMyTown_402_V2_Screen_4_16037	A	M	A	O
34.R01B_SC_AnimalCoverings_dode_P100_A301_Screen_2_13238	A	M	A	O
35.R01B_SC_AnimalCoverings_dode_P100_A301_Screen_3_13239	A	M	A	O
36.R01B_SC_AnimalCoverings_dode_P100_A301_Screen_4_13240	A	F	A	O
37.R01B_LA_Lunchtime_P100_A202_Screen_2_13283	A	F	A	O
38.R01B_LA_Lunchtime_P100_A202_Screen_3_13284	A	M	A	H
39.R01B_LA_Lunchtime_P100_A202_Screen_4_13285	A	F	A	O
40.R01C_MA_IceCreamAtThePark_AmEtPaAg_P100_A203_Screen_2_13244	A	M	A	H
41.R01C_MA_IceCreamAtThePark_AmEtPaAg_P100_A203_Screen_3_13245	A	F	A	H
42.R01C_MA_IceCreamAtThePark_AmEtPaAg_P100_A203_Screen_4_13246	A	F	A	O
43.R01A_SS_HomesOfThePast_203_P100_A301_Screen_2_13205	A	M	A	O
44.R01A_SS_HomesOfThePast_203_P100_A301_Screen_3_13206	A	F	A	O
45.R01A_SS_HomesOfThePast_203_P100_A301_Screen_4_13207	A	F	A	O
46.R01C_SC_Cotton_P100_A201_Screen_2_13316	A	F	A	H
47.R01C_SC_Cotton_P100_A201_Screen_3_13317	A	F	A	H
48.R01C_SC_Cotton_P100_A201_Screen_4_13318	A	M	A	H
49.R01B_LA_ZooTrip_203_P100_A301_Screen_2_13217	A	M	A	O
50.R01B_LA_ZooTrip_203_P100_A301_Screen_3_13218	A	M	A	H
51.R01B_LA_ZooTrip_203_P100_A301_Screen_4_13219	A	M	A	H
52.R01C_MA_BalanceScale_401_V2_Screen_2_14619	A	F	A	H
53.R01C_MA_BalanceScale_401_V2_Screen_3_14620	A	M	A	H
54.R01C_MA_BalanceScale_401_V2_Screen_4_14621	A	F	A	H
55.R01B_SS_FarmersMarket_401_V2_Screen_2_14721	A	F	A	H
56.R01B_SS_FarmersMarket_401_V2_Screen_3_14722	A	F	A	O
57.R01B_SS_FarmersMarket_401_V2_Screen_4_14723	A	M	A	H
58.R01C_SC_Recycling_402_V2_Screen_2_16053	A	F	A	H
59.R01C_SC_Recycling_402_V2_Screen_3_16054	A	F	A	O
60.R01C_SC_Recycling_402_V2_Screen_4_16055	A	F	A	H

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
61.R01C_LA_GrowingTaller_203_P100_A301_Screen_2_13241	A	F	A	H
62.R01C_LA_GrowingTaller_203_P100_A301_Screen_3_13242	A	M	A	O
63.R01C_LA_GrowingTaller_203_P100_A301_Screen_4_13243	A	F	A	H
64.R01C_MA_PuppetShow_dode_P100_A203_Screen_2_13256	A	F	A	O
65.R01C_MA_PuppetShow_dode_P100_A203_Screen_3_13257	A	M	A	H
66.R01C_MA_PuppetShow_dode_P100_A203_Screen_4_13258	A	F	A	H
67.R01C_SS_UrbanNeighborhood_203_P100_A301_Screen_2_13259	A	M	A	H
68.R01C_SS_UrbanNeighborhood_203_P100_A301_Screen_3_13260	A	F	A	O
69.R01C_SS_UrbanNeighborhood_203_P100_A301_Screen_4_13261	A	F	A	H
70.R01C_SC_Leaves_mika_P100_A301_Screen_2_13262	A	M	A	O
71.R01C_SC_Leaves_mika_P100_A301_Screen_3_13263	A	F	A	H
72.R01C_SC_Leaves_mika_P100_A301_Screen_4_13264	A	F	A	H

2.2.2.2 Grades 2–3

Table 2.2.2.2

DIF Analysis and Summary: Read 2-3 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	28	44	33	39
B	0	0	0	0
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.R23A_SI_Getting_Ready_P100_A203_Screen_2_13325	A	M	A	H
2.R23A_SI_Getting_Ready_P100_A203_Screen_3_13326	A	F	A	H
3.R23A_SI_Getting_Ready_P100_A203_Screen_4_13327	A	M	A	O
4.R23B_SI_RunningClub_401_V2_Screen_2_14589	A	M	A	O
5.R23B_SI_RunningClub_401_V2_Screen_3_14590	A	M	A	O
6.R23B_SI_RunningClub_401_V2_Screen_4_14591	A	F	A	H
7.R23A_LA_BenFranklin_203_P100_A301_Screen_2_13331	A	M	A	O
8.R23A_LA_BenFranklin_203_P100_A301_Screen_3_13332	A	F	A	O
9.R23A_LA_BenFranklin_203_P100_A301_Screen_4_13333	A	F	A	O
10.R23A_MA_BuyingSchoolSupplies_P100_A201_Screen_2_13392	A	M	A	O
11.R23A_MA_BuyingSchoolSupplies_P100_A201_Screen_3_13393	A	F	A	O
12.R23A_MA_BuyingSchoolSupplies_P100_A201_Screen_4_13394	A	M	A	O
13.R23A_SS_HomesofthePast_203_P100_A301_Screen_2_13277	A	M	A	O
14.R23A_SS_HomesofthePast_203_P100_A301_Screen_3_13278	A	F	A	H
15.R23A_SS_HomesofthePast_203_P100_A301_Screen_4_13279	A	F	A	O
16.R23B_SC_AnimalMovement_dode_P100_A301_Screen_2_13292	A	F	A	H
17.R23B_SC_AnimalMovement_dode_P100_A301_Screen_3_13293	A	F	A	H
18.R23B_SC_AnimalMovement_dode_P100_A301_Screen_4_13294	A	F	A	O
19.R23B_LA_IvanAtTheMarket_P100_A202_Screen_2_13353	A	M	A	H
20.R23B_LA_IvanAtTheMarket_P100_A202_Screen_3_13354	A	F	A	H
21.R23B_LA_IvanAtTheMarket_P100_A202_Screen_4_13355	A	M	A	O
22.R23B_MA_Cupcakes_P100_A201_Screen_2_13401	A	M	A	H
23.R23B_MA_Cupcakes_P100_A201_Screen_3_13402	A	F	A	O
24.R23B_MA_Cupcakes_P100_A201_Screen_4_13403	A	F	A	O
25.R23B_LA_TreasureHunt_402_v1_Screen_2_15700	A	F	A	H

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.R23B_LA_TreasureHunt_402_v1_Screen_3_15715	A	F	A	H
27.R23B_LA_TreasureHunt_402_v1_Screen_4_15716	A	F	A	O
28.R23B_MA_RecyclingProject_402_v1_Screen_2_15626	A	F	A	H
29.R23B_MA_RecyclingProject_402_v1_Screen_3_15628	A	F	A	H
30.R23B_MA_RecyclingProject_402_v1_Screen_4_15629	A	F	A	H
31.R23C_SS_UrbanNeighborhood_P100_A301_Screen_2_13371	A	F	A	H
32.R23C_SS_UrbanNeighborhood_P100_A301_Screen_3_13372	A	M	A	O
33.R23C_SS_UrbanNeighborhood_P100_A301_Screen_4_13373	A	F	A	H
34.R23B_SC_TempClimate_401_V1_Screen_2_13932	A	F	A	O
35.R23B_SC_TempClimate_401_V1_Screen_3_13936	A	F	A	H
36.R23B_SC_TempClimate_401_V1_Screen_4_13937	A	M	A	H
37.R23B_LA_ZebraStripes_203_P100_A301_alt1_Screen_2_13410	A	F	A	O
38.R23B_LA_ZebraStripes_203_P100_A301_alt1_Screen_3_13411	A	M	A	O
39.R23B_LA_ZebraStripes_203_P100_A301_alt1_Screen_4_13412	A	M	A	H
40.R23B_MA_Library_P100_A201_alt1_Screen_2_13413	A	M	A	H
41.R23B_MA_Library_P100_A201_alt1_Screen_3_13414	A	F	A	O
42.R23B_MA_Library_P100_A201_alt1_Screen_4_13415	A	M	A	O
43.R23B_SS_OurNeighborhood_203_P100_A203_Screen_2_13350	A	F	A	H
44.R23B_SS_OurNeighborhood_203_P100_A203_Screen_3_13351	A	F	A	O
45.R23B_SS_OurNeighborhood_203_P100_A203_Screen_4_13352	A	F	A	H
46.R23A_SC_Birds_dode_P100_A301_Screen_2_13280	A	M	A	H
47.R23A_SC_Birds_dode_P100_A301_Screen_3_13281	A	M	A	O
48.R23A_SC_Birds_dode_P100_A301_Screen_4_13282	A	M	A	H
49.R23A_LA_KittenFable_203_P100_A203FT_Screen_2_13338	A	F	A	O
50.R23A_LA_KittenFable_203_P100_A203FT_Screen_3_13339	A	M	A	H
51.R23A_LA_KittenFable_203_P100_A203FT_Screen_4_13340	A	M	A	H
52.R23C_MA_ReadingProject_402_v2_Screen_2_16092	A	M	A	O
53.R23C_MA_ReadingProject_402_v2_Screen_3_16094	A	F	A	O
54.R23C_MA_ReadingProject_402_v2_Screen_4_16095	A	F	A	O
55.R23B_SS_BoatsLongAgo_401_V2_Screen_2_14583	A	F	A	H
56.R23B_SS_BoatsLongAgo_401_V2_Screen_3_14584	A	F	A	H
57.R23B_SS_BoatsLongAgo_401_V2_Screen_4_14585	A	F	A	O
58.R23B_SC_AnimalMovement_dode_P100_A301_alt1_Screen_2_13419	A	F	A	O
59.R23B_SC_AnimalMovement_dode_P100_A301_alt1_Screen_3_13420	A	F	A	O
60.R23B_SC_AnimalMovement_dode_P100_A301_alt1_Screen_4_13421	A	F	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
61.R23B_LA_ZebraStripes_203_P100_A301_Screen_2_13344	A	M	A	H
62.R23B_LA_ZebraStripes_203_P100_A301_Screen_3_13345	A	F	A	O
63.R23B_LA_ZebraStripes_203_P100_A301_Screen_4_13346	A	M	A	O
64.R23B_MA_Library_P100_A201_Screen_2_13356	A	F	A	O
65.R23B_MA_Library_P100_A201_Screen_3_13357	A	F	A	O
66.R23B_MA_Library_P100_A201_Screen_4_13358	A	M	A	H
67.R23B_SS_OurNeighborhood_203_P100_A203_alt1_Screen_2_13416	A	F	A	O
68.R23B_SS_OurNeighborhood_203_P100_A203_alt1_Screen_3_13417	A	F	A	O
69.R23B_SS_OurNeighborhood_203_P100_A203_alt1_Screen_4_13418	A	M	A	H
70.R23C_SC_Insects_dode_P100_A301_Screen_2_13374	A	F	A	H
71.R23C_SC_Insects_dode_P100_A301_Screen_3_13375	A	M	A	O
72.R23C_SC_Insects_dode_P100_A301_Screen_4_13376	A	F	A	H

2.2.2.3 Grades 4–5

Table 2.2.2.3

DIF Analysis and Summary: Read 4-5 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	35	33	33	34
B	0	1	2	0
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.R45A_SI_WatchingTV_P100_A301FT_Screen_2_13509	A	F	A	H
2.R45A_SI_WatchingTV_P100_A301FT_Screen_3_13510	A	F	A	H
3.R45A_SI_WatchingTV_P100_A301FT_Screen_4_13511	A	M	A	H
4.R45B_SI_PhotoContest_P100_A301FT_Screen_2_13449	A	F	A	O
5.R45B_SI_PhotoContest_P100_A301FT_Screen_3_13450	A	F	A	O
6.R45B_SI_PhotoContest_P100_A301FT_Screen_4_13451	A	F	A	H
7.R45A_LA_RecycleOrCompost_402_V2_Screen_2_15991	A	F	B	H
8.R45A_LA_RecycleOrCompost_402_V2_Screen_3_15992	A	M	A	O
9.R45A_LA_RecycleOrCompost_402_V2_Screen_4_15993	A	F	A	O
10.R45A_MA_Supermarket_pasz_P100_A203_Screen_2_13464	A	F	A	H
11.R45A_MA_Supermarket_pasz_P100_A203_Screen_3_13465	A	M	A	O
12.R45A_MA_Supermarket_pasz_P100_A203_Screen_4_13466	A	F	A	H
13.R45A_SS_ShoppingCart_401_V2_Screen_2_14714	A	F	A	O
14.R45A_SS_ShoppingCart_401_V2_Screen_3_14715	A	M	A	H
15.R45A_SS_ShoppingCart_401_V2_Screen_4_14716	A	M	A	O
16.R45B_SC_Geyzers_P100_A301_45_Screen_2_13407	A	F	A	H
17.R45B_SC_Geyzers_P100_A301_45_Screen_3_13408	A	M	A	H
18.R45B_SC_Geyzers_P100_A301_45_Screen_4_13409	A	M	A	O
19.R45B_LA_OntheTrain_P100_A202_Screen_2_13467	A	M	A	H
20.R45B_LA_OntheTrain_P100_A202_Screen_3_13468	A	M	A	O
21.R45B_LA_OntheTrain_P100_A202_Screen_4_13469	A	F	A	O
22.R45A_MA_BuyingSchoolSupplies_P100_A201_Screen_2_13518	A	M	A	H
23.R45A_MA_BuyingSchoolSupplies_P100_A201_Screen_3_13519	A	M	A	H
24.R45A_MA_BuyingSchoolSupplies_P100_A201_Screen_4_13520	A	M	A	H
25.R45C_LA_CookingWithGrandpa_402_V1_Screen_2_16009	B	F	A	H

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.R45C_LA_CookingWithGrandpa_402_V1_Screen_3_16010	A	F	A	H
27.R45C_LA_CookingWithGrandpa_402_V1_Screen_4_16011	A	F	A	H
28.R45A_MA_ClassroomCleanup_401_V2_Screen_2_14625	A	F	A	O
29.R45A_MA_ClassroomCleanup_401_V2_Screen_3_14626	A	F	A	H
30.R45A_MA_ClassroomCleanup_401_V2_Screen_4_14627	A	M	A	H
31.R45B_SS_LewisAndClark_402_V1_Screen_2_16017	A	F	B	H
32.R45B_SS_LewisAndClark_402_V1_Screen_3_16018	A	F	A	H
33.R45B_SS_LewisAndClark_402_V1_Screen_4_16019	A	F	A	H
34.R45B_SC_KelpForests_402_V1_Screen_2_15706	A	F	A	O
35.R45B_SC_KelpForests_402_V1_Screen_3_15707	A	M	A	O
36.R45B_SC_KelpForests_402_V1_Screen_4_15708	A	M	A	O
37.R45B_MA_ClassSchedule_jc_P100_A201_Screen_2_13479	A	M	A	H
38.R45B_MA_ClassSchedule_jc_P100_A201_Screen_3_13480	A	M	A	O
39.R45B_MA_ClassSchedule_jc_P100_A201_Screen_4_13481	A	F	A	O
40.R45B_SS_Declaration_P100_A203FT_Screen_2_13527	A	M	A	O
41.R45B_SS_Declaration_P100_A203FT_Screen_3_13528	A	M	A	O
42.R45B_SS_Declaration_P100_A203FT_Screen_4_13529	A	M	A	O
43.R45C_SC_Tides_P100_A301_Screen_2_13497	A	F	A	O
44.R45C_SC_Tides_P100_A301_Screen_3_13498	A	M	A	H
45.R45C_SC_Tides_P100_A301_Screen_4_13499	A	F	A	O
46.R45C_LA_BrunelDavinci_203_P100_A301_Screen_2_13488	A	F	A	H
47.R45C_LA_BrunelDavinci_203_P100_A301_Screen_3_13489	A	F	A	O
48.R45C_LA_BrunelDavinci_203_P100_A301_Screen_4_13490	A	F	A	O
49.R45C_MA_SoccerInThePark_401_V1_Screen_2_13926	A	M	A	H
50.R45C_MA_SoccerInThePark_401_V1_Screen_3_13927	A	M	A	H
51.R45C_MA_SoccerInThePark_401_V1_Screen_4_13928	A	M	A	O
52.R45B_SS_NativeAmericanShelters_namo_P100_A202_Screen_2_13482	A	F	A	H
53.R45B_SS_NativeAmericanShelters_namo_P100_A202_Screen_3_13483	A	M	A	H
54.R45B_SS_NativeAmericanShelters_namo_P100_A202_Screen_4_13484	A	F	A	O
55.R45B_SC_Geyzers_P100_A301_Alt1_Screen_2_13539	A	M	A	H
56.R45B_SC_Geyzers_P100_A301_Alt1_Screen_3_13540	A	F	A	H
57.R45B_SC_Geyzers_P100_A301_Alt1_Screen_4_13541	A	F	A	O
58.R45B_LA_OntheTrain_P100_A202_Alt1_Screen_2_13530	A	M	A	H
59.R45B_LA_OntheTrain_P100_A202_Alt1_Screen_3_13531	A	M	A	H
60.R45B_LA_OntheTrain_P100_A202_Alt1_Screen_4_13532	A	M	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
61.R45B_MA_ClassSchedule_jc_P100_A201_Alt1_Screen_2_13533	A	F	A	H
62.R45B_MA_ClassSchedule_jc_P100_A201_Alt1_Screen_3_13534	A	M	A	O
63.R45B_MA_ClassSchedule_jc_P100_A201_Alt1_Screen_4_13535	A	M	A	O
64.R45C_SS_EleanorRoosevelt_203_P100_A301_Screen_2_13503	A	M	A	O
65.R45C_SS_EleanorRoosevelt_203_P100_A301_Screen_3_13504	A	M	A	O
66.R45C_SS_EleanorRoosevelt_203_P100_A301_Screen_4_13505	A	M	A	H
67.R45C_SC_Glaciers_pasz_P100_A301_Screen_2_13506	A	M	A	O
68.R45C_SC_Glaciers_pasz_P100_A301_Screen_3_13507	A	F	A	O
69.R45C_SC_Glaciers_pasz_P100_A301_Screen_4_13508	A	F	A	O

2.2.2.4 Grades 6–8

Table 2.2.2.4

DIF Analysis and Summary: Read 6-8 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	40	31	40	32
B	1	0	0	0
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.R68A_SI_ProperConduct_P100_A203_Screen_2_13554	A	M	A	H
2.R68A_SI_ProperConduct_P100_A203_Screen_3_13555	A	M	A	H
3.R68A_SI_ProperConduct_P100_A203_Screen_4_13556	A	M	A	H
4.R68B_SI_SportsEquipment_301_P100_A301FT_Screen_2_13629	A	M	A	O
5.R68B_SI_SportsEquipment_301_P100_A301FT_Screen_3_13630	A	M	A	O
6.R68B_SI_SportsEquipment_301_P100_A301FT_Screen_4_13631	A	F	A	H
7.R68A_LA_ScavengerHunt_401_V2_Screen_2_14640	A	M	A	O
8.R68A_LA_ScavengerHunt_401_V2_Screen_3_14641	A	M	A	O
9.R68A_LA_ScavengerHunt_401_V2_Screen_4_14642	A	M	A	H
10.R68A_MA_Closet_rize_P100_A203_Screen_2_13563	A	F	A	H
11.R68A_MA_Closet_rize_P100_A203_Screen_3_13564	A	M	A	H
12.R68A_MA_Closet_rize_P100_A203_Screen_4_13565	A	M	A	O
13.R68A_SS_Uruguay_203_P100_A301_Screen_2_13566	A	F	A	H
14.R68A_SS_Uruguay_203_P100_A301_Screen_3_13567	A	M	A	O
15.R68A_SS_Uruguay_203_P100_A301_Screen_4_13568	A	M	A	O
16.R68A_SC_LeafInsects_402_V1_Screen_2_15712	A	M	A	O
17.R68A_SC_LeafInsects_402_V1_Screen_3_15713	B	M	A	H
18.R68A_SC_LeafInsects_402_V1_Screen_4_15714	A	F	A	O
19.R68A_LA_Collage_203_P100_A301_Screen_2_13572	A	M	A	O
20.R68A_LA_Collage_203_P100_A301_Screen_3_13573	A	M	A	O
21.R68A_LA_Collage_203_P100_A301_Screen_4_13574	A	M	A	H
22.R68A_MA_soccerfield_DeRoSaJa_P100_A203_Screen_2_13575	A	F	A	H
23.R68A_MA_soccerfield_DeRoSaJa_P100_A203_Screen_3_13576	A	M	A	O
24.R68A_MA_soccerfield_DeRoSaJa_P100_A203_Screen_4_13577	A	F	A	O
25.R68C_LA_TeamLeader_402_V2_Screen_2_16022	A	F	A	H

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.R68C_LA_TeamLeader_402_V2_Screen_3_16023	A	F	A	O
27.R68C_LA_TeamLeader_402_V2_Screen_4_16024	A	F	A	H
28.R68C_MA_Ratios_401_V1_Screen_2_13962	A	F	A	H
29.R68C_MA_Ratios_401_V1_Screen_3_13963	A	F	A	H
30.R68C_MA_Ratios_401_V1_Screen_4_13964	A	M	A	H
31.R68B_SS_RockAndRoll_203_P100_A301_Screen_2_13584	A	M	A	H
32.R68B_SS_RockAndRoll_203_P100_A301_Screen_3_13585	A	F	A	H
33.R68B_SS_RockAndRoll_203_P100_A301_Screen_4_13586	A	M	A	O
34.R68B_SC_CellDivision_diab_P100_A301_Screen_2_13587	A	M	A	H
35.R68B_SC_CellDivision_diab_P100_A301_Screen_3_13588	A	M	A	H
36.R68B_SC_CellDivision_diab_P100_A301_Screen_4_13589	A	M	A	H
37.R68C_LA_SolarOven_203_P100_A203_Screen_2_13602	A	M	A	H
38.R68C_LA_SolarOven_203_P100_A203_Screen_3_13603	A	M	A	O
39.R68C_LA_SolarOven_203_P100_A203_Screen_4_13604	A	F	A	H
40.R68B_MA_newroom_diab_P100_A203_alt1_Screen_2_13650	A	M	A	O
41.R68B_MA_newroom_diab_P100_A203_alt1_Screen_3_13651	A	M	A	O
42.R68B_MA_newroom_diab_P100_A203_alt1_Screen_4_13652	A	F	A	H
43.R68B_SS_GreatInventions_203_P100_A301_Screen_2_13596	A	M	A	O
44.R68B_SS_GreatInventions_203_P100_A301_Screen_3_13597	A	F	A	O
45.R68B_SS_GreatInventions_203_P100_A301_Screen_4_13598	A	F	A	O
46.R68C_SC_Butterflies_mabr_P100_A301_Screen_2_13611	A	F	A	H
47.R68C_SC_Butterflies_mabr_P100_A301_Screen_3_13612	A	F	A	H
48.R68C_SC_Butterflies_mabr_P100_A301_Screen_4_13613	A	F	A	O
49.R68C_LA_MyPenPal_P100_A202_Screen_2_13659	A	M	A	H
50.R68C_LA_MyPenPal_P100_A202_Screen_3_13660	A	M	A	H
51.R68C_LA_MyPenPal_P100_A202_Screen_4_13661	A	M	A	H
52.R68C_MA_Ratios_401_V2_Screen_2_14616	A	F	A	H
53.R68C_MA_Ratios_401_V2_Screen_3_14617	A	M	A	H
54.R68C_MA_Ratios_401_V2_Screen_4_14618	A	M	A	H
55.R68C_SS_NileRiver_401_V1_Screen_2_14491	A	F	A	H
56.R68C_SS_NileRiver_401_V1_Screen_3_14492	A	F	A	H
57.R68C_SS_NileRiver_401_V1_Screen_4_14493	A	F	A	O
58.R68B_SC_RockCycle_DeRoSaJa_P100_A301_alt1_Screen_2_13656	A	F	A	O
59.R68B_SC_RockCycle_DeRoSaJa_P100_A301_alt1_Screen_3_13657	A	F	A	H
60.R68B_SC_RockCycle_DeRoSaJa_P100_A301_alt1_Screen_4_13658	A	M	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
61.R68C_LA_Prodigy_203_P100_A301_Screen_2_13614	A	M	A	O
62.R68C_LA_Prodigy_203_P100_A301_Screen_3_13615	A	M	A	O
63.R68C_LA_Prodigy_203_P100_A301_Screen_4_13616	A	M	A	O
64.R68C_MA_FoodCollection_RaObAmSc_P100_A203_Screen_2_13617	A	F	A	H
65.R68C_MA_FoodCollection_RaObAmSc_P100_A203_Screen_3_13618	A	F	A	O
66.R68C_MA_FoodCollection_RaObAmSc_P100_A203_Screen_4_13619	A	M	A	H
67.R68C_SS_StudentCouncil_203_P100_A301_Screen_2_13620	A	F	A	H
68.R68C_SS_StudentCouncil_203_P100_A301_Screen_3_13621	A	M	A	H
69.R68C_SS_StudentCouncil_203_P100_A301_Screen_4_13622	A	M	A	O
70.R68C_SC_Vaporization_RaObAmSc_P100_A301_Screen_2_13623	A	F	A	O
71.R68C_SC_Vaporization_RaObAmSc_P100_A301_Screen_3_13624	A	F	A	H
72.R68C_SC_Vaporization_RaObAmSc_P100_A301_Screen_4_13625	A	F	A	O

2.2.2.5 Grades 9–12

Table 2.2.2.5

DIF Analysis and Summary: Read 9-12 S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
A	34	36	40	32
B	1	1	0	0
C	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.R91A_SI_JobSearch_301_P100_A301FT_Screen_2_13743	A	M	A	H
2.R91A_SI_JobSearch_301_P100_A301FT_Screen_3_13744	A	M	A	H
3.R91A_SI_JobSearch_301_P100_A301FT_Screen_4_13745	A	M	A	H
4.R91B_SI_ChoosingCollege_401_V1_Screen_2_13950	A	M	A	H
5.R91B_SI_ChoosingCollege_401_V1_Screen_3_13951	A	F	A	H
6.R91B_SI_ChoosingCollege_401_V1_Screen_4_13952	A	F	A	O
7.R91A_LA_CharlesSchulz_203_P100_A301_Screen_2_13674	A	M	A	O
8.R91A_LA_CharlesSchulz_203_P100_A301_Screen_3_13675	A	M	A	H
9.R91A_LA_CharlesSchulz_203_P100_A301_Screen_4_13676	A	F	A	H
10.R91A_MA_DrawingShapes_kaje_P100_A203_Screen_2_13677	A	M	A	H
11.R91A_MA_DrawingShapes_kaje_P100_A203_Screen_3_13678	A	F	A	H
12.R91A_MA_DrawingShapes_kaje_P100_A203_Screen_4_13679	A	F	A	O
13.R91A_SS_AviationHistory_P100_A203_Screen_2_13680	A	M	A	H
14.R91A_SS_AviationHistory_P100_A203_Screen_3_13681	A	F	A	H
15.R91A_SS_AviationHistory_P100_A203_Screen_4_13682	A	M	A	O
16.R91B_SC_MusicMemory_402_V2_Screen_2_16062	A	M	A	H
17.R91B_SC_MusicMemory_402_V2_Screen_3_16063	A	F	A	H
18.R91B_SC_MusicMemory_402_V2_Screen_4_16064	A	M	A	H
19.R91B_LA_Auntie_203_P100_A301_Screen_2_13692	A	M	A	O
20.R91B_LA_Auntie_203_P100_A301_Screen_3_13693	A	M	A	O
21.R91B_LA_Auntie_203_P100_A301_Screen_4_13694	A	M	A	O
22.R91A_MA_RoadSigns_P100_A203_Screen_2_13689	A	F	A	H
23.R91A_MA_RoadSigns_P100_A203_Screen_3_13690	A	F	A	H
24.R91A_MA_RoadSigns_P100_A203_Screen_4_13691	A	F	A	H
25.R91B_LA_Fiction_402_V2_Screen_2_16058	B	F	A	O

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
26.R91B_LA_Fiction_402_V2_Screen_3_16059	A	F	A	O
27.R91B_LA_Fiction_402_V2_Screen_4_16060	A	M	A	H
28.R91B_MA_CakeMaking_JaGeKaKo_P100_A203_alt1_Screen_2_13767	A	F	A	H
29.R91B_MA_CakeMaking_JaGeKaKo_P100_A203_alt1_Screen_3_13768	A	F	A	H
30.R91B_MA_CakeMaking_JaGeKaKo_P100_A203_alt1_Screen_4_13769	A	M	A	H
31.R91B_SS_Reading_203_P100_A301_Screen_2_13698	A	F	A	H
32.R91B_SS_Reading_203_P100_A301_Screen_3_13699	A	M	A	H
33.R91B_SS_Reading_203_P100_A301_Screen_4_13700	A	F	A	O
34.R91C_SC_PlantsInSpace_402_V2_Screen_2_16070	A	M	A	H
35.R91C_SC_PlantsInSpace_402_V2_Screen_3_16071	A	M	A	O
36.R91C_SC_PlantsInSpace_402_V2_Screen_4_16072	A	M	A	H
37.R91B_LA_Mattie_203_P100_A301_Screen_2_13704	A	M	A	O
38.R91B_LA_Mattie_203_P100_A301_Screen_3_13705	A	M	A	O
39.R91B_LA_Mattie_203_P100_A301_Screen_4_13706	A	F	A	O
40.R91B_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_2_13707	A	F	A	O
41.R91B_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_3_13708	A	M	A	O
42.R91B_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_4_13709	A	F	A	H
43.R91B_SS_Recycling_203_P100_A301_alt1_Screen_2_13770	A	M	A	O
44.R91B_SS_Recycling_203_P100_A301_alt1_Screen_3_13771	A	F	A	H
45.R91B_SS_Recycling_203_P100_A301_alt1_Screen_4_13772	A	M	A	O
46.R91C_SC_Diffusion_elle_P100_A301_Screen_2_13728	A	M	A	O
47.R91C_SC_Diffusion_elle_P100_A301_Screen_3_13729	A	M	A	O
48.R91C_SC_Diffusion_elle_P100_A301_Screen_4_13730	A	F	A	H
49.R91C_LA_Drama_402_V1_Screen_2_14975	A	F	A	O
50.R91C_LA_Drama_402_V1_Screen_3_14976	A	F	A	H
51.R91C_LA_Drama_402_V1_Screen_4_14977	A	M	A	H
52.R91C_MA_Functions_401_V1_Screen_2_13968	B	M	A	H
53.R91C_MA_Functions_401_V1_Screen_3_13969	A	F	A	O
54.R91C_MA_Functions_401_V1_Screen_4_13970	A	M	A	H
55.R91C_SS_Mesopotamia_401_V2_Screen_2_14634	A	F	A	O
56.R91C_SS_Mesopotamia_401_V2_Screen_3_14635	A	F	A	H
57.R91C_SS_Mesopotamia_401_V2_Screen_4_14636	A	F	A	O
58.R91C_SC_pHScale_P100_A201_Screen_2_13785	A	F	A	O
59.R91C_SC_pHScale_P100_A201_Screen_3_13786	A	F	A	O
60.R91C_SC_pHScale_P100_A201_Screen_4_13787	A	F	A	H

Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
61.R91C_LA_Malta_203_P100_A301_L_Screen_2_13731	A	M	A	O
62.R91C_LA_Malta_203_P100_A301_L_Screen_3_13732	A	M	A	O
63.R91C_LA_Malta_203_P100_A301_L_Screen_4_13733	A	M	A	H
64.R91C_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_2_13722	A	F	A	H
65.R91C_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_3_13723	A	M	A	O
66.R91C_MA_CircumferenceandDiameter_ryro_P100_A203_Screen_4_13724	A	F	A	H
67.R91C_SS_SongDynasty_401_V1_Screen_2_13956	A	F	A	H
68.R91C_SS_SongDynasty_401_V1_Screen_3_13957	A	F	A	H
69.R91C_SS_SongDynasty_401_V1_Screen_4_13958	A	F	A	O
70.R91C_SC_PolymerBall_kaje_P100_A301_Screen_2_13740	A	F	A	H
71.R91C_SC_PolymerBall_kaje_P100_A301_Screen_3_13741	A	F	A	O
72.R91C_SC_PolymerBall_kaje_P100_A301_Screen_4_13742	A	M	A	O

2.2.3 Writing

2.2.3.1 Grade 1

Table 2.2.3.1.1

DIF Analysis and Summary: Writ 1 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	2	1	3
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W01A_SI_PartAH8_202_P100_A302_14245	AA	F	AA	O
2.W01A_SI_GoingToSchoolPartB_402_14775	AA	M	AA	H
3.W01A_SI_GoingToSchoolPartC_402_15919	AA	F	AA	O
4.W01A_SI_PartDSentencesAboutMe_P100_A302_14248	AA	M	AA	O

Table 2.2.3.1.2

DIF Analysis and Summary: Writ 1 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W01B_SI_Centers_P100_14241	AA	F	AA	O
2.W01C_MS_FlowerFruit_402_14960	AA	M	AA	O
3.W01C_IT_BirdFeeder_401_14475	AA	F	AA	H

2.2.3.2 Grades 2–3

Table 2.2.3.2.1

DIF Analysis and Summary: Writ 2-3 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	1	2	1
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W23A_SI_WritingTime_P100_14257	AA	M	AA	H
2.W23A_LA_FamilyTrip_402_14789	AA	F	AA	H
3.W23A_MS_AnimalHomes_402_14792	AA	M	AA	O

Table 2.2.3.2.2

DIF Analysis and Summary: Writ 2-3 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W23B_SI_GrownUpJobs_203_P100_A302_14260	AA	F	AA	O
2.W23C_MS_HeartRateChanges_402_15549	AA	F	AA	O
3.W23C_IT_Arctic_401_11921	AA	M	AA	H

2.2.3.3 Grades 4–5

Table 2.2.3.3.1

DIF Analysis and Summary: Writ 4-5 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	1	2	1
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W45A_SI_DismissalRules_kawo_P100_A301_KB_Screen_3_14658_14266	AA	M	AA	H
2.W45A_LA_CityGarden_402_Screen_4_15384_17217	AA	F	AA	O
3.W45A_MS_RobinandAlbatross_402_Screen_4_15397_17212	AA	M	AA	H

Table 2.2.3.3.2

DIF Analysis and Summary: Writ 4-5 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W45B_SI_FieldTripRules_MaEsSaNa_P100_A301_KB_Screen_2_14646_14272	AA	F	AA	O
2.W45C_MS_TulipGrowth_402_Screen_4_15416_17207	AA	F	AA	H
3.W45C_IT_MaliEmpire_401_Screen_6_14730_17200	AA	M	AA	O

2.2.3.4 Grades 6–8

Table 2.2.3.4.1

DIF Analysis and Summary: Writ 6-8 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	2	1
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W68A_SI_Clubs_P100_A301_Screen_4_14663_14284	AA	F	AA	O
2.W68A_LA_LibraryScript_402_Screen_4_15371_17193	AA	F	AA	H
3.W68A_MS_HeightComparison_402_Screen_4_14786_17188	AA	M	AA	H

Table 2.2.3.4.2

DIF Analysis and Summary: Writ 6-8 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W68B_SI_SchoolElectronics_P100_A301_Screen_2_14276_14655	AA	F	AA	O
2.W68C_MS_FishpH_402_Screen_5_15418_17176	AA	M	AA	H
3.W68C_IT_Electives_401_Screen_5_14482_17182	AA	F	AA	O

2.2.3.5 Grades 9–12

Table 2.2.3.5.1

DIF Analysis and Summary: Writ 9-12 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	2	1
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W91A_SI_TeacherStudent_402_Screen_3_15474_17170	AA	F	AA	O
2.W91A_LA_Toaster_P100_A301_Screen_4_14665_14290	AA	M	AA	H
3.W91A_MS_WaterTemp_402_Screen_5_15555_17166	AA	F	AA	H

Table 2.2.3.5.2

DIF Analysis and Summary: Writ 9-12 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	1	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.W91B_SI_BestTeacher_P100_A301_Screen_2_14280_14653	AA	F	AA	O
2.W91B_MS_Viscosity_P100_A203_Screen_2_14281_14652	AA	M	AA	H
3.W91C_IT_TeslaLatimer_401_Screen_4_14474_17159	AA	M	AA	O

2.2.4 Speaking

2.2.4.1 Grade 1

Table 2.2.4.1.1

DIF Analysis and Summary: Spek 1 Pre-A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	2	1
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S01AP_SI_ClassroomDesk_401_V1_Screen_4_P1_14494	AA	M	AA	O
2.S01AP_LS_ParkRanger_402_Screen_4_P1_15201	AA	F	AA	H
3.S01AP_MS_Elephants_402_Screen_4_P1_15004	AA	F	AA	H

Table 2.2.4.1.2

DIF Analysis and Summary: Spek 1 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	4	3	3
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S01AP_SI_ClassroomDesk_401_V1_Screen_4_P1_14494	AA	M	AA	H
2.S01AC_SI_ClassroomDesk_401_V1_Screen_10_P3_14495_14603	AA	F	AA	O
3.S01AP_LS_ParkRanger_402_Screen_4_P1_15201	AA	F	AA	H
4.S01AC_LS_ParkRanger_402_Screen_10_P3_15214	AA	F	AA	O
5.S01AP_MS_Elephants_402_Screen_4_P1_15004	AA	F	AA	O
6.S01AC_MS_Elephants_402_Screen_11_P3_15011	AA	M	AA	H

Table 2.2.4.1.3

DIF Analysis and Summary: Spek 1 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	4	2	3	3
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S01AC_SI_ClassroomDesk_401_V1_Screen_10_P3_14495_14603	AA	M	AA	O
2.S01C_SI_ClassroomDesk_401_V2_Screen_16_P5_14604	AA	F	AA	H
3.S01AC_LS_ParkRanger_402_Screen_10_P3_15214	AA	F	AA	O
4.S01C_LS_ParkRanger_402_Screen_18_P5_15233	AA	M	AA	O
5.S01AC_MS_Elephants_402_Screen_11_P3_15011	AA	M	AA	H
6.S01C_MS_Elephants_402_Screen_19_P5_15019	AA	M	AA	H

2.2.4.2 *Grades 2–3*

Table 2.2.4.2.1

DIF Analysis and Summary: Spek 2-3 Pre-A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S23AP_SI_Playground_401_Screen_4_P1_14579	AA	F	AA	O
2.S23AP_LS_PlaygroundAide_402_Screen_4_P1_15143	AA	M	AA	O
3.S23AP_MS_RampHeight_402_Screen_4_P1_15085	AA	F	AA	H

Table 2.2.4.2.2

DIF Analysis and Summary: Spek 2-3 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	5	2	4
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S23AP_SI_Playground_401_Screen_4_P1_14579	AA	F	AA	O
2.S23AC_SI_Playground_401_Screen_12_P3_14580_14569	AA	M	AA	H
3.S23AP_LS_PlaygroundAide_402_Screen_4_P1_15143	AA	F	AA	O
4.S23AC_LS_PlaygroundAide_402_Screen_10_P3_15149	AA	F	AA	O
5.S23AP_MS_RampHeight_402_Screen_4_P1_15085	AA	F	AA	O
6.S23AC_MS_RampHeight_402_Screen_11_P3_15092	AA	F	AA	H

Table 2.2.4.2.3

DIF Analysis and Summary: Spek 2-3 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	5	3	3
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S23AC_SI_Playground_401_Screen_12_P3_14580_14569	AA	M	AA	H
2.S23C_SI_Playground_401_V2_Screen_17_P5_14570	AA	F	AA	O
3.S23AC_LS_PlaygroundAide_402_Screen_10_P3_15149	AA	F	AA	O
4.S23C_LS_PlaygroundAide_402_Screen_18_P5_15157	AA	F	AA	O
5.S23AC_MS_RampHeight_402_Screen_11_P3_15092	AA	F	AA	H
6.S23C_MS_RampHeight_402_Screen_18_P5_15102	AA	F	AA	H

2.2.4.3 Grades 4–5

Table 2.2.4.3.1

DIF Analysis and Summary: Spek 4-5 Pre-A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	2	1
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S45AP_SI_NewStudent_401_Screen_4_P1_14500	AA	M	AA	H
2.S45AP_LS_ShoeTech_402_Screen_4_P1_15444	AA	F	AA	H
3.S45AP_MS_Circuits_402_Screen_4_P1_15077	AA	F	AA	O

Table 2.2.4.3.2

DIF Analysis and Summary: Spek 4-5 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	4	1	5
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S45AP_SI_NewStudent_401_Screen_4_P1_14500	AA	F	AA	O
2.S45AC_SI_NewStudent_401_Screen_8_P3_14501_14502	AA	F	AA	O
3.S45AP_LS_ShoeTech_402_Screen_4_P1_15444	AA	F	AA	O
4.S45AC_LS_ShoeTech_402_Screen_10_P3_15450	AA	M	AA	O
5.S45AP_MS_Circuits_402_Screen_4_P1_15077	AA	F	AA	O
6.S45AC_MS_Circuits_402_Screen_11_P3_15174	AA	M	AA	H

Table 2.2.4.3.3

DIF Analysis and Summary: Spek 4-5 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	3	3	3	3
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S45AC_SI_NewStudent_401_Screen_8_P3_14501_14502	AA	F	AA	O
2.S45C_SI_NewStudent_401_Screen_9_P5_14503	AA	F	AA	O
3.S45AC_LS_ShoeTech_402_Screen_10_P3_15450	AA	F	AA	H
4.S45C_LS_ShoeTech_402_Screen_17_P5_15457	AA	M	AA	H
5.S45AC_MS_Circuits_402_Screen_11_P3_15174	AA	M	AA	O
6.S45C_MS_Circuits_402_Screen_18_P5_15254	AA	M	AA	H

2.2.4.4 *Grades 6–8*

Table 2.2.4.4.1

DIF Analysis and Summary: Spek 6-8 Pre-A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	1	2	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S68AP_SI_PeerReviewing_401_Screen_4_P1_14510	AA	F	AA	O
2.S68AP_LS_Dart_402_Screen_4_P1_15192	AA	M	AA	H
3.S68AP_MS_Radar_402_Screen_4_P1_15319	AA	F	AA	O

Table 2.2.4.4.2

DIF Analysis and Summary: Spek 6-8 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	4	4	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S68AP_SI_PeerReviewing_401_Screen_4_P1_14510	AA	F	AA	H
2.S68AC_SI_PeerReviewing_401_Screen_13_P3_14511_14504	AA	F	AA	H
3.S68AP_LS_Dart_402_Screen_4_P1_15192	AA	F	AA	H
4.S68AC_LS_Dart_402_Screen_13_P3_15208	AA	M	AA	O
5.S68AP_MS_Radar_402_Screen_4_P1_15319	AA	F	AA	O
6.S68AC_MS_Radar_402_Screen_11_P3_15326	AA	M	AA	H

Table 2.2.4.4.3

DIF Analysis and Summary: Spek 6-8 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	4	2	2	4
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S68AC_SI_PeerReviewing_401_Screen_13_P3_14511_14504	AA	F	AA	O
2.S68C_SI_PeerReviewing_401_Screen_17_P5_14505	AA	F	AA	O
3.S68AC_LS_Dart_402_Screen_13_P3_15208	AA	M	AA	O
4.S68C_LS_Dart_402_Screen_21_P5_15219	AA	M	AA	H
5.S68AC_MS_Radar_402_Screen_11_P3_15326	AA	M	AA	H
6.S68C_MS_Radar_402_Screen_19_P5_15340	AA	M	AA	O

2.2.4.5 Grades 9–12

Table 2.2.4.5.1

DIF Analysis and Summary: Spek 9-12 Pre-A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	1	1	2
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S91AP_SI_ClassSchedules_402_Screen_4_P1_15500	AA	F	AA	O
2.S91AP_LS_WPA_402_Screen_4_P1_15535	AA	M	AA	H
3.S91AP_MS_Carbon_402_Screen_4_P1_15479	AA	M	AA	O

Table 2.2.4.5.2

DIF Analysis and Summary: Spek 9-12 A S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	2	4	2	4
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S91AP_SI_ClassSchedules_402_Screen_4_P1_15500	AA	F	AA	O
2.S91AC_SI_ClassSchedules_402_Screen_10_P3_15506	AA	F	AA	O
3.S91AP_LS_WPA_402_Screen_4_P1_15535	AA	F	AA	O
4.S91AC_LS_WPA_402_Screen_10_P3_15541	AA	M	AA	H
5.S91AP_MS_Carbon_402_Screen_4_P1_15479	AA	F	AA	H
6.S91AC_MS_Carbon_402_Screen_12_P3_15487	AA	M	AA	O

Table 2.2.4.5.3

DIF Analysis and Summary: Spek 9-12 B/C S402 Online

DIF Summary	Male/Female		Hispanic/Other	
DIF Level	Favoring Male (M)	Favoring Female (F)	Favoring Hispanic (H)	Favoring Other (O)
AA	3	3	1	5
BB	0	0	0	0
CC	0	0	0	0
Name	Male/Female		Hispanic/Other	
	DIF Level	Favored Group	DIF Level	Favored Group
1.S91AC_SI_ClassSchedules_402_Screen_10_P3_15506	AA	F	AA	O
2.S91C_SI_ClassSchedules_402_Screen_18_P5_15514	AA	F	AA	O
3.S91AC_LS_WPA_402_Screen_10_P3_15541	AA	M	AA	H
4.S91C_LS_WPA_402_Screen_17_P5_15548	AA	F	AA	O
5.S91AC_MS_Carbon_402_Screen_12_P3_15487	AA	M	AA	O
6.S91C_MS_Carbon_402_Screen_20_P5_15495	AA	M	AA	O

2.3 Raw Score Distribution for Speaking and Writing

Figures and tables in this section provide raw score information for Speaking and Writing. Raw score distribution is presented by grade-level cluster and also by grade-level cluster and tier. For each test form, the figure shows the distribution of the raw scores. The horizontal axis shows the raw scores. The vertical axis shows the number of students (count). Each bar shows how many students received each raw score.

The tables in this section show, by grade and by total for the grade-level cluster:

- The number of students in the analyses (the number of students who were not absent, invalid, refused, exempt, or in the wrong grade-level cluster)
- The minimum observed raw score
- The maximum observed raw score
- The mean (average) raw score
- The standard deviation (std. dev.) of the raw scores

Note that ACCESS Online is tiered and each tier consists of different number of total possible raw score points, therefore, for figures which show raw score distributions by grade-level cluster across tiers, the effect of collapsing raw score distributions across tiers can be observed.

2.3.1 Listening

The ACCESS 2.0 Online Listening test is a multistage adaptive assessment. As students do not all take the same set of items in the test, raw score distributions are not presented.

2.3.2 Reading

The ACCESS 2.0 Online Reading test is a multistage adaptive assessment. As students do not all take the same set of items in the test, raw score distributions are not presented.

2.3.3 Writing

2.3.3.1 Grade 1

Table 2.3.3.1.1

Raw Score Descriptive Statistics: Writ 1 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	142,261	0	27	14.34	4.81
Total	142,261	0	27	14.34	4.81

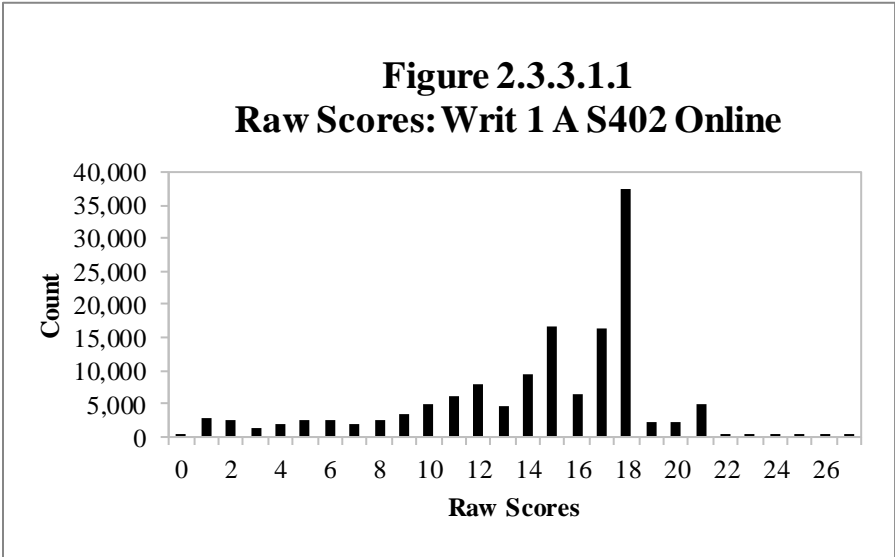


Table 2.3.3.1.2

Raw Score Descriptive Statistics: Writ 1 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	39,883	0	49	27.51	5.33
Total	39,883	0	49	27.51	5.33

Figure 2.3.3.1.2
Raw Scores: Writ 1 B/C S402 Online

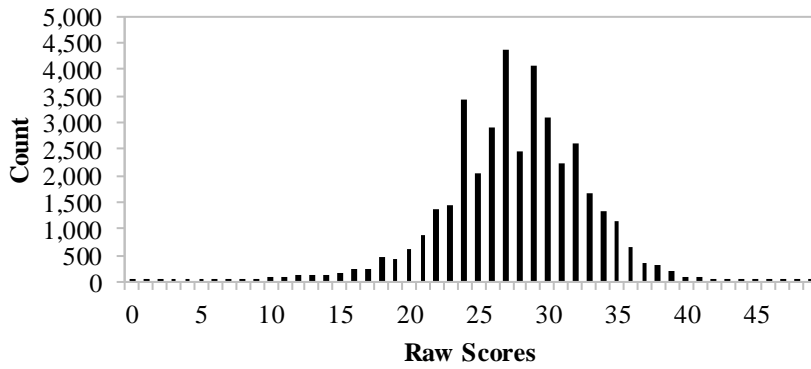
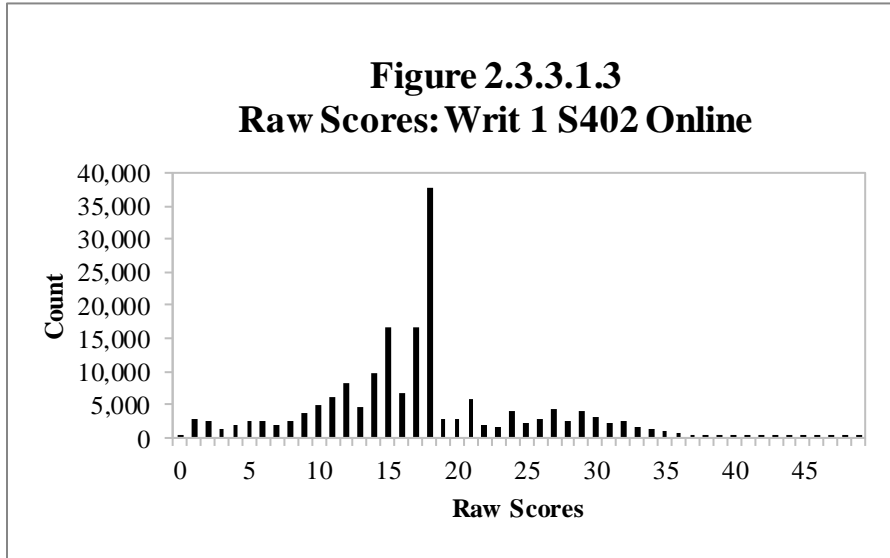


Table 2.3.3.1.3

Raw Score Descriptive Statistics: Writ 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	182,144	0	49	17.23	7.34
Total	182,144	0	49	17.23	7.34

Figure 2.3.3.1.3
Raw Scores: Writ 1 S402 Online



2.3.3.2 Grades 2–3

Table 2.3.3.2.1

Raw Score Descriptive Statistics: Writ 2-3 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	55,626	0	18	9.94	3.72
3	37,763	0	20	10.64	3.68
Total	93,389	0	20	10.22	3.72

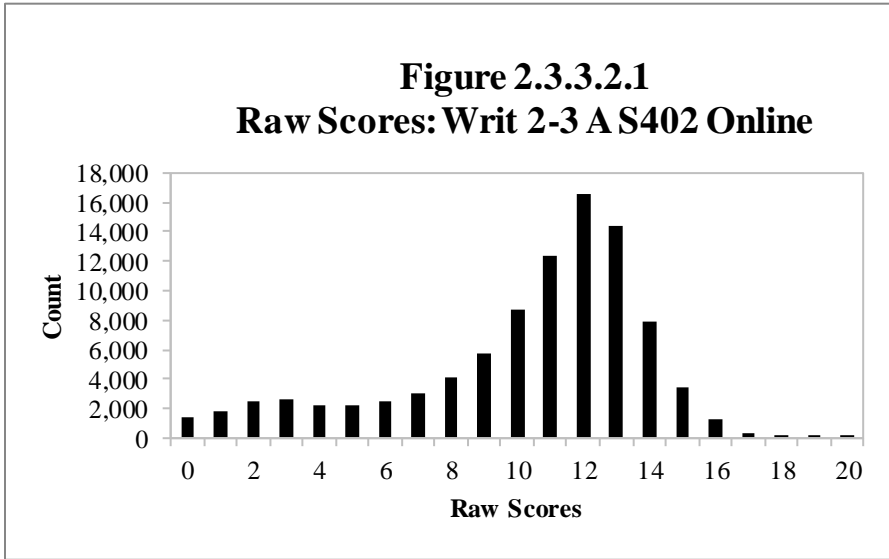


Table 2.3.3.2.2

Raw Score Descriptive Statistics: Writ 2-3 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	131,222	0	47	26.11	4.96
3	155,236	0	50	29.08	4.71
Total	286,458	0	50	27.72	5.05

Figure 2.3.3.2.2
Raw Scores: Writ 2-3 B/C S402 Online

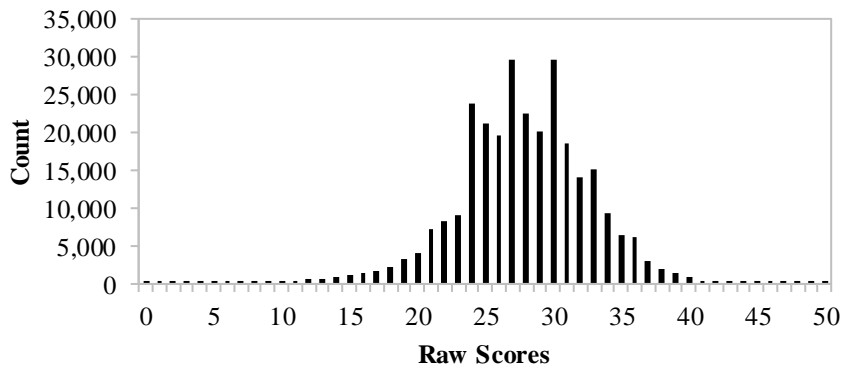
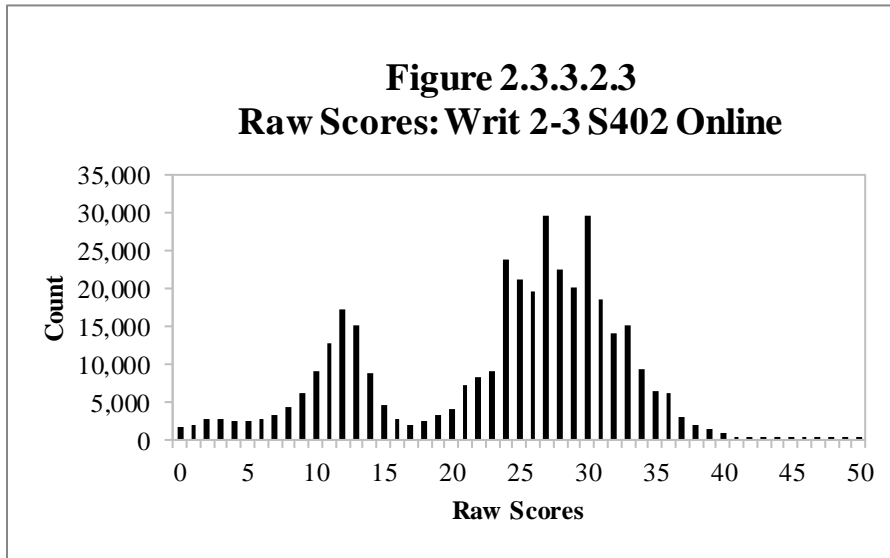


Table 2.3.3.2.3

Raw Score Descriptive Statistics: Writ 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	186,848	0	47	21.29	8.72
3	192,999	0	50	25.47	8.60
Total	379,847	0	50	23.42	8.91



2.3.3.3 Grades 4–5

Table 2.3.3.3.1

Raw Score Descriptive Statistics: Writ 4-5 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	22,106	0	20	7.44	4.16
5	21,069	0	22	8.36	4.19
Total	43,175	0	22	7.89	4.20

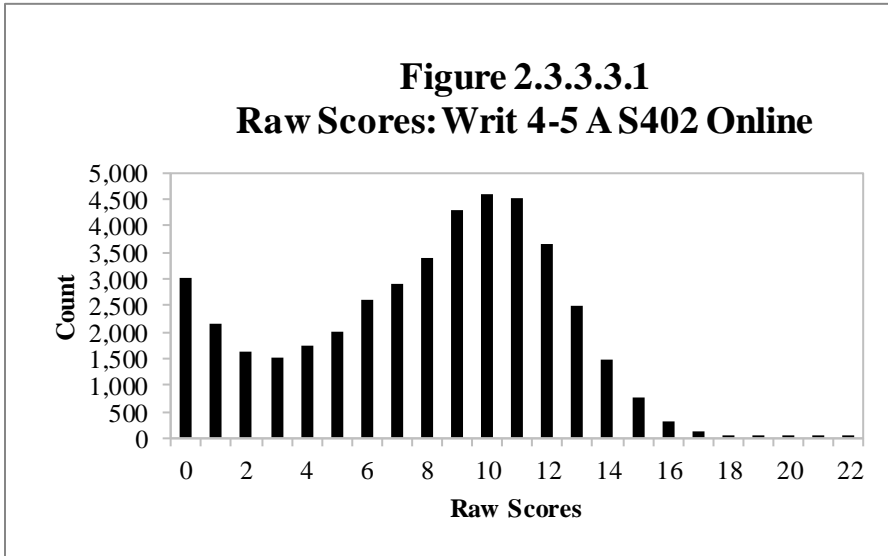


Table 2.3.3.3.2

Raw Score Descriptive Statistics: Writ 4-5 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	151,230	0	51	27.07	6.06
5	93,941	0	52	28.84	5.66
Total	245,171	0	52	27.75	5.97

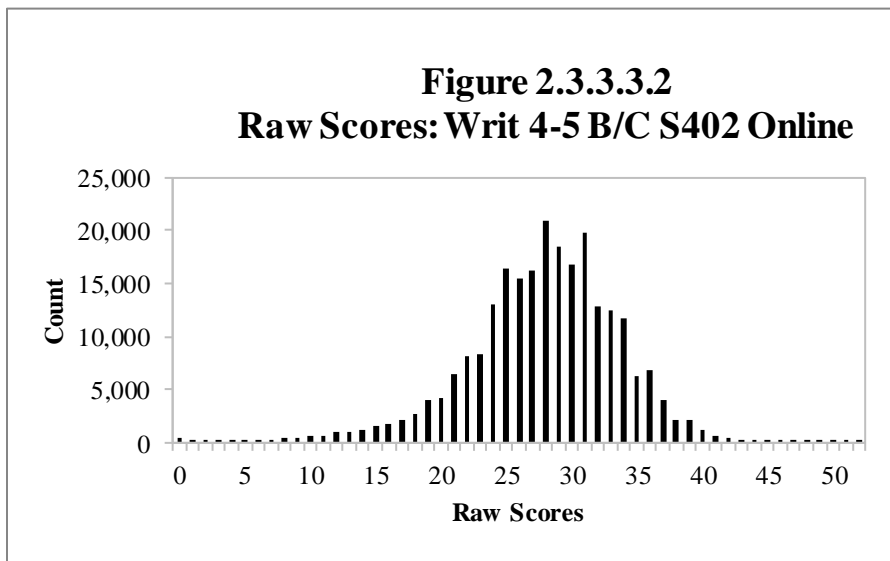
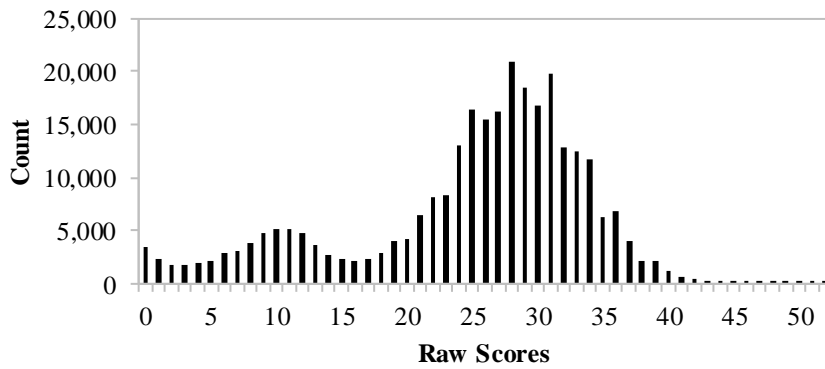


Table 2.3.3.3.3

Raw Score Descriptive Statistics: Writ 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	173,336	0	51	24.57	8.78
5	115,010	0	52	25.09	9.60
Total	288,346	0	52	24.78	9.12

Figure 2.3.3.3.3
Raw Scores: Writ 4-5 S402 Online



2.3.3.4 Grades 6–8

Table 2.3.3.4.1

Raw Score Descriptive Statistics: Writ 6-8 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	30,617	0	20	9.75	4.08
7	34,710	0	22	10.54	4.06
8	34,368	0	23	11.04	4.04
Total	99,695	0	23	10.47	4.09

Figure 2.3.3.4.1
Raw Scores: Writ 6-8 A S402 Online

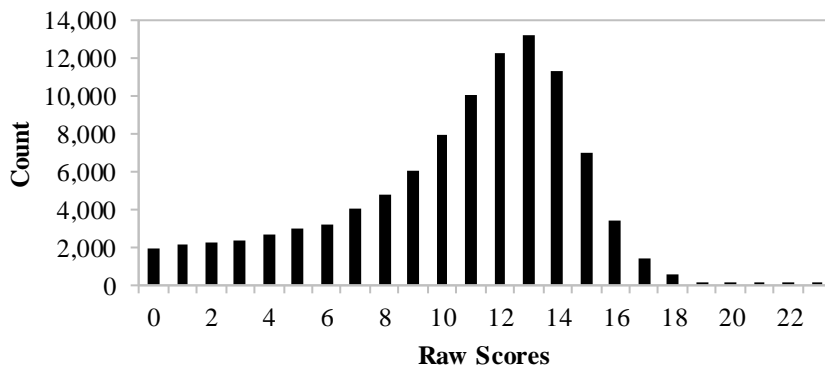


Table 2.3.3.4.2

Raw Score Descriptive Statistics: Writ 6-8 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	55,801	0	52	29.29	4.84
7	48,265	0	52	30.89	4.64
8	46,768	0	54	32.22	4.52
Total	150,834	0	54	30.71	4.83

Figure 2.3.3.4.2
Raw Scores: Writ 6-8 B/C S402 Online

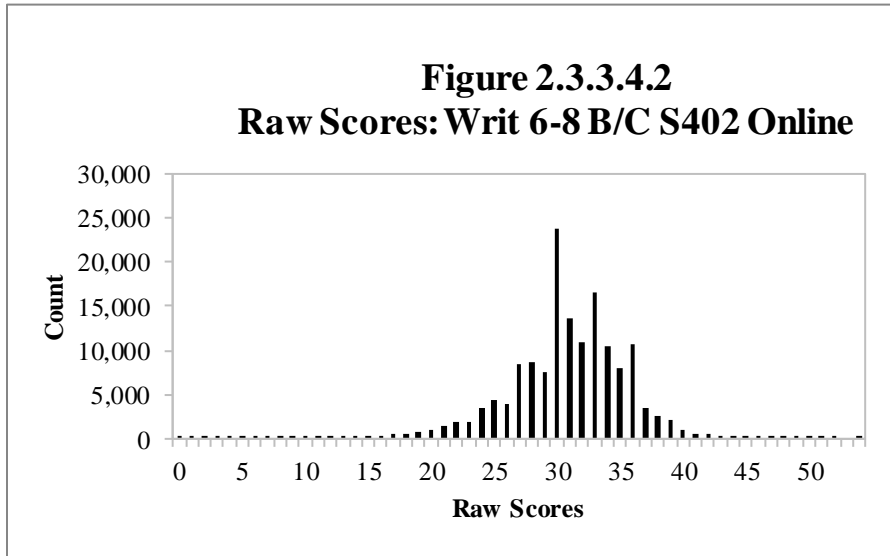
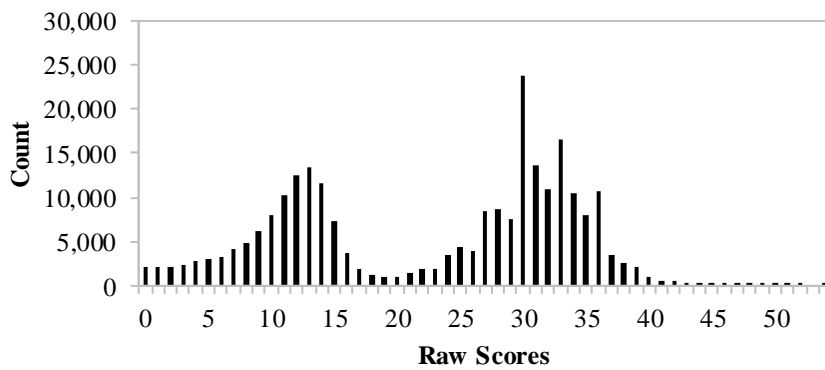


Table 2.3.3.4.3

Raw Score Descriptive Statistics: Writ 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	86,418	0	52	22.37	10.41
7	82,975	0	52	22.38	10.96
8	81,136	0	54	23.25	11.32
Total	250,529	0	54	22.66	10.90

Figure 2.3.3.4.3
Raw Scores: Writ 6-8 S402 Online



2.3.3.5 Grades 9–12

Table 2.3.3.5.1

Raw Score Descriptive Statistics: Writ 9-12 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	41,382	0	24	10.34	4.72
10	32,574	0	24	11.13	4.20
11	22,426	0	25	12.04	4.04
12	14,226	0	24	12.28	4.01
Total	110,608	0	25	11.17	4.41

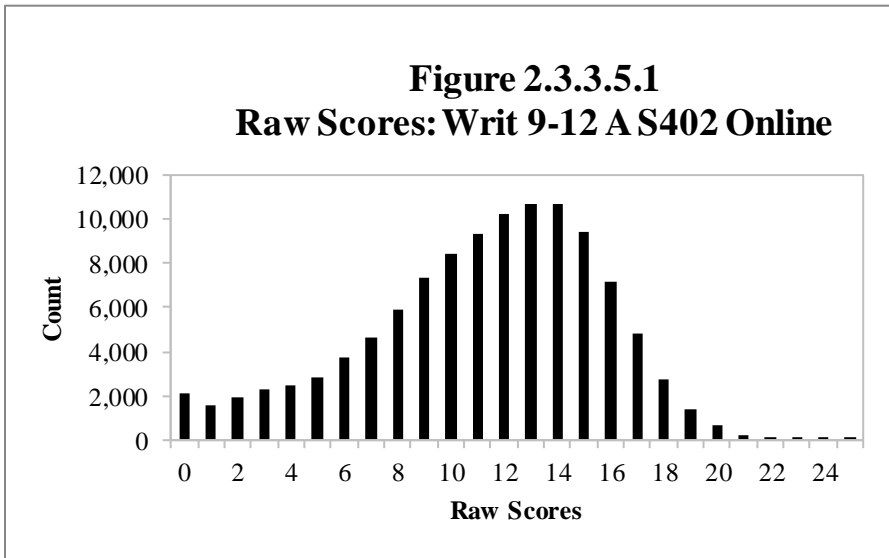


Table 2.3.3.5.2

Raw Score Descriptive Statistics: Writ 9-12 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	53,008	0	54	31.36	6.76
10	53,515	0	54	32.15	6.85
11	40,015	0	54	32.68	6.91
12	29,406	0	54	32.28	7.21
Total	175,944	0	54	32.05	6.92

Figure 2.3.3.5.2
Raw Scores: Writ 9-12 B/C S402 Online

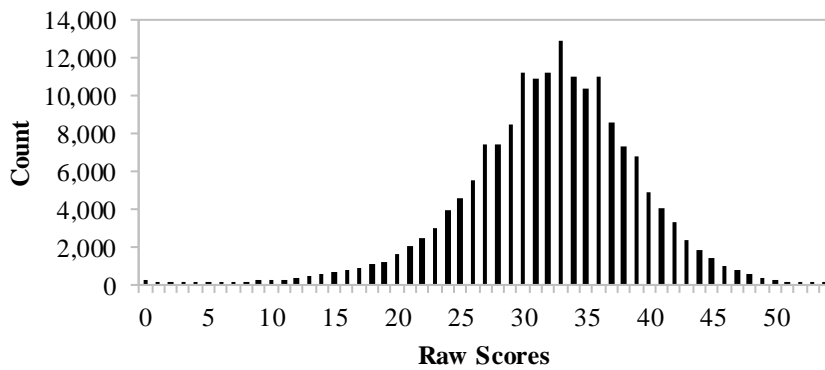
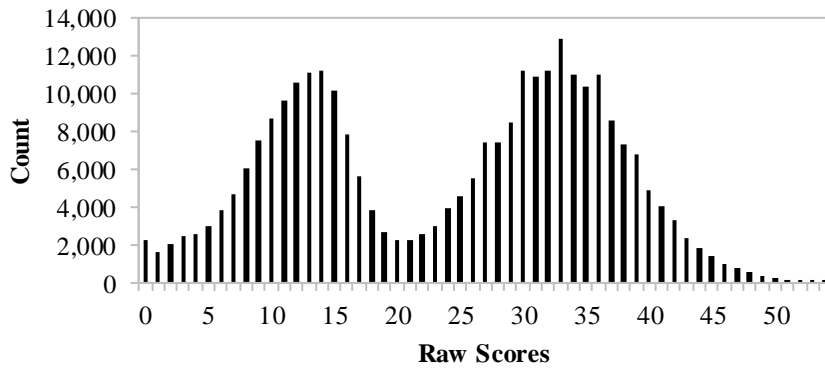


Table 2.3.3.5.3

Raw Score Descriptive Statistics: Writ 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	94,390	0	54	22.15	12.01
10	86,089	0	54	24.20	11.82
11	62,441	0	54	25.27	11.60
12	43,632	0	54	25.76	11.32
Total	286,552	0	54	23.99	11.84

Figure 2.3.3.5.3
Raw Scores: Writ 9-12 S402 Online



2.3.4 Speaking

ACCESS Online Speaking domain has three tiers: Pre-A, A, and B/C and each tier consists of a different number of tasks with a different number of total possible raw score points (See Part I). Note that Speaking Tier Pre-A is intended for students who perform at less than chance on the Listening and Reading test, and is intended to meet the needs of students in very early stages of English language development and that the Pre-A tasks were purposely designed to not over-challenge the students. Therefore, the total possible raw score points for Pre-A are only six.

2.3.4.1 Grade 1

Table 2.3.4.1.1

Raw Score Descriptive Statistics: Spek 1 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	4,437	0	6	4.42	2.07
Total	4,437	0	6	4.42	2.07

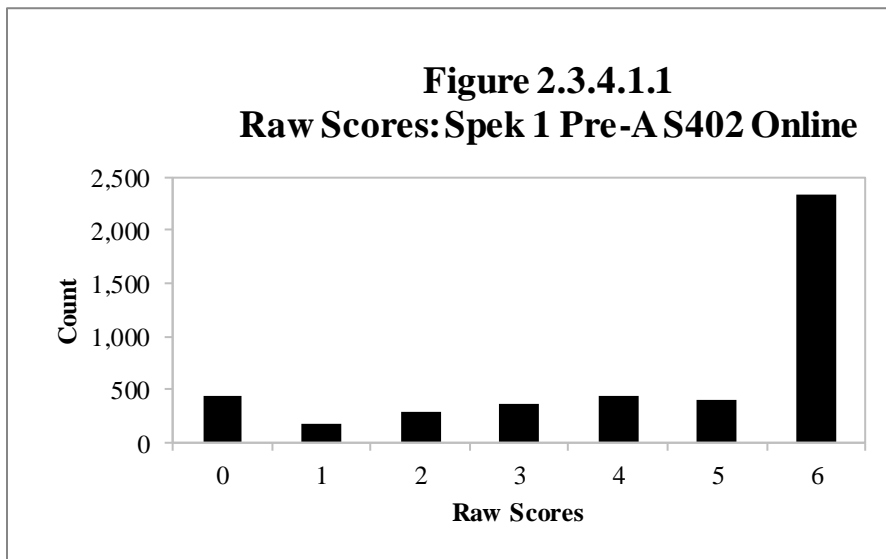


Table 2.3.4.1.2

Raw Score Descriptive Statistics: Spek 1 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	59,144	0	18	10.11	3.14
Total	59,144	0	18	10.11	3.14

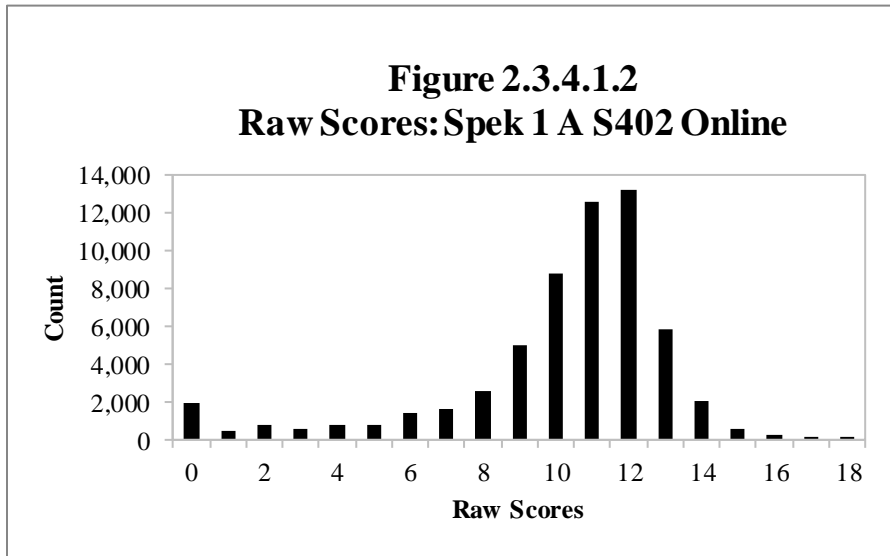


Table 2.3.4.1.3

Raw Score Descriptive Statistics: Spek 1 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	111,017	6	30	18.36	3.29
Total	111,017	6	30	18.36	3.29

Figure 2.3.4.1.3
Raw Scores: Spek 1 B/C S402 Online

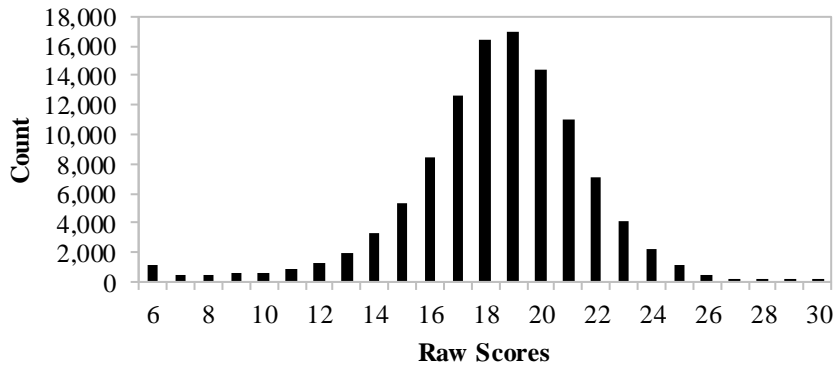
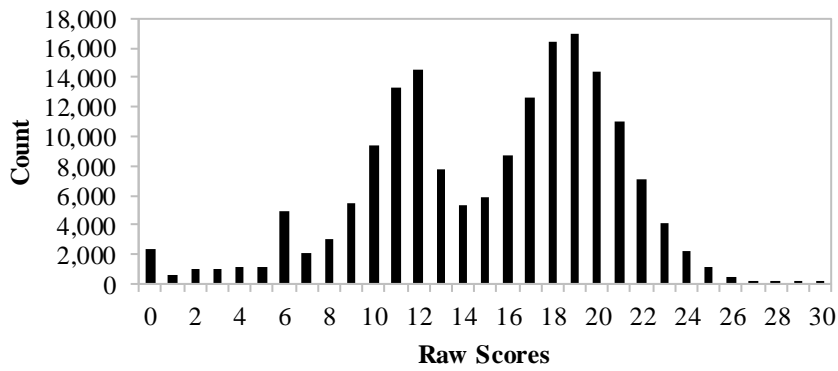


Table 2.3.4.1.4

Raw Score Descriptive Statistics: Spek 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	174,598	0	30	15.21	5.33
Total	174,598	0	30	15.21	5.33

Figure 2.3.4.1.4
Raw Scores: Spek 1 S402 Online



2.3.4.2 Grades 2–3

Table 2.3.4.2.1

Raw Score Descriptive Statistics: Spek 2-3 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	5,115	0	6	4.94	1.83
3	8,553	0	6	5.15	1.67
Total	13,668	0	6	5.07	1.73

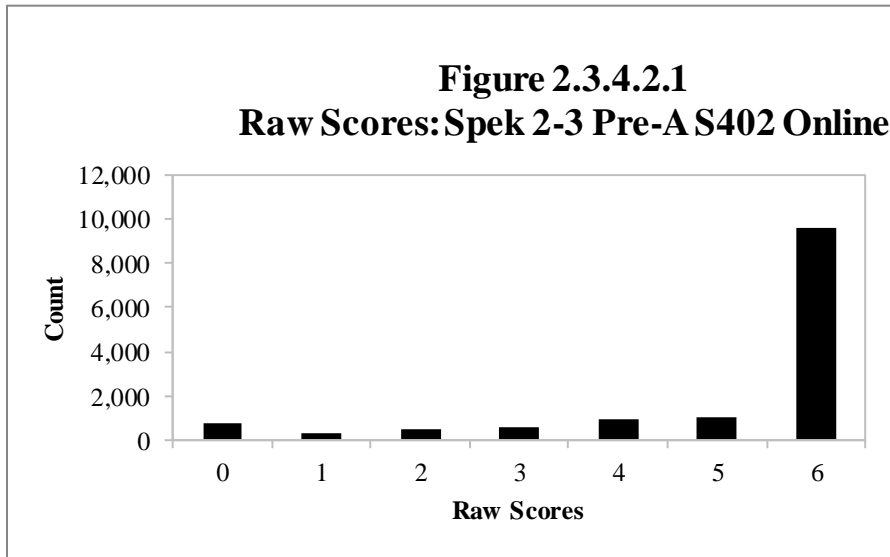


Table 2.3.4.2.2

Raw Score Descriptive Statistics: Spek 2-3 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	42,083	0	18	11.83	2.86
3	38,842	0	18	12.58	2.45
Total	80,925	0	18	12.19	2.70

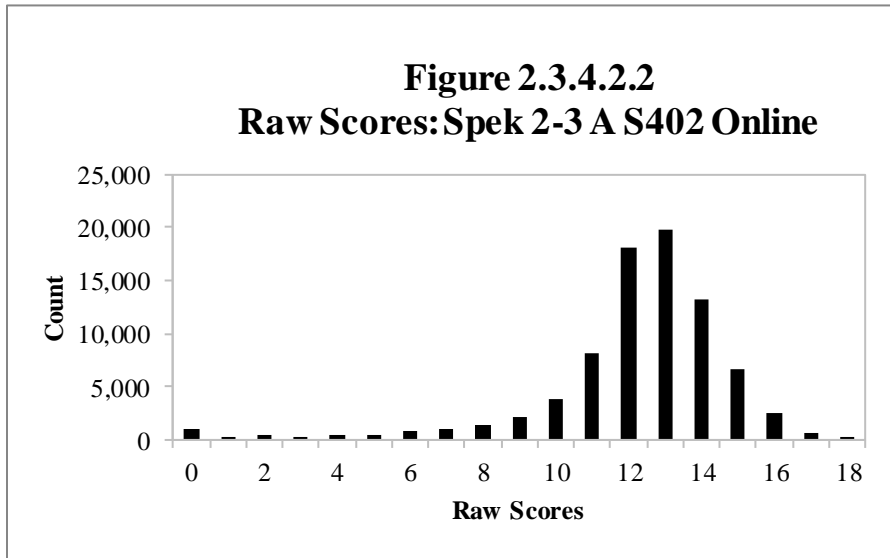


Table 2.3.4.2.3

Raw Score Descriptive Statistics: Spek 2-3 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	129,684	6	30	19.55	3.13
3	135,968	6	30	20.64	3.06
Total	265,652	6	30	20.11	3.14

Figure 2.3.4.2.3
Raw Scores: Spek 2-3 B/C S402 Online

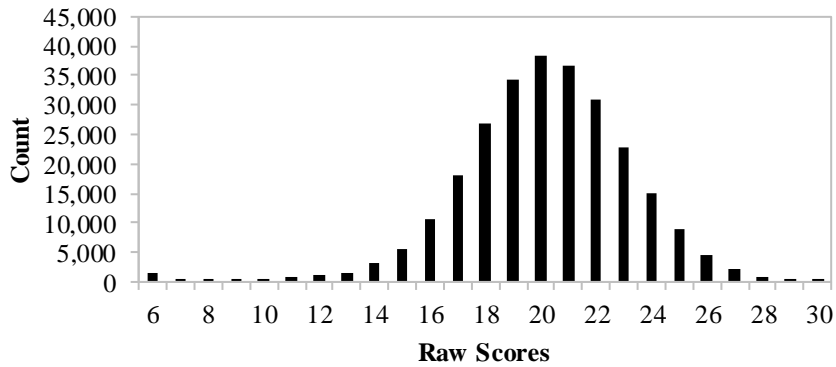
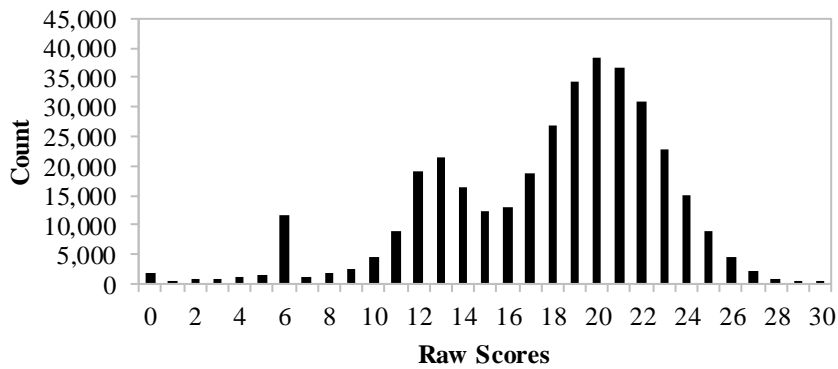


Table 2.3.4.2.4

Raw Score Descriptive Statistics: Spek 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	176,882	0	30	17.29	4.94
3	183,363	0	30	18.21	5.23
Total	360,245	0	30	17.76	5.11

Figure 2.3.4.2.4
Raw Scores: Spek 2-3 S402 Online



2.3.4.3 Grades 4–5

Table 2.3.4.3.1

Raw Score Descriptive Statistics: Spek 4-5 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	1,835	0	6	4.23	2.11
5	3,130	0	6	4.56	1.98
Total	4,965	0	6	4.44	2.03

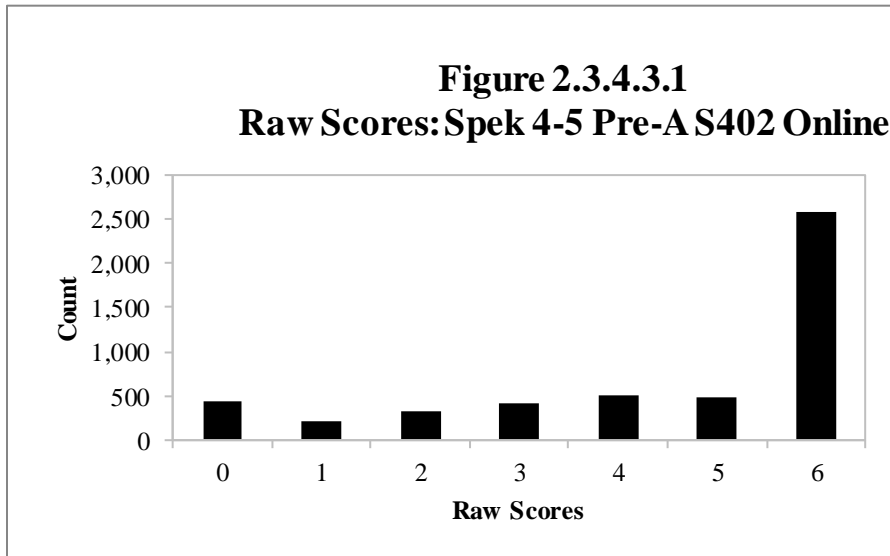


Table 2.3.4.3.2

Raw Score Descriptive Statistics: Spek 4-5 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	16,082	0	17	9.87	2.80
5	11,736	0	17	10.04	2.72
Total	27,818	0	17	9.95	2.77

Figure 2.3.4.3.2
Raw Scores: Spek 4-5 A S402 Online

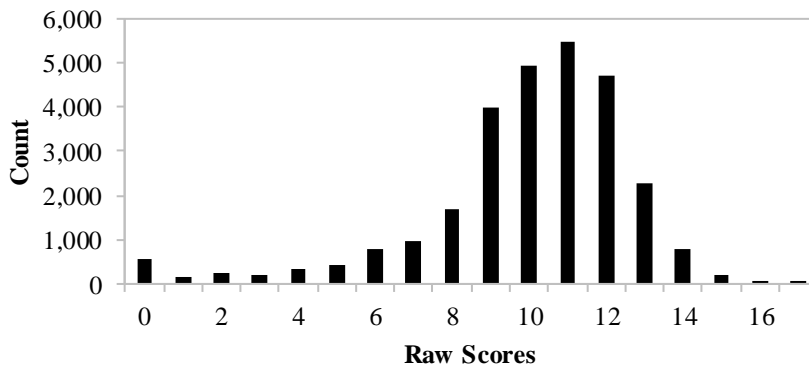


Table 2.3.4.3.3

Raw Score Descriptive Statistics: Spek 4-5 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	158,412	6	30	18.93	3.27
5	101,270	6	30	19.04	3.38
Total	259,682	6	30	18.97	3.31

Figure 2.3.4.3.3
Raw Scores: Spek 4-5 B/C S402 Online

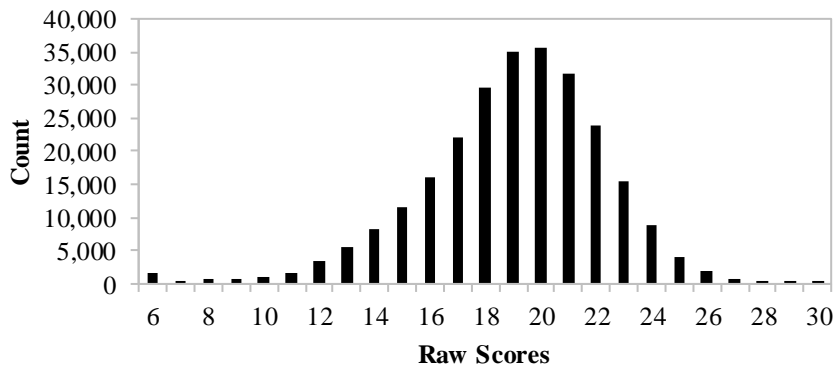
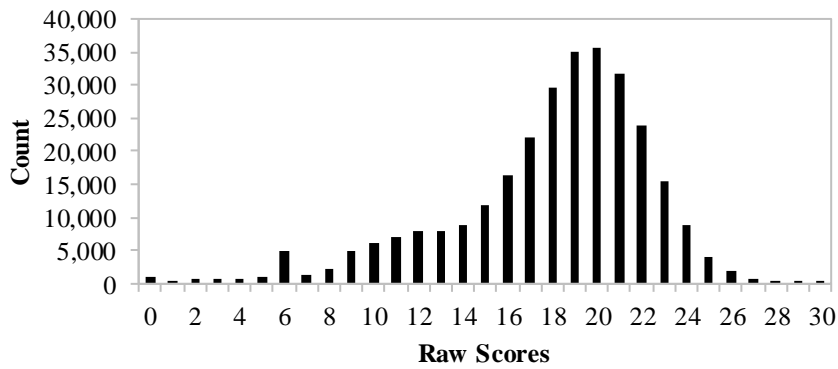


Table 2.3.4.3.4

Raw Score Descriptive Statistics: Spek 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	176,329	0	30	17.95	4.37
5	116,136	0	30	17.74	4.79
Total	292,465	0	30	17.87	4.55

Figure 2.3.4.3.4
Raw Scores: Spek 4-5 S402 Online



2.3.4.4 Grades 6–8

Table 2.3.4.4.1

Raw Score Descriptive Statistics: Spek 6-8 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	2,069	0	6	4.98	1.66
7	2,592	0	6	5.01	1.65
8	4,066	0	6	5.05	1.67
Total	8,727	0	6	5.02	1.66

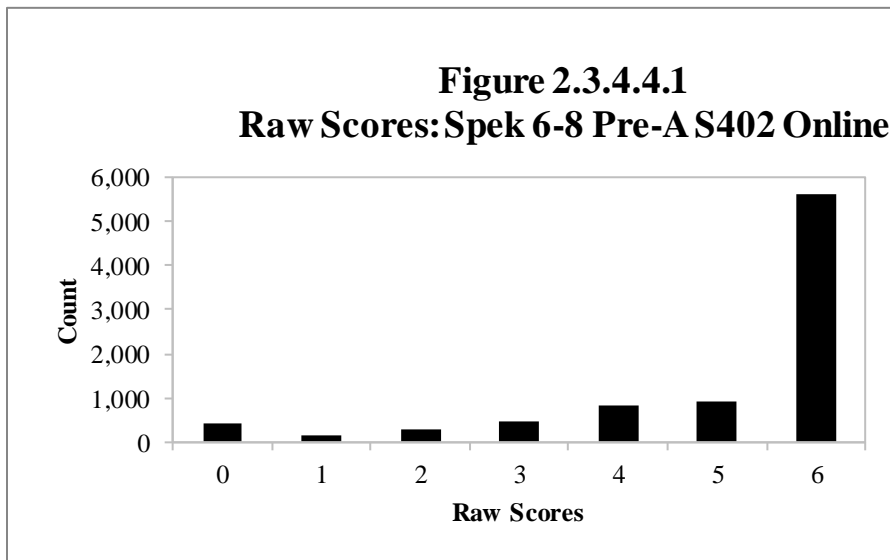


Table 2.3.4.4.2

Raw Score Descriptive Statistics: Spek 6-8 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	18,645	0	18	10.56	2.91
7	14,899	0	18	10.17	3.08
8	24,668	0	18	11.04	2.93
Total	58,212	0	18	10.66	2.98

Figure 2.3.4.4.2
Raw Scores: Spek 6-8 A S402 Online

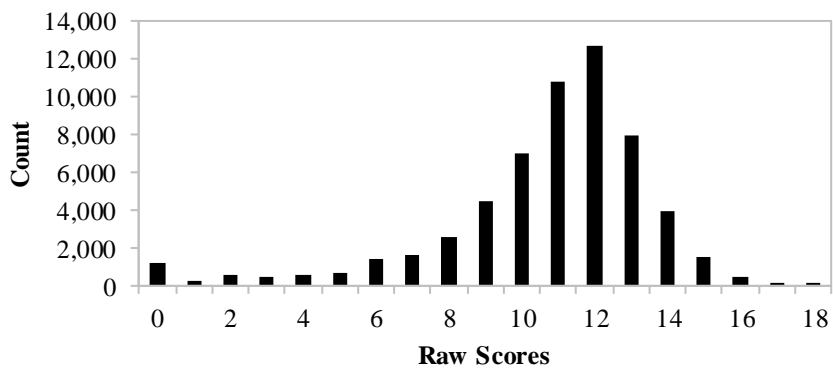


Table 2.3.4.4.3

Raw Score Descriptive Statistics: Spek 6-8 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	66,314	6	29	17.87	3.24
7	65,607	6	30	18.07	3.45
8	52,605	6	30	18.87	3.39
Total	184,526	6	30	18.23	3.38

Figure 2.3.4.4.3
Raw Scores: Spek 6-8 B/C S402 Online

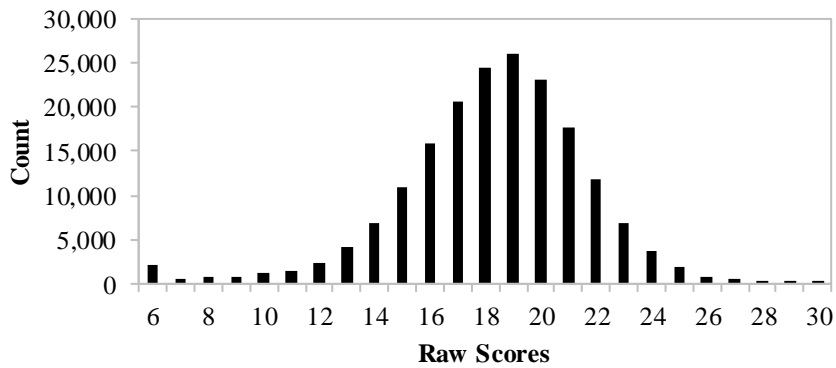
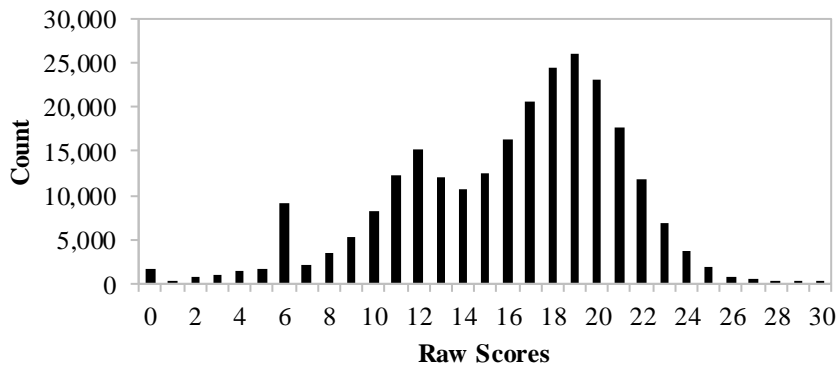


Table 2.3.4.4.4

Raw Score Descriptive Statistics: Spek 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	87,028	0	29	16.00	4.66
7	83,098	0	30	16.25	4.94
8	81,339	0	30	15.81	5.38
Total	251,465	0	30	16.02	5.00

Figure 2.3.4.4.4
Raw Scores: Spek 6-8 S402 Online



2.3.4.5 Grades 9–12

Table 2.3.4.5.1

Raw Score Descriptive Statistics: Spek 9-12 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	3,864	0	6	4.90	1.83
10	5,766	0	6	5.25	1.57
11	4,792	0	6	5.36	1.54
12	3,701	0	6	5.34	1.59
Total	18,123	0	6	5.22	1.63

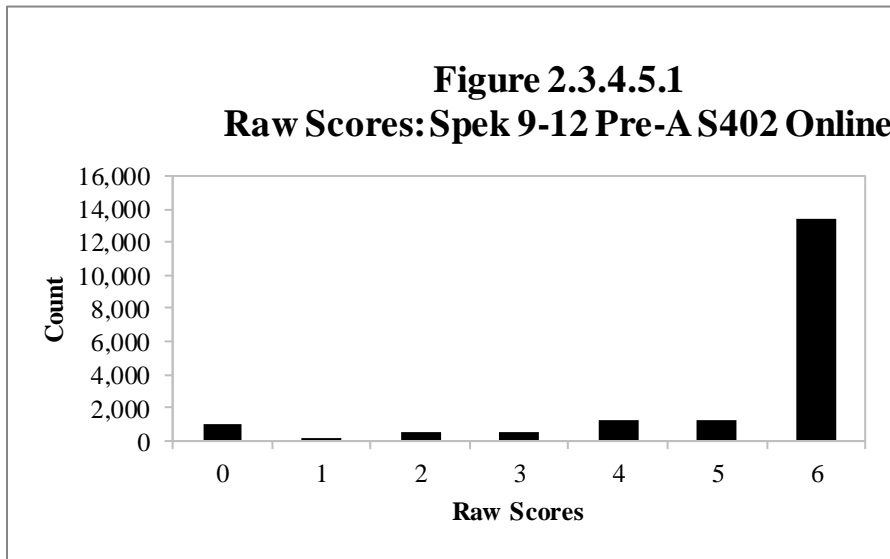


Table 2.3.4.5.2

Raw Score Descriptive Statistics: Spek 9-12 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	54,377	0	17	9.94	2.97
10	36,507	0	17	10.16	2.84
11	14,020	0	16	9.98	2.90
12	21,662	0	18	10.81	2.90
Total	126,566	0	18	10.16	2.93

Figure 2.3.4.5.2
Raw Scores: Spek 9-12 A S402 Online

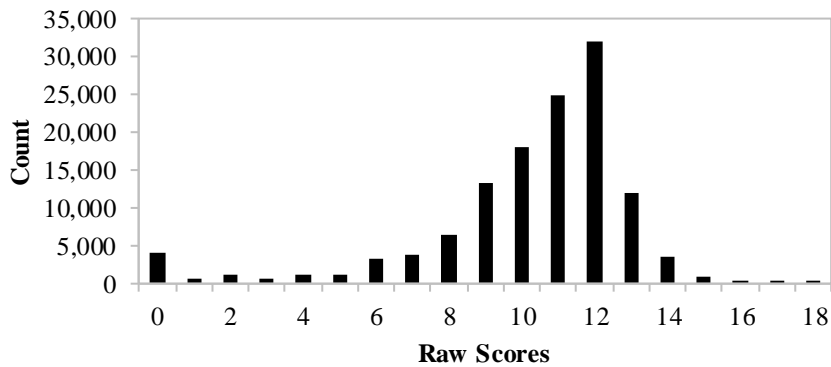


Table 2.3.4.5.3

Raw Score Descriptive Statistics: Spek 9-12 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	36,231	6	30	18.11	3.17
10	43,894	6	30	18.21	3.36
11	43,224	6	30	17.85	3.64
12	18,277	6	30	18.59	3.55
Total	141,626	6	30	18.13	3.43

Figure 2.3.4.5.3
Raw Scores: Spek 9-12 B/C S402 Online

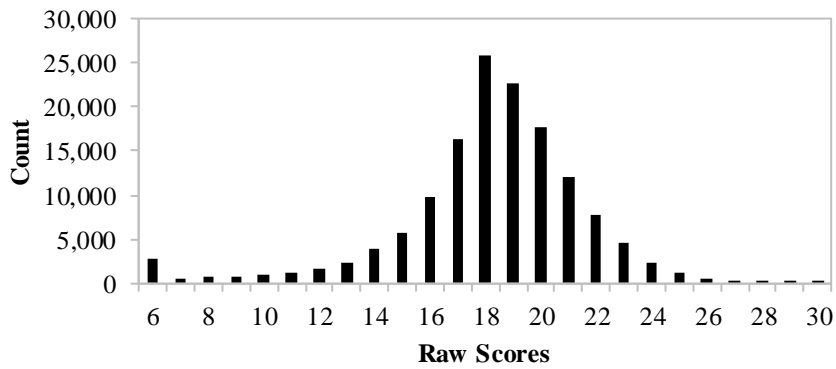
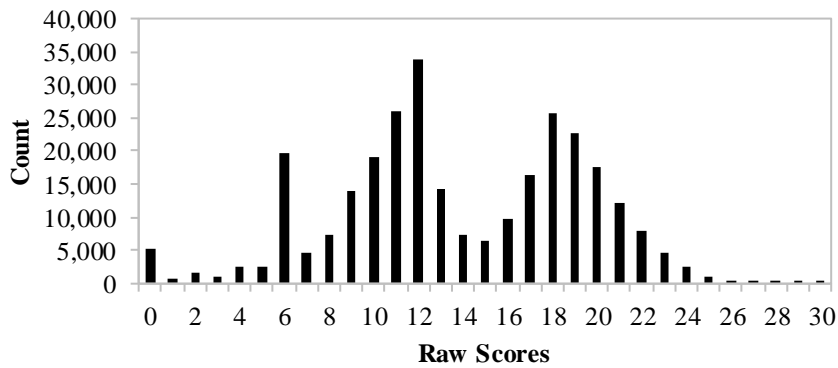


Table 2.3.4.5.4

Raw Score Descriptive Statistics: Spek 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	94,472	0	30	12.87	5.21
10	86,167	0	30	13.94	5.45
11	62,036	0	30	15.11	5.46
12	43,640	0	30	13.61	5.45
Total	286,315	0	30	13.79	5.44

Figure 2.3.4.5.4
Raw Scores: Spek 9-12 S402 Online



2.4 Scale Score Distribution

Figures and tables in this section relate to the ACCESS for ELLs scale scores on each test form. For each test form, raw scores were converted to vertically equated scale scores. Scale score distribution is presented by grade-level cluster. For Writing and Speaking, it is also presented by grade-level cluster and tier.

For each test form, the figure shows the distribution of the scale scores. The scale score distribution is presented as an ungrouped bar graph where observed scale score between the lowest possible to the highest possible scale score is plotted on the horizontal axis and the frequency of occurrence of each observed scale score is plotted on the vertical axis. Since ACCESS has a vertical scale that spans a very wide range, an artifact of showing the frequencies of every observed scale score on the bar graph is that vertical lines in these graphs will appear darker if the observed scale scores are consecutive and lighter if the observed scale scores are further apart.

The tables in this section show, by grade and by total for the grade-level cluster:

- The number of students in the analyses (count)
- The minimum observed scale score
- The maximum observed scale score
- The mean (average) scale score
- The standard deviation (std. dev.) of the scale scores

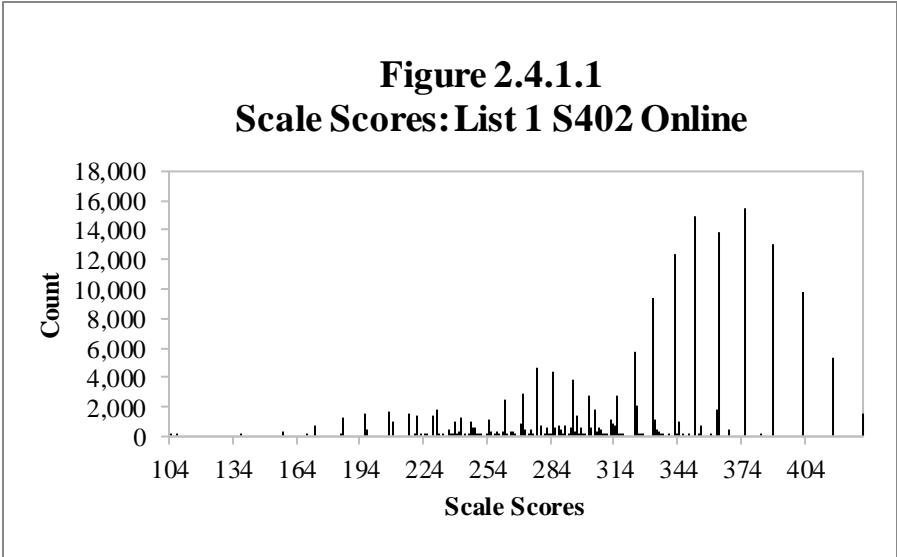
Since ACCESS Online is tiered and depending on the tiers the students were placed or routed to, their possible scale scores will vary; therefore, for figures which show scale score distributions by grade-level cluster across tiers, the effect of collapsing scale score distributions across tiers can be observed.

2.4.1 Listening

2.4.1.1 Grade 1

Table 2.4.1.1
Scale Score Descriptive Statistics: List 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	172,661	104	431	328.79	57.06
Total	172,661	104	431	328.79	57.06

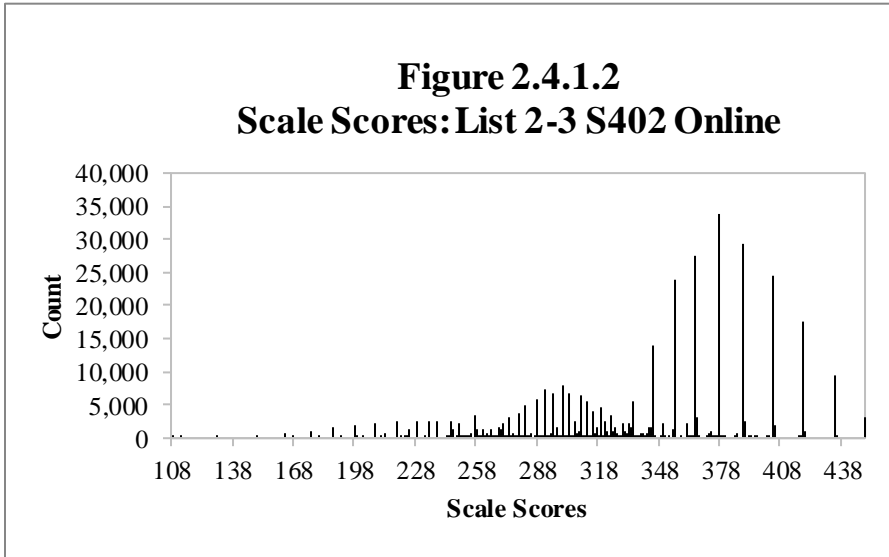


2.4.1.2 Grades 2–3

Table 2.4.1.2

Scale Score Descriptive Statistics: List 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	176,135	108	449	330.26	55.69
3	182,775	112	449	352.21	56.00
Total	358,910	108	449	341.44	56.91

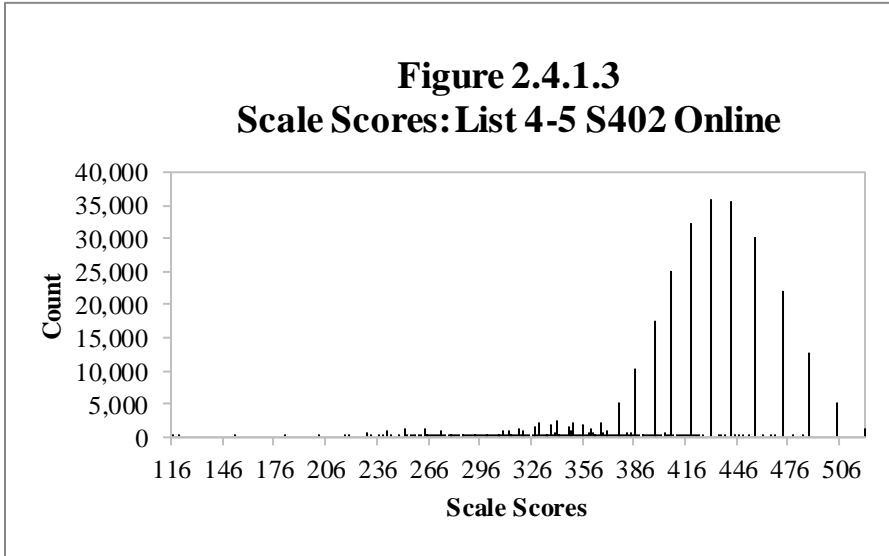


2.4.1.3 Grades 4–5

Table 2.4.1.3

Scale Score Descriptive Statistics: List 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	173,775	116	520	415.45	48.31
5	114,361	120	520	418.86	52.77
Total	288,136	116	520	416.80	50.15

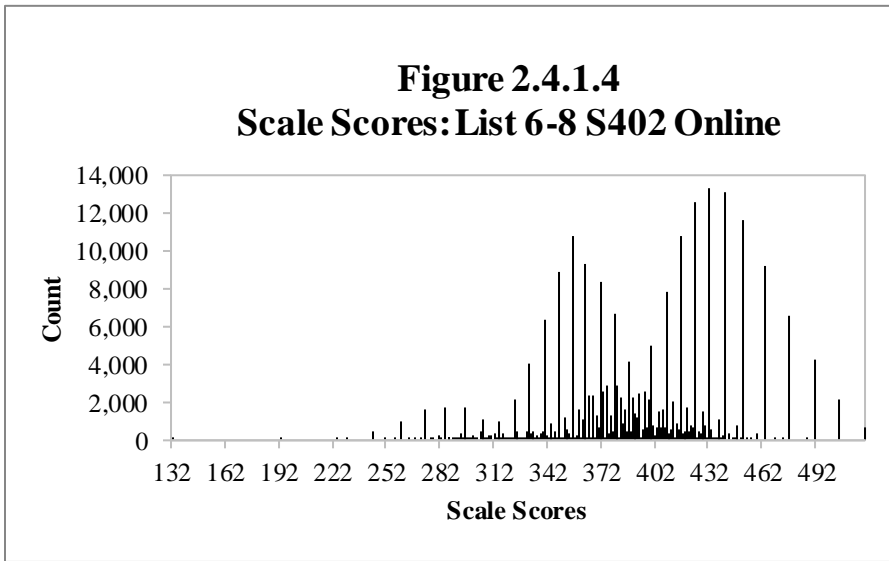


2.4.1.4 Grades 6–8

Table 2.4.1.4

Scale Score Descriptive Statistics: List 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	84,101	193	519	388.97	43.81
7	80,770	193	519	397.12	48.10
8	78,980	132	519	402.55	52.17
Total	243,851	132	519	396.07	48.38

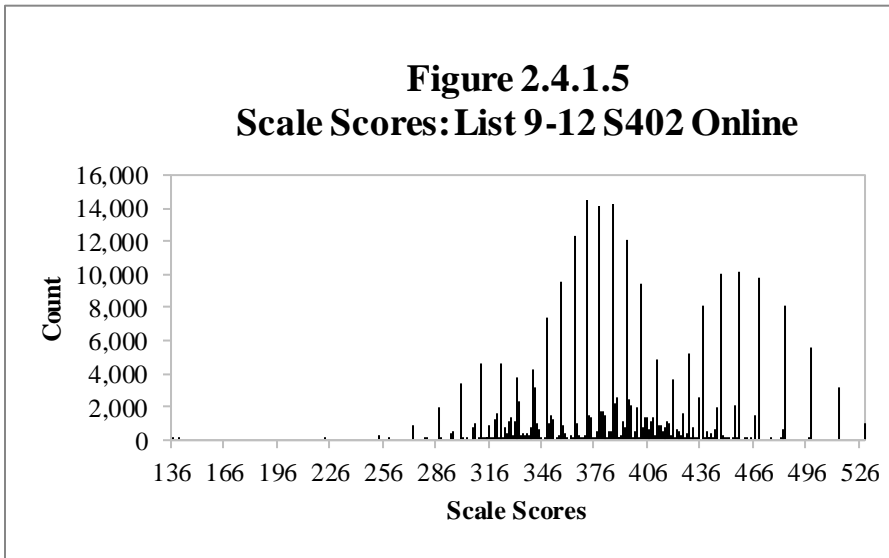


2.4.1.5 Grades 9–12

Table 2.4.1.5

Scale Score Descriptive Statistics: List 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	91,179	136	529	388.85	49.57
10	83,559	140	529	394.57	52.52
11	60,655	223	529	396.50	51.44
12	42,203	223	529	396.05	51.09
Total	277,596	136	529	393.34	51.21



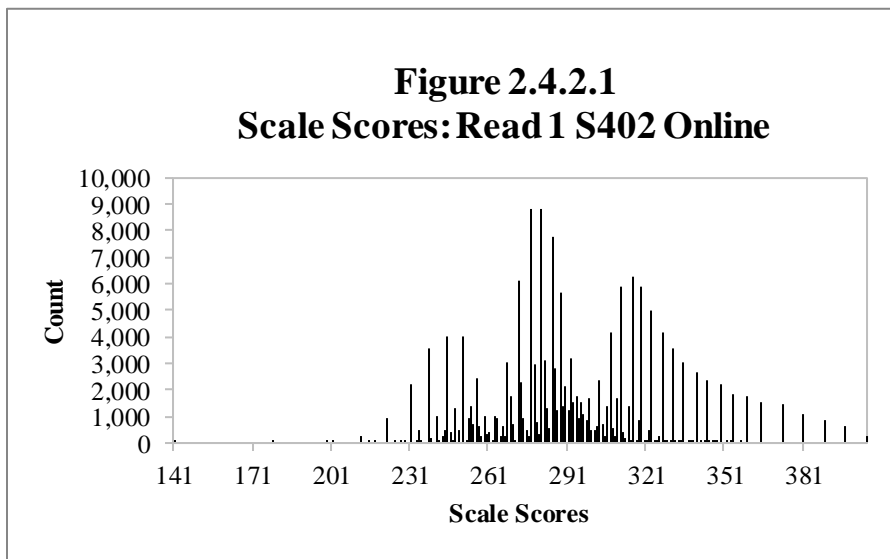
2.4.2 Reading

2.4.2.1 Grade 1

Table 2.4.2.1

Scale Score Descriptive Statistics: Read 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	175,793	141	405	293.56	33.17
Total	175,793	141	405	293.56	33.17

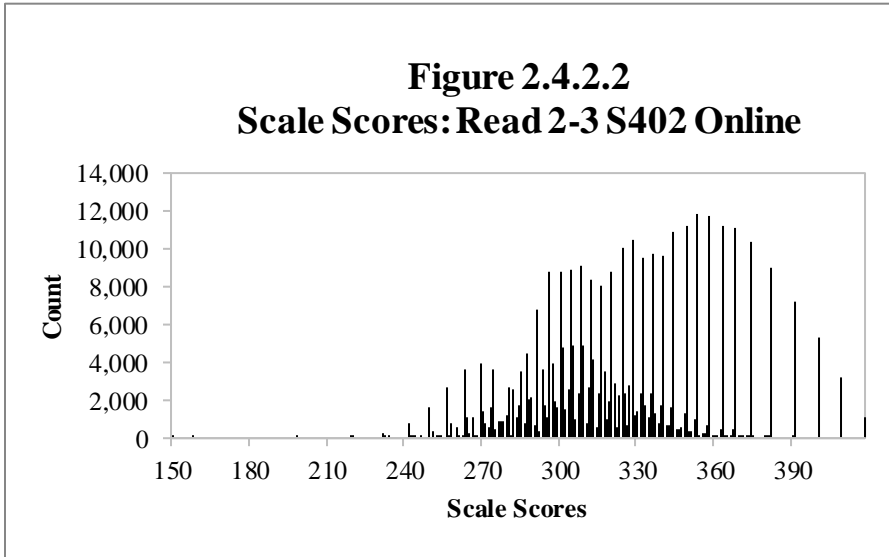


2.4.2.2 Grades 2–3

Table 2.4.2.2

Scale Score Descriptive Statistics: Read 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	178,000	150	418	317.23	31.08
3	183,623	158	418	333.22	35.44
Total	361,623	150	418	325.35	34.31

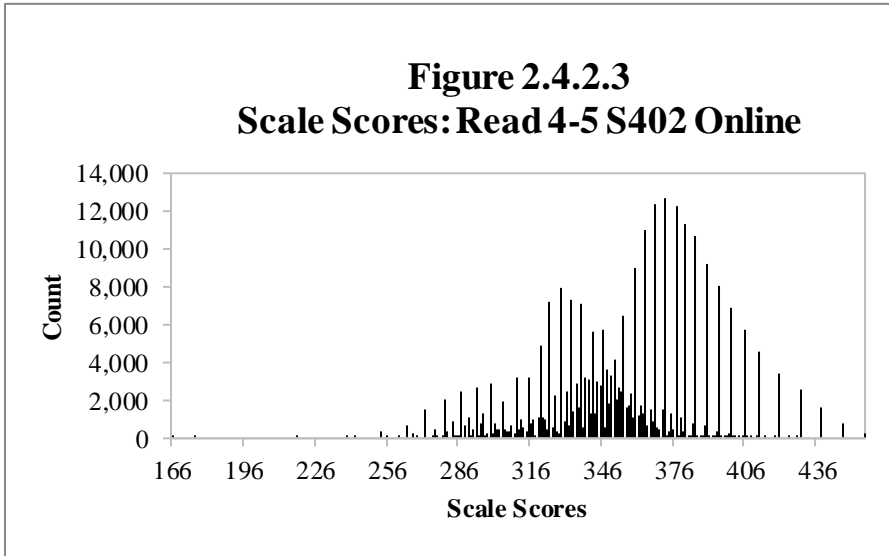


2.4.2.3 Grades 4–5

Table 2.4.2.3

Scale Score Descriptive Statistics: Read 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	172,339	166	456	355.02	32.38
5	113,482	175	456	355.45	35.09
Total	285,821	166	456	355.19	33.48

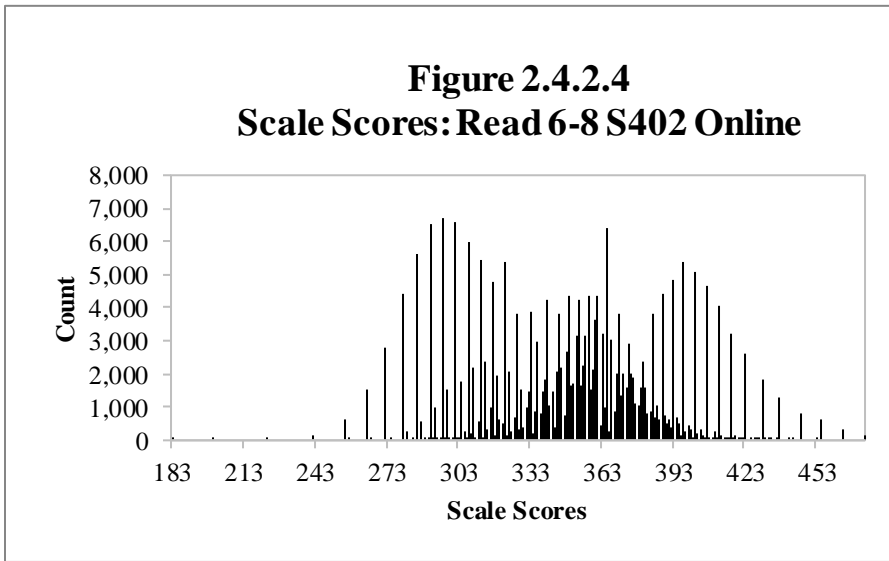


2.4.2.4 Grades 6–8

Table 2.4.2.4

Scale Score Descriptive Statistics: Read 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	85,542	183	473	341.47	36.96
7	81,622	222	473	348.71	39.79
8	79,421	200	473	357.24	41.69
Total	246,585	183	473	348.95	39.99

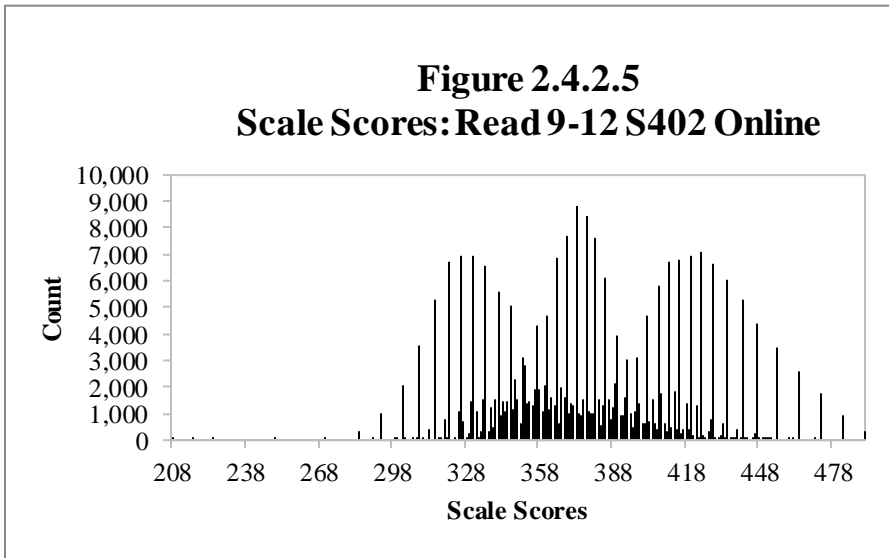


2.4.2.5 Grades 9–12

Table 2.4.2.5

Scale Score Descriptive Statistics: Read 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	90,985	208	491	371.78	38.53
10	82,923	216	491	379.60	39.88
11	59,922	224	491	383.41	39.04
12	41,809	250	491	384.40	38.47
Total	275,639	208	491	378.58	39.37



2.4.3 Writing

2.4.3.1 Grade 1

Table 2.4.3.1.1

Scale Score Descriptive Statistics: Writ 1 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	142,261	111	335	249.70	29.26
Total	142,261	111	335	249.70	29.26

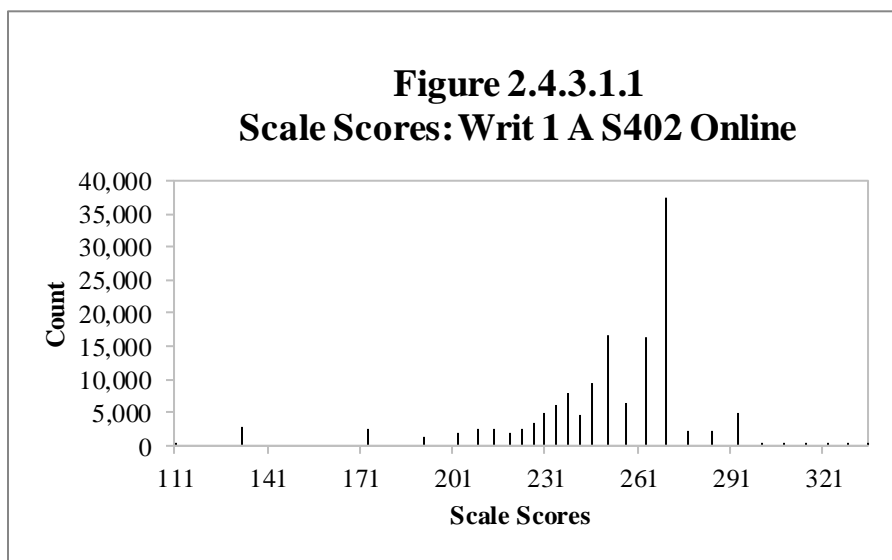


Table 2.4.3.1.2

Scale Score Descriptive Statistics: Writ 1 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	39,883	111	406	296.50	26.86
Total	39,883	111	406	296.50	26.86

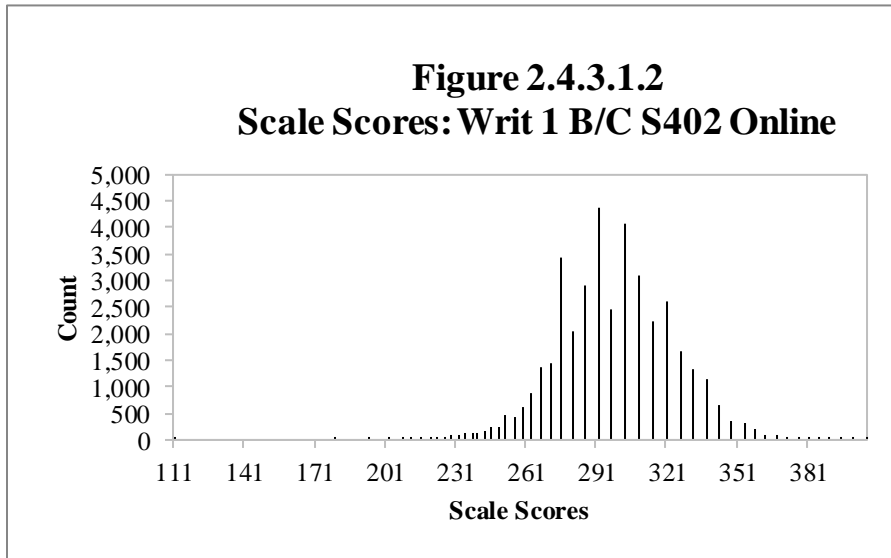
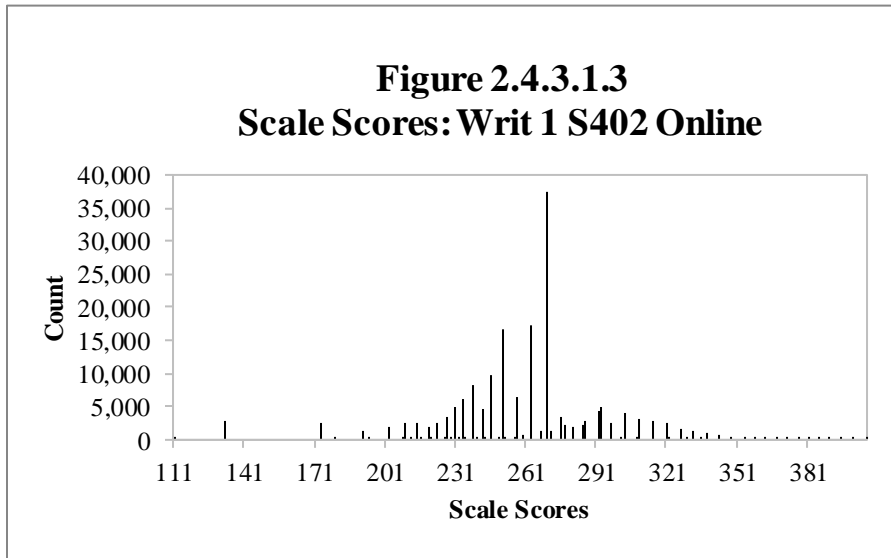


Table 2.4.3.1.3

Scale Score Descriptive Statistics: Writ 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	182,144	111	406	259.94	34.66
Total	182,144	111	406	259.94	34.66

Figure 2.4.3.1.3
Scale Scores: Writ 1 S402 Online



2.4.3.2 Grades 2–3

Table 2.4.3.2.1

Scale Score Descriptive Statistics: Writ 2-3 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	55,626	122	344	261.18	31.59
3	37,763	133	364	267.48	31.01
Total	93,389	122	364	263.73	31.51

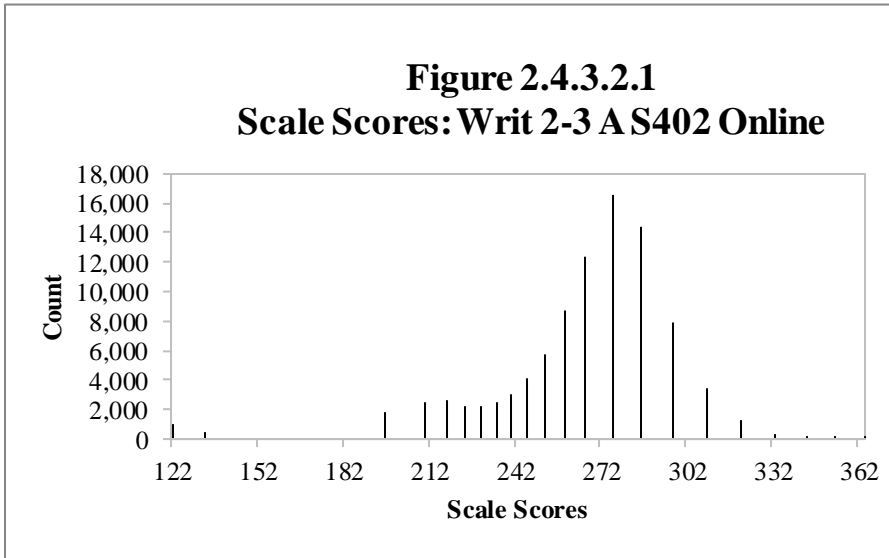


Table 2.4.3.2.2

Scale Score Descriptive Statistics: Writ 2-3 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	131,222	122	424	317.99	24.25
3	155,236	133	441	333.58	25.13
Total	286,458	122	441	326.44	25.92

Figure 2.4.3.2.2
Scale Scores: Writ 2-3 B/C S402 Online

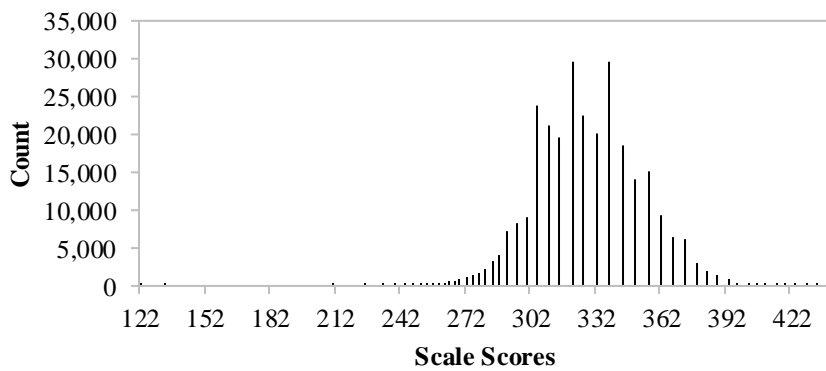
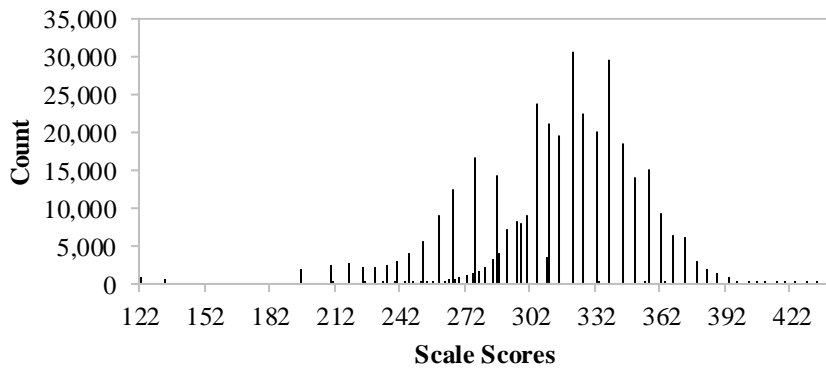


Table 2.4.3.2.3

Scale Score Descriptive Statistics: Writ 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	186,848	122	424	301.08	37.21
3	192,999	133	441	320.65	37.20
Total	379,847	122	441	311.02	38.47

Figure 2.4.3.2.3
Scale Scores: Writ 2-3 S402 Online



2.4.3.3 Grades 4–5

Table 2.4.3.3.1

Scale Score Descriptive Statistics: Writ 4-5 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	22,106	144	399	273.12	45.46
5	21,069	155	417	282.27	41.53
Total	43,175	144	417	277.58	43.82

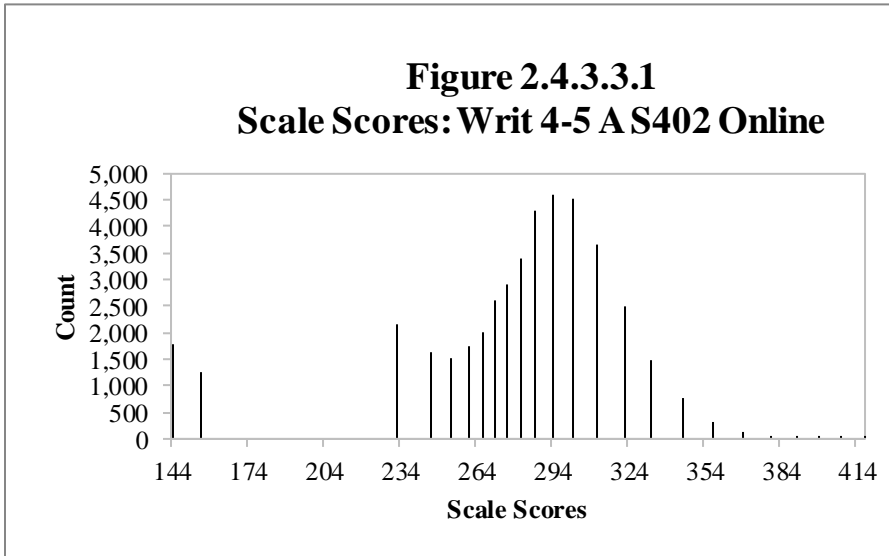


Table 2.4.3.3.2

Scale Score Descriptive Statistics: Writ 4-5 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	151,230	144	471	345.71	30.44
5	93,941	155	481	354.83	29.25
Total	245,171	144	481	349.21	30.32

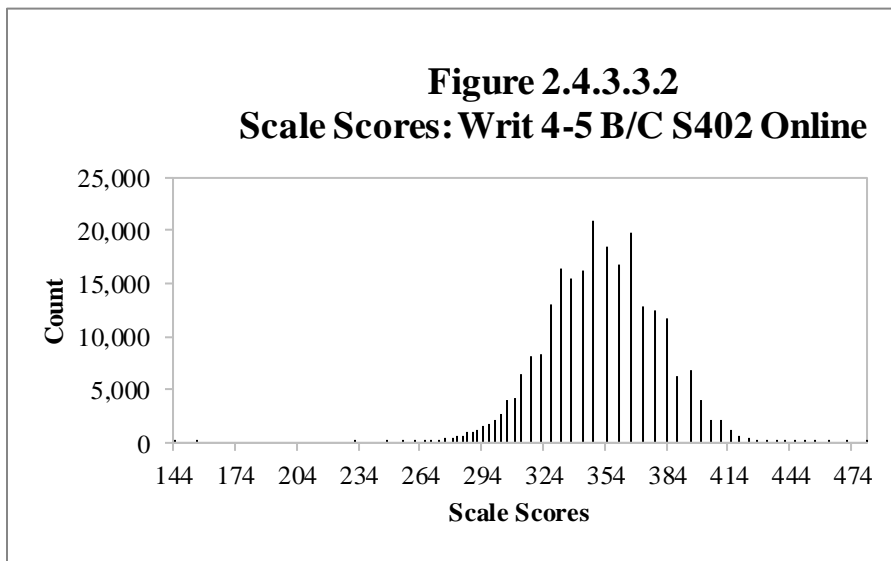
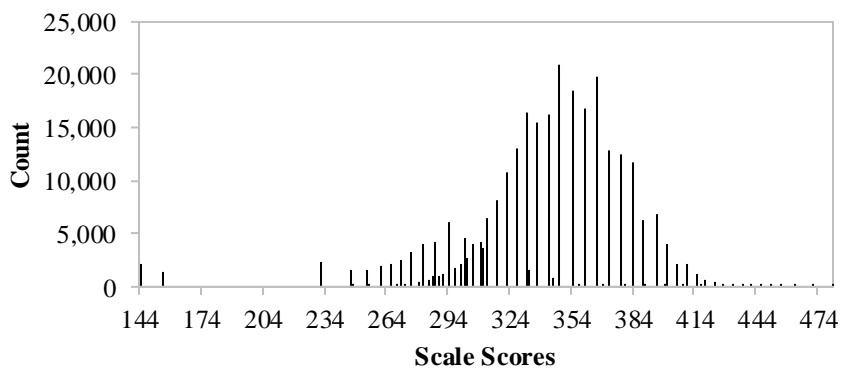


Table 2.4.3.3.3

Scale Score Descriptive Statistics: Writ 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	173,336	144	471	336.45	40.72
5	115,010	155	481	341.54	42.46
Total	288,346	144	481	338.48	41.50

Figure 2.4.3.3.3
Scale Scores: Writ 4-5 S402 Online



2.4.3.4 Grades 6–8

Table 2.4.3.4.1

Scale Score Descriptive Statistics: Writ 6-8 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	30,617	166	390	287.05	35.10
7	34,710	177	408	294.45	34.32
8	34,368	188	417	299.07	34.19
Total	99,695	166	417	293.77	34.86

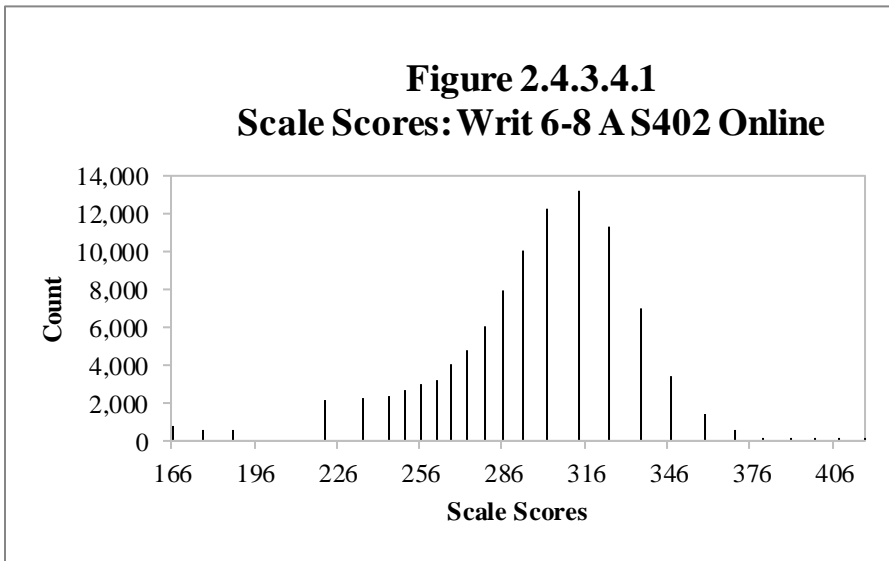


Table 2.4.3.4.2

Scale Score Descriptive Statistics: Writ 6-8 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	55,801	166	467	342.71	25.18
7	48,265	177	467	351.47	24.60
8	46,768	188	516	358.74	24.18
Total	150,834	166	516	350.48	25.56

Figure 2.4.3.4.2
Scale Scores: Writ 6-8 B/C S402 Online

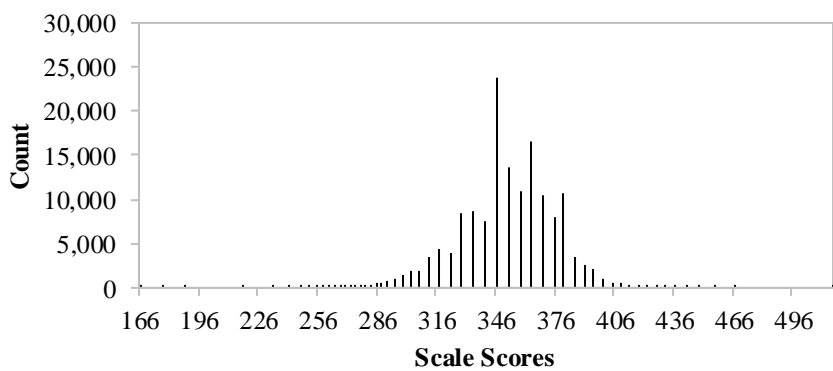
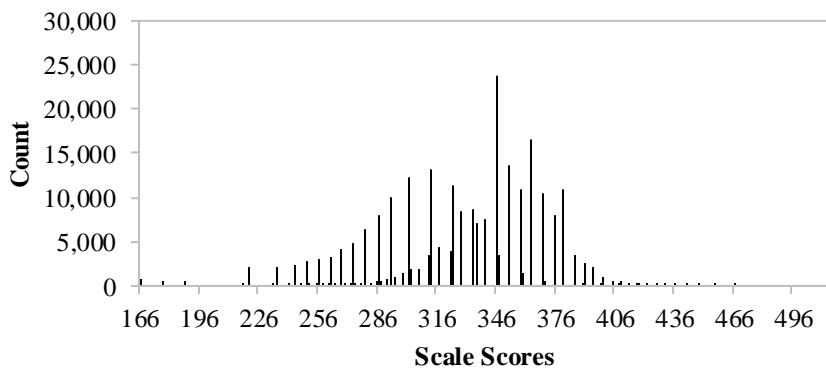


Table 2.4.3.4.3

Scale Score Descriptive Statistics: Writ 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	86,418	166	467	322.99	39.43
7	82,975	177	467	327.62	40.44
8	81,136	188	516	333.47	41.25
Total	250,529	166	516	327.91	40.59

Figure 2.4.3.4.3
Scale Scores: Writ 6-8 S402 Online



2.4.3.5 Grades 9–12

Table 2.4.3.5.1

Scale Score Descriptive Statistics: Writ 9-12 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	41,382	199	456	323.30	42.33
10	32,574	210	456	330.06	37.07
11	22,426	221	468	338.03	36.56
12	14,226	232	456	340.23	36.22
Total	110,608	199	468	330.46	39.47

Figure 2.4.3.5.1
Scale Scores: Writ 9-12 A S402 Online

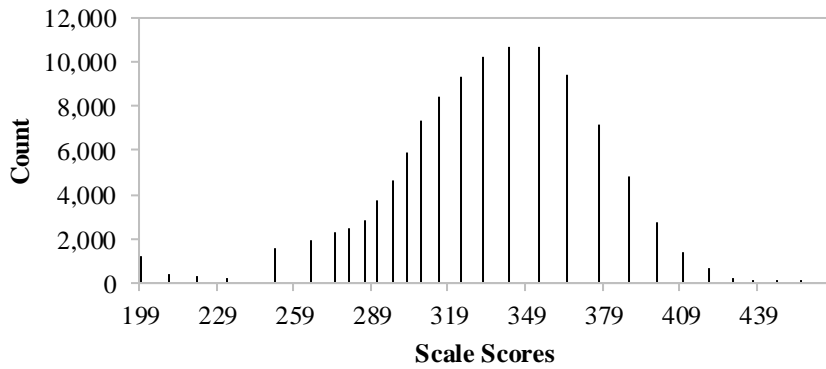


Table 2.4.3.5.2

Scale Score Descriptive Statistics: Writ 9-12 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	53,008	199	538	375.40	34.72
10	53,515	210	538	379.64	35.04
11	40,015	221	538	382.45	35.28
12	29,406	232	538	380.49	36.46
Total	175,944	199	538	379.14	35.34

Figure 2.4.3.5.2
Scale Scores: Writ 9-12 B/C S402 Online

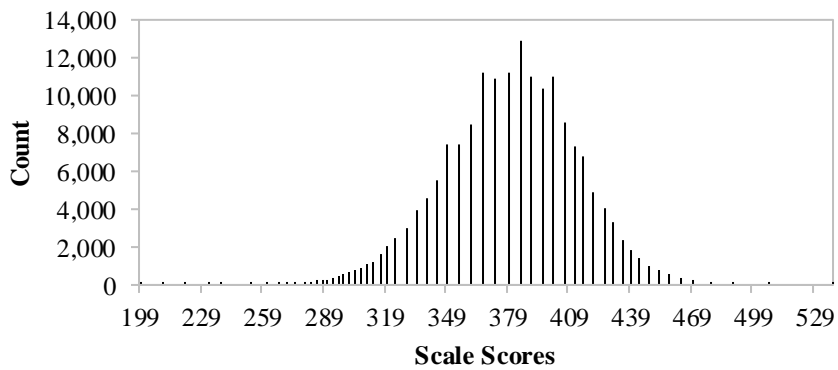
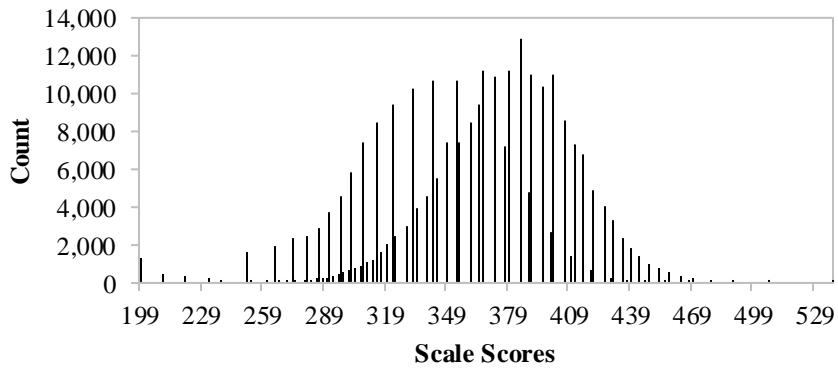


Table 2.4.3.5.3

Scale Score Descriptive Statistics: Writ 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	94,390	199	538	352.56	46.16
10	86,089	210	538	360.88	43.14
11	62,441	221	538	366.50	41.62
12	43,632	232	538	367.36	40.98
Total	286,552	199	538	360.35	43.93

Figure 2.4.3.5.3
Scale Scores: Writ 9-12 S402 Online



2.4.4 Speaking

ACCESS Online Speaking domain has three tiers: Pre-A, A, and B/C and each tier consists of a different number of tasks with a different number of total possible raw score points (See Part I). Note that Speaking Tier Pre-A is intended for students who perform at less than chance on the Listening and Reading test, and is intended to meet the needs of students in very early stages of English language development and that the Pre-A tasks were purposely designed to not over-challenge the students.

2.4.4.1 Grade 1

Table 2.4.4.1.1

Scale Score Descriptive Statistics: Spek 1 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	4,437	106	186	164.21	28.38
Total	4,437	106	186	164.21	28.38

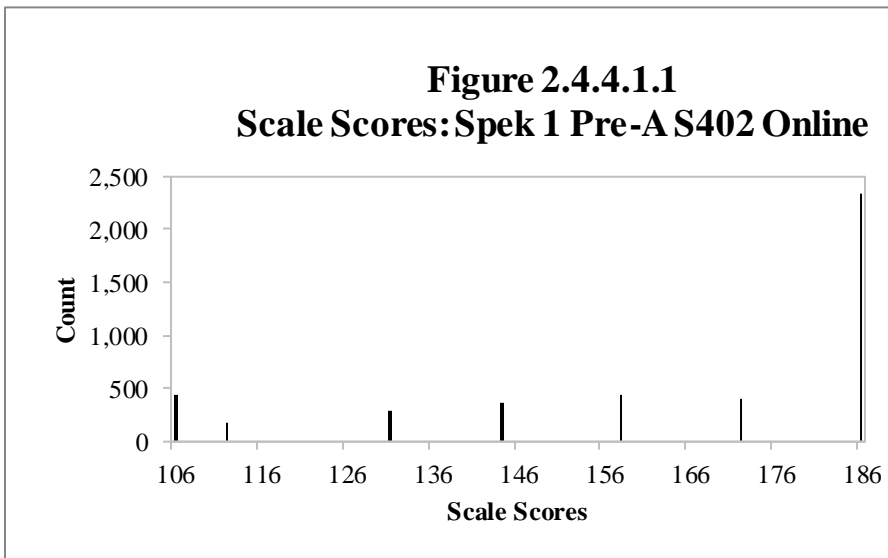


Table 2.4.4.1.2

Scale Score Descriptive Statistics: Spek 1 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	59,144	106	393	230.93	47.57
Total	59,144	106	393	230.93	47.57

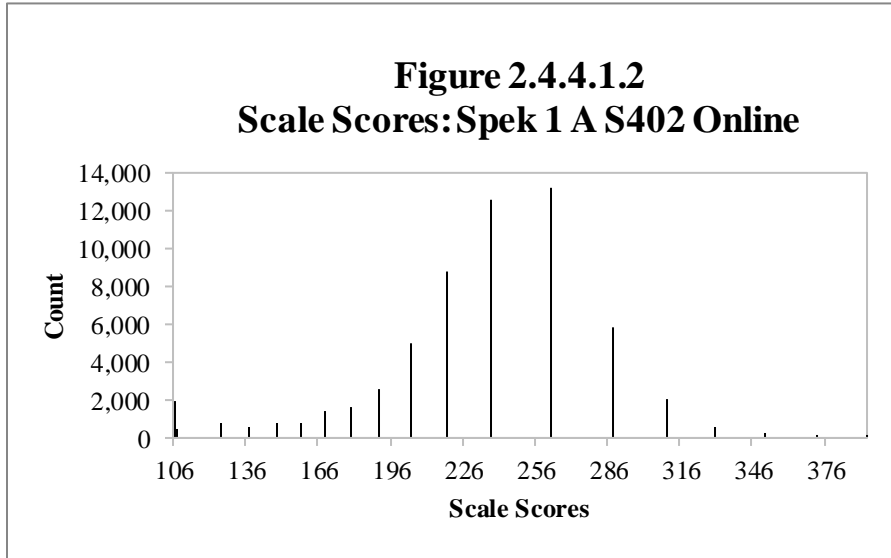


Table 2.4.4.1.3

Scale Score Descriptive Statistics: Spek 1 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	111,017	106	403	269.88	38.11
Total	111,017	106	403	269.88	38.11

Figure 2.4.4.1.3
Scale Scores: Spek 1 B/C S402 Online

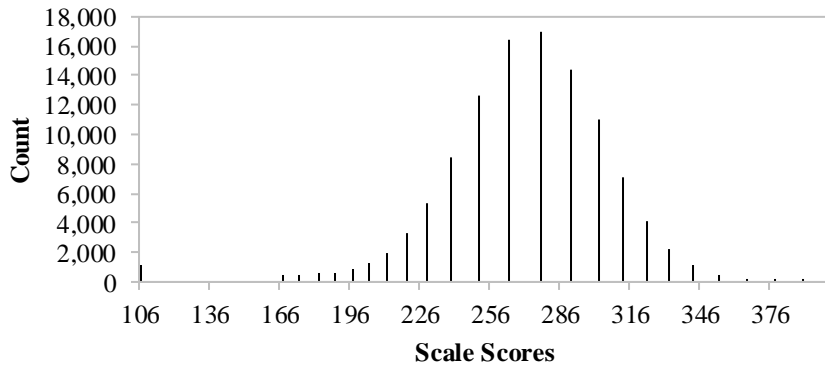
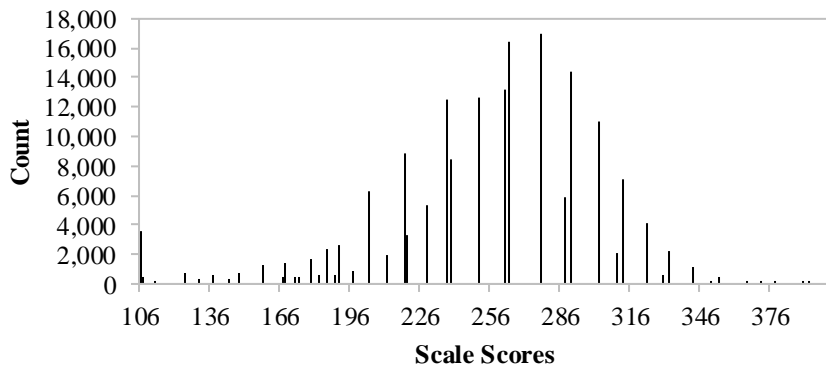


Table 2.4.4.1.4

Scale Score Descriptive Statistics: Spek 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	174,598	106	403	254.00	47.50
Total	174,598	106	403	254.00	47.50

Figure 2.4.4.1.4
Scale Scores: Spek 1 S402 Online



2.4.4.2 Grades 2–3

Table 2.4.4.2.1

Scale Score Descriptive Statistics: Spek 2-3 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	5,115	112	154	143.55	16.30
3	8,553	118	154	146.28	13.39
Total	13,668	112	154	145.26	14.61

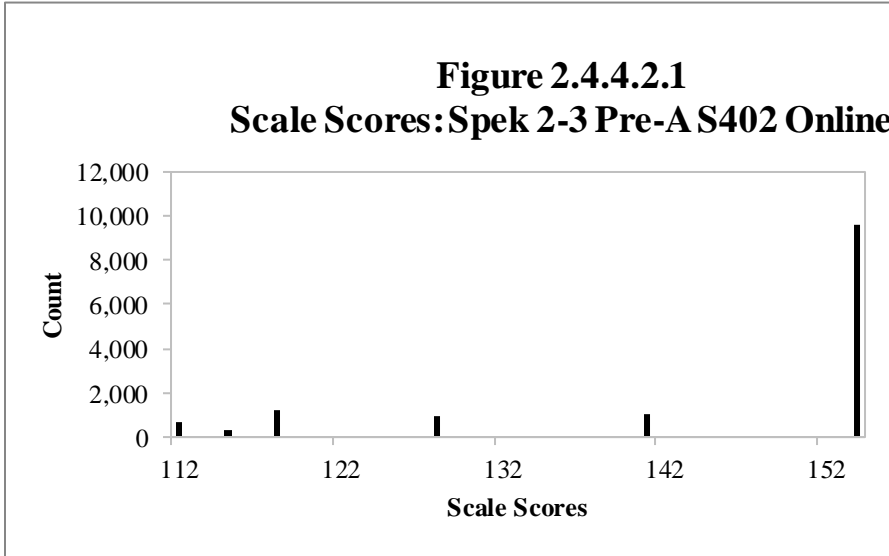


Table 2.4.4.2.2

Scale Score Descriptive Statistics: Spek 2-3 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	42,083	112	374	243.28	48.90
3	38,842	118	374	257.87	44.31
Total	80,925	112	374	250.28	47.32

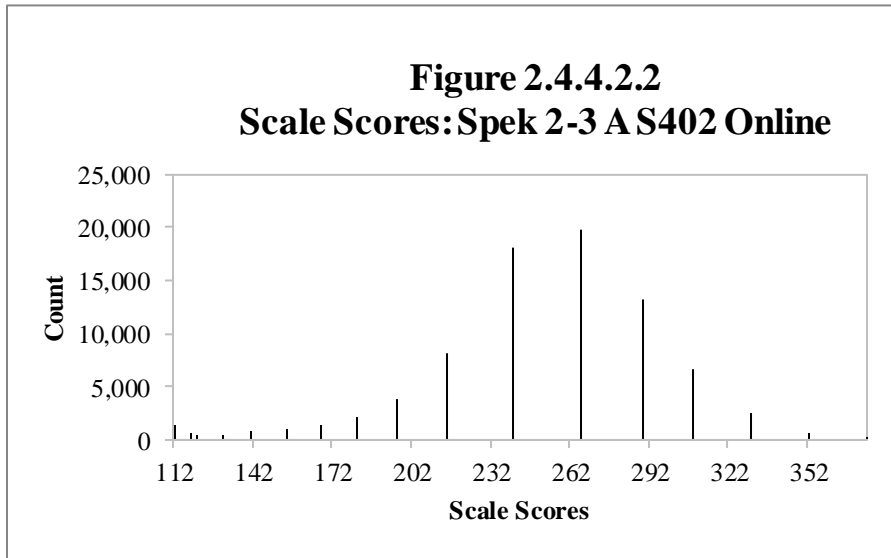


Table 2.4.4.2.3

Scale Score Descriptive Statistics: Spek 2-3 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	129,684	112	415	271.99	35.70
3	135,968	118	425	284.54	34.79
Total	265,652	112	425	278.42	35.79

Figure 2.4.4.2.3
Scale Scores: Spek 2-3 B/C S402 Online

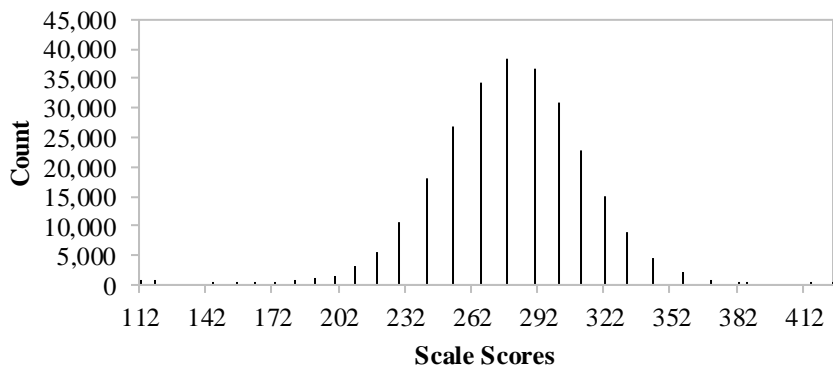
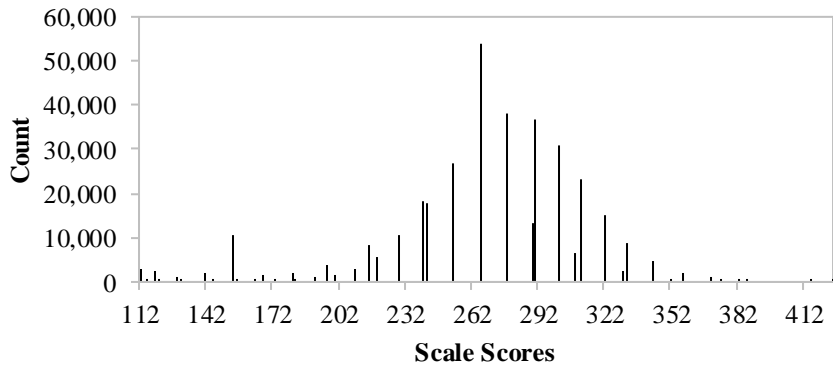


Table 2.4.4.2.4

Scale Score Descriptive Statistics: Spek 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	176,882	112	415	261.45	45.53
3	183,363	118	425	272.44	47.09
Total	360,245	112	425	267.04	46.66

Figure 2.4.4.2.4
Scale Scores: Spek 2-3 S402 Online



2.4.4.3 Grades 4–5

Table 2.4.4.3.1

Scale Score Descriptive Statistics: Spek 4-5 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	1,835	124	194	171.40	26.52
5	3,130	130	194	176.45	23.16
Total	4,965	124	194	174.59	24.57

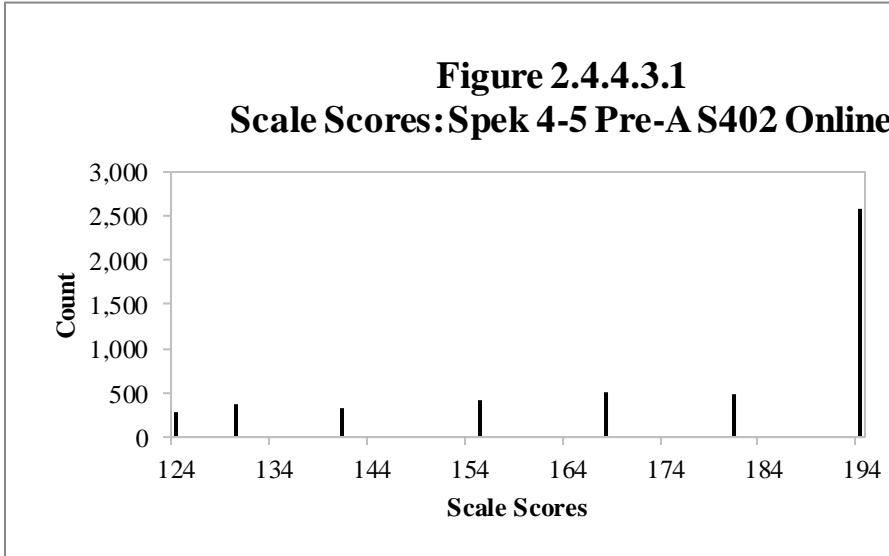


Table 2.4.4.3.2

Scale Score Descriptive Statistics: Spek 4-5 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	16,082	124	412	257.64	48.09
5	11,736	130	412	260.84	47.07
Total	27,818	124	412	258.99	47.69

Figure 2.4.4.3.2
Scale Scores: Spek 4-5 A S402 Online

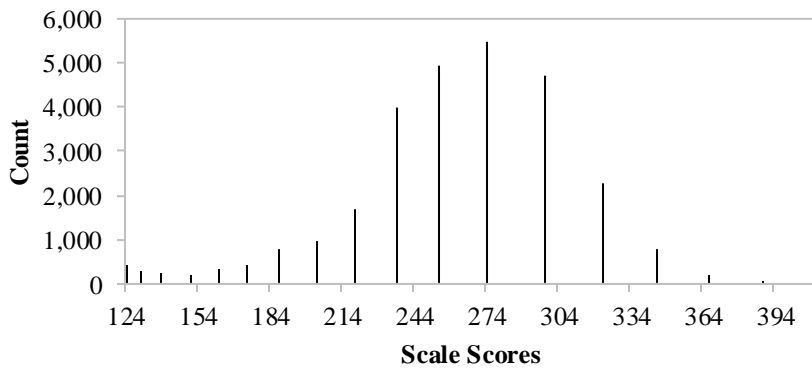


Table 2.4.4.3.3

Scale Score Descriptive Statistics: Spek 4-5 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	158,412	124	448	317.01	38.45
5	101,270	130	448	318.32	39.65
Total	259,682	124	448	317.52	38.93

Figure 2.4.4.3.3
Scale Scores: Spek 4-5 B/C S402 Online

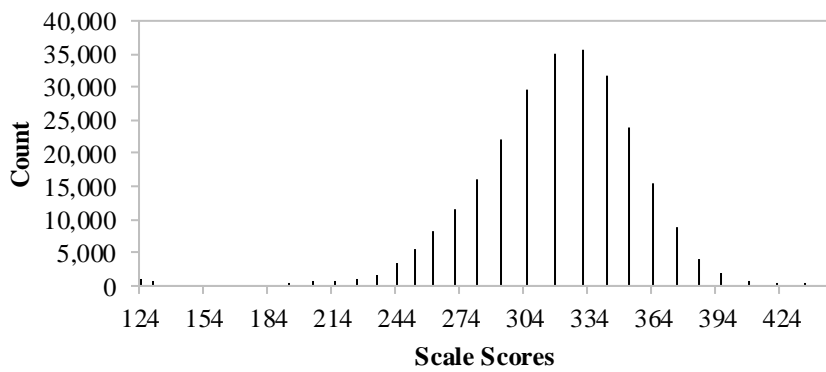
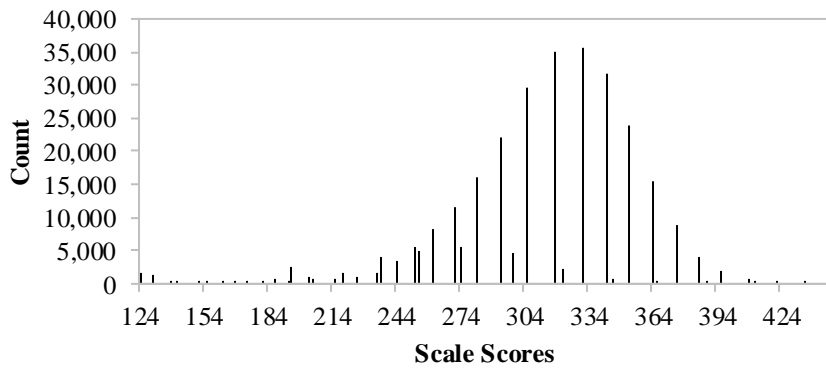


Table 2.4.4.3.4

Scale Score Descriptive Statistics: Spek 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	176,329	124	448	310.08	45.17
5	116,136	130	448	308.69	48.91
Total	292,465	124	448	309.53	46.70

Figure 2.4.4.3.4
Scale Scores: Spek 4-5 S402 Online



2.4.4.4 Grades 6–8

Table 2.4.4.4.1

Scale Score Descriptive Statistics: Spek 6-8 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	2,069	136	202	188.56	20.88
7	2,592	142	202	189.38	19.73
8	4,066	148	202	190.65	18.39
Total	8,727	136	202	189.78	19.42

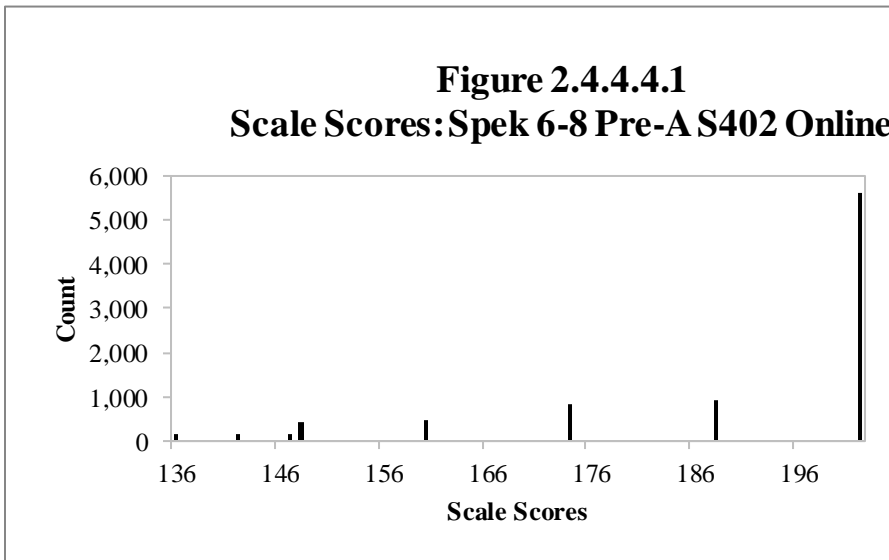


Table 2.4.4.4.2

Scale Score Descriptive Statistics: Spek 6-8 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	18,645	136	444	285.92	52.97
7	14,899	142	444	278.56	54.30
8	24,668	148	444	296.20	53.67
Total	58,212	136	444	288.39	54.09

Figure 2.4.4.4.2
Scale Scores: Spek 6-8 A S402 Online

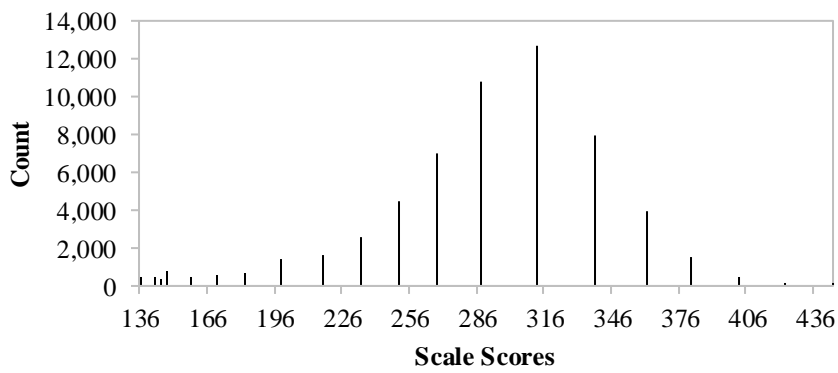


Table 2.4.4.4.3

Scale Score Descriptive Statistics: Spek 6-8 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	66,314	136	458	326.67	39.33
7	65,607	142	471	329.11	41.73
8	52,605	148	471	338.48	40.81
Total	184,526	136	471	330.90	40.91

Figure 2.4.4.4.3
Scale Scores: Spek 6-8 B/C S402 Online

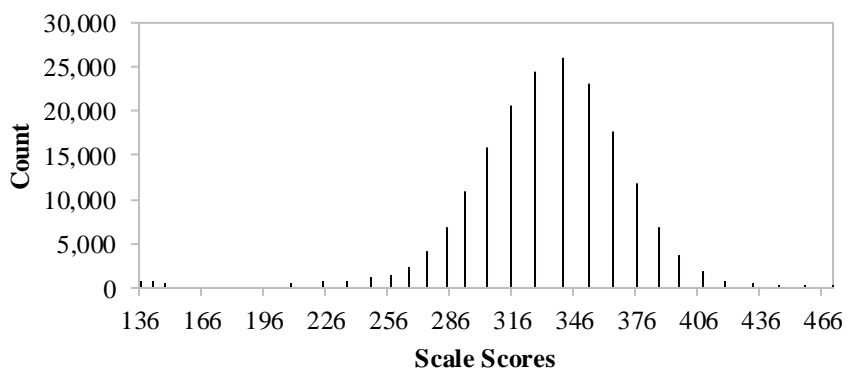
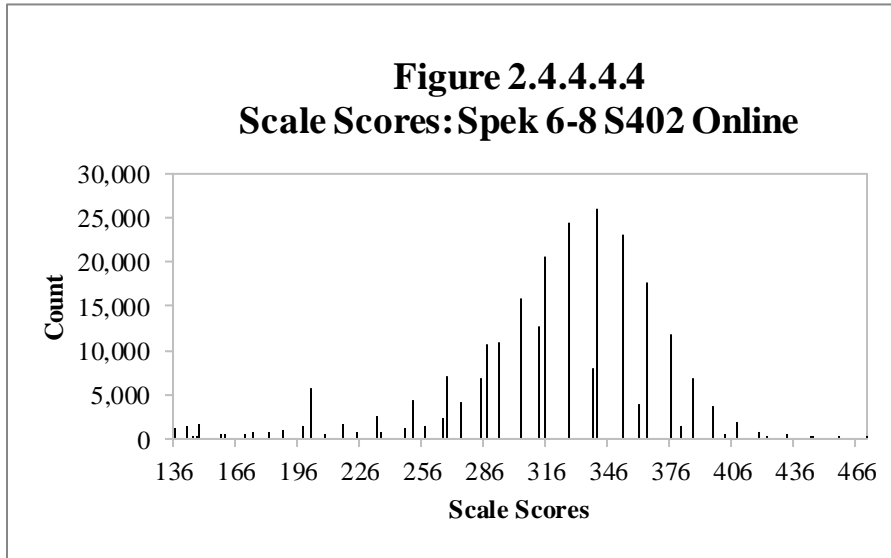


Table 2.4.4.4.4

Scale Score Descriptive Statistics: Spek 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	87,028	136	458	314.65	49.55
7	83,098	142	471	315.69	52.94
8	81,339	148	471	318.27	56.51
Total	251,465	136	471	316.16	53.02



2.4.4.5 Grades 9–12

Table 2.4.4.5.1

Scale Score Descriptive Statistics: Spek 9-12 Pre-A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	3,864	154	228	213.91	23.14
10	5,766	160	228	218.68	18.99
11	4,792	166	228	220.48	17.20
12	3,701	172	228	220.78	16.43
Total	18,123	154	228	218.57	19.20

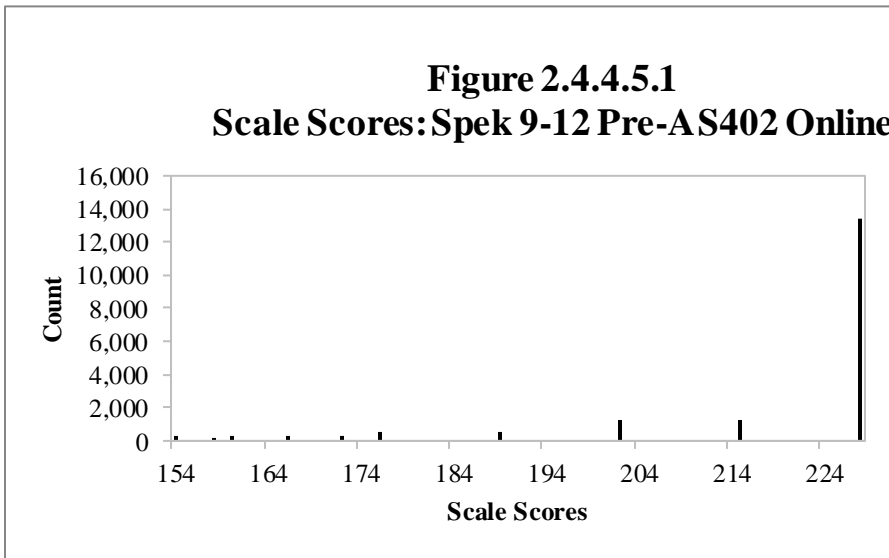


Table 2.4.4.5.2

Scale Score Descriptive Statistics: Spek 9-12 A S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	54,377	154	435	287.17	48.34
10	36,507	160	435	291.07	46.08
11	14,020	166	414	287.89	45.35
12	21,662	172	456	304.98	46.81
Total	126,566	154	456	291.42	47.54

Figure 2.4.4.5.2
Scale Scores: Spek 9-12 A S402 Online

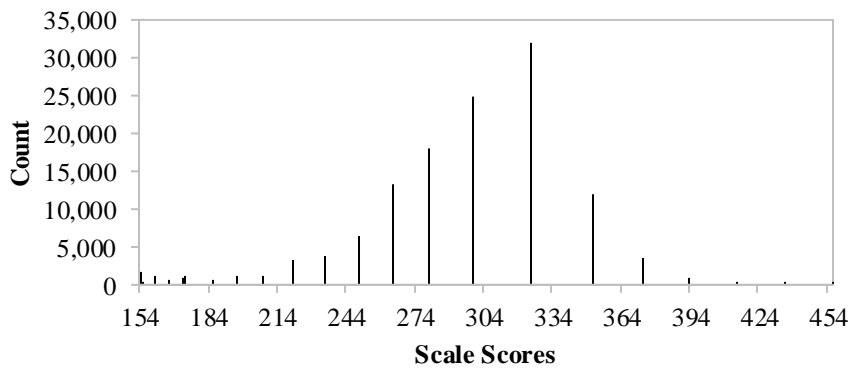


Table 2.4.4.5.3

Scale Score Descriptive Statistics: Spek 9-12 B/C S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	36,231	154	468	332.16	38.74
10	43,894	160	471	333.43	40.50
11	43,224	166	474	329.38	43.27
12	18,277	172	476	338.14	42.05
Total	141,626	154	476	332.48	41.22

Figure 2.4.4.5.3
Scale Scores: Spek 9-12 B/C S402 Online

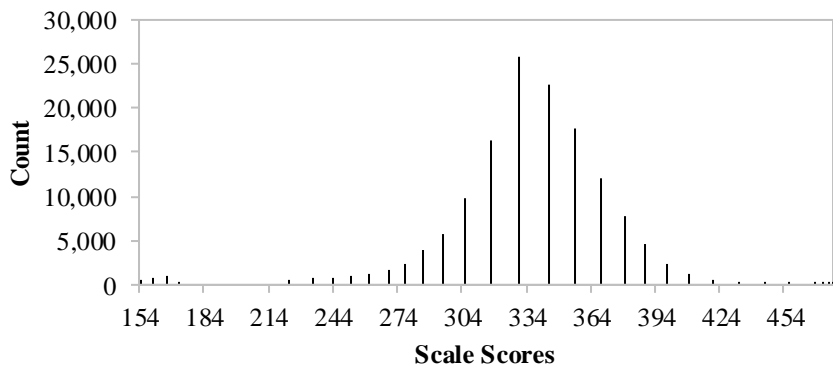
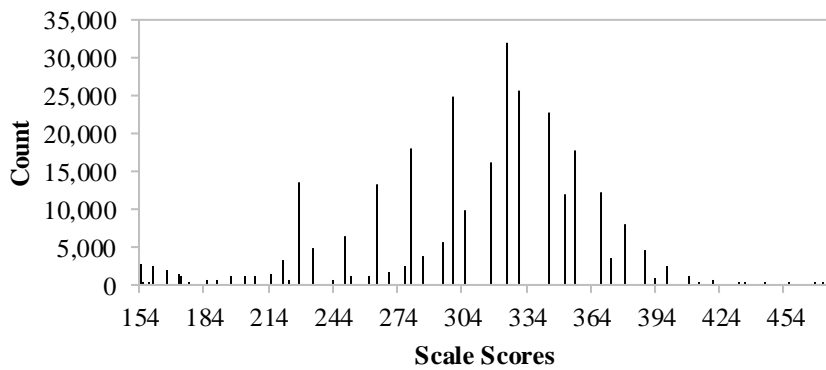


Table 2.4.4.5.4

Scale Score Descriptive Statistics: Spek 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	94,472	154	468	301.43	52.30
10	86,167	160	471	307.81	52.38
11	62,036	166	474	311.59	52.74
12	43,640	172	476	311.73	53.55
Total	286,315	154	476	307.12	52.78

Figure 2.4.4.5.4
Scale Scores: Spek 9-12 S402 Online



2.5 Proficiency Level Distribution

The figures and tables in this section provide information on the proficiency level distribution of the students who took the test form based on their performance. Proficiency level distribution is presented by grade-level cluster. For Writing and Speaking, it is also presented by grade-level cluster and tier. In the figure, the horizontal axis shows the six WIDA proficiency levels. The vertical axis shows the percentage of students. Each bar shows the percentage of students who were placed into each proficiency level in the domain being tested on this test form.

In the tables presented in this section, each row shows, by grade and by total for the grade-level cluster:

- The WIDA proficiency level designation (1–6)
- The number of students (count) whose performance on the test form placed them into that proficiency level in the domain being tested
- The percentage of students, out of the total number of students taking the form, who were placed into that proficiency level in the domain being tested.

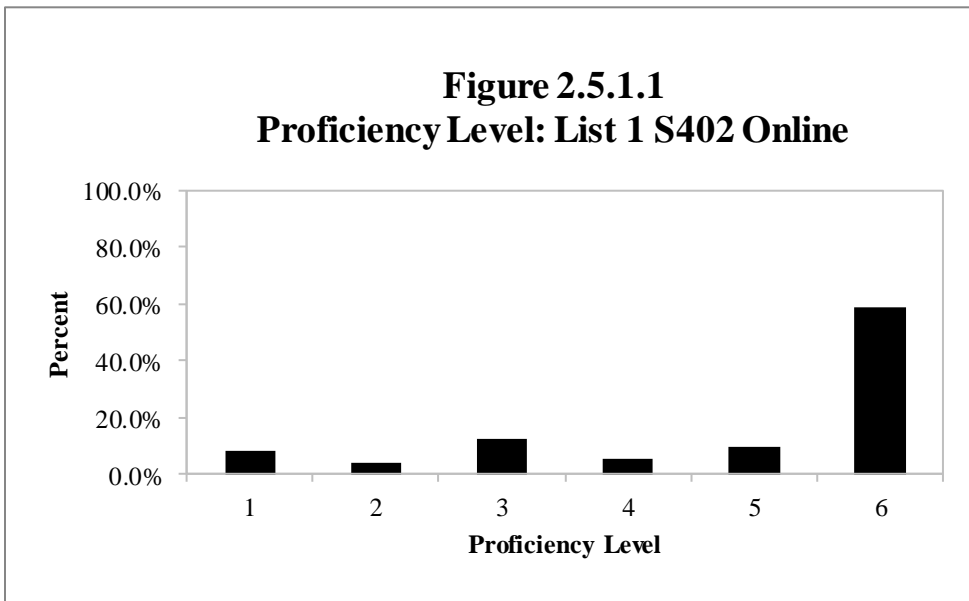
2.5.1 Listening

2.5.1.1 Grade 1

Table 2.5.1.1

Proficiency Level Distribution: List 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	14,094	8.16%	14,094	8.16%
2	7,614	4.41%	7,614	4.41%
3	21,934	12.70%	21,934	12.70%
4	9,700	5.62%	9,700	5.62%
5	17,188	9.95%	17,188	9.95%
6	102,131	59.15%	102,131	59.15%
Total	172,661	100.00%	172,661	100.00%



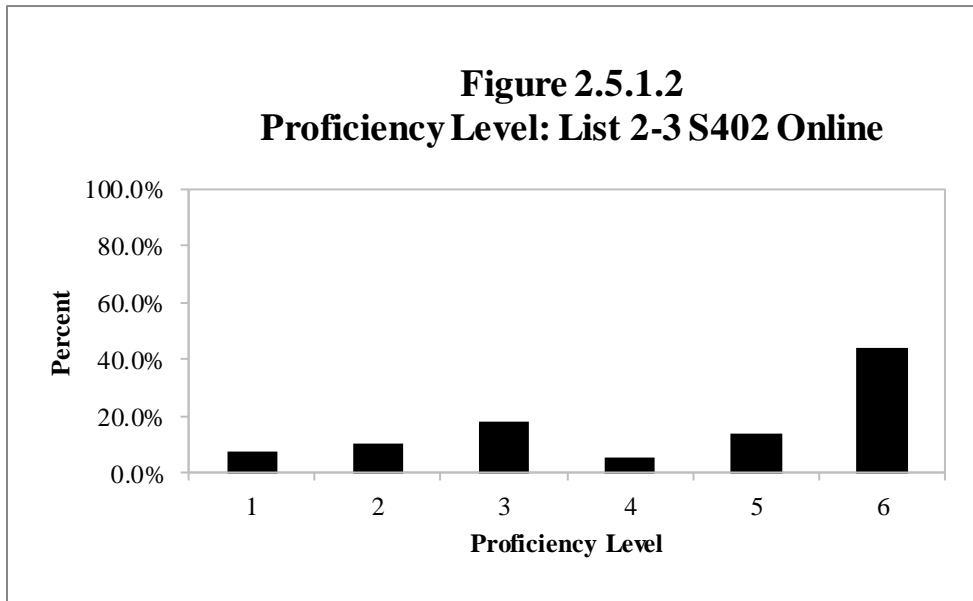
2.5.1.2 Grades 2–3

Table 2.5.1.2

Proficiency Level Distribution: List 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	13,586	7.71%	14,207	7.77%	27,793	7.74%
2	20,599	11.70%	16,208	8.87%	36,807	10.26%
3	34,223	19.43%	30,157	16.50%	64,380	17.94%
4	9,456	5.37%	11,463	6.27%	20,919	5.83%
5	21,583	12.25%	29,488	16.13%	51,071	14.23%
6	76,688	43.54%	81,252	44.45%	157,940	44.01%
Total	176,135	100.00%	182,775	100.00%	358,910	100.00%

Figure 2.5.1.2
Proficiency Level: List 2-3 S402 Online

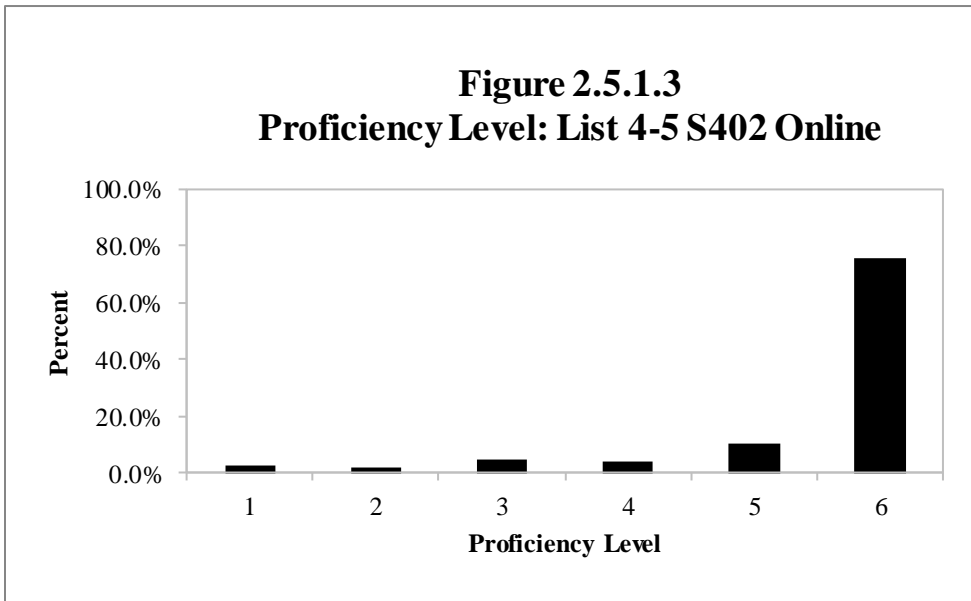


2.5.1.3 Grades 4–5

Table 2.5.1.3

Proficiency Level Distribution: List 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	3,444	1.98%	3,987	3.49%	7,431	2.58%
2	3,455	1.99%	2,896	2.53%	6,351	2.20%
3	8,255	4.75%	6,609	5.78%	14,864	5.16%
4	6,506	3.74%	4,532	3.96%	11,038	3.83%
5	17,159	9.87%	13,009	11.38%	30,168	10.47%
6	134,956	77.66%	83,328	72.86%	218,284	75.76%
Total	173,775	100.00%	114,361	100.00%	288,136	100.00%

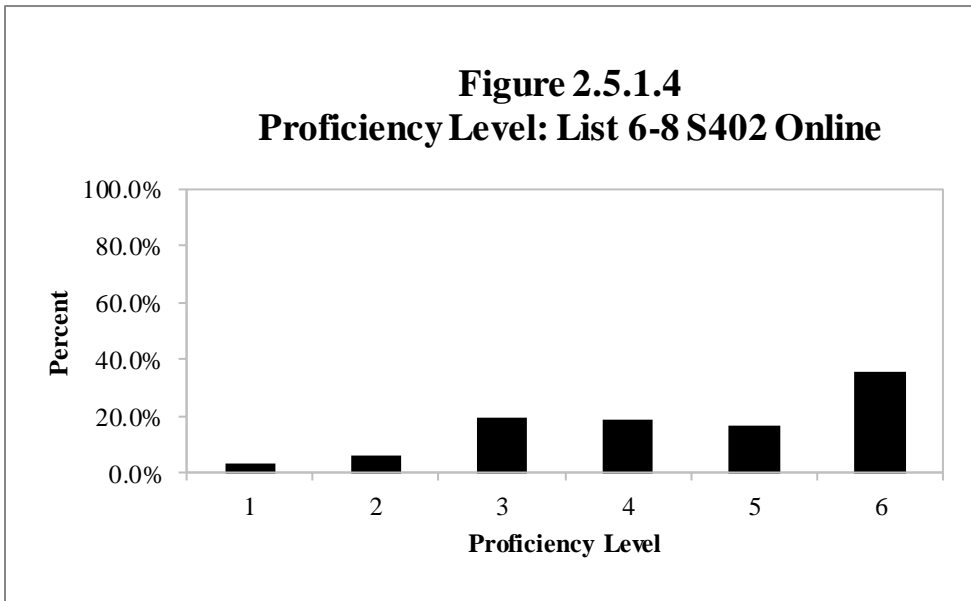


2.5.1.4 Grades 6–8

Table 2.5.1.4

Proficiency Level Distribution: List 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	2,115	2.51%	2,567	3.18%	4,050	5.13%	8,732	3.58%
2	5,286	6.29%	4,512	5.59%	5,430	6.88%	15,228	6.24%
3	15,293	18.18%	16,910	20.94%	15,224	19.28%	47,427	19.45%
4	16,384	19.48%	14,747	18.26%	14,456	18.30%	45,587	18.69%
5	16,463	19.58%	12,510	15.49%	11,020	13.95%	39,993	16.40%
6	28,560	33.96%	29,524	36.55%	28,800	36.46%	86,884	35.63%
Total	84,101	100.00%	80,770	100.00%	78,980	100.00%	243,851	100.00%

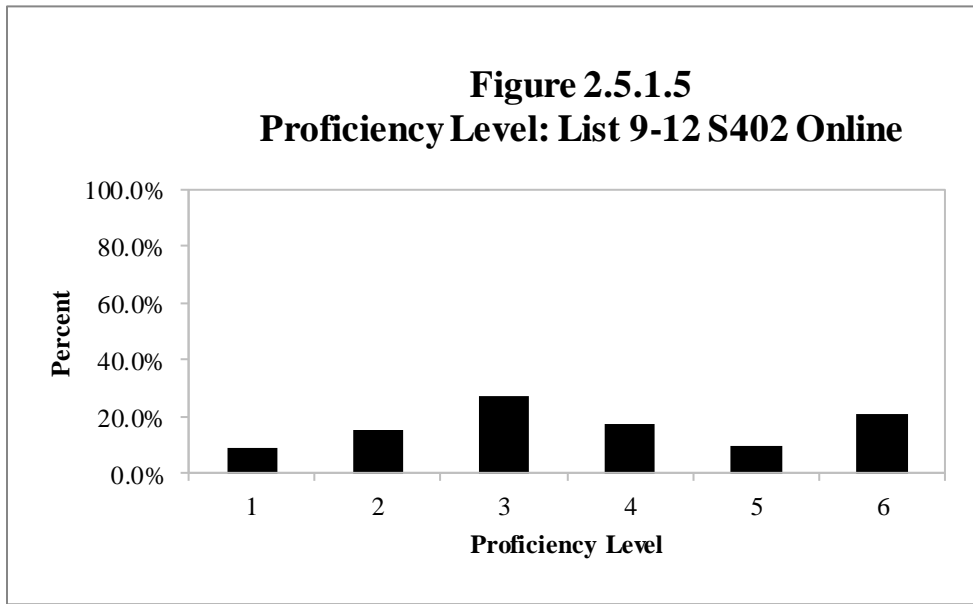


2.5.1.5 Grades 9–12

Table 2.5.1.5

Proficiency Level Distribution: List 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	5,058	5.55%	7,765	9.29%	7,249	11.95%	5,662	13.42%	25,734	9.27%
2	15,708	17.23%	13,159	15.75%	7,010	11.56%	6,695	15.86%	42,572	15.34%
3	24,250	26.60%	22,257	26.64%	16,572	27.32%	11,861	28.10%	74,940	27.00%
4	17,691	19.40%	13,495	16.15%	11,219	18.50%	6,393	15.15%	48,798	17.58%
5	8,577	9.41%	8,582	10.27%	5,814	9.59%	4,571	10.83%	27,544	9.92%
6	19,895	21.82%	18,301	21.90%	12,791	21.09%	7,021	16.64%	58,008	20.90%
Total	91,179	100.00%	83,559	100.00%	60,655	100.00%	42,203	100.00%	277,596	100.00%



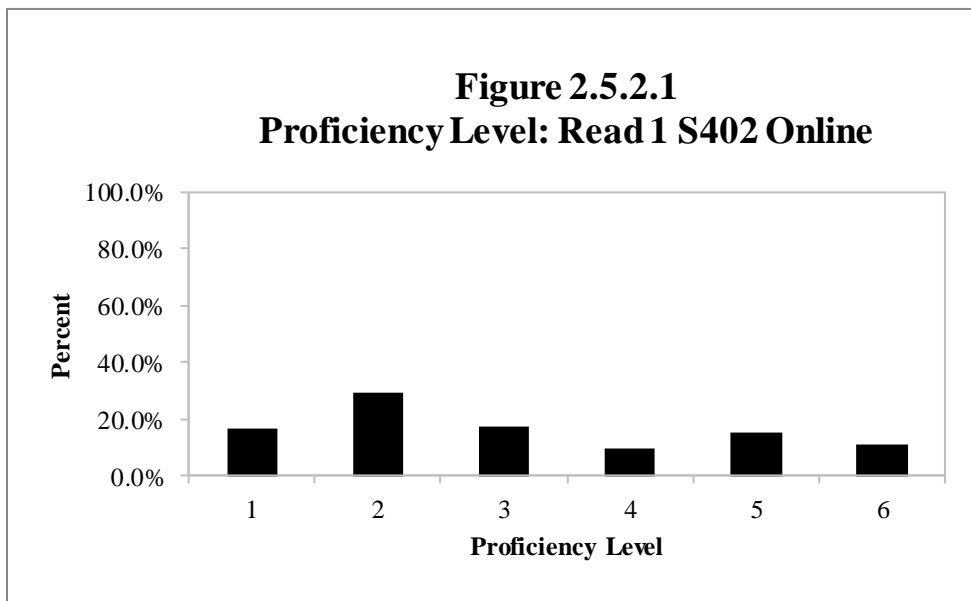
2.5.2 Reading

2.5.2.1 Grade 1

Table 2.5.2.1

Proficiency Level Distribution: Read 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	29,055	16.53%	29,055	16.53%
2	52,145	29.66%	52,145	29.66%
3	31,001	17.63%	31,001	17.63%
4	16,847	9.58%	16,847	9.58%
5	26,956	15.33%	26,956	15.33%
6	19,789	11.26%	19,789	11.26%
Total	175,793	100.00%	175,793	100.00%



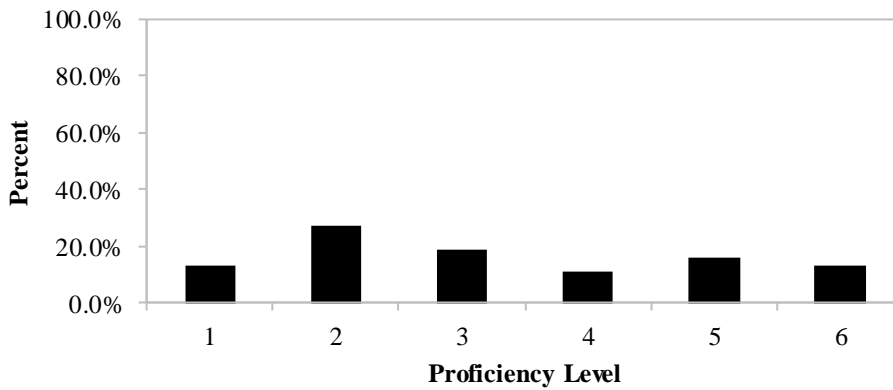
2.5.2.2 Grades 2–3

Table 2.5.2.2

Proficiency Level Distribution: Read 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	21,032	11.82%	26,294	14.32%	47,326	13.09%
2	50,164	28.18%	48,863	26.61%	99,027	27.38%
3	36,473	20.49%	32,190	17.53%	68,663	18.99%
4	25,026	14.06%	15,244	8.30%	40,270	11.14%
5	25,118	14.11%	32,900	17.92%	58,018	16.04%
6	20,187	11.34%	28,132	15.32%	48,319	13.36%
Total	178,000	100.00%	183,623	100.00%	361,623	100.00%

Figure 2.5.2.2
Proficiency Level: Read 2-3 S402 Online



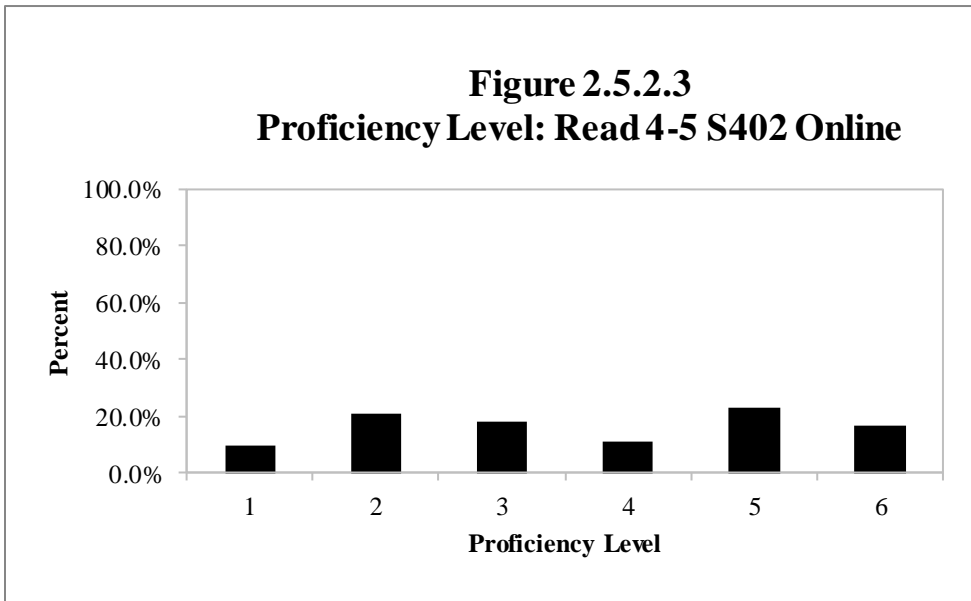
2.5.2.3 Grades 4–5

Table 2.5.2.3

Proficiency Level Distribution: Read 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	12,309	7.14%	15,495	13.65%	27,804	9.73%
2	33,322	19.34%	27,163	23.94%	60,485	21.16%
3	30,924	17.94%	21,872	19.27%	52,796	18.47%
4	19,432	11.28%	12,691	11.18%	32,123	11.24%
5	45,137	26.19%	20,228	17.82%	65,365	22.87%
6	31,215	18.11%	16,033	14.13%	47,248	16.53%
Total	172,339	100.00%	113,482	100.00%	285,821	100.00%

Figure 2.5.2.3
Proficiency Level: Read 4-5 S402 Online

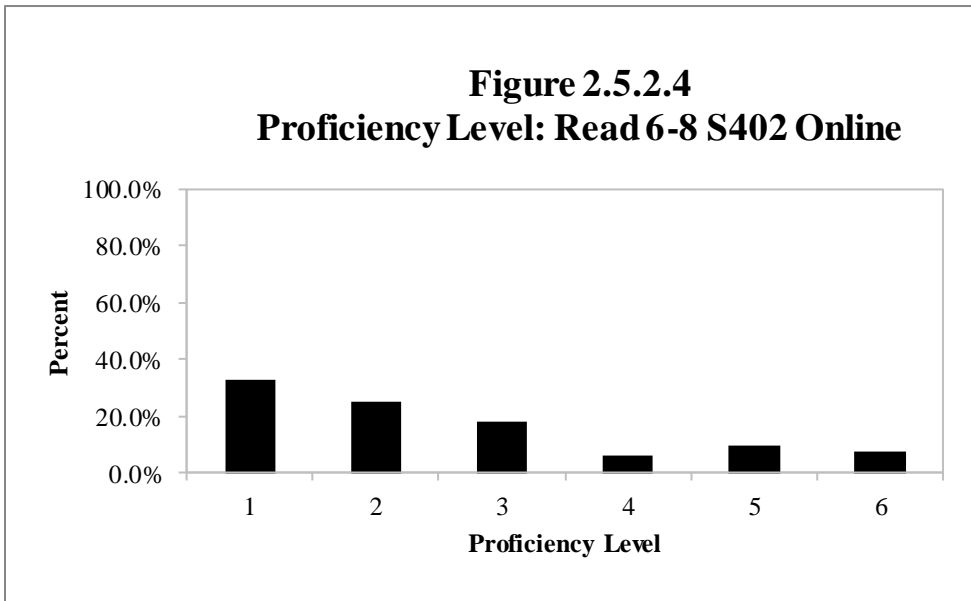


2.5.2.4 Grades 6–8

Table 2.5.2.4

Proficiency Level Distribution: Read 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	28,841	33.72%	27,326	33.48%	24,777	31.20%	80,944	32.83%
2	22,072	25.80%	20,488	25.10%	20,077	25.28%	62,637	25.40%
3	16,701	19.52%	15,262	18.70%	13,575	17.09%	45,538	18.47%
4	5,146	6.02%	4,901	6.00%	4,491	5.65%	14,538	5.90%
5	8,265	9.66%	7,069	8.66%	7,952	10.01%	23,286	9.44%
6	4,517	5.28%	6,576	8.06%	8,549	10.76%	19,642	7.97%
Total	85,542	100.00%	81,622	100.00%	79,421	100.00%	246,585	100.00%

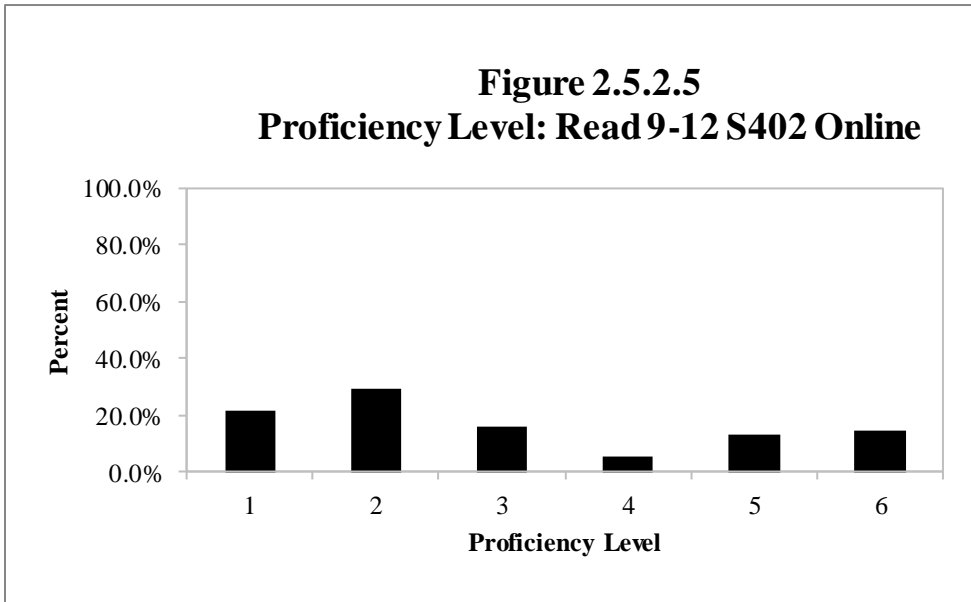


2.5.2.5 Grades 9–12

Table 2.5.2.5

Proficiency Level Distribution: Read 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	21,102	23.19%	17,865	21.54%	12,161	20.29%	9,140	21.86%	60,268	21.86%
2	26,005	28.58%	22,261	26.85%	19,105	31.88%	13,977	33.43%	81,348	29.51%
3	16,374	18.00%	13,724	16.55%	7,903	13.19%	5,407	12.93%	43,408	15.75%
4	4,200	4.62%	4,286	5.17%	3,443	5.75%	2,679	6.41%	14,608	5.30%
5	10,478	11.52%	11,326	13.66%	8,221	13.72%	5,569	13.32%	35,594	12.91%
6	12,826	14.10%	13,461	16.23%	9,089	15.17%	5,037	12.05%	40,413	14.66%
Total	90,985	100.00%	82,923	100.00%	59,922	100.00%	41,809	100.00%	275,639	100.00%



2.5.3 Writing

2.5.3.1 Grade 1

Table 2.5.3.1.1

Proficiency Level Distribution: Writ 1 A S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	32,618	22.93%	32,618	22.93%
2	99,030	69.61%	99,030	69.61%
3	10,613	7.46%	10,613	7.46%
4	0	0.00%	0	0.00%
5	0	0.00%	0	0.00%
6	0	0.00%	0	0.00%
Total	142,261	100.00%	142,261	100.00%

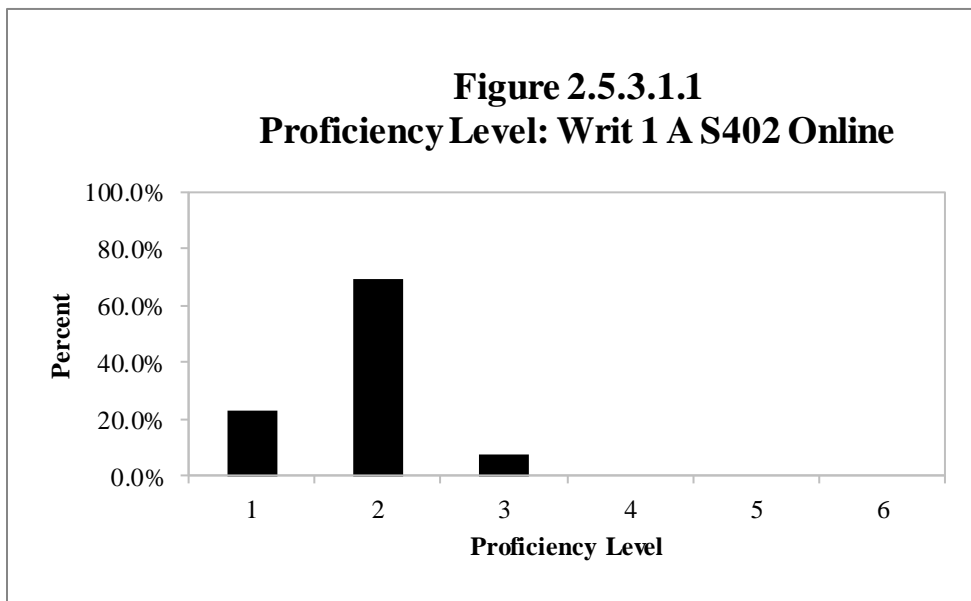


Table 2.5.3.1.2

Proficiency Level Distribution: Writ 1 B/C S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	620	1.55%	620	1.55%
2	6,090	15.27%	6,090	15.27%
3	30,222	75.78%	30,222	75.78%
4	2,933	7.35%	2,933	7.35%
5	17	0.04%	17	0.04%
6	1	0.00%	1	0.00%
Total	39,883	100.00%	39,883	100.00%

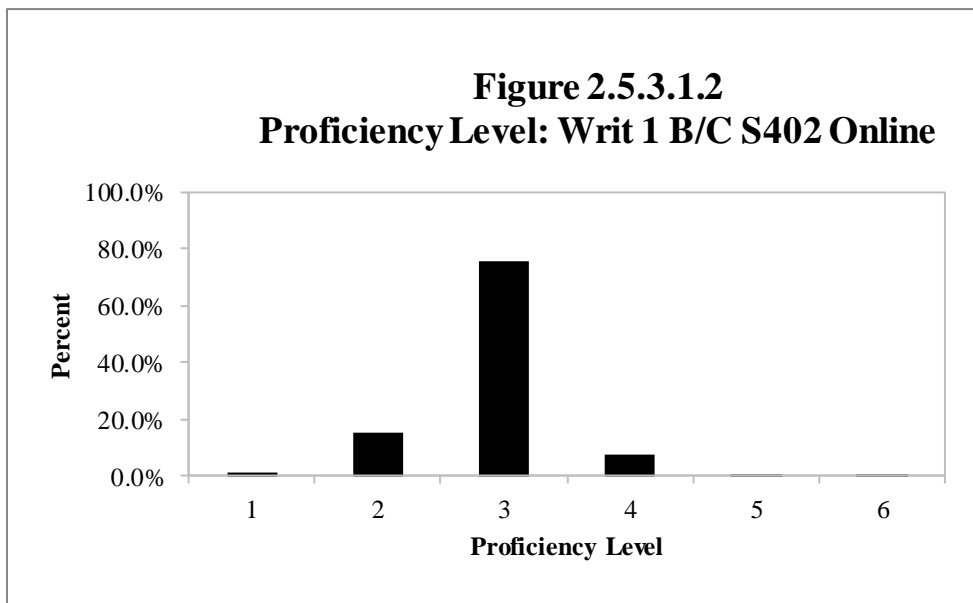
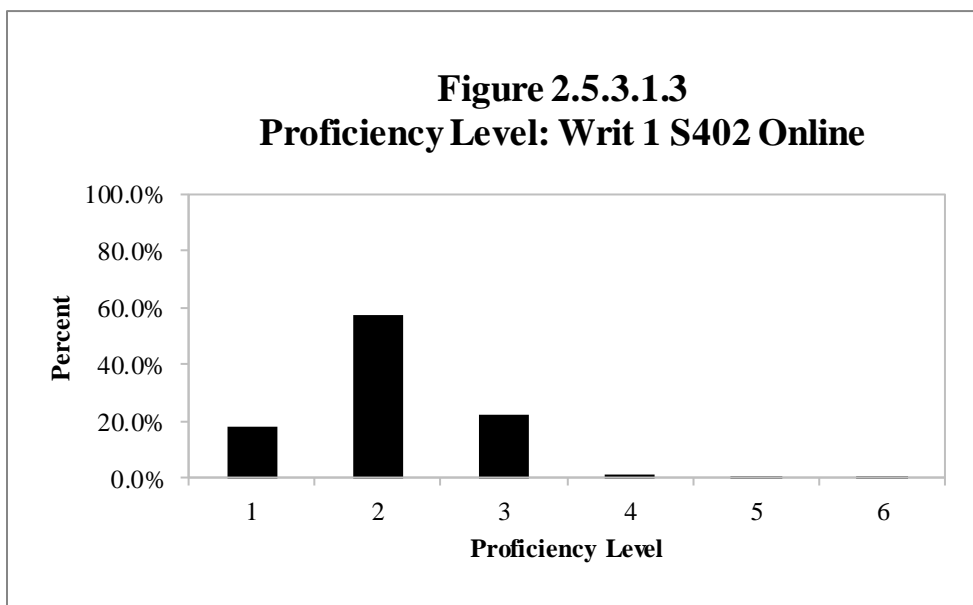


Table 2.5.3.1.3

Proficiency Level Distribution: Writ 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	33,238	18.25%	33,238	18.25%
2	105,120	57.71%	105,120	57.71%
3	40,835	22.42%	40,835	22.42%
4	2,933	1.61%	2,933	1.61%
5	17	0.01%	17	0.01%
6	1	0.00%	1	0.00%
Total	182,144	100.00%	182,144	100.00%



2.5.3.2 Grades 2–3

Table 2.5.3.2.1

Proficiency Level Distribution: Writ 2-3 A S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	11,941	21.47%	8,012	21.22%	19,953	21.37%
2	29,548	53.12%	16,477	43.63%	46,025	49.28%
3	14,121	25.39%	13,267	35.13%	27,388	29.33%
4	16	0.03%	7	0.02%	23	0.02%
5	0	0.00%	0	0.00%	0	0.00%
6	0	0.00%	0	0.00%	0	0.00%
Total	55,626	100.00%	37,763	100.00%	93,389	100.00%

Figure 2.5.3.2.1
Proficiency Level: Writ 2-3 A S402 Online

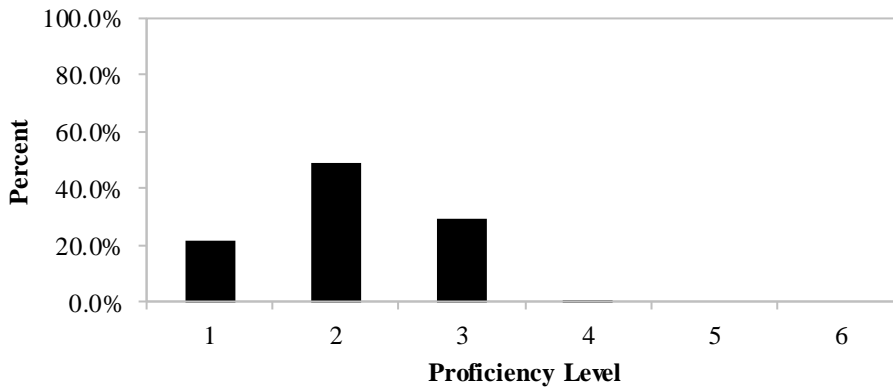


Table 2.5.3.2.2

Proficiency Level Distribution: Writ 2-3 B/C S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	378	0.29%	171	0.11%	549	0.19%
2	6,024	4.59%	2,813	1.81%	8,837	3.08%
3	103,997	79.25%	107,408	69.19%	211,405	73.80%
4	20,421	15.56%	43,842	28.24%	64,263	22.43%
5	392	0.30%	947	0.61%	1,339	0.47%
6	10	0.01%	55	0.04%	65	0.02%
Total	131,222	100.00%	155,236	100.00%	286,458	100.00%

Figure 2.5.3.2.2
Proficiency Level: Writ 2-3 B/C S402 Online

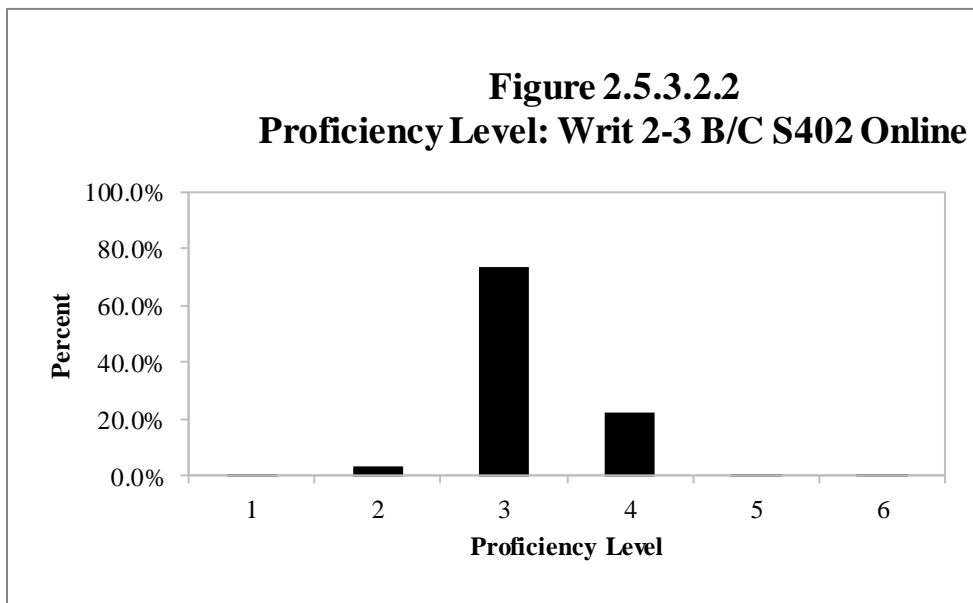
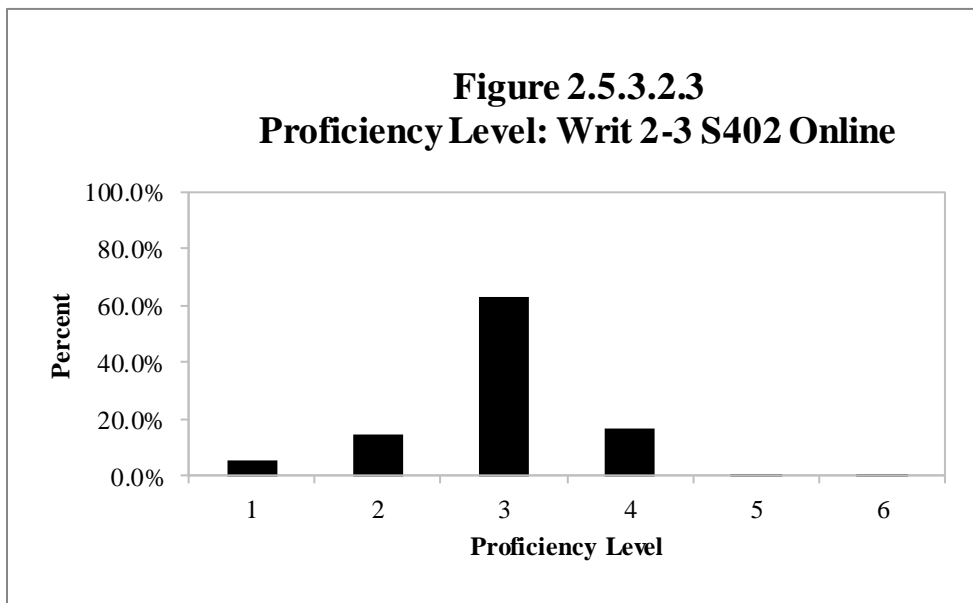


Table 2.5.3.2.3

Proficiency Level Distribution: Writ 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	12,319	6.59%	8,183	4.24%	20,502	5.40%
2	35,572	19.04%	19,290	9.99%	54,862	14.44%
3	118,118	63.22%	120,675	62.53%	238,793	62.87%
4	20,437	10.94%	43,849	22.72%	64,286	16.92%
5	392	0.21%	947	0.49%	1,339	0.35%
6	10	0.01%	55	0.03%	65	0.02%
Total	186,848	100.00%	192,999	100.00%	379,847	100.00%

Figure 2.5.3.2.3
Proficiency Level: Writ 2-3 S402 Online



2.5.3.3 Grades 4–5

Table 2.5.3.3.1

Proficiency Level Distribution: Writ 4-5 A S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	5,760	26.06%	5,125	24.32%	10,885	25.21%
2	8,143	36.84%	6,149	29.19%	14,292	33.10%
3	8,043	36.38%	9,469	44.94%	17,512	40.56%
4	160	0.72%	324	1.54%	484	1.12%
5	0	0.00%	2	0.01%	2	0.00%
6	0	0.00%	0	0.00%	0	0.00%
Total	22,106	100.00%	21,069	100.00%	43,175	100.00%

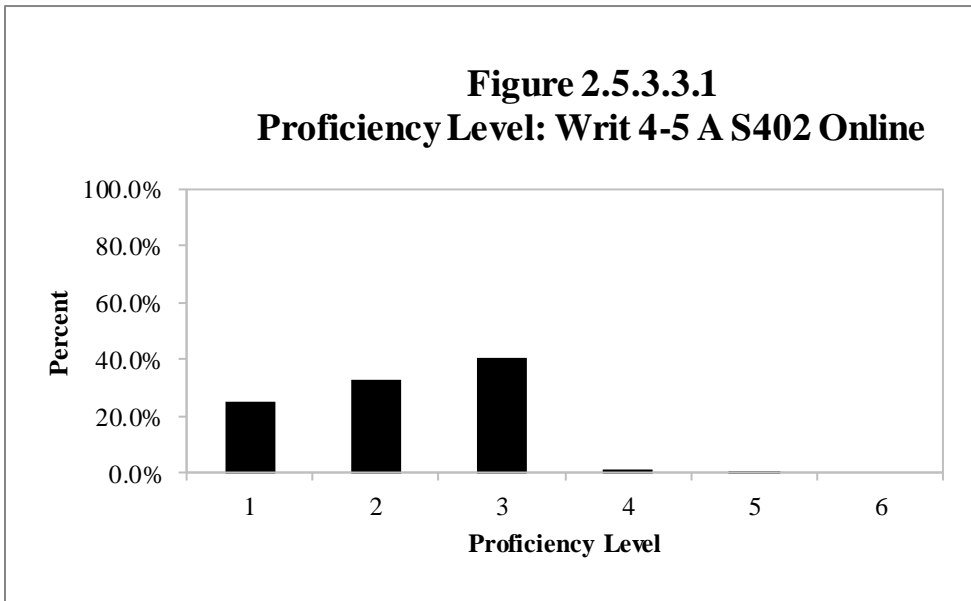


Table 2.5.3.3.2

Proficiency Level Distribution: Writ 4-5 B/C S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	834	0.55%	272	0.29%	1,106	0.45%
2	2,974	1.97%	1,454	1.55%	4,428	1.81%
3	82,735	54.71%	47,630	50.70%	130,365	53.17%
4	61,415	40.61%	41,662	44.35%	103,077	42.04%
5	2,990	1.98%	2,749	2.93%	5,739	2.34%
6	282	0.19%	174	0.19%	456	0.19%
Total	151,230	100.00%	93,941	100.00%	245,171	100.00%

Figure 2.5.3.3.2
Proficiency Level: Writ 4-5 B/C S402 Online

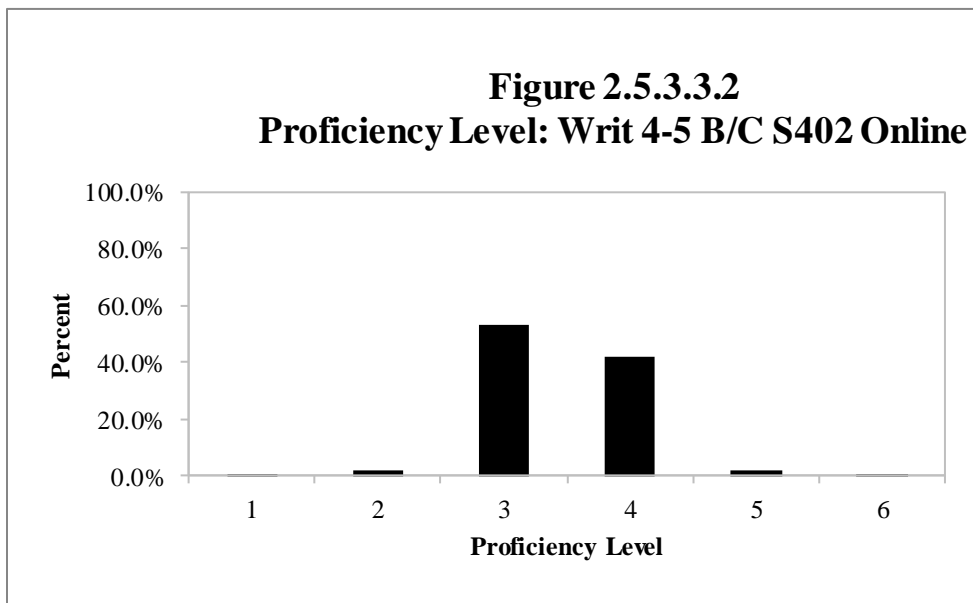
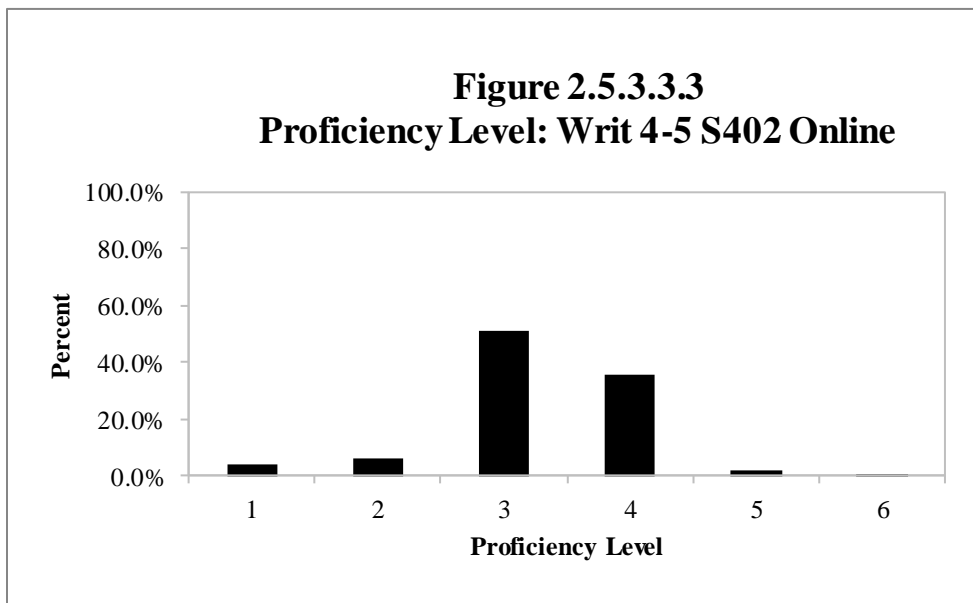


Table 2.5.3.3.3

Proficiency Level Distribution: Writ 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	6,594	3.80%	5,397	4.69%	11,991	4.16%
2	11,117	6.41%	7,603	6.61%	18,720	6.49%
3	90,778	52.37%	57,099	49.65%	147,877	51.28%
4	61,575	35.52%	41,986	36.51%	103,561	35.92%
5	2,990	1.72%	2,751	2.39%	5,741	1.99%
6	282	0.16%	174	0.15%	456	0.16%
Total	173,336	100.00%	115,010	100.00%	288,346	100.00%



2.5.3.4 Grades 6–8

Table 2.5.3.4.1

Proficiency Level Distribution: Writ 6-8 A S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	7,914	25.85%	7,348	21.17%	9,568	27.84%	24,830	24.91%
2	10,137	33.11%	14,162	40.80%	9,585	27.89%	33,884	33.99%
3	12,483	40.77%	12,931	37.25%	15,066	43.84%	40,480	40.60%
4	83	0.27%	269	0.77%	149	0.43%	501	0.50%
5	0	0.00%	0	0.00%	0	0.00%	0	0.00%
6	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	30,617	100.00%	34,710	100.00%	34,368	100.00%	99,695	100.00%

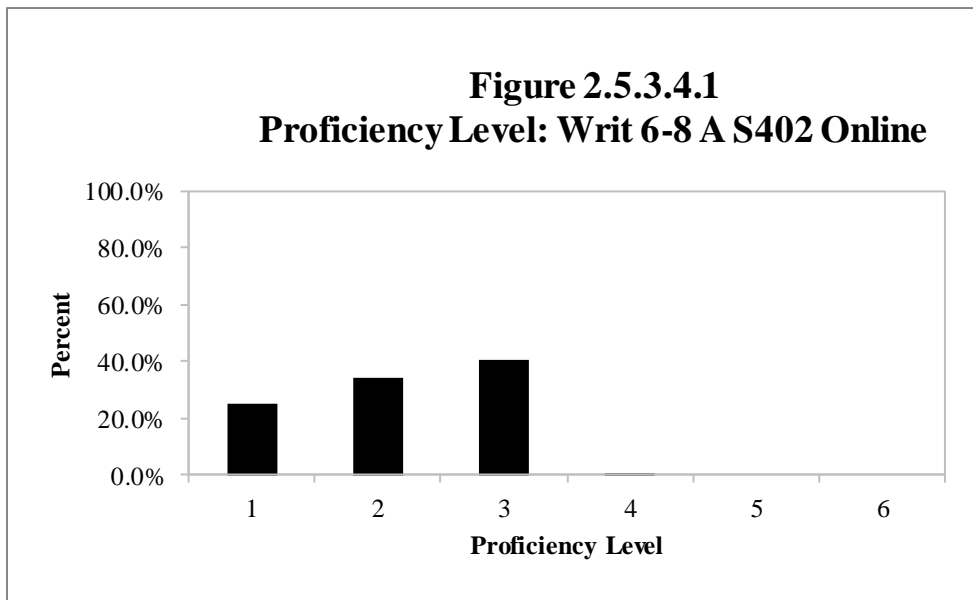


Table 2.5.3.4.2

Proficiency Level Distribution: Writ 6-8 B/C S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	305	0.55%	238	0.49%	268	0.57%	811	0.54%
2	2,377	4.26%	1,967	4.08%	1,351	2.89%	5,695	3.78%
3	39,429	70.66%	33,222	68.83%	31,208	66.73%	103,859	68.86%
4	13,639	24.44%	12,776	26.47%	13,830	29.57%	40,245	26.68%
5	49	0.09%	61	0.13%	109	0.23%	219	0.15%
6	2	0.00%	1	0.00%	2	0.00%	5	0.00%
Total	55,801	100.00%	48,265	100.00%	46,768	100.00%	150,834	100.00%

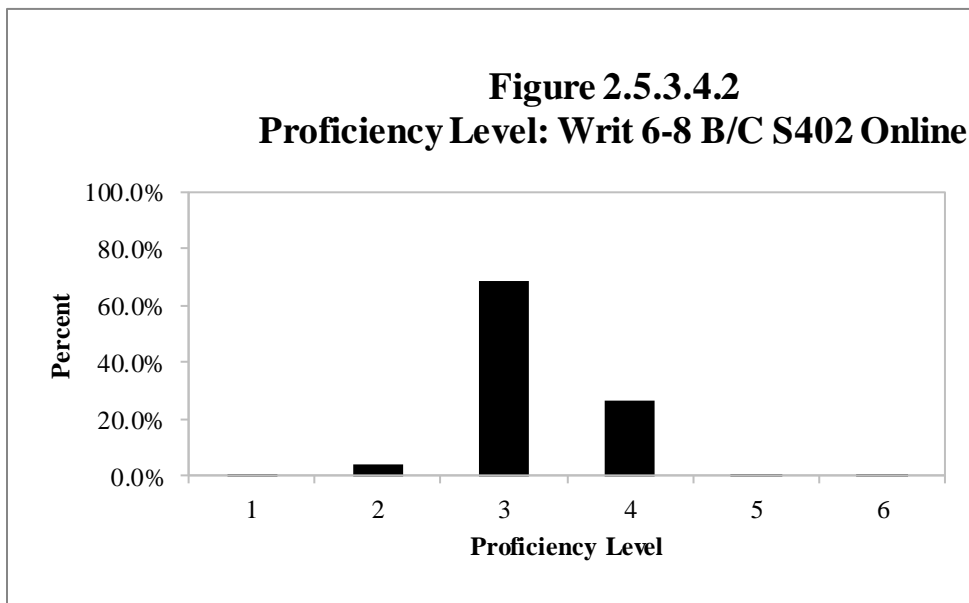
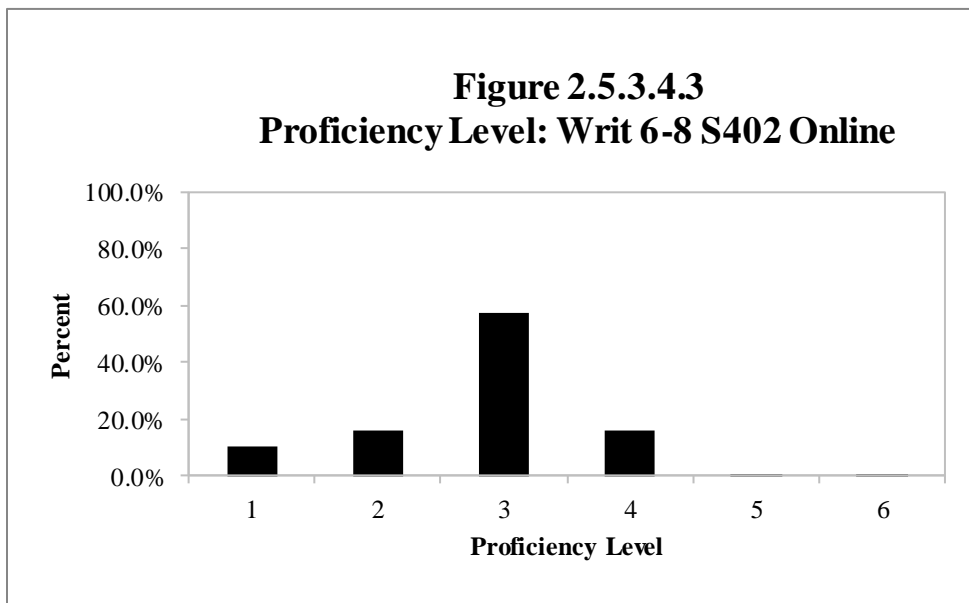


Table 2.5.3.4.3

Proficiency Level Distribution: Writ 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	8,219	9.51%	7,586	9.14%	9,836	12.12%	25,641	10.23%
2	12,514	14.48%	16,129	19.44%	10,936	13.48%	39,579	15.80%
3	51,912	60.07%	46,153	55.62%	46,274	57.03%	144,339	57.61%
4	13,722	15.88%	13,045	15.72%	13,979	17.23%	40,746	16.26%
5	49	0.06%	61	0.07%	109	0.13%	219	0.09%
6	2	0.00%	1	0.00%	2	0.00%	5	0.00%
Total	86,418	100.00%	82,975	100.00%	81,136	100.00%	250,529	100.00%



2.5.3.5 Grades 9–12

Table 2.5.3.5.1

Proficiency Level Distribution: Writ 9-12 A S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	7,191	17.38%	6,105	18.74%	3,887	17.33%	3,863	27.15%	21,046	19.03%
2	12,092	29.22%	9,950	30.55%	7,177	32.00%	4,286	30.13%	33,505	30.29%
3	18,990	45.89%	13,879	42.61%	10,061	44.86%	5,205	36.59%	48,135	43.52%
4	3,077	7.44%	2,618	8.04%	1,288	5.74%	870	6.12%	7,853	7.10%
5	32	0.08%	22	0.07%	13	0.06%	2	0.01%	69	0.06%
6	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	41,382	100.00%	32,574	100.00%	22,426	100.00%	14,226	100.00%	110,608	100.00%

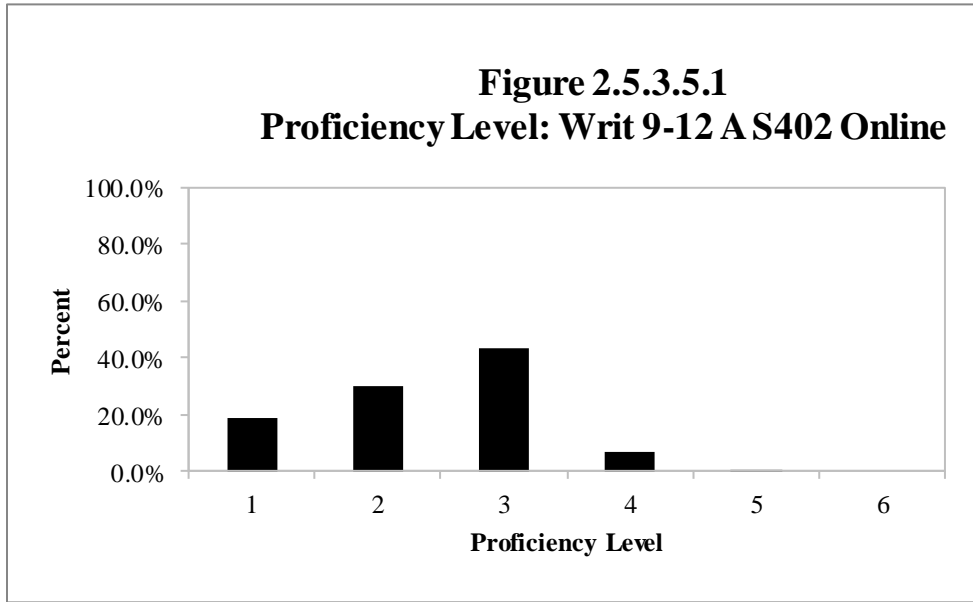


Table 2.5.3.5.2

Proficiency Level Distribution: Writ 9-12 B/C S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	484	0.91%	754	1.41%	1,105	2.76%	1,705	5.80%	4,048	2.30%
2	2,548	4.81%	3,319	6.20%	3,002	7.50%	2,532	8.61%	11,401	6.48%
3	22,335	42.14%	22,233	41.55%	19,578	48.93%	15,440	52.51%	79,586	45.23%
4	24,953	47.07%	25,316	47.31%	15,085	37.70%	9,127	31.04%	74,481	42.33%
5	2,601	4.91%	1,863	3.48%	1,235	3.09%	593	2.02%	6,292	3.58%
6	87	0.16%	30	0.06%	10	0.02%	9	0.03%	136	0.08%
Total	53,008	100.00%	53,515	100.00%	40,015	100.00%	29,406	100.00%	175,944	100.00%

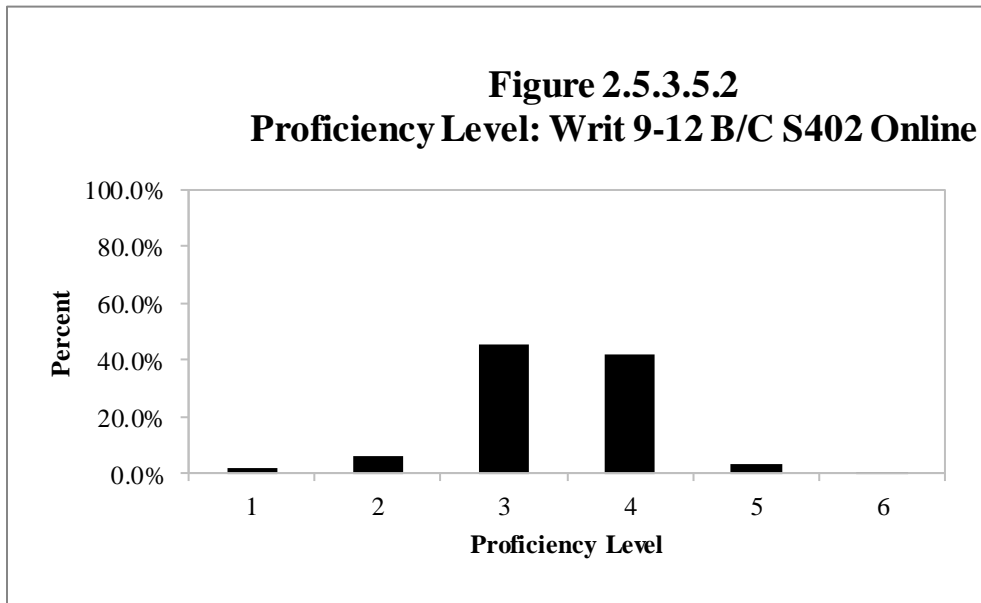
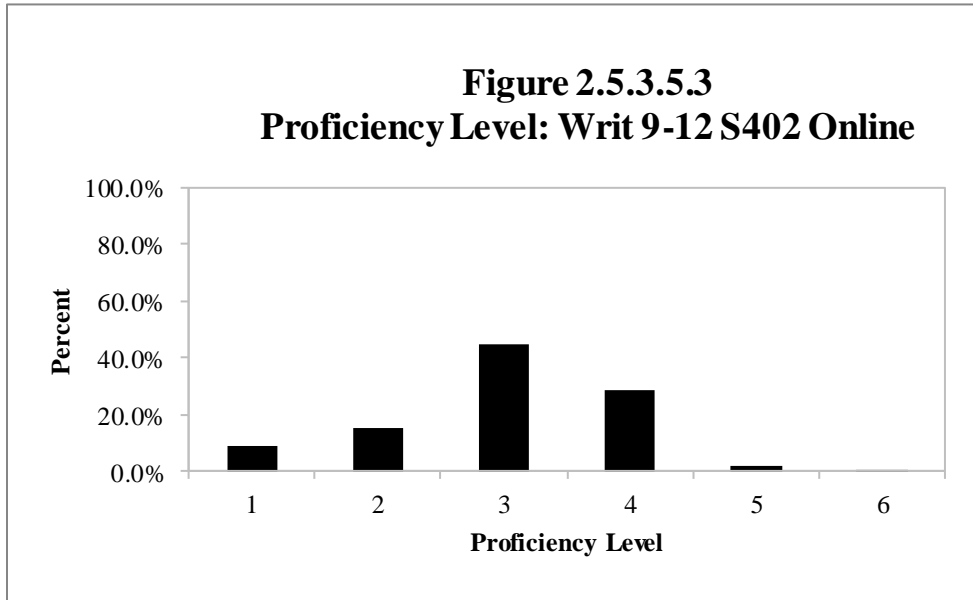


Table 2.5.3.5.3

Proficiency Level Distribution: Writ 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	7,675	8.13%	6,859	7.97%	4,992	7.99%	5,568	12.76%	25,094	8.76%
2	14,640	15.51%	13,269	15.41%	10,179	16.30%	6,818	15.63%	44,906	15.67%
3	41,325	43.78%	36,112	41.95%	29,639	47.47%	20,645	47.32%	127,721	44.57%
4	28,030	29.70%	27,934	32.45%	16,373	26.22%	9,997	22.91%	82,334	28.73%
5	2,633	2.79%	1,885	2.19%	1,248	2.00%	595	1.36%	6,361	2.22%
6	87	0.09%	30	0.03%	10	0.02%	9	0.02%	136	0.05%
Total	94,390	100.00%	86,089	100.00%	62,441	100.00%	43,632	100.00%	286,552	100.00%



2.5.4 Speaking

Note that Speaking Tier Pre-A is intended for students who perform at less than chance on the Listening and Reading test, and is intended to meet the needs of students in very early stages of English language development. Students routed to this form cannot score higher than PL1.

2.5.4.1 Grade 1

Table 2.5.4.1.1

Proficiency Level Distribution: Spek 1 Pre-A S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	4,437	100.00%	4,437	100.00%
Total	4,437	100.00%	4,437	100.00%

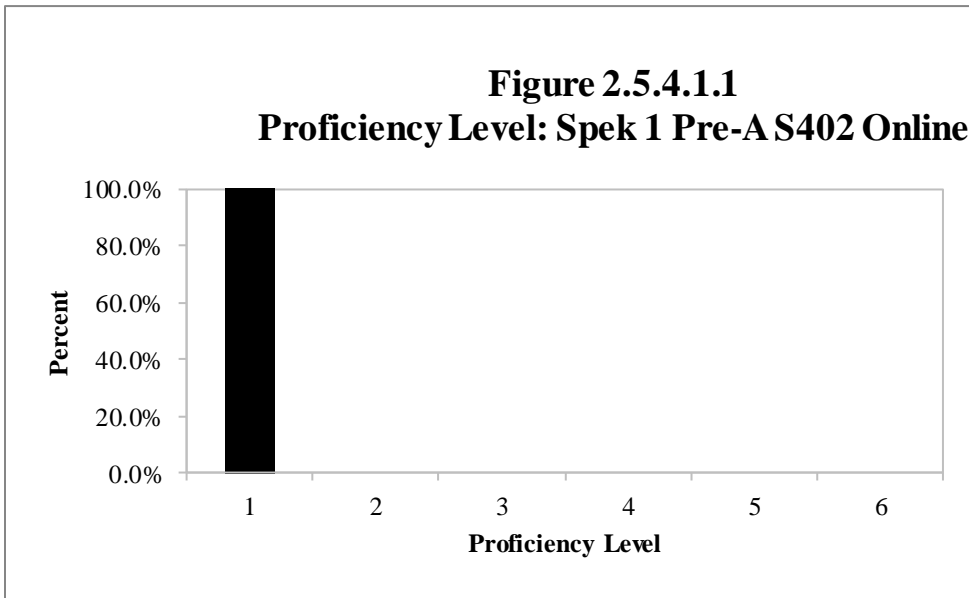


Table 2.5.4.1.2

Proficiency Level Distribution: Spek 1 A S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	15,862	26.82%	15,862	26.82%
2	21,356	36.11%	21,356	36.11%
3	21,087	35.65%	21,087	35.65%
4	796	1.35%	796	1.35%
5	43	0.07%	43	0.07%
6	0	0.00%	0	0.00%
Total	59,144	100.00%	59,144	100.00%

Figure 2.5.4.1.2
Proficiency Level: Spek 1 A S402 Online

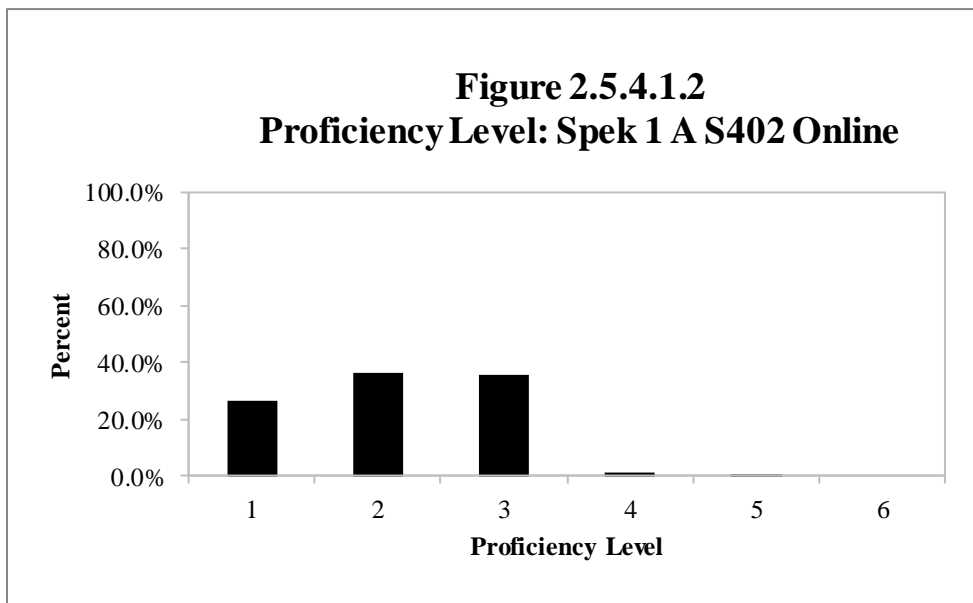


Table 2.5.4.1.3

Proficiency Level Distribution: Spek 1 B/C S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	5,402	4.87%	5,402	4.87%
2	31,581	28.45%	31,581	28.45%
3	58,786	52.95%	58,786	52.95%
4	14,964	13.48%	14,964	13.48%
5	279	0.25%	279	0.25%
6	5	0.00%	5	0.00%
Total	111,017	100.00%	111,017	100.00%

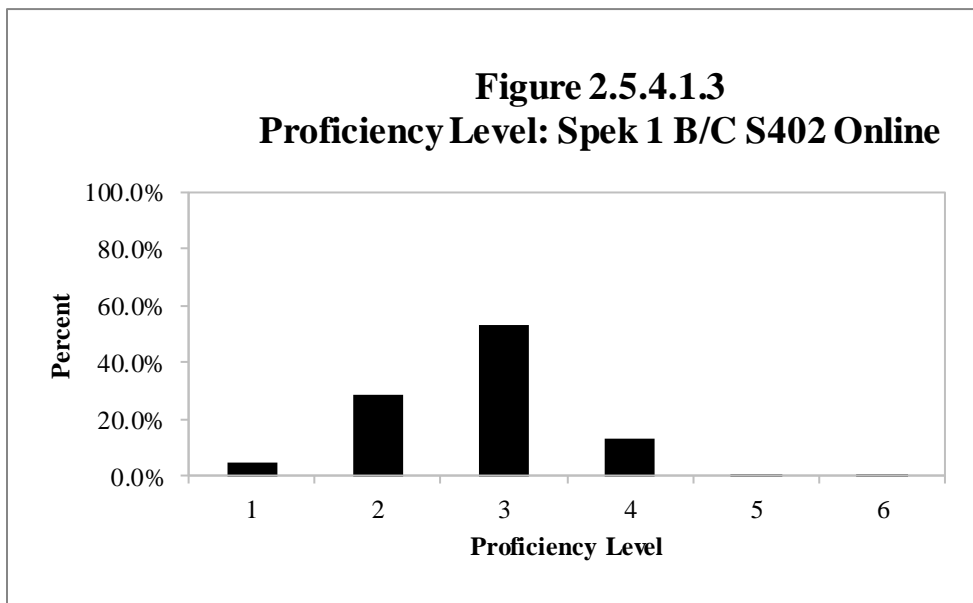
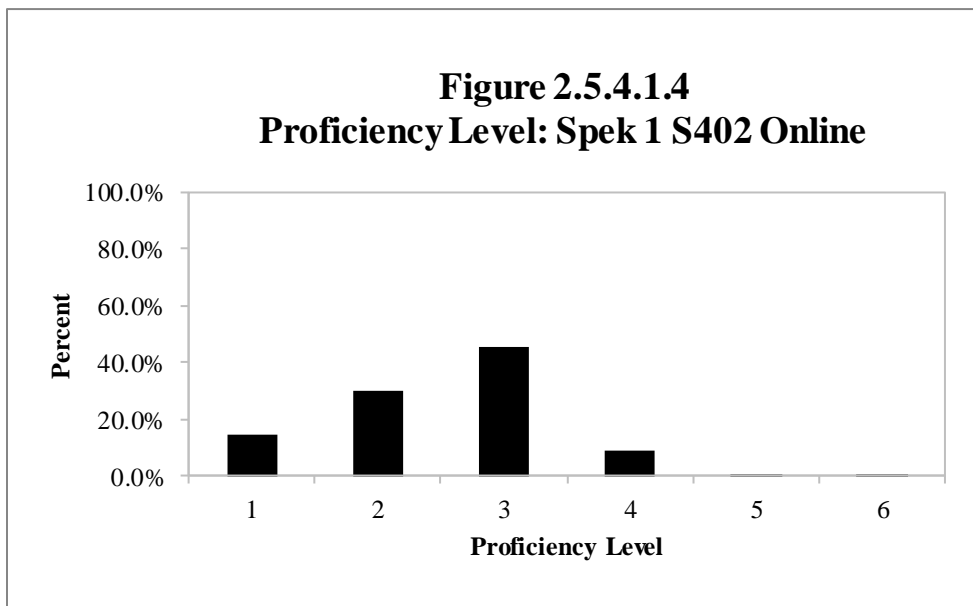


Table 2.5.4.1.4

Proficiency Level Distribution: Spek 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	25,701	14.72%	25,701	14.72%
2	52,937	30.32%	52,937	30.32%
3	79,873	45.75%	79,873	45.75%
4	15,760	9.03%	15,760	9.03%
5	322	0.18%	322	0.18%
6	5	0.00%	5	0.00%
Total	174,598	100.00%	174,598	100.00%



2.5.4.2 Grades 2–3

Table 2.5.4.2.1

Proficiency Level Distribution: Spek 2-3 Pre-A S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	5,115	100.00%	8,553	100.00%	13,668	100.00%
Total	5,115	100.00%	8,553	100.00%	13,668	100.00%

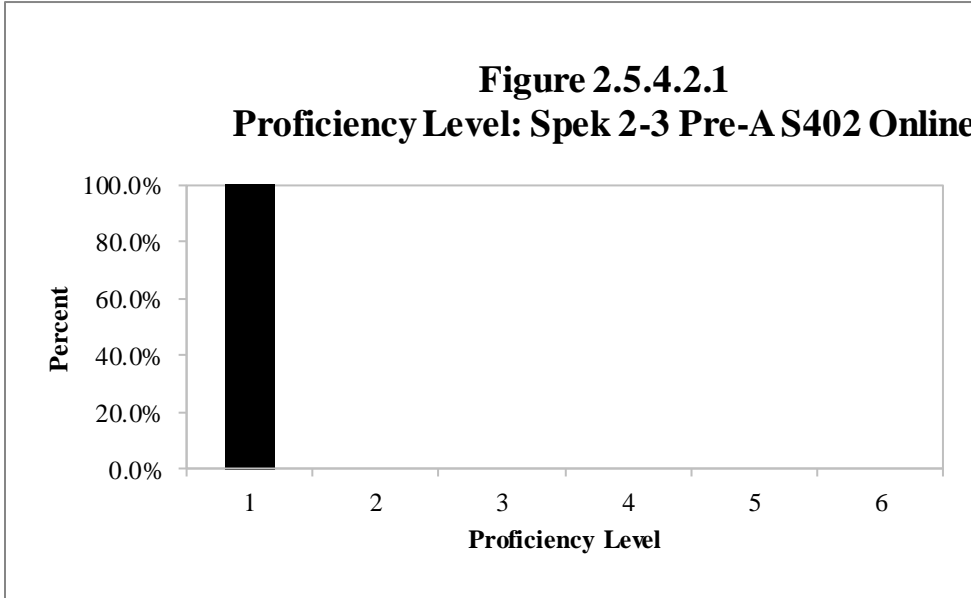


Table 2.5.4.2.2

Proficiency Level Distribution: Spek 2-3 A S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	12,689	30.15%	7,311	18.82%	20,000	24.71%
2	19,437	46.19%	18,328	47.19%	37,765	46.67%
3	8,681	20.63%	12,712	32.73%	21,393	26.44%
4	1,248	2.97%	491	1.26%	1,739	2.15%
5	28	0.07%	0	0.00%	28	0.03%
6	0	0.00%	0	0.00%	0	0.00%
Total	42,083	100.00%	38,842	100.00%	80,925	100.00%

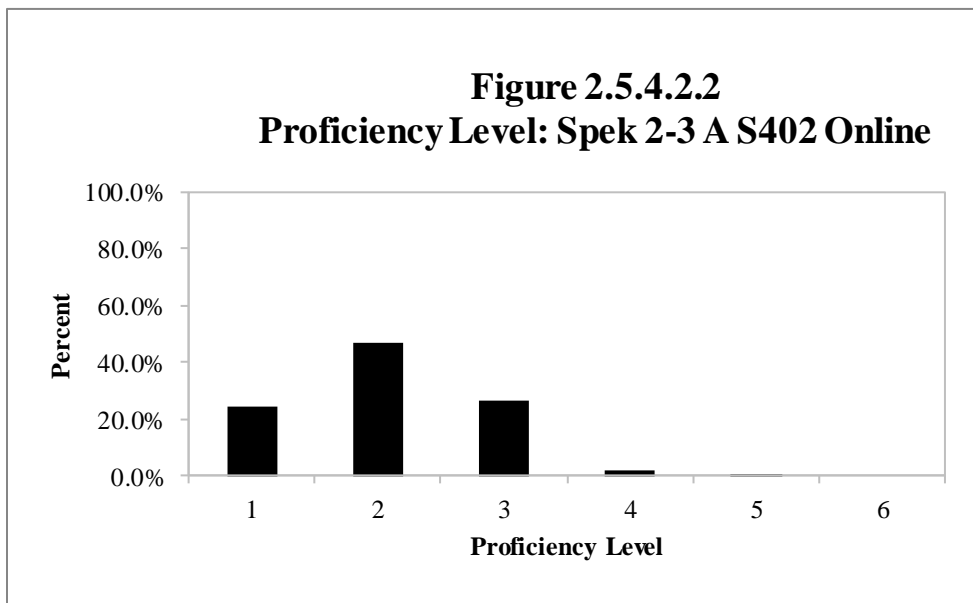


Table 2.5.4.2.3

Proficiency Level Distribution: Spek 2-3 B/C S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	9,881	7.62%	9,053	6.66%	18,934	7.13%
2	51,650	39.83%	53,994	39.71%	105,644	39.77%
3	57,308	44.19%	61,535	45.26%	118,843	44.74%
4	10,729	8.27%	11,083	8.15%	21,812	8.21%
5	89	0.07%	238	0.18%	327	0.12%
6	27	0.02%	65	0.05%	92	0.03%
Total	129,684	100.00%	135,968	100.00%	265,652	100.00%

Figure 2.5.4.2.3
Proficiency Level: Spek 2-3 B/C S402 Online

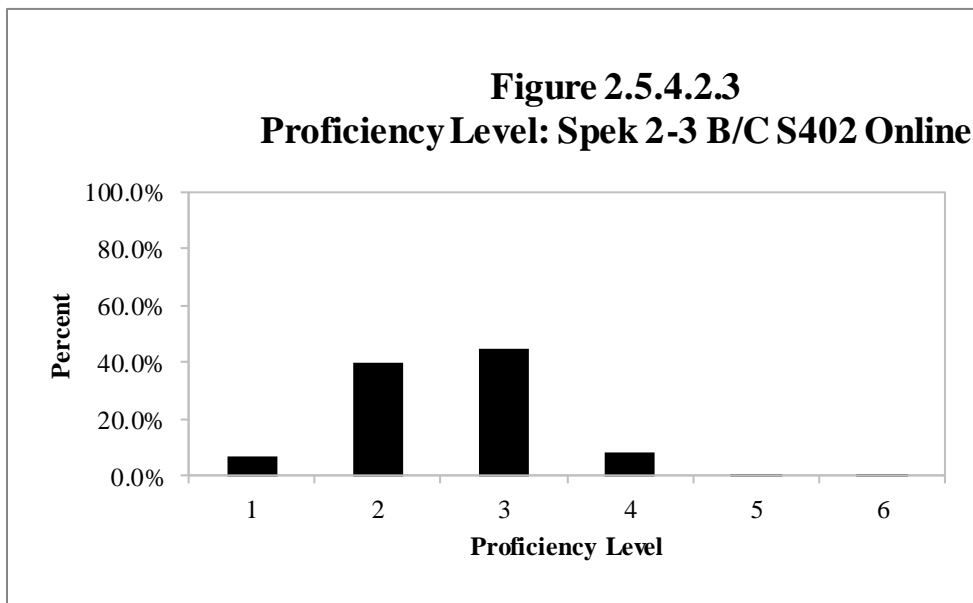
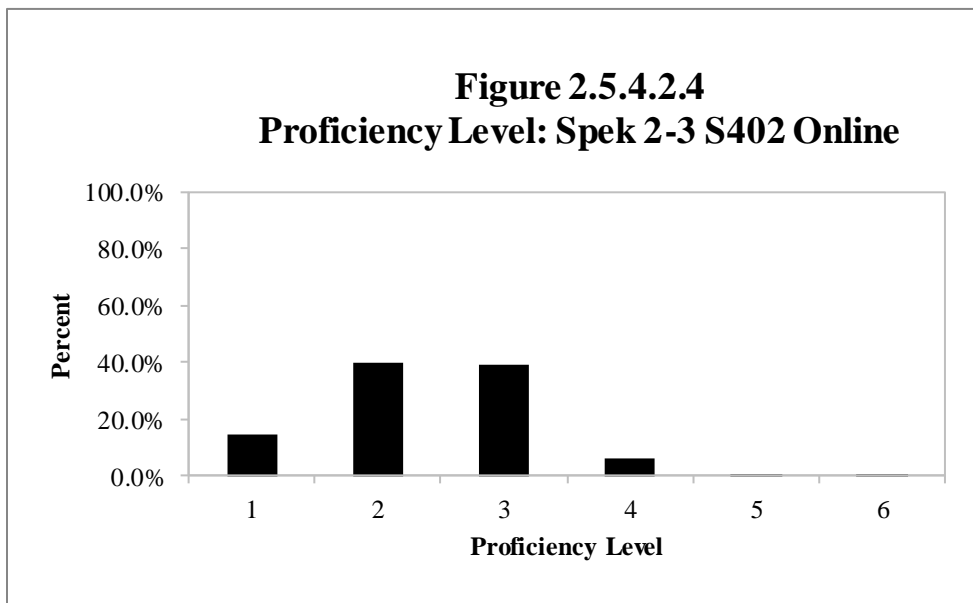


Table 2.5.4.2.4

Proficiency Level Distribution: Spek 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	27,685	15.65%	24,917	13.59%	52,602	14.60%
2	71,087	40.19%	72,322	39.44%	143,409	39.81%
3	65,989	37.31%	74,247	40.49%	140,236	38.93%
4	11,977	6.77%	11,574	6.31%	23,551	6.54%
5	117	0.07%	238	0.13%	355	0.10%
6	27	0.02%	65	0.04%	92	0.03%
Total	176,882	100.00%	183,363	100.00%	360,245	100.00%

Figure 2.5.4.2.4
Proficiency Level: Spek 2-3 S402 Online



2.5.4.3 Grades 4–5

Table 2.5.4.3.1

Proficiency Level Distribution: Spek 4-5 Pre-A S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	1,835	100.00%	3,130	100.00%	4,965	100.00%
Total	1,835	100.00%	3,130	100.00%	4,965	100.00%

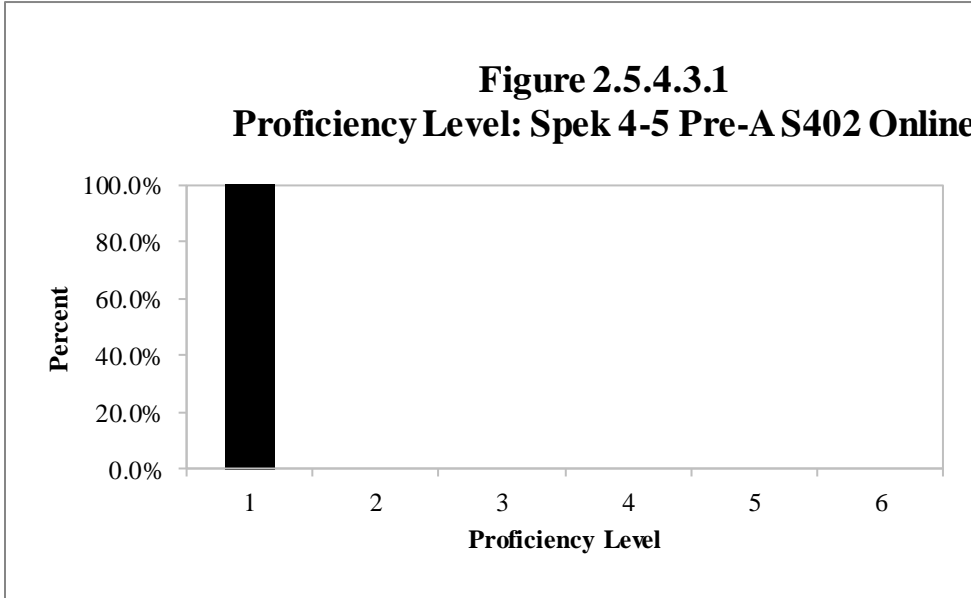


Table 2.5.4.3.2

Proficiency Level Distribution: Spek 4-5 A S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	5,534	34.41%	5,847	49.82%	11,381	40.91%
2	6,023	37.45%	4,371	37.24%	10,394	37.36%
3	3,957	24.61%	1,390	11.84%	5,347	19.22%
4	562	3.49%	127	1.08%	689	2.48%
5	6	0.04%	1	0.01%	7	0.03%
6	0	0.00%	0	0.00%	0	0.00%
Total	16,082	100.00%	11,736	100.00%	27,818	100.00%

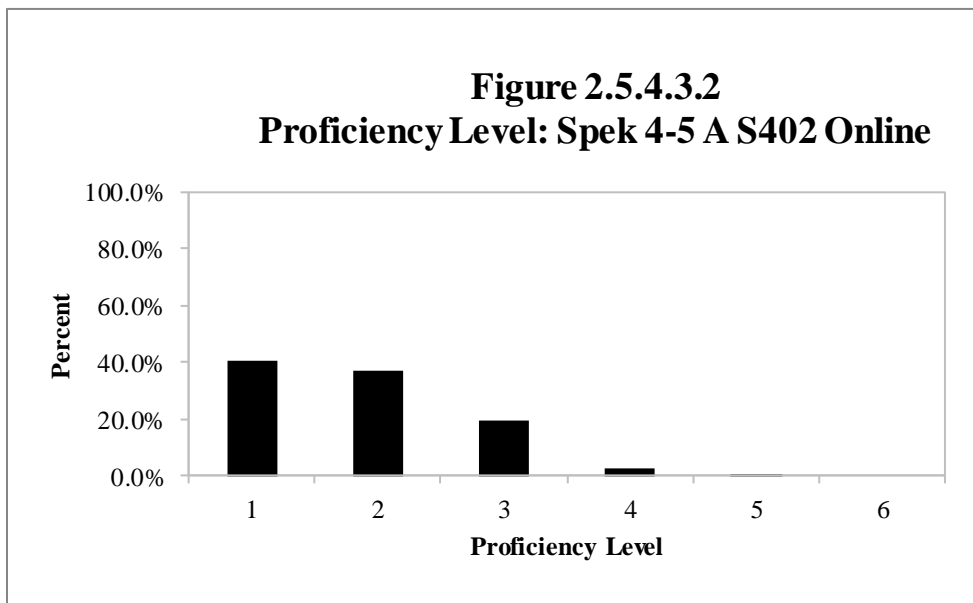


Table 2.5.4.3.3

Proficiency Level Distribution: Spek 4-5 B/C S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	5,573	3.52%	5,993	5.92%	11,566	4.45%
2	25,780	16.27%	21,919	21.64%	47,699	18.37%
3	75,582	47.71%	50,794	50.16%	126,376	48.67%
4	50,923	32.15%	22,052	21.78%	72,975	28.10%
5	506	0.32%	504	0.50%	1,010	0.39%
6	48	0.03%	8	0.01%	56	0.02%
Total	158,412	100.00%	101,270	100.00%	259,682	100.00%

Figure 2.5.4.3.3
Proficiency Level: Spek 4-5 B/C S402 Online

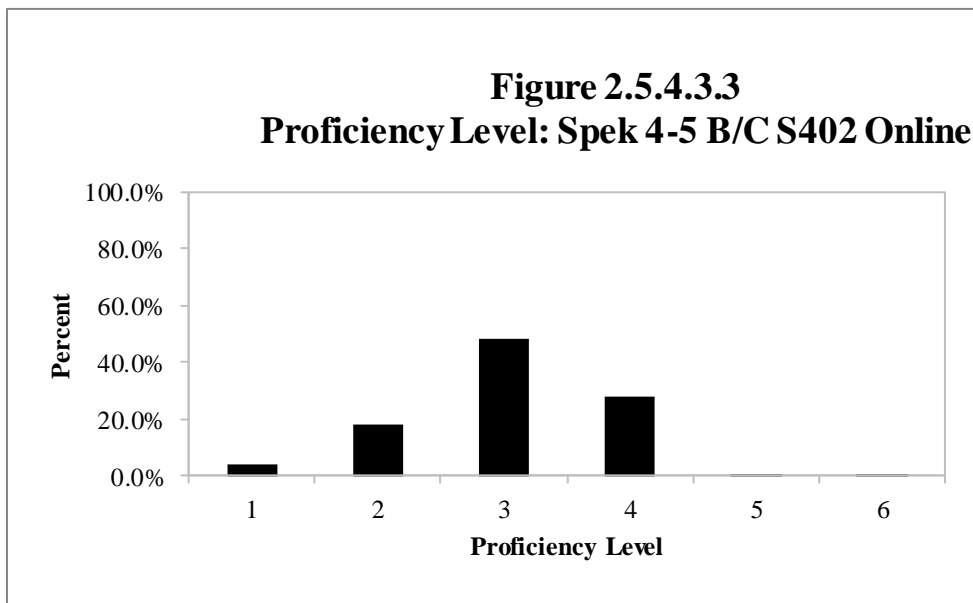
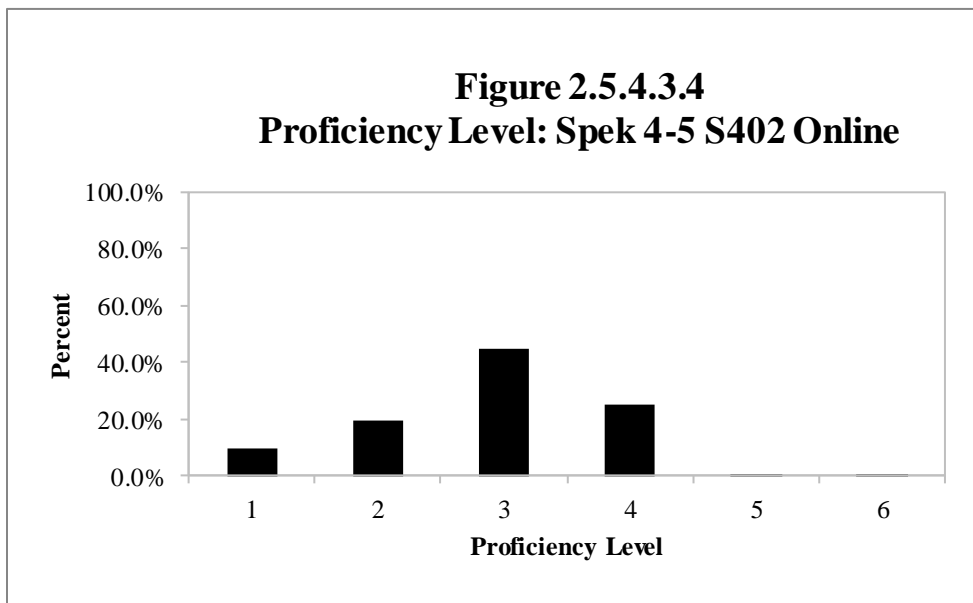


Table 2.5.4.3.4

Proficiency Level Distribution: Spek 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	12,942	7.34%	14,970	12.89%	27,912	9.54%
2	31,803	18.04%	26,290	22.64%	58,093	19.86%
3	79,539	45.11%	52,184	44.93%	131,723	45.04%
4	51,485	29.20%	22,179	19.10%	73,664	25.19%
5	512	0.29%	505	0.43%	1,017	0.35%
6	48	0.03%	8	0.01%	56	0.02%
Total	176,329	100.00%	116,136	100.00%	292,465	100.00%

Figure 2.5.4.3.4
Proficiency Level: Spek 4-5 S402 Online



2.5.4.4 Grades 6–8

Table 2.5.4.4.1

Proficiency Level Distribution: Spek 6-8 Pre-A S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	2,069	100.00%	2,592	100.00%	4,066	100.00%	8,727	100.00%
Total	2,069	100.00%	2,592	100.00%	4,066	100.00%	8,727	100.00%

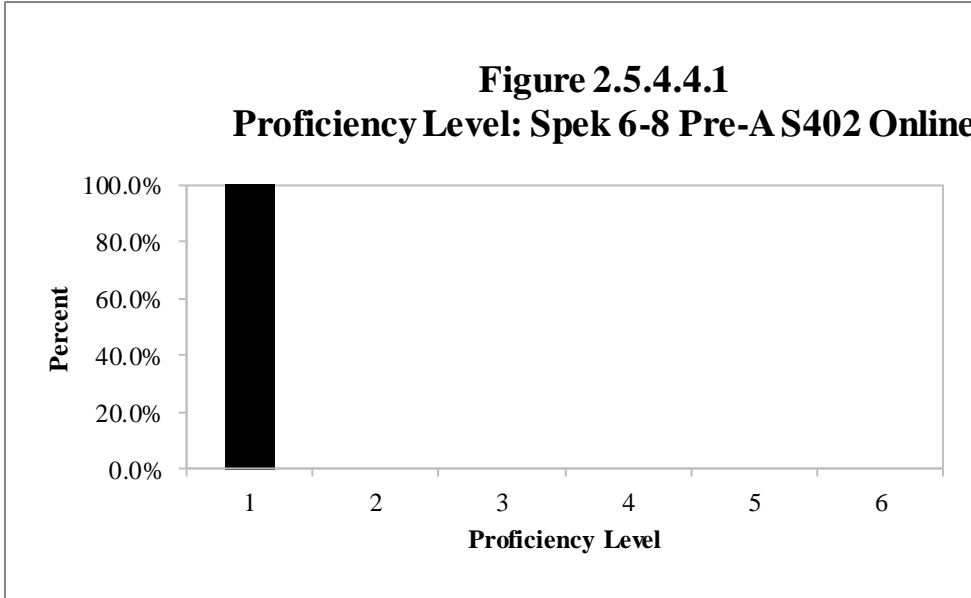


Table 2.5.4.4.2

Proficiency Level Distribution: Spek 6-8 A S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	4,589	24.61%	6,454	43.32%	7,389	29.95%	18,432	31.66%
2	5,891	31.60%	5,777	38.77%	9,940	40.30%	21,608	37.12%
3	6,532	35.03%	2,344	15.73%	6,031	24.45%	14,907	25.61%
4	1,616	8.67%	323	2.17%	1,299	5.27%	3,238	5.56%
5	17	0.09%	1	0.01%	9	0.04%	27	0.05%
6	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	18,645	100.00%	14,899	100.00%	24,668	100.00%	58,212	100.00%

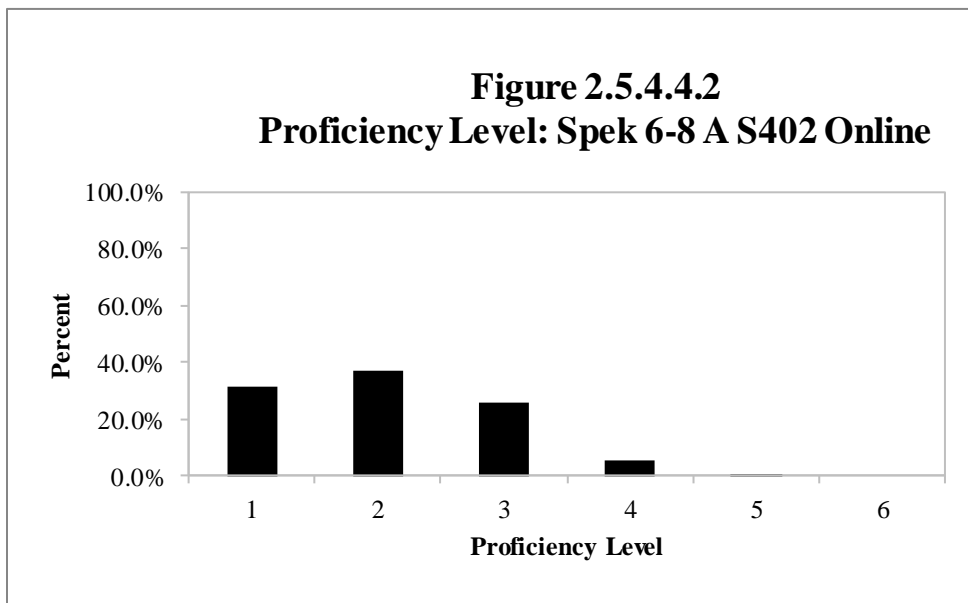


Table 2.5.4.4.3

Proficiency Level Distribution: Spek 6-8 B/C S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	3,424	5.16%	5,337	8.13%	2,952	5.61%	11,713	6.35%
2	15,835	23.88%	19,814	30.20%	11,946	22.71%	47,595	25.79%
3	34,621	52.21%	31,755	48.40%	31,883	60.61%	98,259	53.25%
4	12,137	18.30%	8,523	12.99%	5,726	10.88%	26,386	14.30%
5	294	0.44%	164	0.25%	93	0.18%	551	0.30%
6	3	0.00%	14	0.02%	5	0.01%	22	0.01%
Total	66,314	100.00%	65,607	100.00%	52,605	100.00%	184,526	100.00%

Figure 2.5.4.4.3
Proficiency Level: Spek 6-8 B/C S402 Online

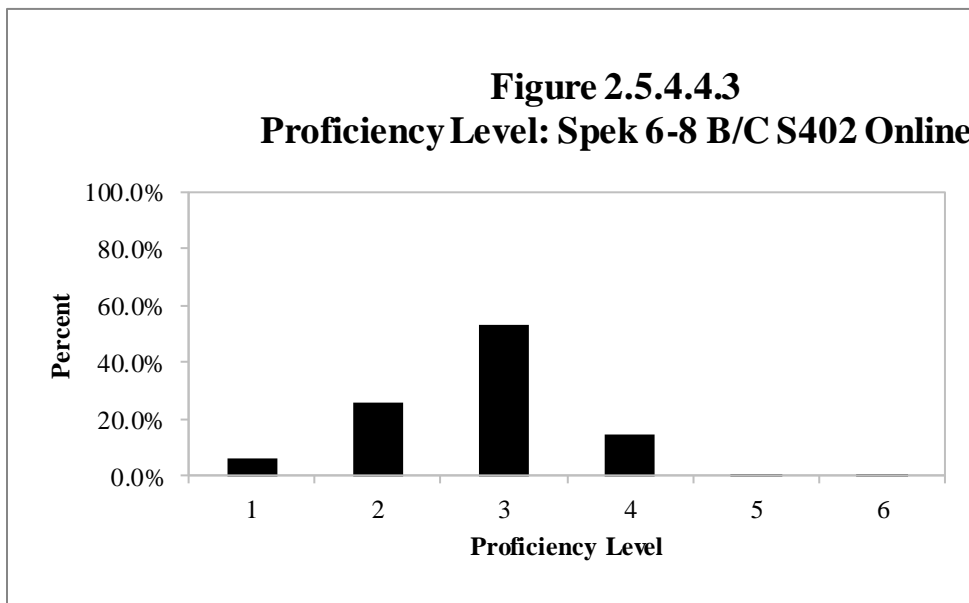
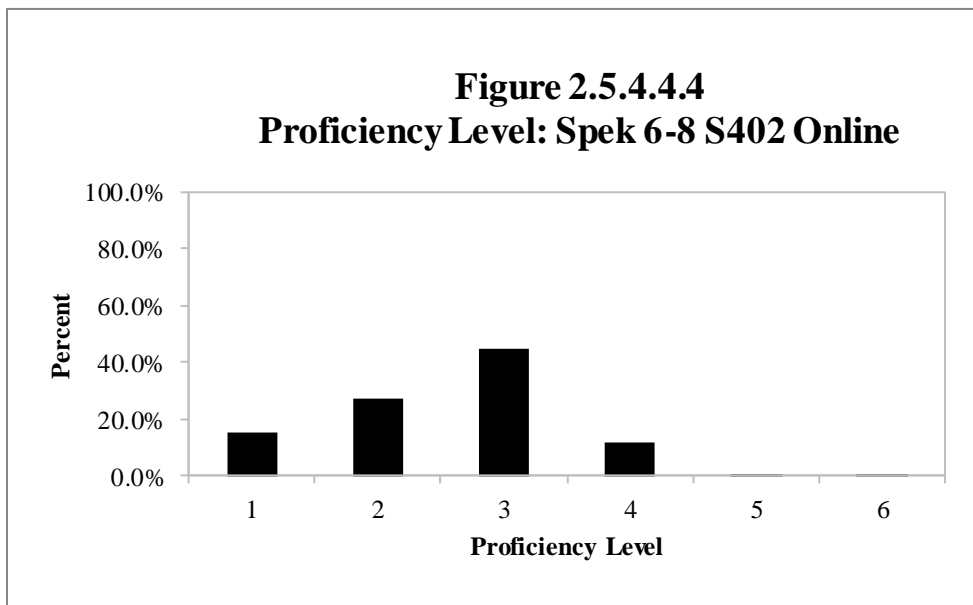


Table 2.5.4.4.4

Proficiency Level Distribution: Spek 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	10,082	11.58%	14,383	17.31%	14,407	17.71%	38,872	15.46%
2	21,726	24.96%	25,591	30.80%	21,886	26.91%	69,203	27.52%
3	41,153	47.29%	34,099	41.03%	37,914	46.61%	113,166	45.00%
4	13,753	15.80%	8,846	10.65%	7,025	8.64%	29,624	11.78%
5	311	0.36%	165	0.20%	102	0.13%	578	0.23%
6	3	0.00%	14	0.02%	5	0.01%	22	0.01%
Total	87,028	100.00%	83,098	100.00%	81,339	100.00%	251,465	100.00%



2.5.4.5 Grades 9–12

Table 2.5.4.5.1

Proficiency Level Distribution: Spek 9-12 Pre-A S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	3,864	100.00%	5,766	100.00%	4,792	100.00%	3,701	100.00%	18,123	100.00%
Total	3,864	100.00%	5,766	100.00%	4,792	100.00%	3,701	100.00%	18,123	100.00%

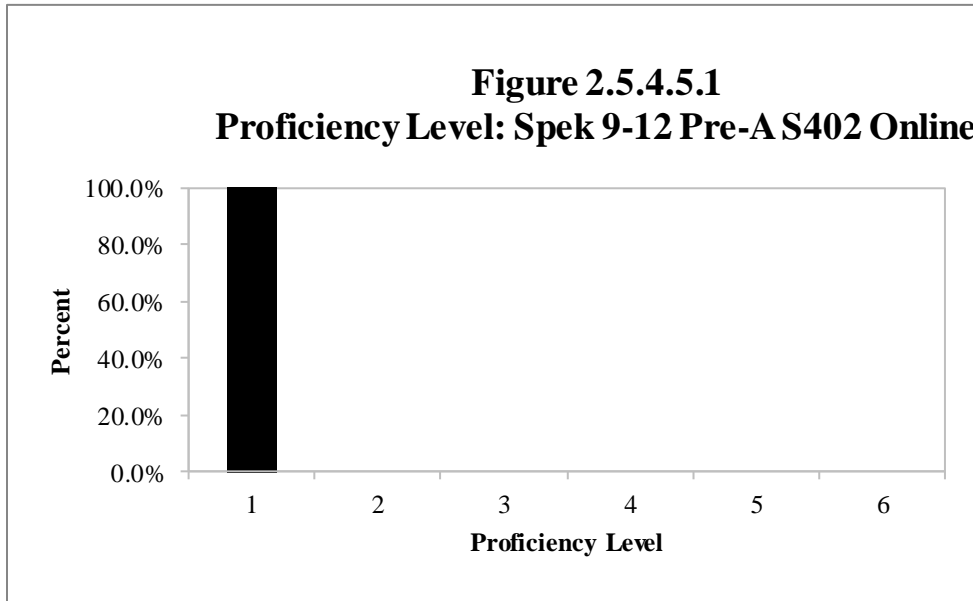


Table 2.5.4.5.2

Proficiency Level Distribution: Spek 9-12 A S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	25,218	46.38%	15,678	42.95%	6,415	45.76%	10,295	47.53%	57,606	45.51%
2	23,204	42.67%	16,585	45.43%	6,239	44.50%	6,647	30.69%	52,675	41.62%
3	5,651	10.39%	4,017	11.00%	1,360	9.70%	4,646	21.45%	15,674	12.38%
4	304	0.56%	227	0.62%	6	0.04%	72	0.33%	609	0.48%
5	0	0.00%	0	0.00%	0	0.00%	2	0.01%	2	0.00%
6	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	54,377	100.00%	36,507	100.00%	14,020	100.00%	21,662	100.00%	126,566	100.00%

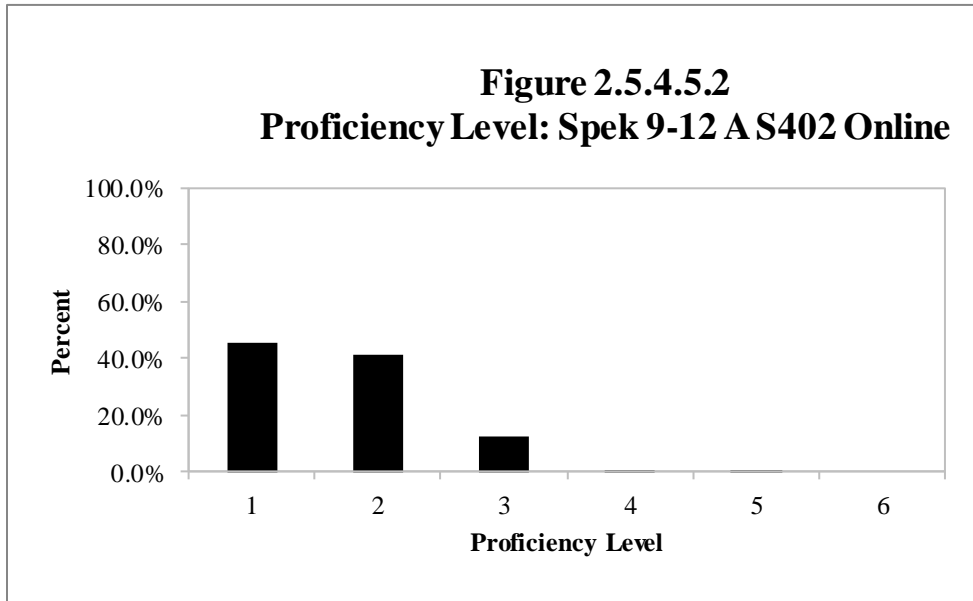


Table 2.5.4.5.3

Proficiency Level Distribution: Spek 9-12 B/C S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	3,269	9.02%	4,313	9.83%	7,618	17.62%	2,249	12.31%	17,449	12.32%
2	8,661	23.90%	17,848	40.66%	15,556	35.99%	5,554	30.39%	47,619	33.62%
3	22,460	61.99%	20,300	46.25%	19,467	45.04%	10,092	55.22%	72,319	51.06%
4	1,806	4.98%	1,420	3.24%	571	1.32%	371	2.03%	4,168	2.94%
5	32	0.09%	10	0.02%	9	0.02%	10	0.05%	61	0.04%
6	3	0.01%	3	0.01%	3	0.01%	1	0.01%	10	0.01%
Total	36,231	100.00%	43,894	100.00%	43,224	100.00%	18,277	100.00%	141,626	100.00%

Figure 2.5.4.5.3
Proficiency Level: Spek 9-12 B/C S402 Online

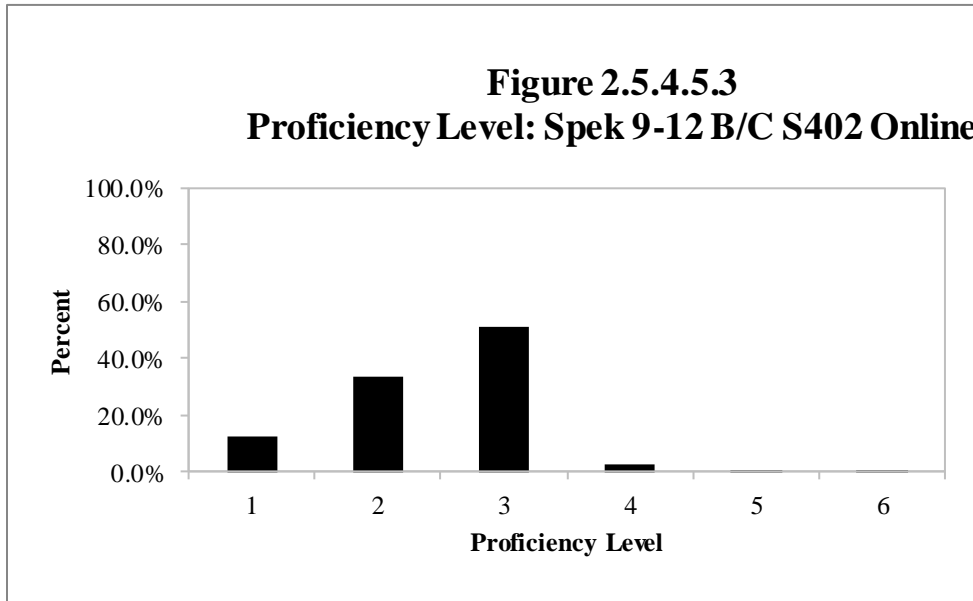
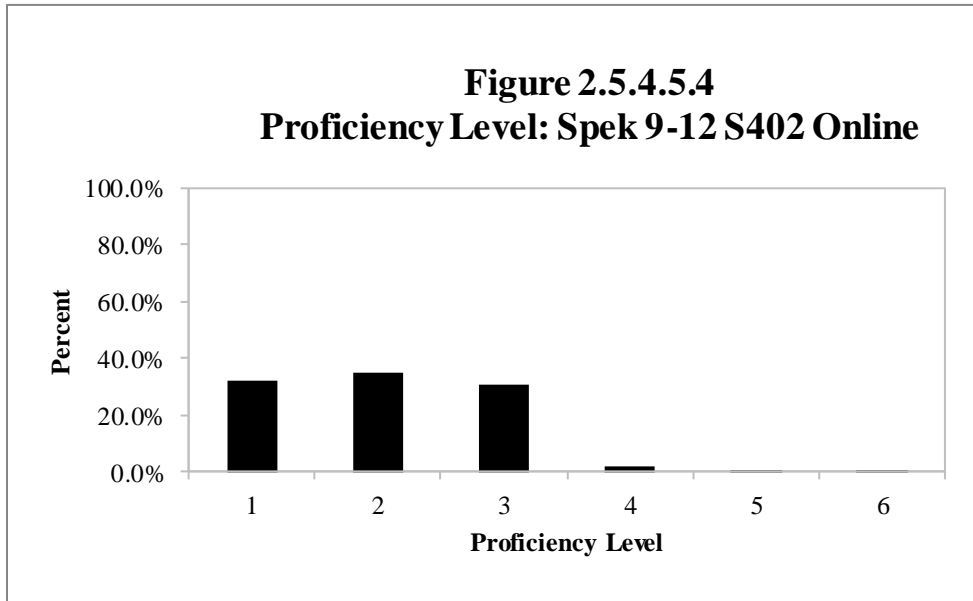


Table 2.5.4.5.4

Proficiency Level Distribution: Spek 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	32,351	34.24%	25,757	29.89%	18,825	30.35%	16,245	37.23%	93,178	32.54%
2	31,865	33.73%	34,433	39.96%	21,795	35.13%	12,201	27.96%	100,294	35.03%
3	28,111	29.76%	24,317	28.22%	20,827	33.57%	14,738	33.77%	87,993	30.73%
4	2,110	2.23%	1,647	1.91%	577	0.93%	443	1.02%	4,777	1.67%
5	32	0.03%	10	0.01%	9	0.01%	12	0.03%	63	0.02%
6	3	0.00%	3	0.00%	3	0.00%	1	0.00%	10	0.00%
Total	94,472	100.00%	86,167	100.00%	62,036	100.00%	43,640	100.00%	286,315	100.00%



2.6 Raw to Scale Score Conversion for Speaking and Writing

This section presents the raw score to scale score conversion table for the test forms for Speaking and Writing.

The first column shows all possible raw scores. The following column(s) show the corresponding scale score for the highest grade in the grade-level cluster. The next column shows the conditional standard error of measurement (i.e., from the Rasch analysis) in the metric of the scale score. The last two columns show a lower bound (i.e., the scale score minus one standard error) and an upper bound (i.e., the scale score plus one standard error) around the scale score. In some cases, the resulting lower bound fell below 100. In such cases, the lower bound has been set at 100, which has been determined to be the lowest score possible on the scale.

At the lower end of the raw score scale, scale scores are truncated where necessary so that the lowest scale score given is the scale score corresponding to a proficiency level score of 1.0. The standard error and the lower and upper bounds reported in these tables reflect the truncated score.

2.6.1 Listening

The ACCESS 2.0 Online Listening test is a multistage adaptive assessment. As students do not all take the same set of items in the test, raw to scale score conversion tables are not presented.

2.6.2 Reading

The ACCESS 2.0 Online Reading test is a multistage adaptive assessment. As students do not all take the same set of items in the test, raw to scale score conversion tables are not presented.

2.6.3 Writing

2.6.3.1 Grade 1

Table 2.6.3.1.1

Raw Score to Scale Score Conversion: Writ 1 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound	Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	111^	43.23	100.00^	154.23	34	380	13.16	366.84	393.16
1	132	38.96	100.00^	170.96	35	387	13.61	373.39	400.61
2	173	26.80	146.20	199.80	36	394	14.45	379.55	408.45
3	191	18.74	172.26	209.74	37	403	15.98	387.02	418.98
4	202	14.80	187.20	216.80	38	414	18.96	395.04	432.96
5	209	12.70	196.30	221.70	39	432	26.39	405.61	458.39
6	214	11.47	202.53	225.47	40	464	48.52	415.48	512.52
7	219	10.71	208.29	229.71					
8	223	10.26	212.74	233.26					
9	227	10.02	216.98	237.02					
10	230	9.96	220.04	239.96					
11	234	10.07	223.93	244.07					
12	238	10.31	227.69	248.31					
13	242	10.69	231.31	252.69					
14	246	11.22	234.78	257.22					
15	251	11.87	239.13	262.87					
16	257	12.59	244.41	269.59					
17	263	13.29	249.71	276.29					
18	270	13.91	256.09	283.91					
19	277	14.34	262.66	291.34					
20	285	14.53	270.47	299.53					
21	293	14.50	278.50	307.50					
22	301	14.28	286.72	315.28					
23	308	13.96	294.04	321.96					
24	315	13.64	301.36	328.64					
25	322	13.43	308.57	335.43					
26	329	13.32	315.68	342.32					
27	335	13.32	321.68	348.32					
28	342	13.32	328.68	355.32					
29	349	13.29	335.71	362.29					
30	355	13.21	341.79	368.21					
31	362	13.08	348.92	375.08					
32	368	12.97	355.03	380.97					
33	374	12.97	361.03	386.97					

^ Truncated

Table 2.6.3.1.2

Raw Score to Scale Score Conversion: Writ 1 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound	Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	111^	106.33	100.00^	217.33	34	332	12.32	319.68	344.32
1	179	24.22	154.78	203.22	35	338	12.16	325.84	350.16
2	194	16.54	177.46	210.54	36	343	11.95	331.05	354.95
3	202	13.43	188.57	215.43	37	348	11.73	336.27	359.73
4	208	11.73	196.27	219.73	38	354	11.55	342.45	365.55
5	212	10.69	201.31	222.69	39	358	11.33	346.67	369.33
6	216	10.02	205.98	226.02	40	363	11.17	351.83	374.17
7	220	9.53	210.47	229.53	41	368	11.04	356.96	379.04
8	223	9.18	213.82	232.18	42	372	10.96	361.04	382.96
9	226	8.97	217.03	234.97	43	377	10.93	366.07	387.93
10	229	8.81	220.19	237.81	44	381	10.96	370.04	391.96
11	232	8.70	223.30	240.70	45	386	11.09	374.91	397.09
12	235	8.65	226.35	243.65	46	390	11.28	378.72	401.28
13	238	8.65	229.35	246.65	47	395	11.63	383.37	406.63
14	240	8.70	231.30	248.70	48	400	12.11	387.89	412.11
15	243	8.75	234.25	251.75	49	406	12.83	393.17	418.83
16	246	8.89	237.11	254.89	50	413	13.91	399.09	426.91
17	249	9.05	239.95	258.05	51	421	15.65	405.35	436.65
18	252	9.29	242.71	261.29	52	432	18.82	413.18	450.82
19	256	9.56	246.44	265.56	53	450	26.45	423.55	476.45
20	259	9.85	249.15	268.85	54	481	48.63	432.37	529.63
21	263	10.23	252.77	273.23					
22	267	10.61	256.39	277.61					
23	271	11.01	259.99	282.01					
24	276	11.38	264.62	287.38					
25	281	11.71	269.29	292.71					
26	286	12.00	274.00	298.00					
27	292	12.22	279.78	304.22					
28	297	12.41	284.59	309.41					
29	303	12.51	290.49	315.51					
30	309	12.59	296.41	321.59					
31	315	12.59	302.41	327.59					
32	321	12.54	308.46	333.54					
33	327	12.46	314.54	339.46					

^ Truncated

2.6.3.2 Grades 2–3

Table 2.6.3.2.1

Raw Score to Scale Score Conversion: Writ 2-3 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	133^	101.23	100.00^	234.23
1	196	23.41	172.59	219.41
2	210	16.41	193.59	226.41
3	218	13.80	204.20	231.80
4	224	12.54	211.46	236.54
5	230	11.95	218.05	241.95
6	235	11.79	223.21	246.79
7	240	11.90	228.10	251.90
8	246	12.32	233.68	258.32
9	252	13.05	238.95	265.05
10	259	14.02	244.98	273.02
11	266	15.17	250.83	281.17
12	276	16.25	259.75	292.25
13	286	17.08	268.92	303.08
14	297	17.61	279.39	314.61
15	309	17.86	291.14	326.86
16	321	17.83	303.17	338.83
17	333	17.51	315.49	350.51
18	344	16.97	327.03	360.97
19	354	16.33	337.67	370.33
20	364	15.73	348.27	379.73
21	372	15.33	356.67	387.33
22	381	15.28	365.72	396.28
23	390	15.68	374.32	405.68
24	400	16.84	383.16	416.84
25	412	19.47	392.53	431.47
26	431	26.53	404.47	457.53
27	462	48.39	413.61	510.39

^ Truncated

Table 2.6.3.2.2

Raw Score to Scale Score Conversion: Writ 2-3 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound	Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	133^	126.74	100.00^	259.74	34	362	12.38	349.62	374.38
1	211	24.38	186.62	235.38	35	367	12.22	354.78	379.22
2	225	16.57	208.43	241.57	36	373	12.00	361.00	385.00
3	234	13.35	220.65	247.35	37	378	11.79	366.21	389.79
4	239	11.57	227.43	250.57	38	383	11.55	371.45	394.55
5	244	10.45	233.55	254.45	39	388	11.33	376.67	399.33
6	247	9.69	237.31	256.69	40	393	11.12	381.88	404.12
7	251	9.16	241.84	260.16	41	397	10.96	386.04	407.96
8	254	8.78	245.22	262.78	42	402	10.82	391.18	412.82
9	257	8.51	248.49	265.51	43	406	10.74	395.26	416.74
10	259	8.35	250.65	267.35	44	410	10.74	399.26	420.74
11	262	8.27	253.73	270.27	45	415	10.85	404.15	425.85
12	264	8.22	255.78	272.22	46	419	11.04	407.96	430.04
13	267	8.24	258.76	275.24	47	424	11.36	412.64	435.36
14	269	8.32	260.68	277.32	48	429	11.84	417.16	440.84
15	272	8.46	263.54	280.46	49	434	12.59	421.41	446.59
16	275	8.65	266.35	283.65	50	441	13.69	427.31	454.69
17	278	8.89	269.11	286.89	51	449	15.49	433.51	464.49
18	281	9.18	271.82	290.18	52	459	18.74	440.26	477.74
19	284	9.53	274.47	293.53	53	477	26.42	450.58	503.42
20	287	9.93	277.07	296.93	54	509	48.65	460.35	557.65
21	291	10.34	280.66	301.34					
22	295	10.77	284.23	305.77					
23	300	11.17	288.83	311.17					
24	305	11.52	293.48	316.52					
25	310	11.84	298.16	321.84					
26	315	12.11	302.89	327.11					
27	321	12.32	308.68	333.32					
28	326	12.49	313.51	338.49					
29	332	12.59	319.41	344.59					
30	338	12.65	325.35	350.65					
31	344	12.65	331.35	356.65					
32	350	12.62	337.38	362.62					
33	356	12.51	343.49	368.51					

^ Truncated

2.6.3.3 Grades 4–5

Table 2.6.3.3.1

Raw Score to Scale Score Conversion: Writ 4-5 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	155 [^]	133.18	100.00 [^]	288.18
1	232	23.41	208.59	255.41
2	246	16.35	229.65	262.35
3	254	13.67	240.33	267.67
4	261	12.41	248.59	273.41
5	266	11.79	254.21	277.79
6	271	11.60	259.40	282.60
7	276	11.76	264.24	287.76
8	281	12.22	268.78	293.22
9	287	13.00	274.00	300.00
10	294	14.04	279.96	308.04
11	302	15.22	286.78	317.22
12	311	16.33	294.67	327.33
13	322	17.13	304.87	339.13
14	333	17.67	315.33	350.67
15	345	17.88	327.12	362.88
16	357	17.83	339.17	374.83
17	369	17.51	351.49	386.51
18	380	17.00	363.00	397.00
19	390	16.33	373.67	406.33
20	399	15.71	383.29	414.71
21	408	15.28	392.72	423.28
22	417	15.20	401.80	432.20
23	426	15.57	410.43	441.57
24	435	16.73	418.27	451.73
25	447	19.36	427.64	466.36
26	466	26.48	439.52	492.48
27	497	48.41	448.59	545.41

[^] Truncated

Table 2.6.3.3.2

Raw Score to Scale Score Conversion: Writ 4-5 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound	Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	155^	126.47	100.00^	281.47	34	384	12.38	371.62	396.38
1	232	24.35	207.65	256.35	35	389	12.22	376.78	401.22
2	247	16.57	230.43	263.57	36	395	12.00	383.00	407.00
3	255	13.37	241.63	268.37	37	400	11.79	388.21	411.79
4	261	11.63	249.37	272.63	38	405	11.55	393.45	416.55
5	266	10.50	255.50	276.50	39	410	11.33	398.67	421.33
6	269	9.75	259.25	278.75	40	415	11.12	403.88	426.12
7	273	9.24	263.76	282.24	41	419	10.96	408.04	429.96
8	276	8.86	267.14	284.86	42	424	10.85	413.15	434.85
9	279	8.59	270.41	287.59	43	428	10.77	417.23	438.77
10	281	8.40	272.60	289.40	44	432	10.77	421.23	442.77
11	284	8.30	275.70	292.30	45	437	10.87	426.13	447.87
12	286	8.27	277.73	294.27	46	441	11.06	429.94	452.06
13	289	8.27	280.73	297.27	47	446	11.38	434.62	457.38
14	291	8.35	282.65	299.35	48	451	11.87	439.13	462.87
15	294	8.49	285.51	302.49	49	456	12.59	443.41	468.59
16	297	8.67	288.33	305.67	50	463	13.72	449.28	476.72
17	300	8.89	291.11	308.89	51	471	15.52	455.48	486.52
18	303	9.18	293.82	312.18	52	481	18.74	462.26	499.74
19	306	9.53	296.47	315.53	53	499	26.42	472.58	525.42
20	310	9.91	300.09	319.91	54	531	48.65	482.35	579.65
21	313	10.34	302.66	323.34					
22	317	10.74	306.26	327.74					
23	322	11.14	310.86	333.14					
24	327	11.52	315.48	338.52					
25	332	11.84	320.16	343.84					
26	337	12.11	324.89	349.11					
27	343	12.32	330.68	355.32					
28	348	12.49	335.51	360.49					
29	354	12.59	341.41	366.59					
30	360	12.65	347.35	372.65					
31	366	12.65	353.35	378.65					
32	372	12.59	359.41	384.59					
33	378	12.51	365.49	390.51					

^ Truncated

2.6.3.4 Grades 6–8

Table 2.6.3.4.1

Raw Score to Scale Score Conversion: Writ 6-8 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	188 [^]	53.97	134.03	241.97
1	221	23.41	197.59	244.41
2	235	16.51	218.49	251.51
3	244	13.96	230.04	257.96
4	250	12.78	237.22	262.78
5	256	12.24	243.76	268.24
6	262	12.06	249.94	274.06
7	267	12.16	254.84	279.16
8	273	12.51	260.49	285.51
9	279	13.13	265.87	292.13
10	286	13.99	272.01	299.99
11	293	15.06	277.94	308.06
12	302	16.14	285.86	318.14
13	313	17.02	295.98	330.02
14	324	17.56	306.44	341.56
15	336	17.83	318.17	353.83
16	347	17.78	329.22	364.78
17	359	17.45	341.55	376.45
18	370	16.92	353.08	386.92
19	380	16.33	363.67	396.33
20	390	15.76	374.24	405.76
21	399	15.41	383.59	414.41
22	408	15.41	392.59	423.41
23	417	15.84	401.16	432.84
24	427	17.02	409.98	444.02
25	439	19.60	419.40	458.60
26	458	26.61	431.39	484.61
27	489	48.39	440.61	537.39

[^] Truncated

Table 2.6.3.4.2

Raw Score to Scale Score Conversion: Writ 6-8 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound	Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	188^	49.14	138.86	237.14	34	369	12.38	356.62	381.38
1	218	24.35	193.65	242.35	35	375	12.22	362.78	387.22
2	233	16.57	216.43	249.57	36	380	12.00	368.00	392.00
3	241	13.35	227.65	254.35	37	386	11.79	374.21	397.79
4	247	11.57	235.43	258.57	38	391	11.55	379.45	402.55
5	251	10.45	240.55	261.45	39	395	11.33	383.67	406.33
6	255	9.69	245.31	264.69	40	400	11.12	388.88	411.12
7	258	9.16	248.84	267.16	41	405	10.96	394.04	415.96
8	261	8.81	252.19	269.81	42	409	10.82	398.18	419.82
9	264	8.54	255.46	272.54	43	413	10.77	402.23	423.77
10	267	8.35	258.65	275.35	44	418	10.77	407.23	428.77
11	269	8.27	260.73	277.27	45	422	10.85	411.15	432.85
12	272	8.24	263.76	280.24	46	427	11.04	415.96	438.04
13	274	8.24	265.76	282.24	47	431	11.36	419.64	442.36
14	277	8.32	268.68	285.32	48	436	11.84	424.16	447.84
15	279	8.46	270.54	287.46	49	442	12.59	429.41	454.59
16	282	8.65	273.35	290.65	50	448	13.72	434.28	461.72
17	285	8.89	276.11	293.89	51	456	15.49	440.51	471.49
18	288	9.18	278.82	297.18	52	467	18.74	448.26	485.74
19	291	9.53	281.47	300.53	53	485	26.42	458.58	511.42
20	295	9.93	285.07	304.93	54	516	48.65	467.35	564.65
21	299	10.34	288.66	309.34					
22	303	10.77	292.23	313.77					
23	307	11.17	295.83	318.17					
24	312	11.52	300.48	323.52					
25	317	11.84	305.16	328.84					
26	323	12.11	310.89	335.11					
27	328	12.32	315.68	340.32					
28	334	12.49	321.51	346.49					
29	340	12.59	327.41	352.59					
30	346	12.65	333.35	358.65					
31	352	12.65	339.35	364.65					
32	358	12.62	345.38	370.62					
33	363	12.51	350.49	375.51					

^ Truncated

2.6.3.5 Grades 9–12

Table 2.6.3.5.1

Raw Score to Scale Score Conversion: Writ 9-12 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	232^	38.40	193.60	270.40
1	251	23.44	227.56	274.44
2	265	16.57	248.43	281.57
3	274	14.04	259.96	288.04
4	280	12.81	267.19	292.81
5	286	12.19	273.81	298.19
6	291	11.95	279.05	302.95
7	297	12.00	285.00	309.00
8	302	12.38	289.62	314.38
9	308	13.02	294.98	321.02
10	315	13.96	301.04	328.96
11	323	15.09	307.91	338.09
12	332	16.19	315.81	348.19
13	342	17.05	324.95	359.05
14	354	17.59	336.41	371.59
15	365	17.83	347.17	382.83
16	377	17.78	359.22	394.78
17	389	17.48	371.52	406.48
18	400	16.94	383.06	416.94
19	410	16.33	393.67	426.33
20	420	15.76	404.24	435.76
21	429	15.41	413.59	444.41
22	437	15.39	421.61	452.39
23	446	15.79	430.21	461.79
24	456	16.92	439.08	472.92
25	468	19.52	448.48	487.52
26	487	26.56	460.44	513.56
27	519	48.39	470.61	567.39

^ Truncated

Table 2.6.3.5.2

Raw Score to Scale Score Conversion: Writ 9-12 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound	Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	232^	28.19	203.81	260.19	34	390	12.35	377.65	402.35
1	238	24.27	213.73	262.27	35	396	12.19	383.81	408.19
2	253	16.57	236.43	269.57	36	401	11.98	389.02	412.98
3	261	13.40	247.60	274.40	37	407	11.76	395.24	418.76
4	267	11.68	255.32	278.68	38	412	11.55	400.45	423.55
5	271	10.61	260.39	281.61	39	416	11.33	404.67	427.33
6	275	9.88	265.12	284.88	40	421	11.14	409.86	432.14
7	279	9.40	269.60	288.40	41	426	11.01	414.99	437.01
8	282	9.02	272.98	291.02	42	430	10.90	419.10	440.90
9	285	8.78	276.22	293.78	43	435	10.85	424.15	445.85
10	288	8.62	279.38	296.62	44	439	10.87	428.13	449.87
11	290	8.51	281.49	298.51	45	443	10.98	432.02	453.98
12	293	8.49	284.51	301.49	46	448	11.17	436.83	459.17
13	296	8.49	287.51	304.49	47	453	11.49	441.51	464.49
14	298	8.54	289.46	306.54	48	458	11.98	446.02	469.98
15	301	8.62	292.38	309.62	49	464	12.70	451.30	476.70
16	304	8.78	295.22	312.78	50	470	13.83	456.17	483.83
17	307	8.97	298.03	315.97	51	478	15.57	462.43	493.57
18	310	9.24	300.76	319.24	52	489	18.77	470.23	507.77
19	313	9.53	303.47	322.53	53	507	26.42	480.58	533.42
20	317	9.88	307.12	326.88	54	538	48.63	489.37	586.63
21	320	10.26	309.74	330.26					
22	324	10.66	313.34	334.66					
23	329	11.06	317.94	340.06					
24	334	11.44	322.56	345.44					
25	339	11.79	327.21	350.79					
26	344	12.06	331.94	356.06					
27	349	12.27	336.73	361.27					
28	355	12.43	342.57	367.43					
29	361	12.54	348.46	373.54					
30	367	12.62	354.38	379.62					
31	373	12.62	360.38	385.62					
32	379	12.57	366.43	391.57					
33	385	12.49	372.51	397.49					

^ Truncated

2.6.4 Speaking

2.6.4.1 Grade 1

Table 2.6.4.1.1

Raw Score to Scale Score Conversion: Spek 1 Pre-A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	106^	30.42	100.00^	136.42
1	112	26.62	100.00^	138.62
2	131	20.77	110.23	151.77
3	144	19.60	124.40	163.60
4	158	20.77	137.23	178.77
5	172*	25.15	146.85	197.15
6	186*	32.76	153.24	218.76

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.1.2

Raw Score to Scale Score Conversion: Spek 1 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	106^	27.49	100.00^	133.49
1	107	26.91	100.00^	133.91
2	125	20.18	104.82	145.18
3	137	17.84	119.16	154.84
4	148	16.96	131.04	164.96
5	158	17.26	140.74	175.26
6	168	17.55	150.45	185.55
7	179	18.43	160.57	197.43
8	191	19.01	171.99	210.01
9	204	19.89	184.11	223.89
10	219	21.64	197.36	240.64
11	237	24.86	212.14	261.86
12	262	28.08	233.92	290.08
13	288	26.91	261.09	314.91
14	310	24.57	285.43	334.57
15	330	23.98	306.02	353.98
16	351	25.74	325.26	376.74
17	372*	30.42	341.58	402.42
18	393*	38.61	354.39	431.61

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.1.3

Raw Score to Scale Score Conversion: Spek 1 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
6	106^	26.03	100.00^	132.03
7	167	15.21	151.79	182.21
8	174	14.92	159.08	188.92
9	182	14.92	167.08	196.92
10	189	14.62	174.38	203.62
11	197	14.62	182.38	211.62
12	204	14.92	189.08	218.92
13	212	15.21	196.79	227.21
14	220	15.79	204.21	235.79
15	229	16.67	212.33	245.67
16	239	17.84	221.16	256.84
17	251	19.30	231.70	270.30
18	264	20.18	243.82	284.18
19	278	19.89	258.11	297.89
20	291	19.01	271.99	310.01
21	303	18.13	284.87	321.13
22	313	17.26	295.74	330.26
23	323	16.96	306.04	339.96
24	333	16.96	316.04	349.96
25	343	17.26	325.74	360.26
26	354	18.13	335.87	372.13
27	366	19.89	346.11	385.89
28	378*	22.23	355.77	400.23
29	390*	25.45	364.55	415.45
30	403*	30.13	372.87	433.13

^ Truncated

* Adjusted for end of scale effect

2.6.4.2 Grades 2–3

Table 2.6.4.2.1

Raw Score to Scale Score Conversion: Spek 2-3 Pre-A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	118^	19.30	100.00^	137.30
1	118^	19.30	100.00^	137.30
2	118^	19.30	100.00^	137.30
3	118^	19.30	100.00^	137.30
4	128	20.47	107.53	148.47
5	141*	24.57	116.43	165.57
6	154*	31.00	123.00	185.00

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.2.2

Raw Score to Scale Score Conversion: Spek 2-3 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	118^	17.26	100.74	135.26
1	118^	17.26	100.74	135.26
2	118^	17.26	100.74	135.26
3	118^	17.26	100.74	135.26
4	120	17.26	102.74	137.26
5	130	17.55	112.45	147.55
6	141	18.43	122.57	159.43
7	154	19.30	134.70	173.30
8	167	19.89	147.11	186.89
9	181	20.77	160.23	201.77
10	196	22.23	173.77	218.23
11	215	25.15	189.85	240.15
12	240	28.08	211.92	268.08
13	266	26.62	239.38	292.62
14	289	24.57	264.43	313.57
15	308	23.98	284.02	331.98
16	330	25.74	304.26	355.74
17	352*	30.71	321.29	382.71
18	374*	39.78	334.22	413.78

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.2.3

Raw Score to Scale Score Conversion: Spek 2-3 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
6	118^	16.67	101.33	134.67
7	145	16.67	128.33	161.67
8	155	16.67	138.33	171.67
9	164	16.38	147.62	180.38
10	173	16.09	156.91	189.09
11	182	16.09	165.91	198.09
12	191	16.09	174.91	207.09
13	200	16.09	183.91	216.09
14	209	16.67	192.33	225.67
15	219	17.26	201.74	236.26
16	229	17.84	211.16	246.84
17	241	18.72	222.28	259.72
18	253	19.30	233.70	272.30
19	266	19.30	246.70	285.30
20	278	18.72	259.28	296.72
21	290	18.13	271.87	308.13
22	301	17.84	283.16	318.84
23	311	17.55	293.45	328.55
24	322	17.55	304.45	339.55
25	332	18.13	313.87	350.13
26	344	18.72	325.28	362.72
27	357	20.47	336.53	377.47
28	370*	22.81	347.19	392.81
29	386*	26.91	359.09	412.91
30	425*	46.21	378.79	471.21

^ Truncated

* Adjusted for end of scale effect

2.6.4.3 Grades 4–5

Table 2.6.4.3.1

Raw Score to Scale Score Conversion: Spek 4-5 Pre-A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	130^	23.69	106.31	153.69
1	130^	23.69	106.31	153.69
2	141	20.77	120.23	161.77
3	155	19.60	135.40	174.60
4	168	20.77	147.23	188.77
5	181*	24.57	156.43	205.57
6	194*	31.29	162.71	225.29

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.3.2

Raw Score to Scale Score Conversion: Spek 4-5 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	130^	22.81	107.19	152.81
1	130^	22.81	107.19	152.81
2	138	20.18	117.82	158.18
3	151	18.43	132.57	169.43
4	162	18.13	143.87	180.13
5	174	19.01	154.99	193.01
6	187	20.77	166.23	207.77
7	203	21.94	181.06	224.94
8	219	21.94	197.06	240.94
9	236	22.52	213.48	258.52
10	254	23.40	230.60	277.40
11	274	25.45	248.55	299.45
12	298	26.91	271.09	324.91
13	322	26.32	295.68	348.32
14	345	24.86	320.14	369.86
15	366	24.86	341.14	390.86
16	389	26.91	362.09	415.91
17	412*	31.59	380.41	443.59
18	435*	40.36	394.64	475.36

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.3.3

Raw Score to Scale Score Conversion: Spek 4-5 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
6	130^	22.23	107.77	152.23
7	193	18.72	174.28	211.72
8	205	18.13	186.87	223.13
9	215	17.26	197.74	232.26
10	225	16.67	208.33	241.67
11	235	16.38	218.62	251.38
12	244	16.09	227.91	260.09
13	252	16.09	235.91	268.09
14	261	16.38	244.62	277.38
15	271	16.96	254.04	287.96
16	281	17.84	263.16	298.84
17	293	18.72	274.28	311.72
18	305	19.30	285.70	324.30
19	318	19.60	298.40	337.60
20	331	19.01	311.99	350.01
21	342	18.13	323.87	360.13
22	353	17.84	335.16	370.84
23	364	17.55	346.45	381.55
24	375	17.55	357.45	392.55
25	385	17.84	367.16	402.84
26	396	18.72	377.28	414.72
27	409	20.18	388.82	429.18
28	422*	22.52	399.48	444.52
29	435*	26.03	408.97	461.03
30	448*	30.71	417.29	478.71

^ Truncated

* Adjusted for end of scale effect

2.6.4.4 Grades 6–8

Table 2.6.4.4.1

Raw Score to Scale Score Conversion: Spek 6-8 Pre-A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	148^	20.47	127.53	168.47
1	148^	20.47	127.53	168.47
2	148^	20.47	127.53	168.47
3	160	19.30	140.70	179.30
4	174	20.47	153.53	194.47
5	188*	25.15	162.85	213.15
6	202*	33.05	168.95	235.05

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.4.2

Raw Score to Scale Score Conversion: Spek 6-8 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	148^	19.60	128.40	167.60
1	148^	19.60	128.40	167.60
2	148^	19.60	128.40	167.60
3	158	18.43	139.57	176.43
4	170	18.72	151.28	188.72
5	182	20.18	161.82	202.18
6	198	22.81	175.19	220.81
7	217	23.40	193.60	240.40
8	234	22.23	211.77	256.23
9	251	21.64	229.36	272.64
10	268	22.52	245.48	290.52
11	287	25.15	261.85	312.15
12	312	28.08	283.92	340.08
13	338	26.91	311.09	364.91
14	361	24.86	336.14	385.86
15	381	24.28	356.72	405.28
16	402	26.03	375.97	428.03
17	423*	30.42	392.58	453.42
18	444*	38.61	405.39	482.61

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.4.3

Raw Score to Scale Score Conversion: Spek 6-8 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
6	148^	19.60	128.40	167.60
7	209	21.06	187.94	230.06
8	224	19.89	204.11	243.89
9	236	18.13	217.87	254.13
10	247	17.26	229.74	264.26
11	257	16.67	240.33	273.67
12	266	16.09	249.91	282.09
13	275	16.09	258.91	291.09
14	284	16.38	267.62	300.38
15	293	16.96	276.04	309.96
16	304	17.84	286.16	321.84
17	315	18.72	296.28	333.72
18	327	19.30	307.70	346.30
19	340	19.60	320.40	359.60
20	353	19.01	333.99	372.01
21	365	18.43	346.57	383.43
22	376	17.84	358.16	393.84
23	387	17.55	369.45	404.55
24	397	17.55	379.45	414.55
25	408	17.84	390.16	425.84
26	419	18.72	400.28	437.72
27	432	20.18	411.82	452.18
28	445*	22.81	422.19	467.81
29	458*	26.03	431.97	484.03
30	471*	30.71	440.29	501.71

^ Truncated

* Adjusted for end of scale effect

2.6.4.5 Grades 9–12

Table 2.6.4.5.1

Raw Score to Scale Score Conversion: Spek 9-12 Pre-A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	172^	21.64	150.36	193.64
1	172^	21.64	150.36	193.64
2	176	20.47	155.53	196.47
3	189	19.01	169.99	208.01
4	202	20.47	181.53	222.47
5	215*	24.28	190.72	239.28
6	228*	31.29	196.71	259.29

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.5.2

Raw Score to Scale Score Conversion: Spek 9-12 A S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
0	172^	20.47	151.53	192.47
1	172^	20.47	151.53	192.47
2	173	20.18	152.82	193.18
3	185	18.13	166.87	203.13
4	196	17.84	178.16	213.84
5	207	18.72	188.28	225.72
6	220	19.89	200.11	239.89
7	234	21.06	212.94	255.06
8	249	20.77	228.23	269.77
9	264	21.06	242.94	285.06
10	280	22.23	257.77	302.23
11	299	25.15	273.85	324.15
12	324	28.37	295.63	352.37
13	351	26.91	324.09	377.91
14	373	24.57	348.43	397.57
15	393	23.98	369.02	416.98
16	414	25.74	388.26	439.74
17	435*	30.42	404.58	465.42
18	456*	38.90	417.10	494.90

^ Truncated

* Adjusted for end of scale effect

Table 2.6.4.5.3

Raw Score to Scale Score Conversion: Spek 9-12 B/C S402 Online

Raw Score	Scale Score	CSEM	Low Bound	High Bound
6	172^	19.89	152.11	191.89
7	223	17.55	205.45	240.55
8	234	17.26	216.74	251.26
9	243	16.38	226.62	259.38
10	252	15.79	236.21	267.79
11	260	15.50	244.50	275.50
12	269	15.50	253.50	284.50
13	277	15.50	261.50	292.50
14	285	16.09	268.91	301.09
15	295	16.67	278.33	311.67
16	305	17.84	287.16	322.84
17	317	19.01	297.99	336.01
18	330	19.89	310.11	349.89
19	344	19.89	324.11	363.89
20	356	19.01	336.99	375.01
21	368	18.13	349.87	386.13
22	379	17.55	361.45	396.55
23	389	16.96	372.04	405.96
24	399	16.96	382.04	415.96
25	409	17.55	391.45	426.55
26	420	18.13	401.87	438.13
27	432	19.89	412.11	451.89
28	444*	22.23	421.77	466.23
29	456*	25.45	430.55	481.45
30	476*	33.05	442.95	509.05

^ Truncated

* Adjusted for end of scale effect

2.7 Equating Summary

Each year a certain percentage of items on each ACCESS for ELLs test form are new, as determined by the refreshment plan for that Series. For Series 402, all four domains were refreshed. An equating procedure known as common-item equating is used to equate the results on new forms to the older forms. In this procedure, the difficulty measures for items that appear on both the new and the old forms are kept constant across both forms. Thus, performances on the newer form may be interpreted with the same frame of reference. Many items appearing on ACCESS 2.0 Online Series 402 also appeared on Series 401. All items common to both forms were anchored to their 401 values in the first equating run. In addition, for the Speaking domain, difficulty measures for the new tasks were anchored to their initial calibrated values from the Speaking field test analysis. After the first equating run, some items that were originally anchored, either to their operational or to their field test value, proved to have changed in their difficulty measure. This change is measured by the “Displacement” statistic. This statistic shows the difference between the difficulty value of the anchored item and what its difficulty value would have been had it not been anchored. Typically, displacements of less than 0.5 logits are unlikely to have much impact on measurement in a test instrument (Linacre, n.d.). For Listening and Reading items, and for Writing tasks, if this value was large (i.e., usually above .30 or below -.30), that item was unanchored in the final equating run (i.e., it was treated as if it were a new item). For Speaking tasks, a slightly different displacement criterion (above .50 or below -.50) was used since anchored tasks from the Speaking domain have been shown to be less stable than items and tasks from other domains.

A pre-equating design was used to conduct the annual equating for Listening and Reading domains. This design allows for Listening and Reading item parameters to be available for setting up the computer adaptive engine prior to operational administration. For the Listening and Reading domains, student data collected from the Series 402 embedded field test were used to conduct the equating analyses. All available student data at the time the equating analyses were conducted were included in the analyses.

For the Writing domain, the equating analysis was conducted using Series 402 operational data collected during the early testing window. The Writing equating study was conducting a random sample drawn with a target sample size of 3,000 students per grade-level cluster. The Writing equating sample was drawn so that it was proportional to the Series 401 population for the Writing domain, by grade and tiered form.

For the Speaking domain, student data from the Series 402 appended Speaking field test administration were used to conduct the initial common-item equating. These initial item parameters were then verified using Series 402 operational data collected during the early testing window. The Speaking verification study was conducted using a random sample drawn with a target sample size of 3,000 students per grade-level cluster. The Speaking verification sample was drawn such that it was proportional to the Series 401 population for the Speaking domain, by grade and tier.

Tables in this section present a summary of the equating and verification procedures. The first section of the table compares the current test (i.e., the Series 402 version of that test form) to the previous year's test (i.e., the Series 401 version of that test form). The number of items, the average item difficulty, the standard deviation of the item difficulty values, and the difficulty value of the easiest and hardest item on each test form are shown. These values are in terms of logits used in the Rasch measurement model.

The second section of the table presents information on the anchoring items. The total number of possible anchors that were initially anchored to their previous values is shown, as well as the standard deviation of those items. Next, the number of items that were anchored in the final equating run is shown, again with the average item difficulty and standard deviation. Finally, the percentage of items that served as anchors and their average displacement value is given. Generally speaking, the greater the number of tasks anchored and the closer their average displacement is to 0.00, the more trustworthy the equating results will be.

The third section of the tables gives information about the anchor items or tasks, both by order of displacement statistics and by order of item difficulty. The displacement statistics provide information on the difference between the difficulty value of the anchored item and what that difficulty value would have been had the item not been anchored. Smaller displacement statistics indicate more consistency between the item's difficulty value on the Series 402 test form and on the Series 401 test form. It is desirable that the anchor items represent a wide range of difficulties across the entire spectrum of the item difficulty values on a test form.

In general, and for longer tests such as Listening and Reading, the greater the representation across the difficulty range of anchor items, the more trustworthy the equating results will be. For the Writing and Speaking domains, which are shorter and performance based, and which have additional content and exposure considerations in terms of item refreshment, this rule of thumb may not always apply. In addition, the number of anchors is also a function of the targeted refreshment plan, which can differ by Series and by domains.

For the Writing and Speaking tasks, this table has a fourth section, which provides the anchored step measures for the score on each task. For the ACCESS Writing and Speaking tasks, a Rasch-grouped rating scale model is used (see Part I, Section 3.3.2.2). For Writing, the step difficulty values are the same for all the tasks that are scored on the 0–9 raw score scale. These constant step difficulty values help to provide anchors in the calibration of new Writing tasks onto the common WIDA score scale each year. For Speaking, the step difficulty values for all P1 tasks are the same and the step difficulty values for all P3 and P5 tasks are the same. As with Writing, these constant step difficulty values help to provide anchors in the calibration of new Speaking tasks onto the common WIDA score scale each year.

2.7.1 Listening

2.7.1.1 Grade 1

Table 2.7.1.1

Equating Summary: List 1 S402 Online

Comparison of Forms	Form 402			Form 401		
	No. of Items	Average Difficulty (Std. Dev.)		No. of Items	Average Difficulty (Std. Dev.)	
	54	-1.25 (1.33)		54	-1.40 (1.40)	
	Easiest	Hardest		Easiest	Hardest	
	-4.38	1.46		-4.38	1.46	
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	45	-1.18 (1.41)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	45	-1.18 (1.41)				
	Percentage Anchors	Average Displacement				
83%	0.03					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13803	-1.67	-0.29	12445	-4.38	0.18
	12461	0.79	-0.21	12690	-3.39	0.11
	12460	1.09	-0.19	13889	-3.27	0.17
	12692	-3.17	-0.15	12692	-3.17	-0.15
	12845	-0.16	-0.13	13810	-2.97	0.09
	13816	-1.89	-0.12	12691	-2.96	0.19
	12746	-0.86	-0.10	13891	-2.55	0.17
	11667	0.44	-0.09	12446	-2.54	0.15
	12459	-0.22	-0.09	13808	-2.41	0.07
	12844	1.46	-0.08	13802	-2.40	0.06
	13879	-0.64	-0.07	13890	-2.23	0.17
	12843	0.21	-0.05	13883	-2.09	0.08
	13877	1.34	-0.04	12457	-2.08	0.09
	12447	1.15	-0.04	11671	-2.02	0.03
	12754	-0.47	-0.04	13809	-1.90	0.09

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13878	0.31	-0.03	13816	-1.89	-0.12
12462	-1.14	-0.03	12458	-1.86	0.03	
13885	-0.28	-0.02	13900	-1.82	0.18	
12458	-1.86	0.03	13884	-1.78	0.19	
11671	-2.02	0.03	13803	-1.67	-0.29	
11668	-0.81	0.04	13814	-1.56	0.25	
12745	-1.35	0.04	12745	-1.35	0.04	
12846	0.58	0.05	13899	-1.15	0.08	
13802	-2.40	0.06	12462	-1.14	-0.03	
13808	-2.41	0.07	13804	-1.03	0.13	
12848	0.10	0.07	13898	-0.94	0.12	
13883	-2.09	0.08	12746	-0.86	-0.10	
12847	0.02	0.08	11668	-0.81	0.04	
13899	-1.15	0.08	13879	-0.64	-0.07	
12457	-2.08	0.09	12754	-0.47	-0.04	
13809	-1.90	0.09	13815	-0.38	0.12	
13810	-2.97	0.09	13885	-0.28	-0.02	
12690	-3.39	0.11	12459	-0.22	-0.09	
13898	-0.94	0.12	12845	-0.16	-0.13	
13815	-0.38	0.12	12847	0.02	0.08	
13804	-1.03	0.13	12848	0.10	0.07	
12446	-2.54	0.15	12843	0.21	-0.05	
13889	-3.27	0.17	13878	0.31	-0.03	
13890	-2.23	0.17	11667	0.44	-0.09	
13891	-2.55	0.17	12846	0.58	0.05	
13900	-1.82	0.18	12461	0.79	-0.21	
12445	-4.38	0.18	12460	1.09	-0.19	
13884	-1.78	0.19	12447	1.15	-0.04	
12691	-2.96	0.19	13877	1.34	-0.04	
13814	-1.56	0.25	12844	1.46	-0.08	

2.7.1.2 Grades 2–3

Table 2.7.1.2

Equating Summary: List 2-3 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	54	-1.15 (1.63)	54	-1.16 (1.59)		
	Easiest	Hardest	Easiest	Hardest		
	-3.89	1.84	-3.89	1.84		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	51	-1.11 (1.60)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	46	-1.08 (1.68)				
	Percentage Anchors	Average Displacement				
85%	0.04					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13789	-0.32	-0.27	12731	-3.89	0.17
	12734	0.26	-0.24	13788	-3.85	-0.04
	12706	-1.64	-0.22	13797	-3.68	0.08
	12787	-0.11	-0.21	11544	-3.56	0.15
	13790	-2.68	-0.20	13905	-3.26	0.28
	12705	-0.17	-0.19	12825	-3.26	-0.05
	12828	-2.29	-0.10	13904	-3.24	0.13
	12786	1.56	-0.08	12956	-3.09	0.14
	12588	0.80	-0.08	13799	-2.87	-0.06
	12707	-0.30	-0.08	13798	-2.72	0.04
	13799	-2.87	-0.06	13790	-2.68	-0.20
	12785	0.00	-0.06	12732	-2.36	0.29
	12825	-3.26	-0.05	13910	-2.33	0.14
	12587	1.82	-0.04	12828	-2.29	-0.10
	13788	-3.85	-0.04	13906	-2.24	0.09

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	12813	-1.83	-0.01	12730	-2.07	0.30
12953	0.13	0.01	12813	-1.83	-0.01	
12815	-0.47	0.01	12733	-1.69	0.04	
12955	1.23	0.03	12706	-1.64	-0.22	
12733	-1.69	0.04	12584	-1.52	0.09	
13798	-2.72	0.04	12814	-1.26	0.06	
12988	-1.07	0.05	12957	-1.12	0.11	
12586	-0.24	0.06	12988	-1.07	0.05	
12814	-1.26	0.06	12582	-1.01	0.13	
12971	0.35	0.07	13911	-0.87	0.29	
12994	1.84	0.07	12815	-0.47	0.01	
13797	-3.68	0.08	13789	-0.32	-0.27	
12735	1.28	0.08	12707	-0.30	-0.08	
13906	-2.24	0.09	12586	-0.24	0.06	
12584	-1.52	0.09	13912	-0.24	0.09	
13912	-0.24	0.09	12705	-0.17	-0.19	
12992	1.62	0.10	12787	-0.11	-0.21	
12957	-1.12	0.11	12991	-0.07	0.22	
12582	-1.01	0.13	12785	0.00	-0.06	
13904	-3.24	0.13	12953	0.13	0.01	
12956	-3.09	0.14	12734	0.26	-0.24	
13910	-2.33	0.14	12990	0.29	0.23	
11544	-3.56	0.15	12971	0.35	0.07	
12731	-3.89	0.17	12993	0.63	0.28	
12991	-0.07	0.22	12588	0.80	-0.08	
12990	0.29	0.23	12955	1.23	0.03	
13905	-3.26	0.28	12735	1.28	0.08	
12993	0.63	0.28	12786	1.56	-0.08	
12732	-2.36	0.29	12992	1.62	0.10	
13911	-0.87	0.29	12587	1.82	-0.04	
12730	-2.07	0.30	12994	1.84	0.07	

2.7.1.3 Grades 4–5

Table 2.7.1.3

Equating Summary: List 4-5 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	54	0.45 (1.80)	54	0.25 (1.77)		
	Easiest	Hardest	Easiest	Hardest		
	-2.76	4.50	-2.76	4.50		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	45	0.28 (1.85)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	43	0.35 (1.86)				
	Percentage Anchors	Average Displacement				
80%	0.05					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	14217	0.98	-0.29	12415	-2.76	0.19
	12598	1.98	-0.29	12919	-2.65	0.08
	14214	4.50	-0.26	12793	-2.36	0.18
	13028	3.20	-0.24	12413	-1.91	0.08
	14225	-0.27	-0.19	12581	-1.90	0.27
	13027	3.33	-0.17	13024	-1.78	0.09
	13070	3.09	-0.17	12571	-1.61	0.26
	12925	1.42	-0.17	12386	-1.45	0.28
	12923	0.31	-0.13	14215	-1.42	0.06
	13069	2.71	-0.11	12416	-1.40	0.13
	12572	-1.25	-0.11	14226	-1.35	0.27
	14212	2.49	-0.05	12572	-1.25	-0.11
	12928	1.69	-0.02	12596	-1.12	0.18
	12573	0.54	0.00	12394	-0.89	0.05
	13071	0.77	0.02	14224	-0.77	0.11

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	12394	-0.89	0.05	13026	-0.76	0.18
12794	-0.22	0.05	12918	-0.47	0.16	
14215	-1.42	0.06	13025	-0.38	0.19	
14213	1.13	0.08	14225	-0.27	-0.19	
12413	-1.91	0.08	12794	-0.22	0.05	
12919	-2.65	0.08	12923	0.31	-0.13	
13024	-1.78	0.09	12597	0.43	0.17	
12943	3.60	0.09	12573	0.54	0.00	
13029	1.83	0.10	13071	0.77	0.02	
12396	1.26	0.10	12585	0.89	0.22	
12946	1.46	0.11	14217	0.98	-0.29	
14224	-0.77	0.11	14213	1.13	0.08	
12416	-1.40	0.13	12396	1.26	0.10	
12918	-0.47	0.16	12583	1.38	0.20	
12597	0.43	0.17	14216	1.40	0.24	
13026	-0.76	0.18	12925	1.42	-0.17	
12596	-1.12	0.18	12942	1.44	0.22	
12793	-2.36	0.18	12946	1.46	0.11	
13025	-0.38	0.19	12928	1.69	-0.02	
12415	-2.76	0.19	13029	1.83	0.10	
12583	1.38	0.20	12598	1.98	-0.29	
12585	0.89	0.22	14212	2.49	-0.05	
12942	1.44	0.22	13069	2.71	-0.11	
14216	1.40	0.24	13070	3.09	-0.17	
12571	-1.61	0.26	13028	3.20	-0.24	
12581	-1.90	0.27	13027	3.33	-0.17	
14226	-1.35	0.27	12943	3.60	0.09	
12386	-1.45	0.28	14214	4.50	-0.26	

2.7.1.4 Grades 6–8

Table 2.7.1.4

Equating Summary: List 6-8 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	54	1.16 (1.36)	54	0.85 (1.42)		
	Easiest	Hardest	Easiest	Hardest		
	-2.40	3.95	-2.40	3.95		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	39	0.84 (1.42)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	36	0.85 (1.40)				
	Percentage Anchors	Average Displacement				
67%	0.03					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	11474	1.71	-0.28	12884	-2.40	0.17
	12532	3.95	-0.25	12526	-0.95	-0.03
	12486	2.93	-0.24	13061	-0.79	0.16
	12531	2.46	-0.16	13060	-0.69	0.01
	13838	2.51	-0.15	12849	-0.68	0.09
	12905	2.50	-0.14	12885	-0.67	0.23
	12899	2.09	-0.13	12481	-0.65	0.28
	12533	1.47	-0.13	12922	-0.51	0.09
	13839	2.15	-0.12	12454	-0.49	0.08
	12850	0.90	-0.09	12482	-0.38	0.14
	12901	2.25	-0.07	13062	-0.13	0.05
	13840	2.02	-0.06	12455	-0.01	0.16
	12526	-0.95	-0.03	12886	0.11	0.28
	12382	2.70	-0.02	13039	0.20	0.11
	13060	-0.69	0.01	12528	0.23	0.19

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13062	-0.13	0.05	12484	0.33	0.22
12381	1.30	0.07	11467	0.84	0.15	
11472	1.61	0.07	12850	0.90	-0.09	
12454	-0.49	0.08	13041	1.00	0.10	
12849	-0.68	0.09	12483	1.17	0.09	
12922	-0.51	0.09	12456	1.26	0.09	
12483	1.17	0.09	12381	1.30	0.07	
12456	1.26	0.09	12529	1.42	0.21	
13041	1.00	0.10	12533	1.47	-0.13	
13039	0.20	0.11	11472	1.61	0.07	
12482	-0.38	0.14	11474	1.71	-0.28	
11467	0.84	0.15	13840	2.02	-0.06	
13061	-0.79	0.16	12899	2.09	-0.13	
12455	-0.01	0.16	13839	2.15	-0.12	
12884	-2.40	0.17	12901	2.25	-0.07	
12528	0.23	0.19	12531	2.46	-0.16	
12529	1.42	0.21	12905	2.50	-0.14	
12484	0.33	0.22	13838	2.51	-0.15	
12885	-0.67	0.23	12382	2.70	-0.02	
12886	0.11	0.28	12486	2.93	-0.24	
12481	-0.65	0.28	12532	3.95	-0.25	

2.7.1.5 Grades 9–12

Table 2.7.1.5

Equating Summary: List 9-12 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	54	1.46 (1.16)	54	1.30 (1.25)		
	Easiest	Hardest	Easiest	Hardest		
	-0.52	3.91	-0.52	3.91		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	45	1.44 (1.23)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	44	1.39 (1.21)				
	Percentage Anchors	Average Displacement				
81%	0.00					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13863	3.10	-0.24	11035	-0.52	0.16
	13867	3.88	-0.22	12869	-0.48	0.14
	11344	3.91	-0.22	12887	-0.46	0.05
	13865	2.68	-0.19	12360	-0.42	-0.03
	13845	1.12	-0.18	11034	-0.40	0.15
	13038	3.60	-0.17	12893	0.07	0.00
	12890	1.50	-0.17	13844	0.10	0.00
	12443	2.22	-0.15	12444	0.11	0.07
	11198	1.98	-0.14	12527	0.26	0.24
	13037	2.66	-0.12	12870	0.37	0.10
	12714	1.14	-0.09	12525	0.40	0.21
	13862	2.18	-0.09	11199	0.40	0.01
	12895	2.83	-0.07	12716	0.41	0.26
	11343	2.65	-0.04	11036	0.51	0.13
	12907	2.18	-0.03	12889	0.57	0.17

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13864	1.80	-0.03	13036	1.07	0.13
12360	-0.42	-0.03	12442	1.10	0.03	
12903	1.40	-0.02	13845	1.12	-0.18	
12893	0.07	0.00	12714	1.14	-0.09	
12720	1.60	0.00	12871	1.19	0.04	
13844	0.10	0.00	11245	1.21	0.00	
11245	1.21	0.00	13846	1.21	0.12	
11199	0.40	0.01	12903	1.40	-0.02	
12530	2.24	0.02	11215	1.44	0.10	
12361	2.15	0.02	12441	1.47	0.04	
12442	1.10	0.03	12890	1.50	-0.17	
12894	2.82	0.04	12720	1.60	0.00	
12871	1.19	0.04	13864	1.80	-0.03	
12441	1.47	0.04	12715	1.89	0.04	
12715	1.89	0.04	11198	1.98	-0.14	
12887	-0.46	0.05	12361	2.15	0.02	
12444	0.11	0.07	13862	2.18	-0.09	
12870	0.37	0.10	12907	2.18	-0.03	
11215	1.44	0.10	12443	2.22	-0.15	
13846	1.21	0.12	12530	2.24	0.02	
11036	0.51	0.13	11343	2.65	-0.04	
13036	1.07	0.13	13037	2.66	-0.12	
12869	-0.48	0.14	13865	2.68	-0.19	
11034	-0.40	0.15	12894	2.82	0.04	
11035	-0.52	0.16	12895	2.83	-0.07	
12889	0.57	0.17	13863	3.10	-0.24	
12525	0.40	0.21	13038	3.60	-0.17	
12527	0.26	0.24	13867	3.88	-0.22	
12716	0.41	0.26	11344	3.91	-0.22	

2.7.2 Reading

2.7.2.1 Grade 1

Table 2.7.2.1

Equating Summary: Read 1 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	72	-0.95 (1.10)	72	-1.01 (1.24)		
	Easiest	Hardest	Easiest	Hardest		
	-4.46	0.79	-4.96	1.00		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	60	-0.91 (1.12)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	48	-0.77 (0.92)				
	Percentage Anchors	Average Displacement				
67%	0.01					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13263	0.24	-0.26	13315	-2.58	0.25
	13246	-0.45	-0.24	13314	-2.42	0.22
	13316	-0.61	-0.20	13211	-2.30	0.17
	13259	0.79	-0.19	13213	-2.28	0.08
	13260	-0.12	-0.18	13193	-2.11	0.01
	13257	0.61	-0.17	13194	-2.06	-0.01
	13264	0.73	-0.15	13199	-1.94	0.29
	13256	0.57	-0.15	13206	-1.82	0.08
	13284	-1.71	-0.13	13284	-1.71	-0.13
	13220	-0.83	-0.12	13212	-1.67	-0.11
	13212	-1.67	-0.11	13238	-1.58	0.04
	13243	0.47	-0.10	13197	-1.54	0.01
	13240	-0.95	-0.09	13195	-1.52	0.00
	13261	0.24	-0.09	13283	-1.23	0.09
	13198	-0.64	-0.07	13276	-1.13	0.02

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13318	-0.81	-0.07	13196	-1.11	-0.01
13258	0.14	-0.06	13275	-1.10	0.11	
13222	-1.04	-0.05	13222	-1.04	-0.05	
13245	-0.81	-0.03	13217	-1.03	0.05	
13317	-0.63	-0.03	13240	-0.95	-0.09	
13207	-0.32	-0.02	13220	-0.83	-0.12	
13194	-2.06	-0.01	13318	-0.81	-0.07	
13196	-1.11	-0.01	13245	-0.81	-0.03	
13242	0.57	-0.01	13244	-0.80	0.06	
13195	-1.52	0.00	13198	-0.64	-0.07	
13241	0.50	0.01	13317	-0.63	-0.03	
13197	-1.54	0.01	13285	-0.62	0.07	
13193	-2.11	0.01	13316	-0.61	-0.20	
13276	-1.13	0.02	13239	-0.60	0.09	
13238	-1.58	0.04	13246	-0.45	-0.24	
13205	-0.34	0.04	13218	-0.45	0.20	
13217	-1.03	0.05	14619	-0.44	0.30	
13244	-0.80	0.06	13205	-0.34	0.04	
13285	-0.62	0.07	13207	-0.32	-0.02	
13213	-2.28	0.08	14621	-0.16	0.30	
13206	-1.82	0.08	13260	-0.12	-0.18	
13283	-1.23	0.09	14620	0.03	0.24	
13239	-0.60	0.09	13219	0.05	0.26	
13275	-1.10	0.11	13258	0.14	-0.06	
13211	-2.30	0.17	13263	0.24	-0.26	
13218	-0.45	0.20	13261	0.24	-0.09	
13314	-2.42	0.22	13243	0.47	-0.10	
14620	0.03	0.24	13241	0.50	0.01	
13315	-2.58	0.25	13256	0.57	-0.15	
13219	0.05	0.26	13242	0.57	-0.01	
13199	-1.94	0.29	13257	0.61	-0.17	
14621	-0.16	0.30	13264	0.73	-0.15	
14619	-0.44	0.30	13259	0.79	-0.19	

2.7.2.2 Grades 2–3

Table 2.7.2.2

Equating Summary: Read 2-3 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	72	-0.44 (1.06)	72	-0.55 (1.06)		
	Easiest	Hardest	Easiest	Hardest		
	-3.26	1.34	-3.39	1.53		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	63	-0.49 (1.08)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	50	-0.45 (1.06)				
	Percentage Anchors	Average Displacement				
69%	0.01					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13375	1.34	-0.26	13280	-3.26	0.07
	13346	0.60	-0.24	13292	-2.99	0.20
	13421	0.70	-0.24	13278	-2.72	0.29
	13418	1.24	-0.23	13325	-2.62	-0.07
	13419	-1.67	-0.20	13294	-1.88	0.24
	13417	0.67	-0.20	13392	-1.78	0.23
	13326	-1.25	-0.15	13419	-1.67	-0.20
	13344	0.33	-0.15	13331	-1.45	-0.03
	13327	-1.01	-0.13	13277	-1.42	-0.01
	13376	0.66	-0.12	13372	-1.27	-0.03
	13413	-0.47	-0.11	13326	-1.25	-0.15
	13416	0.46	-0.11	13394	-1.25	0.12
	13415	-0.14	-0.10	13354	-1.20	0.30
	14590	-0.21	-0.09	13327	-1.01	-0.13
	13358	0.54	-0.08	13420	-0.90	0.06

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13374	-0.30	-0.08	13414	-0.76	0.25
13325	-2.62	-0.07	13373	-0.63	-0.06	
13338	0.80	-0.06	13281	-0.62	0.16	
13373	-0.63	-0.06	13413	-0.47	-0.11	
13340	-0.25	-0.04	13332	-0.43	0.12	
13412	-0.11	-0.03	13410	-0.34	0.06	
13331	-1.45	-0.03	13350	-0.32	0.09	
13372	-1.27	-0.03	13374	-0.30	-0.08	
13351	-0.24	-0.02	13340	-0.25	-0.04	
14583	0.05	-0.01	13351	-0.24	-0.02	
13277	-1.42	-0.01	13282	-0.23	0.04	
13932	-0.08	0.02	14590	-0.21	-0.09	
13282	-0.23	0.04	13371	-0.21	0.25	
13410	-0.34	0.06	13415	-0.14	-0.10	
13420	-0.90	0.06	13357	-0.13	0.09	
13280	-3.26	0.07	13412	-0.11	-0.03	
13339	0.38	0.08	13932	-0.08	0.02	
13356	0.07	0.08	14583	0.05	-0.01	
13350	-0.32	0.09	13352	0.05	0.13	
13357	-0.13	0.09	13356	0.07	0.08	
13411	0.21	0.11	13411	0.21	0.11	
13332	-0.43	0.12	13344	0.33	-0.15	
13394	-1.25	0.12	13339	0.38	0.08	
13352	0.05	0.13	13937	0.42	0.17	
13936	0.45	0.16	13936	0.45	0.16	
13281	-0.62	0.16	13416	0.46	-0.11	
13937	0.42	0.17	13358	0.54	-0.08	
13292	-2.99	0.20	13346	0.60	-0.24	
13392	-1.78	0.23	14585	0.64	0.25	
13294	-1.88	0.24	13376	0.66	-0.12	

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13371	-0.21	0.25	13417	0.67	-0.20
14585	0.64	0.25	13421	0.70	-0.24	
13414	-0.76	0.25	13338	0.80	-0.06	
13278	-2.72	0.29	13418	1.24	-0.23	
13354	-1.20	0.30	13375	1.34	-0.26	

2.7.2.3 Grades 4–5

Table 2.7.2.3

Equating Summary: Read 4-5 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	69	0.77 (1.29)	66	0.79 (1.31)		
	Easiest	Hardest	Easiest	Hardest		
	-3.19	3.18	-3.19	3.18		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	57	0.83 (1.35)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	56	0.84 (1.36)				
	Percentage Anchors	Average Displacement				
81%	0.03					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13469	1.15	-0.27	13509	-3.19	0.00
	13508	3.18	-0.15	13518	-1.94	0.11
	13527	1.08	-0.14	13464	-1.61	0.05
	13480	0.75	-0.13	13519	-1.12	0.14
	13484	2.41	-0.13	13510	-1.06	-0.01
	13450	1.77	-0.13	13465	-0.93	0.08
	13528	1.64	-0.12	14715	-0.75	0.28
	13504	2.57	-0.11	13407	-0.72	-0.02
	13511	1.08	-0.10	13479	-0.69	-0.06
	13497	1.99	-0.07	13539	-0.63	0.28
	13482	2.46	-0.07	13466	-0.43	-0.02
	13498	-0.05	-0.07	14714	-0.37	0.06
	13506	1.88	-0.06	13520	-0.31	0.07
	13479	-0.69	-0.06	14626	-0.26	0.16
	13533	1.43	-0.05	13409	-0.17	0.20

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13451	-0.11	-0.04	13451	-0.11	-0.04
13489	1.33	-0.04	14625	-0.08	0.26	
13540	1.92	-0.03	13498	-0.05	-0.07	
13499	1.17	-0.03	13408	0.06	0.22	
13488	0.40	-0.02	14716	0.20	0.26	
13407	-0.72	-0.02	13449	0.25	0.05	
13466	-0.43	-0.02	13488	0.40	-0.02	
13530	1.35	-0.02	13480	0.75	-0.13	
13510	-1.06	-0.01	13529	0.98	0.12	
13490	2.11	-0.01	13534	0.99	0.15	
13468	1.31	0.00	13511	1.08	-0.10	
13509	-3.19	0.00	13527	1.08	-0.14	
13507	1.55	0.02	13469	1.15	-0.27	
13505	1.96	0.03	13499	1.17	-0.03	
13531	2.11	0.03	13468	1.31	0.00	
13481	1.68	0.03	13489	1.33	-0.04	
13535	2.38	0.03	13530	1.35	-0.02	
13449	0.25	0.05	13533	1.43	-0.05	
13464	-1.61	0.05	13926	1.50	0.15	
14714	-0.37	0.06	13532	1.51	0.19	
13928	2.86	0.06	13507	1.55	0.02	
13927	2.35	0.07	14627	1.59	0.16	
13520	-0.31	0.07	13528	1.64	-0.12	
13465	-0.93	0.08	13481	1.68	0.03	
13518	-1.94	0.11	13450	1.77	-0.13	
13541	2.13	0.11	13506	1.88	-0.06	
13529	0.98	0.12	13540	1.92	-0.03	
13483	2.13	0.12	13505	1.96	0.03	
13519	-1.12	0.14	13497	1.99	-0.07	
13534	0.99	0.15	13531	2.11	0.03	

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13926	1.50	0.15	13490	2.11	-0.01
14627	1.59	0.16	13483	2.13	0.12	
14626	-0.26	0.16	13541	2.13	0.11	
13503	2.15	0.16	13503	2.15	0.16	
13532	1.51	0.19	13927	2.35	0.07	
13409	-0.17	0.20	13535	2.38	0.03	
13408	0.06	0.22	13484	2.41	-0.13	
14716	0.20	0.26	13482	2.46	-0.07	
14625	-0.08	0.26	13504	2.57	-0.11	
14715	-0.75	0.28	13928	2.86	0.06	
13539	-0.63	0.28	13508	3.18	-0.15	

2.7.2.4 Grades 6–8

Table 2.7.2.4

Equating Summary: Read 6-8 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	72	1.10 (1.46)	69	1.10 (1.54)		
	Easiest	Hardest	Easiest	Hardest		
	-2.04	3.78	-2.57	3.78		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	66	1.19 (1.48)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	62	1.16 (1.50)				
	Percentage Anchors	Average Displacement				
86%	0.00					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13963	1.94	-0.30	13554	-2.04	0.02
	13630	1.84	-0.22	13575	-1.58	0.00
	13631	0.84	-0.22	13566	-1.37	-0.03
	13661	1.22	-0.22	13555	-1.30	-0.06
	13962	1.39	-0.19	13565	-1.25	0.14
	13629	0.78	-0.14	14641	-1.23	0.02
	13621	3.33	-0.14	13573	-1.03	0.06
	13657	1.62	-0.14	13564	-0.98	0.13
	13622	3.78	-0.09	13572	-0.68	0.04
	13604	1.87	-0.09	14640	-0.55	0.08
	13617	3.33	-0.08	13563	-0.52	0.06
	13585	0.57	-0.08	13574	-0.52	0.06
	13589	1.93	-0.08	13576	-0.48	0.15
	14492	1.78	-0.08	13567	-0.34	0.00
	14491	1.72	-0.07	13577	-0.09	0.19

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13656	2.35	-0.07	13556	-0.09	-0.04
13596	0.44	-0.07	13568	0.15	0.16	
13623	2.40	-0.07	13596	0.44	-0.07	
13618	3.13	-0.06	14642	0.52	0.10	
13555	-1.30	-0.06	13585	0.57	-0.08	
13625	3.31	-0.06	13586	0.61	0.14	
13658	3.59	-0.05	13588	0.78	-0.02	
13624	3.54	-0.05	13629	0.78	-0.14	
13556	-0.09	-0.04	13631	0.84	-0.22	
13616	2.67	-0.03	13597	1.01	0.05	
13566	-1.37	-0.03	13603	1.01	0.16	
13659	1.26	-0.03	13602	1.09	0.20	
13588	0.78	-0.02	13650	1.09	0.02	
13575	-1.58	0.00	13613	1.15	0.03	
13567	-0.34	0.00	13611	1.15	0.06	
14493	2.61	0.01	13661	1.22	-0.22	
14641	-1.23	0.02	13612	1.23	0.10	
13650	1.09	0.02	13584	1.26	0.06	
13554	-2.04	0.02	13659	1.26	-0.03	
13652	2.41	0.03	13962	1.39	-0.19	
13613	1.15	0.03	13657	1.62	-0.14	
13572	-0.68	0.04	14491	1.72	-0.07	
13597	1.01	0.05	14492	1.78	-0.08	
13620	1.82	0.05	13598	1.80	0.21	
13615	2.21	0.05	13620	1.82	0.05	
13611	1.15	0.06	13630	1.84	-0.22	
13584	1.26	0.06	13604	1.87	-0.09	
13651	2.53	0.06	13589	1.93	-0.08	
13563	-0.52	0.06	13963	1.94	-0.30	
13574	-0.52	0.06	13614	1.95	0.07	

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13573	-1.03	0.06	13615	2.21	0.05
	13614	1.95	0.07	13656	2.35	-0.07
	14640	-0.55	0.08	13623	2.40	-0.07
	14642	0.52	0.10	13652	2.41	0.03
	13612	1.23	0.10	14616	2.52	0.12
	14616	2.52	0.12	13651	2.53	0.06
	13564	-0.98	0.13	14493	2.61	0.01
	13586	0.61	0.14	13616	2.67	-0.03
	13565	-1.25	0.14	13619	3.03	0.17
	13576	-0.48	0.15	13618	3.13	-0.06
	13603	1.01	0.16	13625	3.31	-0.06
	13568	0.15	0.16	13621	3.33	-0.14
	13619	3.03	0.17	13617	3.33	-0.08
	13577	-0.09	0.19	14617	3.34	0.28
	13602	1.09	0.20	13624	3.54	-0.05
	13598	1.80	0.21	13658	3.59	-0.05
	14617	3.34	0.28	13622	3.78	-0.09

2.7.2.5 Grades 9–12

Table 2.7.2.5

Equating Summary: Read 9-12 S402 Online

Comparison of Forms	Form 402		Form 401			
	No. of Items	Average Difficulty (Std. Dev.)	No. of Items	Average Difficulty (Std. Dev.)		
	72	1.91 (1.33)	72	1.84 (1.37)		
	Easiest	Hardest	Easiest	Hardest		
	-1.77	4.58	-1.77	4.58		
Anchoring Items	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	60	1.92 (1.40)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	59	1.91 (1.41)				
	Percentage Anchors	Average Displacement				
82%	0.01					
Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13680	-0.46	-0.19	13674	-1.77	0.14
	13676	1.32	-0.18	13767	-0.89	0.07
	13969	3.47	-0.15	13680	-0.46	-0.19
	13742	3.87	-0.14	13677	-0.32	0.04
	13689	0.26	-0.13	13690	0.10	0.07
	13970	2.85	-0.11	13675	0.12	0.07
	13693	1.19	-0.11	13692	0.12	-0.03
	13950	1.41	-0.11	13678	0.16	0.13
	13968	2.61	-0.08	13743	0.26	-0.02
	13957	4.58	-0.08	13689	0.26	-0.13
	13786	4.30	-0.08	13681	0.55	-0.05
	13733	2.87	-0.07	13744	0.60	-0.04
	13741	3.30	-0.07	13682	0.77	0.10
	13958	4.25	-0.06	13704	0.80	0.27
	13952	1.92	-0.06	13679	0.86	0.02

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13787	3.69	-0.06	13745	1.04	-0.05
13681	0.55	-0.05	13694	1.14	0.15	
13745	1.04	-0.05	13693	1.19	-0.11	
13769	2.14	-0.05	13698	1.20	0.10	
13744	0.60	-0.04	13705	1.29	0.27	
13722	2.50	-0.04	13676	1.32	-0.18	
14636	3.11	-0.04	13950	1.41	-0.11	
13951	2.69	-0.03	13699	1.48	0.00	
13724	3.96	-0.03	13691	1.49	0.09	
13692	0.12	-0.03	13728	1.59	0.05	
13740	2.76	-0.02	13707	1.60	0.21	
13743	0.26	-0.02	13772	1.83	0.13	
13731	3.95	-0.01	13952	1.92	-0.06	
13723	2.82	-0.01	13706	1.94	0.21	
13956	3.92	-0.01	13768	2.02	0.03	
13770	2.46	-0.01	13700	2.04	0.16	
13730	2.86	-0.01	14634	2.09	0.16	
13699	1.48	0.00	13769	2.14	-0.05	
13709	2.72	0.00	13708	2.16	0.03	
13771	2.32	0.00	13771	2.32	0.00	
13679	0.86	0.02	13770	2.46	-0.01	
13768	2.02	0.03	13722	2.50	-0.04	
13708	2.16	0.03	13785	2.54	0.24	
14635	3.35	0.03	13968	2.61	-0.08	
13677	-0.32	0.04	13951	2.69	-0.03	
13728	1.59	0.05	13709	2.72	0.00	
13675	0.12	0.07	13740	2.76	-0.02	
13690	0.10	0.07	13723	2.82	-0.01	
13767	-0.89	0.07	13970	2.85	-0.11	
13691	1.49	0.09	13730	2.86	-0.01	

Displacement of Anchor Items	Anchor Items by Displacement			Anchor Items by Item Difficulty		
	Item ID	Item Difficulty	Displacement	Item ID	Item Difficulty	Displacement
	13698	1.20	0.10	13733	2.87	-0.07
13682	0.77	0.10	13732	2.92	0.22	
13772	1.83	0.13	14636	3.11	-0.04	
13678	0.16	0.13	13741	3.30	-0.07	
13674	-1.77	0.14	14635	3.35	0.03	
13694	1.14	0.15	13969	3.47	-0.15	
13700	2.04	0.16	13787	3.69	-0.06	
14634	2.09	0.16	13742	3.87	-0.14	
13707	1.60	0.21	13956	3.92	-0.01	
13706	1.94	0.21	13731	3.95	-0.01	
13732	2.92	0.22	13724	3.96	-0.03	
13785	2.54	0.24	13958	4.25	-0.06	
13704	0.80	0.27	13786	4.30	-0.08	
13705	1.29	0.27	13957	4.58	-0.08	

2.7.3 Writing

2.7.3.1 Grade 1

Table 2.7.3.1.1

Equating Summary: Writ 1 A S402 Online

Comparison of Forms*	Form 402		Form 401			
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)		
	4	-2.17 (3.40)	4	-1.80 (2.56)		
	Easiest	Hardest	Easiest	Hardest		
	-7.22	-0.07	-5.53	-0.03		
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	2	-3.74 (4.91)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	1	-0.27 (N/A)				
	Percentage Anchors	Average Displacement				
25%	0.00					
Rating Scale Step Measures by Task	Anchored Scale Steps					
	Task	Step	Measure			
	Task 2	1	-3.80			
		2	3.89			
		3	-0.09			
	Task 3/Task 4	1	-2.47			
		2	-2.78			
		3	-2.61			
		4	-1.68			
		5	-0.48			
		6	0.97			
		7	2.25			
		8	3.21			
	9	3.59				
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14248	-0.27	0.00	14248	-0.27	0.00

Table 2.7.3.1.2

Equating Summary: Writ 1 B/C S402 Online

Comparison of Forms*	Form 402		Form 401					
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)				
	3	0.12 (0.47)	3	0.35 (0.29)				
	Easiest	Hardest	Easiest	Hardest				
	-0.40	0.52	0.01	0.52				
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)						
	1	0.52 (N/A)						
	No. of Anchors Used	Average Difficulty (Std. Dev.)						
	1	0.52 (N/A)						
	Percentage Anchors	Average Displacement						
33%	0.00							
Common Rating Scale Step Measures	Anchored Scale Steps							
	Step	Measure						
	1	-2.47						
	2	-2.78						
	3	-2.61						
	4	-1.68						
	5	-0.48						
	6	0.97						
	7	2.25						
	8	3.21						
9	3.59							
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty				
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement		
	14241	0.52	0.00	14241	0.52	0.00		

2.7.3.2 Grades 2–3

Table 2.7.3.2.1

Equating Summary: Writ 2-3 A S402 Online

Comparison of Forms*	Form 402		Form 401			
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)		
	3	-0.02 (0.26)	3	0.11 (0.22)		
	Easiest	Hardest	Easiest	Hardest		
	-0.23	0.27	-0.10	0.33		
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	1	-0.10 (N/A)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	1	-0.10 (N/A)				
	Percentage Anchors	Average Displacement				
33%	0.00					
Common Rating Scale Step Measures	Anchored Scale Steps					
	Step	Measure				
	1	-2.47				
	2	-2.78				
	3	-2.61				
	4	-1.68				
	5	-0.48				
	6	0.97				
	7	2.25				
	8	3.21				
9	3.59					
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14257	-0.10	0.00	14257	-0.10	0.00

Table 2.7.3.2.2

Equating Summary: Writ 2-3 B/C S402 Online

Comparison of Forms*	Form 402		Form 401					
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)				
	3	1.02 (0.14)	3	0.47 (0.55)				
	Easiest	Hardest	Easiest	Hardest				
	0.94	1.19	-0.14	0.95				
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)						
	1	0.95 (N/A)						
	No. of Anchors Used	Average Difficulty (Std. Dev.)						
	1	0.95 (N/A)						
	Percentage Anchors	Average Displacement						
33%	0.00							
Common Rating Scale Step Measures	Anchored Scale Steps							
	Step	Measure						
	1	-2.47						
	2	-2.78						
	3	-2.61						
	4	-1.68						
	5	-0.48						
	6	0.97						
	7	2.25						
	8	3.21						
9	3.59							
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty				
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement		
	14260	0.95	0.00	14260	0.95	0.00		

2.7.3.3 Grades 4–5

Table 2.7.3.3.1

Equating Summary: Writ 4-5 A S402 Online

Comparison of Forms*	Form 402		Form 401			
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)		
	3	1.31 (0.12)	3	1.26 (0.14)		
	Easiest	Hardest	Easiest	Hardest		
	1.19	1.41	1.15	1.41		
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	1	1.41 (N/A)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	1	1.41 (N/A)				
	Percentage Anchors	Average Displacement				
33%	0.00					
Common Rating Scale Step Measures	Anchored Scale Steps					
	Step	Measure				
	1	-2.47				
	2	-2.78				
	3	-2.61				
	4	-1.68				
	5	-0.48				
	6	0.97				
	7	2.25				
	8	3.21				
9	3.59					
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14266	1.41	0.00	14266	1.41	0.00

Table 2.7.3.3.2

Equating Summary: Writ 4-5 B/C S402 Online

Comparison of Forms*	Form 402		Form 401			
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)		
	3	1.81 (0.27)	3	2.00 (0.45)		
	Easiest	Hardest	Easiest	Hardest		
	1.51	2.00	1.51	2.39		
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	1	1.51 (N/A)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	1	1.51 (N/A)				
	Percentage Anchors	Average Displacement				
33%	0.00					
Common Rating Scale Step Measures	Anchored Scale Steps					
	Step	Measure				
	1	-2.47				
	2	-2.78				
	3	-2.61				
	4	-1.68				
	5	-0.48				
	6	0.97				
	7	2.25				
	8	3.21				
9	3.59					
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14272	1.51	0.00	14272	1.51	0.00

2.7.3.4 Grades 6–8

Table 2.7.3.4.1

Equating Summary: Writ 6-8 A S402 Online

Comparison of Forms*	Form 402		Form 401			
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)		
	3	0.97 (0.40)	3	0.92 (0.36)		
	Easiest	Hardest	Easiest	Hardest		
	0.64	1.41	0.60	1.32		
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	1	0.85 (N/A)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	1	0.85 (N/A)				
	Percentage Anchors	Average Displacement				
33%	0.00					
Common Rating Scale Step Measures	Anchored Scale Steps					
	Step	Measure				
	1	-2.47				
	2	-2.78				
	3	-2.61				
	4	-1.68				
	5	-0.48				
	6	0.97				
	7	2.25				
	8	3.21				
9	3.59					
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14284	0.85	0.00	14284	0.85	0.00

Table 2.7.3.4.2

Equating Summary: Writ 6-8 B/C S402 Online

Comparison of Forms*	Form 402		Form 401			
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)		
	3	1.30 (0.20)	3	1.30 (0.17)		
	Easiest	Hardest	Easiest	Hardest		
	1.10	1.49	1.10	1.42		
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	1	1.10 (N/A)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	1	1.10 (N/A)				
	Percentage Anchors	Average Displacement				
33%	0.00					
Common Rating Scale Step Measures	Anchored Scale Steps					
	Step	Measure				
	1	-2.47				
	2	-2.78				
	3	-2.61				
	4	-1.68				
	5	-0.48				
	6	0.97				
	7	2.25				
	8	3.21				
9	3.59					
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14655	1.10	0.00	14655	1.10	0.00

2.7.3.5 Grades 9–12

Table 2.7.3.5.1

Equating Summary: Writ 9-12 AS402 Online

Comparison of Forms*	Form 402		Form 401			
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)		
	3	2.07 (0.36)	3	2.14 (0.40)		
	Easiest	Hardest	Easiest	Hardest		
	1.68	2.36	1.68	2.41		
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	1	1.68 (N/A)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	1	1.68 (N/A)				
	Percentage Anchors	Average Displacement				
33%	0.00					
Common Rating Scale Step Measures	Anchored Scale Steps					
	Step	Measure				
	1	-2.47				
	2	-2.78				
	3	-2.61				
	4	-1.68				
	5	-0.48				
	6	0.97				
	7	2.25				
	8	3.21				
9	3.59					
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14290	1.68	0.00	14290	1.68	0.00

Table 2.7.3.5.2

Equating Summary: Writ 9-12 B/C S402 Online

Comparison of Forms*	Form 402		Form 401					
	No. of Tasks	Average Difficulty (Std. Dev.)	No. of Tasks	Average Difficulty (Std. Dev.)				
	3	2.03 (0.34)	3	1.91 (0.13)				
	Easiest	Hardest	Easiest	Hardest				
	1.83	2.43	1.83	2.07				
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)						
	2	1.84 (0.01)						
	No. of Anchors Used	Average Difficulty (Std. Dev.)						
	2	1.84 (0.01)						
	Percentage Anchors	Average Displacement						
67%	-0.02							
Common Rating Scale Step Measures	Anchored Scale Steps							
	Step	Measure						
	1	-2.47						
	2	-2.78						
	3	-2.61						
	4	-1.68						
	5	-0.48						
	6	0.97						
	7	2.25						
	8	3.21						
9	3.59							
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty				
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement		
	14653	1.84	-0.07	14652	1.83	0.03		
	14652	1.83	0.03	14653	1.84	-0.07		

2.7.4 Speaking

2.7.4.1 Grade 1

Table 2.7.4.1

Equating Summary: Spek 1 S402 Online

Comparison of Forms	Form 402			Form 401		
	No. of Tasks	Average Difficulty (Std. Dev.)		No. of Tasks	Average Difficulty (Std. Dev.)	
	9	-1.30 (2.12)		9	-1.37 (2.30)	
	Easiest	Hardest		Easiest	Hardest	
	-4.43	0.35		-4.50	0.81	
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	9	-1.30 (2.12)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	9	-1.30 (2.12)				
	Percentage Anchors	Average Displacement				
100%	-0.04					
Rating Scale Step Measures by Task	Anchored Scale Steps					
	Task	Step	Measure			
	PL 1 Tasks	1	0.56			
		2	-0.56			
	PL 3/PL 5 Tasks	1	-2.65			
		2	-1.80			
		3	1.46			
		4	2.98			
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	15201	-3.90	-0.48	14494	-4.43	0.32
	14604	0.11	-0.21	15004	-4.02	-0.16
	15004	-4.02	-0.16	15201	-3.90	-0.48
	15233	0.35	-0.11	14495	-0.14	0.00
	14495	-0.14	0.00	15011	-0.07	0.00
	15011	-0.07	0.00	14604	0.11	-0.21
	15214	0.24	0.15	15019	0.13	0.15
	15019	0.13	0.15	15214	0.24	0.15
14494	-4.43	0.32	15233	0.35	-0.11	

2.7.4.2 Grades 2–3

Table 2.7.4.2

Equating Summary: Spek 2-3 S402 Online

Comparison of Forms	Form 402			Form 401		
	No. of Tasks		Average Difficulty (Std. Dev.)	No. of Tasks		Average Difficulty (Std. Dev.)
	9		-1.90 (2.48)	10		-1.78 (3.01)
	Easiest		Hardest	Easiest		Hardest
	-5.24		0.66	-6.11		1.07
Anchoring Tasks	No. of Possible Anchors		Average Difficulty (Std. Dev.)			
	9		-1.90 (2.48)			
	No. of Anchors Used		Average Difficulty (Std. Dev.)			
	8		-1.53 (2.37)			
	Percentage Anchors		Average Displacement			
89%		0.07				
Rating Scale Step Measures by Task	Anchored Scale Steps					
	Task	Step	Measure			
	PL 1 Tasks	1	0.56			
		2	-0.56			
	PL 3/PL 5 Tasks	1	-2.65			
		2	-1.80			
		3	1.46			
		4	2.98			
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	14580	-0.93	-0.27	15143	-5.24	0.29
	15092	-0.31	-0.11	15085	-5.23	0.31
	15157	-0.67	-0.04	15149	-0.98	0.34
	15102	0.66	0.00	14580	-0.93	-0.27
	14570	0.48	0.04	15157	-0.67	-0.04
	15143	-5.24	0.29	15092	-0.31	-0.11
	15085	-5.23	0.31	14570	0.48	0.04
	15149	-0.98	0.34	15102	0.66	0.00

2.7.4.3 Grades 4–5

Table 2.7.4.3

Equating Summary: Spek 4-5 S402 Online

Comparison of Forms	Form 402			Form 401		
	No. of Tasks	Average Difficulty (Std. Dev.)		No. of Tasks	Average Difficulty (Std. Dev.)	
	9	-0.25 (2.69)		9	-0.30 (2.83)	
	Easiest	Hardest		Easiest	Hardest	
	-4.04	2.20		-4.15	2.68	
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)				
	9	-0.25 (2.69)				
	No. of Anchors Used	Average Difficulty (Std. Dev.)				
	7	-0.85 (2.77)				
	Percentage Anchors	Average Displacement				
78%	-0.04					
Rating Scale Step Measures by Task	Anchored Scale Steps					
	Task	Step	Measure			
	PL 1 Tasks	1	0.56			
		2	-0.56			
	PL 3/PL 5 Tasks	1	-2.65			
		2	-1.80			
		3	1.46			
		4	2.98			
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty		
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement
	15444	-3.49	-0.45	14500	-4.04	0.20
	14503	2.12	-0.31	15077	-3.76	-0.02
	15174	0.74	-0.06	15444	-3.49	-0.45
	15457	1.72	-0.05	15174	0.74	-0.06
	15077	-3.76	-0.02	14501	0.75	0.39
	14500	-4.04	0.20	15457	1.72	-0.05
	14501	0.75	0.39	14503	2.12	-0.31

2.7.4.4 Grades 6–8

Table 2.7.4.4

Equating Summary: Spek 6-8 S402 Online

Comparison of Forms*	Form 402			Form 401					
	No. of Tasks	Average Difficulty (Std. Dev.)		No. of Tasks	Average Difficulty (Std. Dev.)				
	9	0.33 (2.97)		9	0.57 (2.85)				
	Easiest	Hardest		Easiest	Hardest				
	-3.73	3.02		-3.54	2.84				
Anchoring Tasks	No. of Possible Anchors	Average Difficulty (Std. Dev.)							
	9	0.33 (2.97)							
	No. of Anchors Used	Average Difficulty (Std. Dev.)							
	8	0.84 (2.72)							
	Percentage Anchors	Average Displacement							
89%	0.01								
Rating Scale Step Measures by Task	Anchored Scale Steps								
	Task	Step	Measure						
	PL 1 Tasks	1	0.56						
		2	-0.56						
	PL 3/PL 5 Tasks	1	-2.65						
		2	-1.80						
		3	1.46						
		4	2.98						
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty					
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement			
	14511	2.10	-0.27	14510	-3.54	-0.17			
	14510	-3.54	-0.17	15192	-3.42	0.19			
	15340	3.02	-0.04	15208	1.25	0.05			
	15208	1.25	0.05	15326	1.86	0.09			
	15219	2.60	0.05	14511	2.10	-0.27			
	15326	1.86	0.09	15219	2.60	0.05			
	14505	2.84	0.16	14505	2.84	0.16			
	15192	-3.42	0.19	15340	3.02	-0.04			

2.7.4.5 Grades 9–12

Table 2.7.4.5

Equating Summary: Spek 9-12 S402 Online

Comparison of Forms*	Form 402			Form 401				
	No. of Tasks		Average Difficulty (Std. Dev.)	No. of Tasks		Average Difficulty (Std. Dev.)		
	9		0.71 (2.48)	11		0.76 (2.27)		
	Easiest		Hardest	Easiest		Hardest		
	-2.61		2.84	-2.77		3.04		
Anchoring Tasks	No. of Possible Anchors		Average Difficulty (Std. Dev.)					
	9		0.71 (2.48)					
	No. of Anchors Used		Average Difficulty (Std. Dev.)					
	5		-0.56 (2.77)					
	Percentage Anchors		Average Displacement					
56%		-0.15						
Rating Scale Step Measures by Task	Anchored Scale Steps							
	Task	Step	Measure					
	PL 1 Tasks	1	0.56					
		2	-0.56					
	PL 3/PL 5 Tasks	1	-2.65					
		2	-1.80					
		3	1.46					
		4	2.98					
Displacement of Anchor Tasks	Anchor Tasks by Displacement			Anchor Tasks by Task Difficulty				
	Task ID	Task Difficulty	Displacement	Task ID	Task Difficulty	Displacement		
	15479	-2.61	-0.33	15479	-2.61	-0.33		
	15535	-2.57	-0.26	15535	-2.57	-0.26		
	15500	-2.54	-0.15	15500	-2.54	-0.15		
	15495	2.84	-0.15	15541	2.07	0.14		
	15541	2.07	0.14	15495	2.84	-0.15		

2.8 Test Characteristic Curve

Test characteristic curves graphically show the relationship between the ability measure (in logits) on the horizontal axis and the expected raw score on the vertical axis. Five vertical lines indicate the five cut scores for the highest grade in the cluster for the test form, dividing the figure into six sections for each of the WIDA proficiency levels (Levels 1–6) for the domain being tested. (Note that for some domains for Tier A tests, it was not possible to place into all six language proficiency levels. As would be expected, higher raw scores are required to be placed into higher language proficiency levels. The relative width of each section between the cut score lines, however, gives an indication of how many items on that form must be answered correctly (or points on the Writing section must be earned) to be placed into a WIDA language Proficiency Level.

As the Listening and Reading assessments are multistage adaptive tests, raw scores are not a meaningful aspect of these tests, so no test characteristic curve is presented for these domains.

2.8.1 Listening

The ACCESS 2.0 Online Listening test is a multi-stage adaptive assessment. As students do not all take the same set of items in the test, no test characteristic curve is presented.

2.8.2 Reading

The ACCESS 2.0 Online Reading test is a multi-stage adaptive assessment. As students do not all take the same set of items in the test, no test characteristic curve is presented.

2.8.3 Writing

2.8.3.1 Grade 1

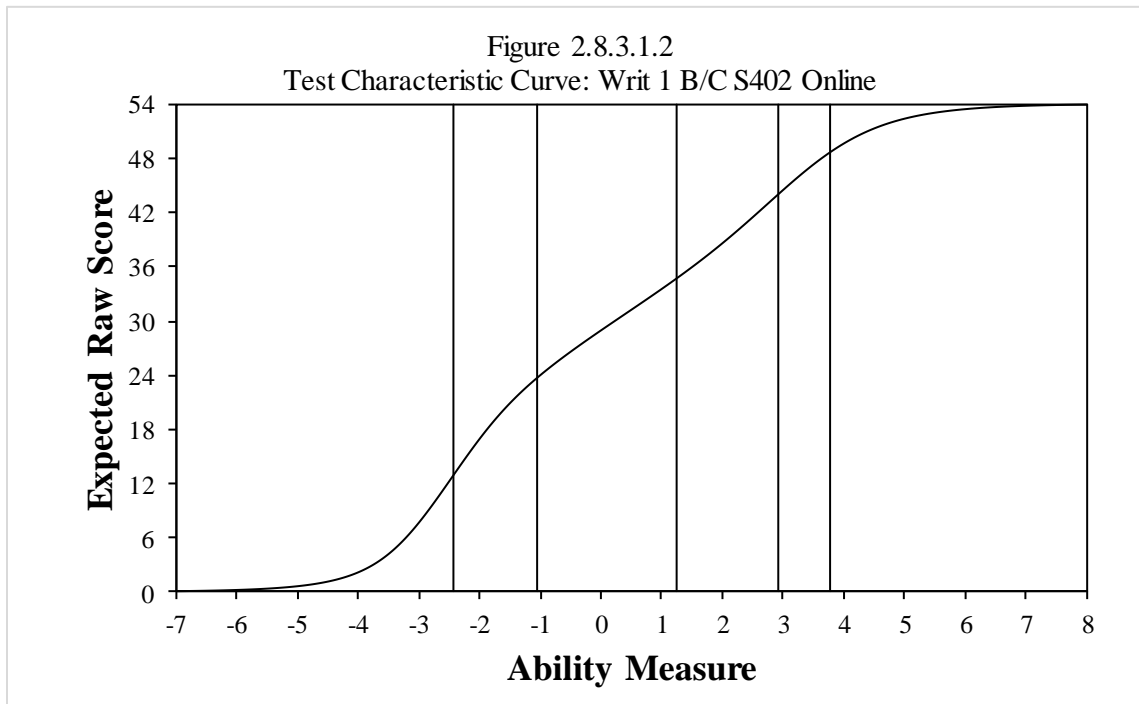
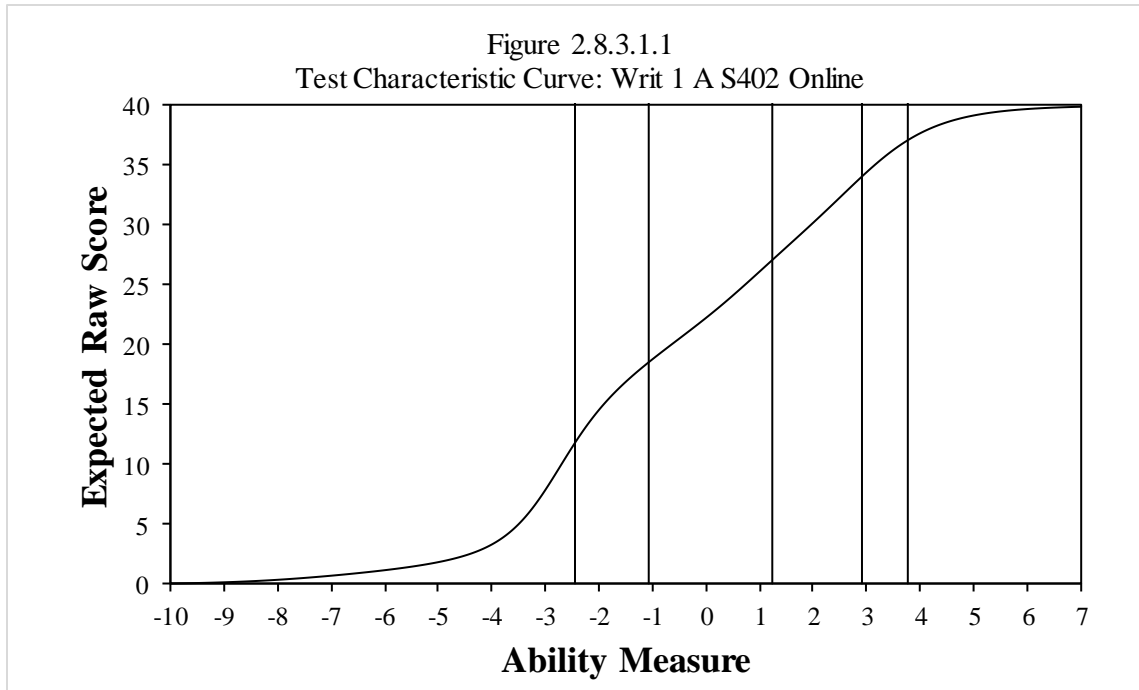
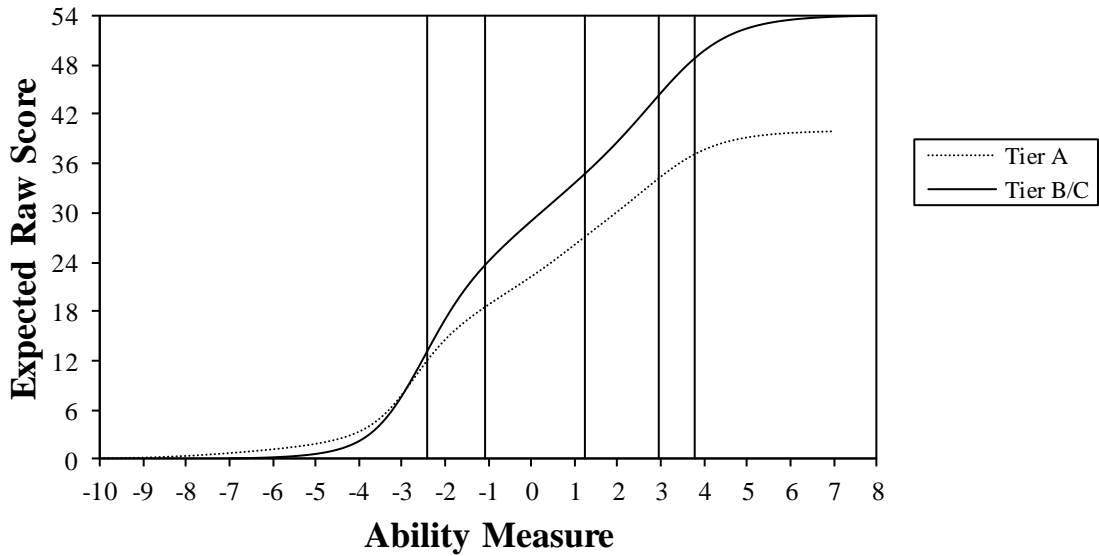
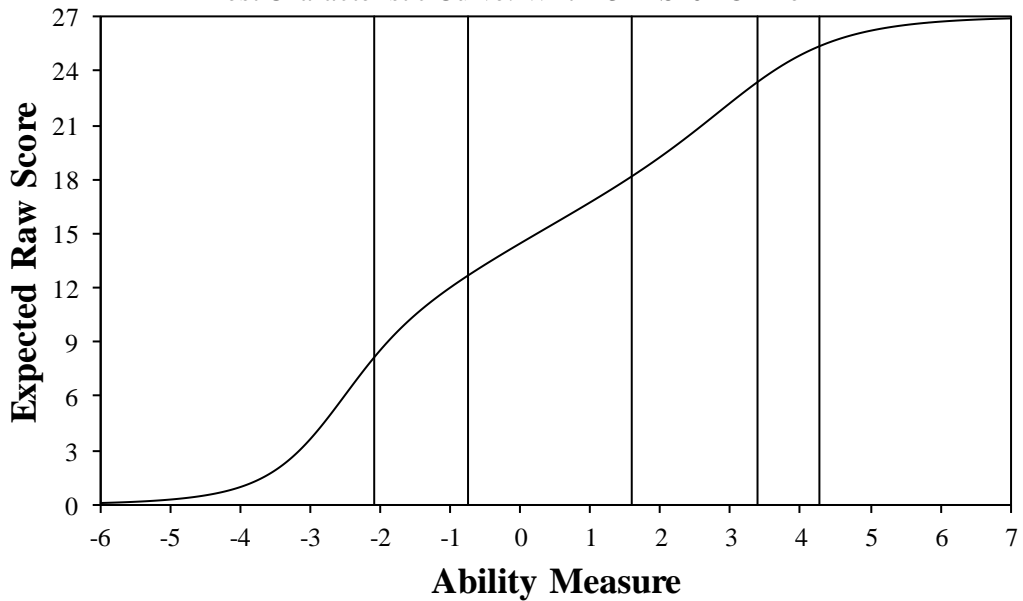


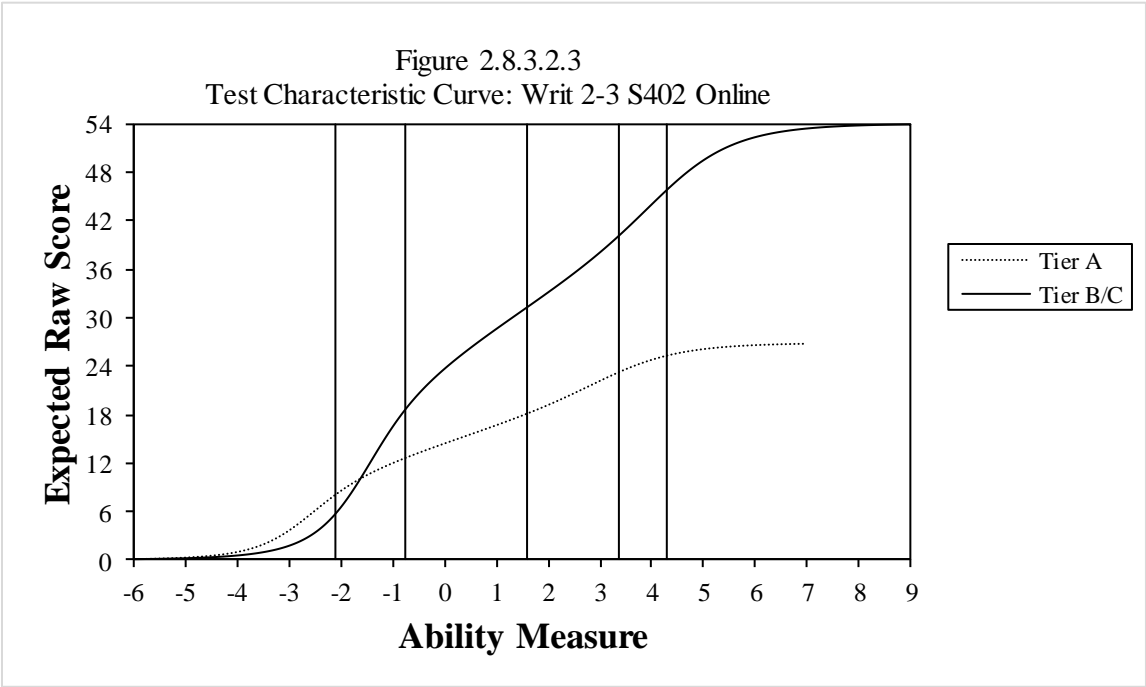
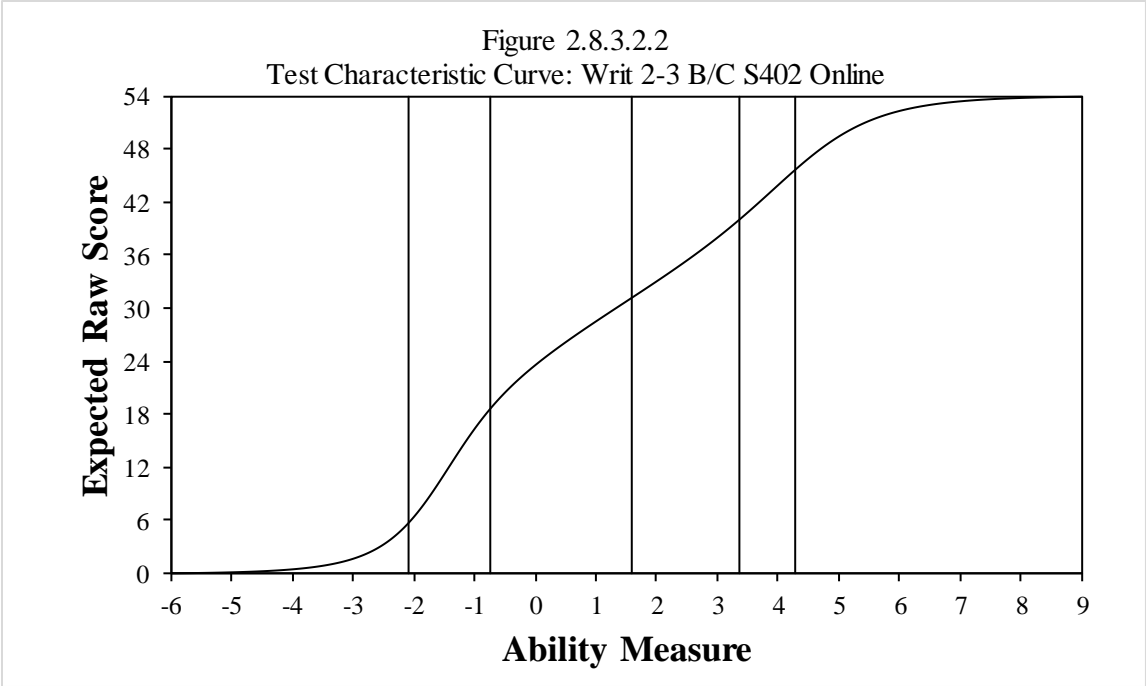
Figure 2.8.3.1.3
 Test Characteristic Curve: Writ 1 S402 Online



2.8.3.2 Grade 2-3

Figure 2.8.3.2.1
 Test Characteristic Curve: Writ 2-3 A S402 Online





2.8.3.3 Grades 4-5

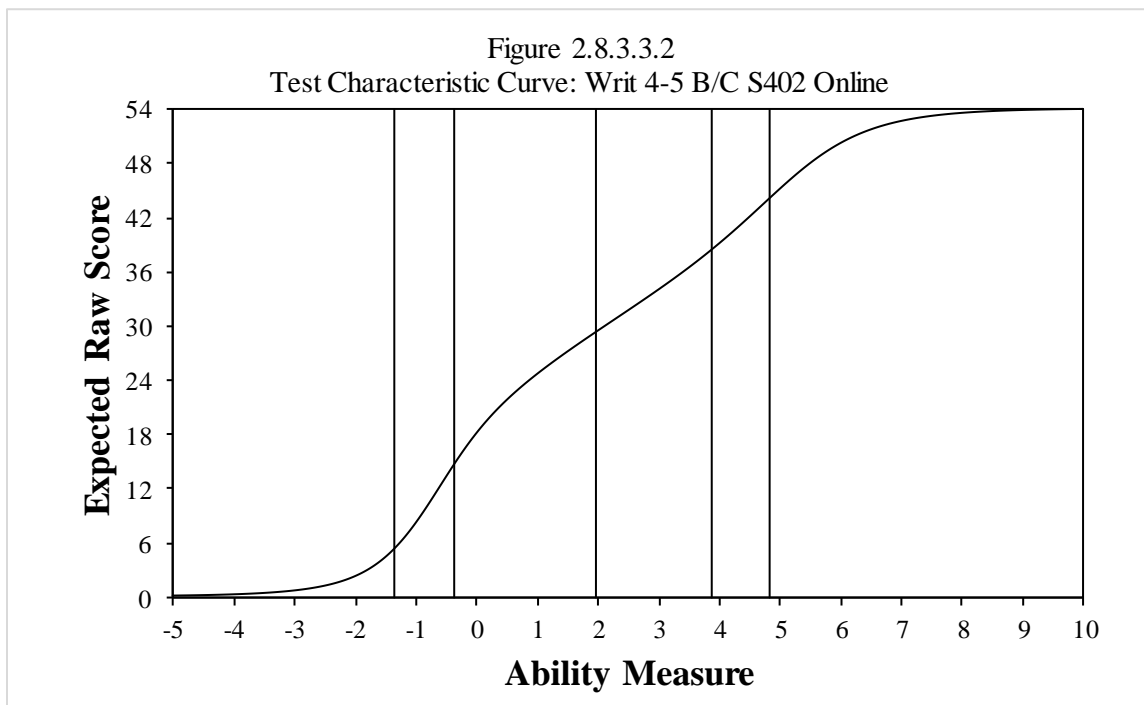
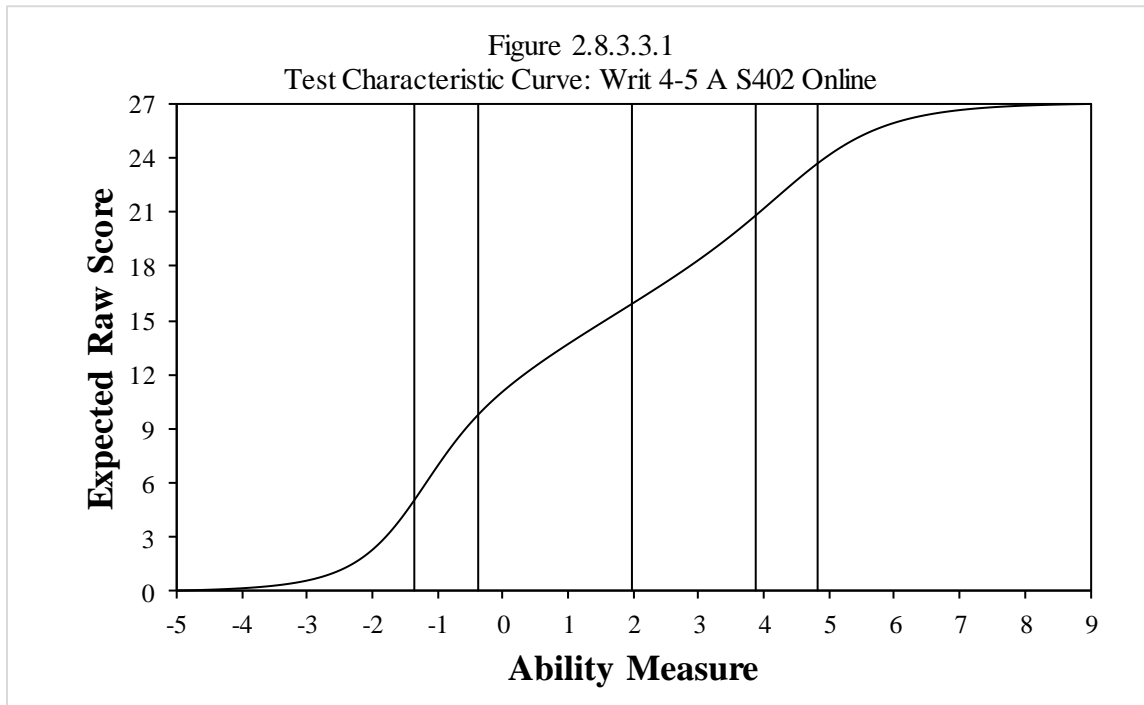
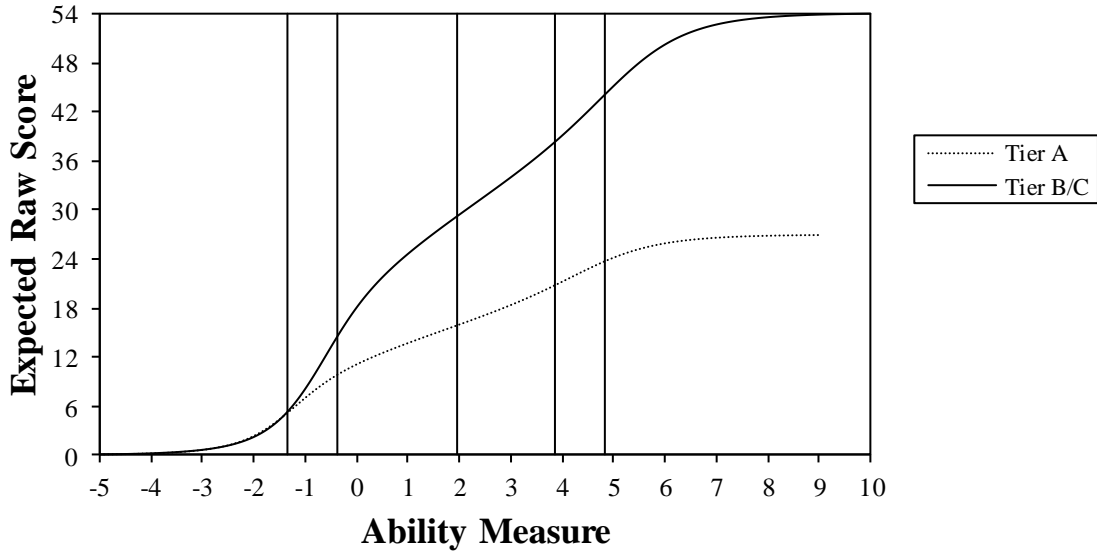


Figure 2.8.3.3.3
 Test Characteristic Curve: Writ 4-5 S402 Online



2.8.3.4 Grades 6-8

Figure 2.8.3.4.1
 Test Characteristic Curve: Writ 6-8 A S402 Online

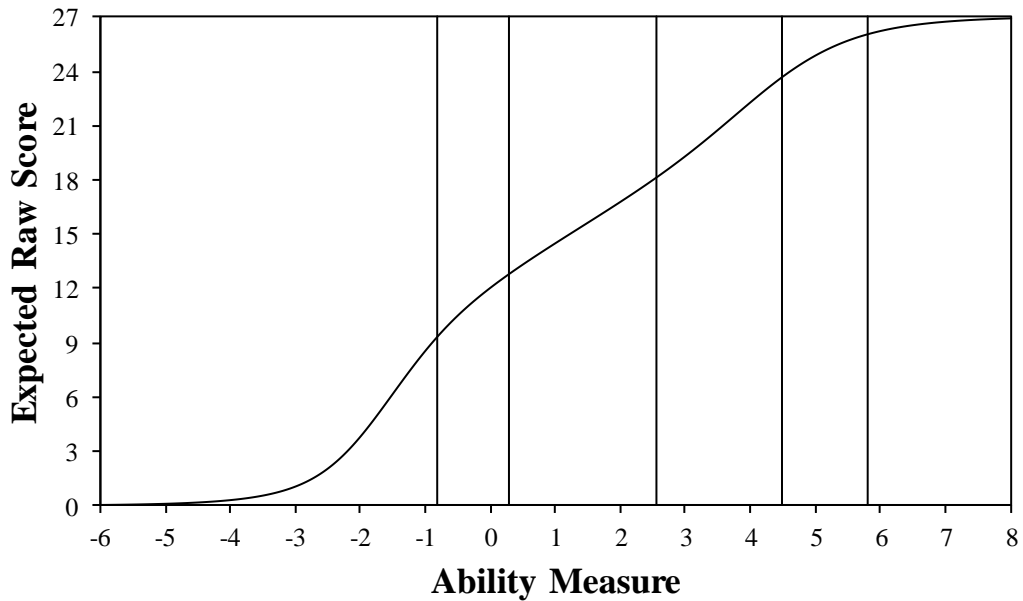


Figure 2.8.3.4.2
 Test Characteristic Curve: Writ 6-8 B/C S402 Online

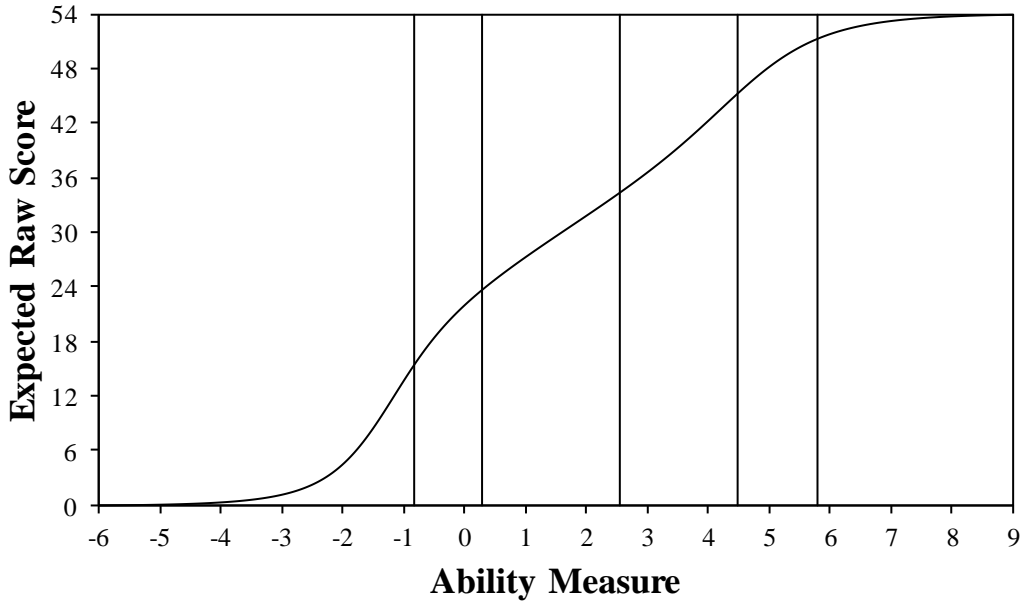
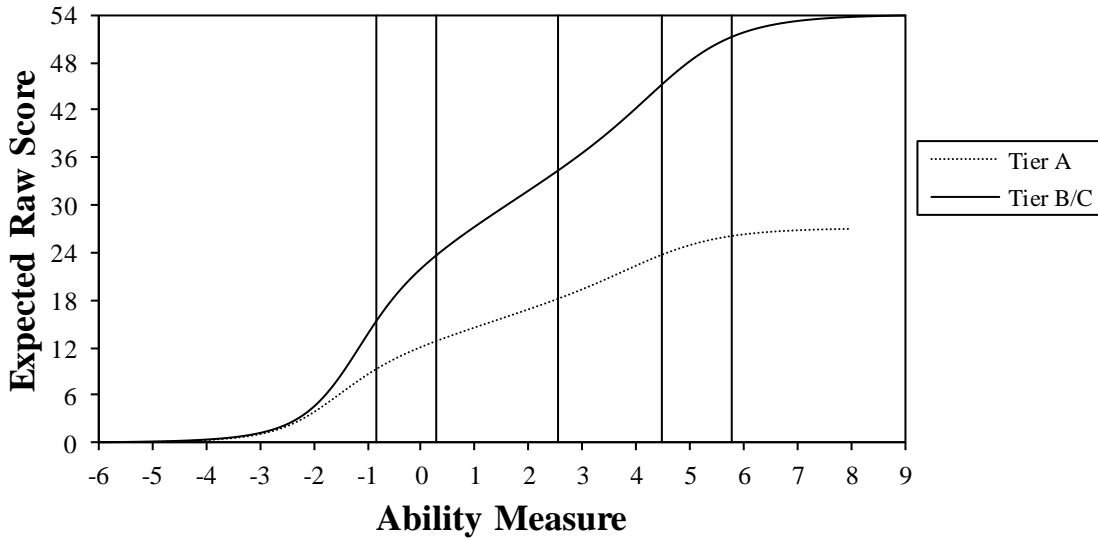
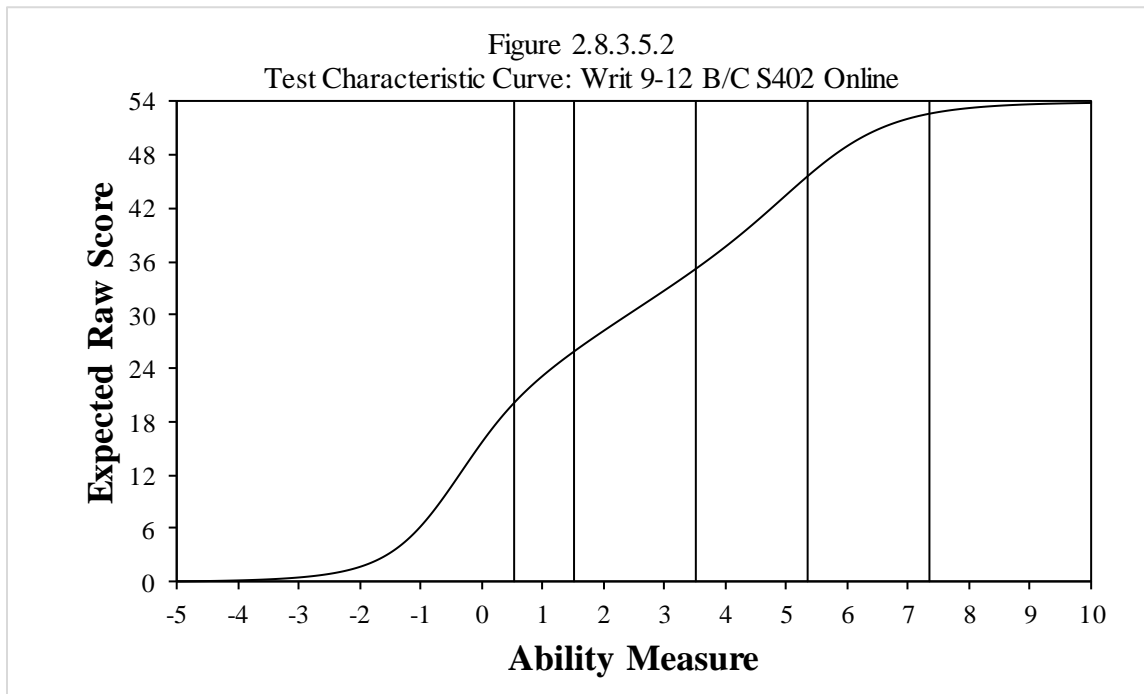
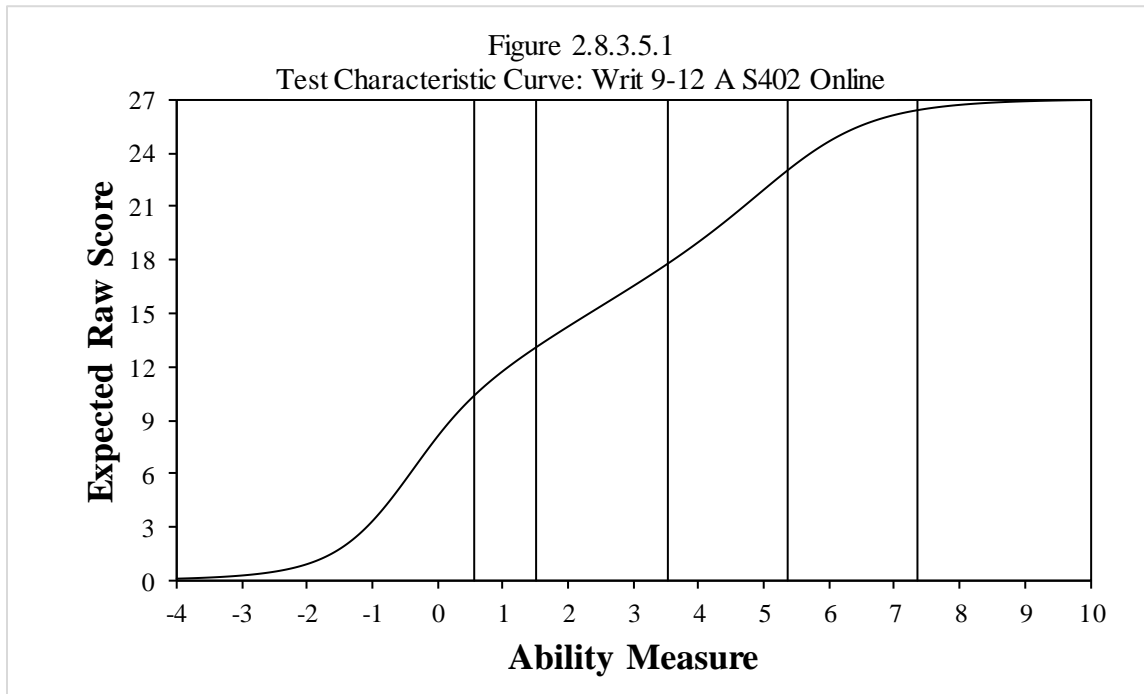
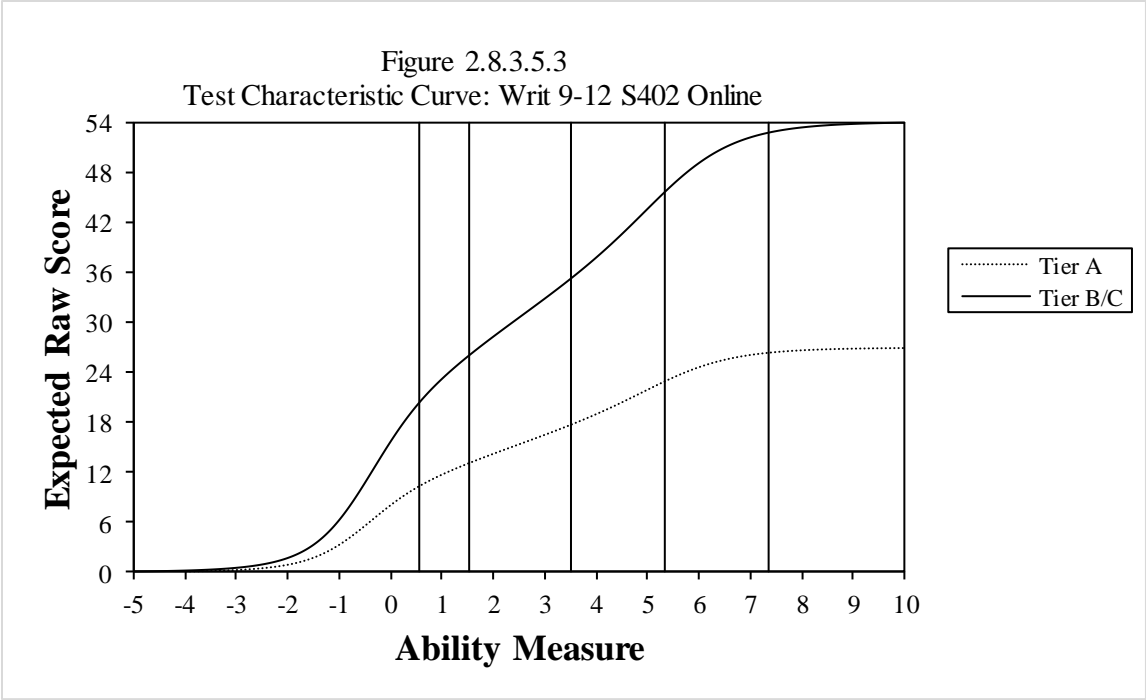


Figure 2.8.3.4.3
 Test Characteristic Curve: Writ 6-8 S402 Online



2.8.3.5 Grades 9-12





2.8.4 Speaking

2.8.4.1 *Grade 1*

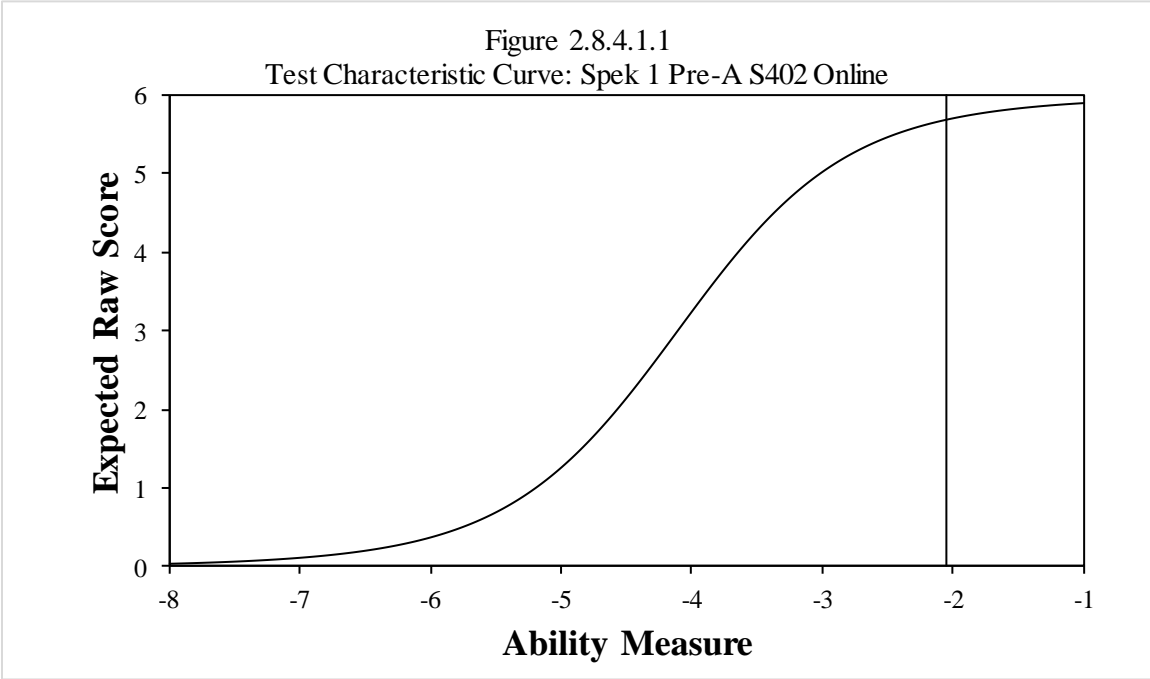


Figure 2.8.4.1.2
 Test Characteristic Curve: Spek 1 A S402 Online

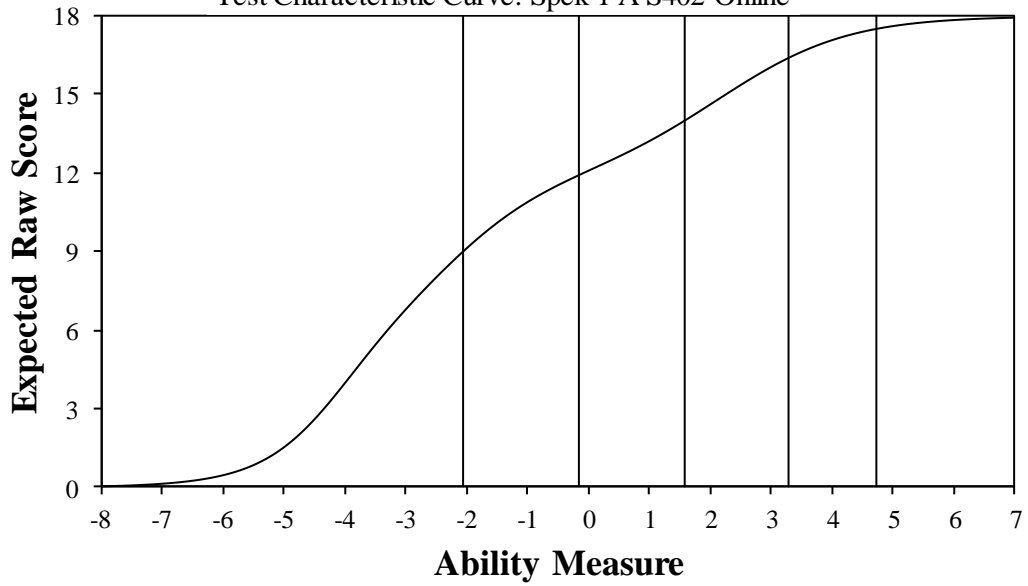


Figure 2.8.4.1.3
 Test Characteristic Curve: Spek 1 B/C S402 Online

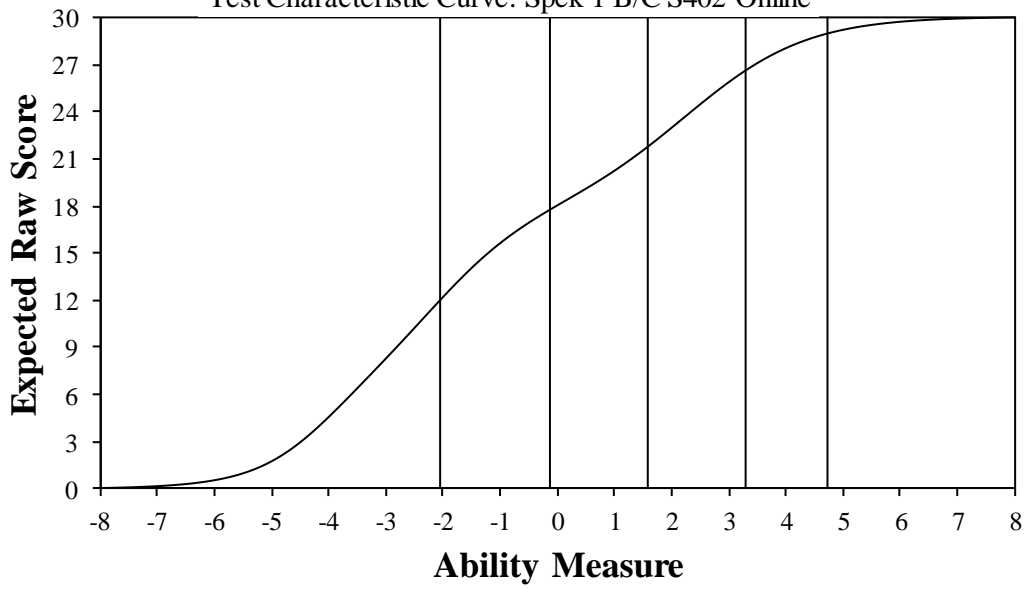
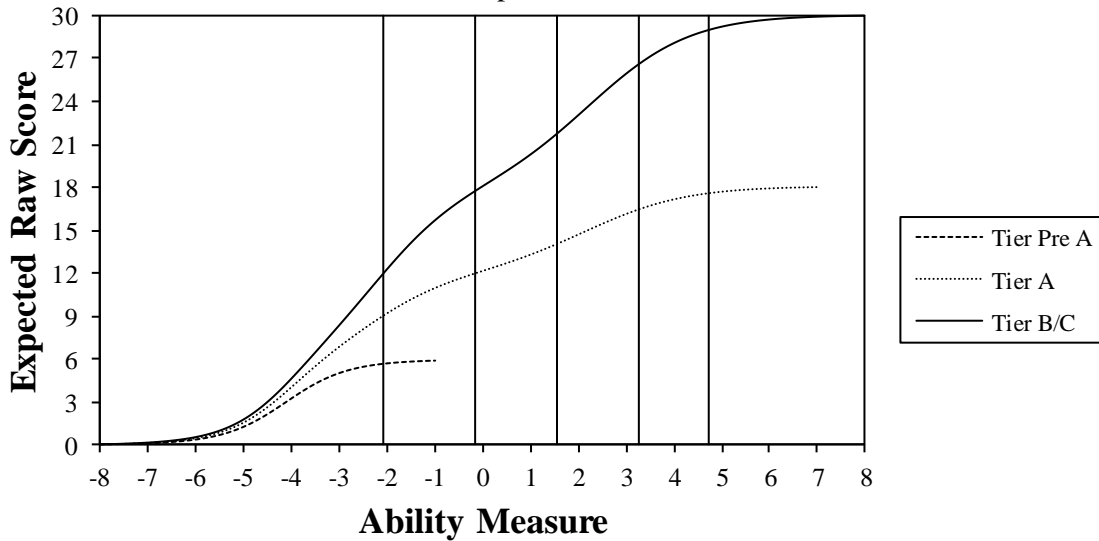


Figure 2.8.4.1.4
 Test Characteristic Curve: Spek 1 S402 Online



2.8.4.2 Grade 2-3

Figure 2.8.4.2.1
 Test Characteristic Curve: Spek 2-3 Pre-A S402 Online

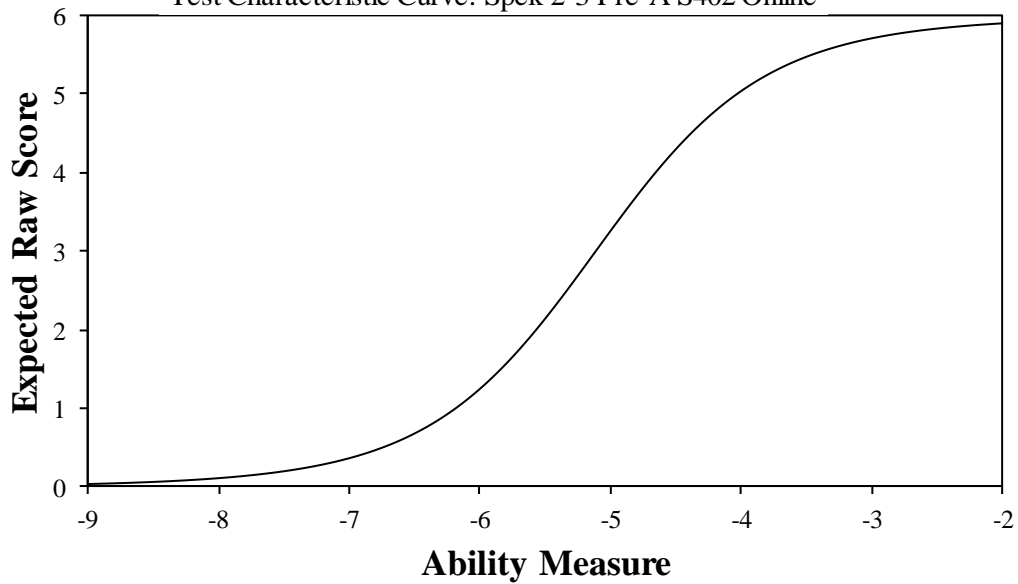


Figure 2.8.4.2.2
Test Characteristic Curve: Spek 2-3 A S402 Online

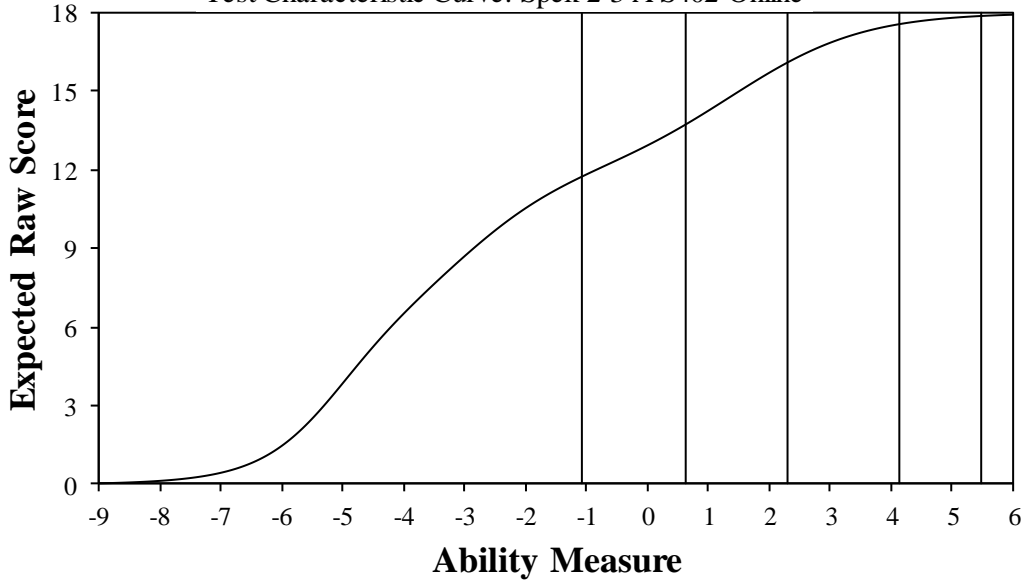
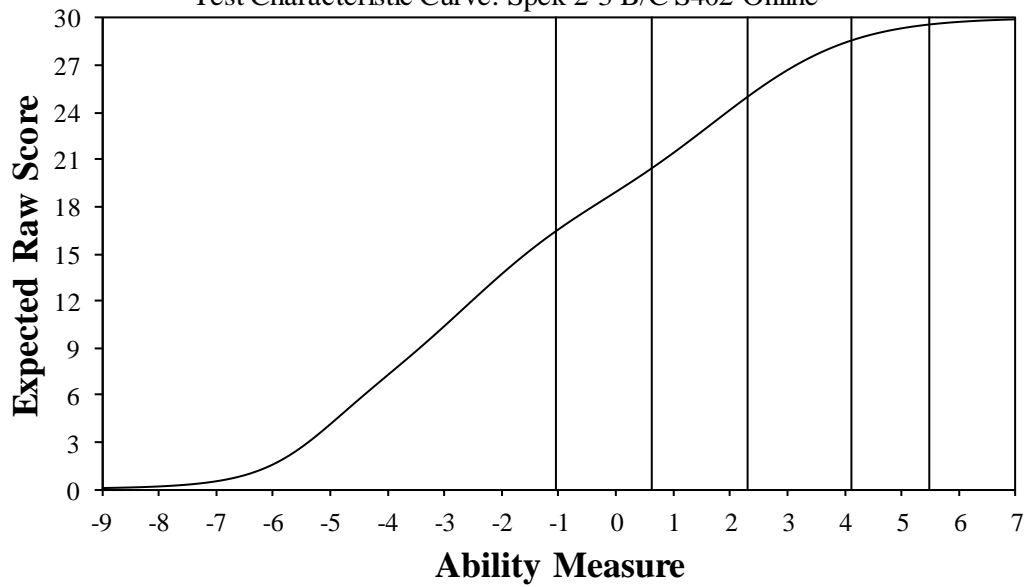
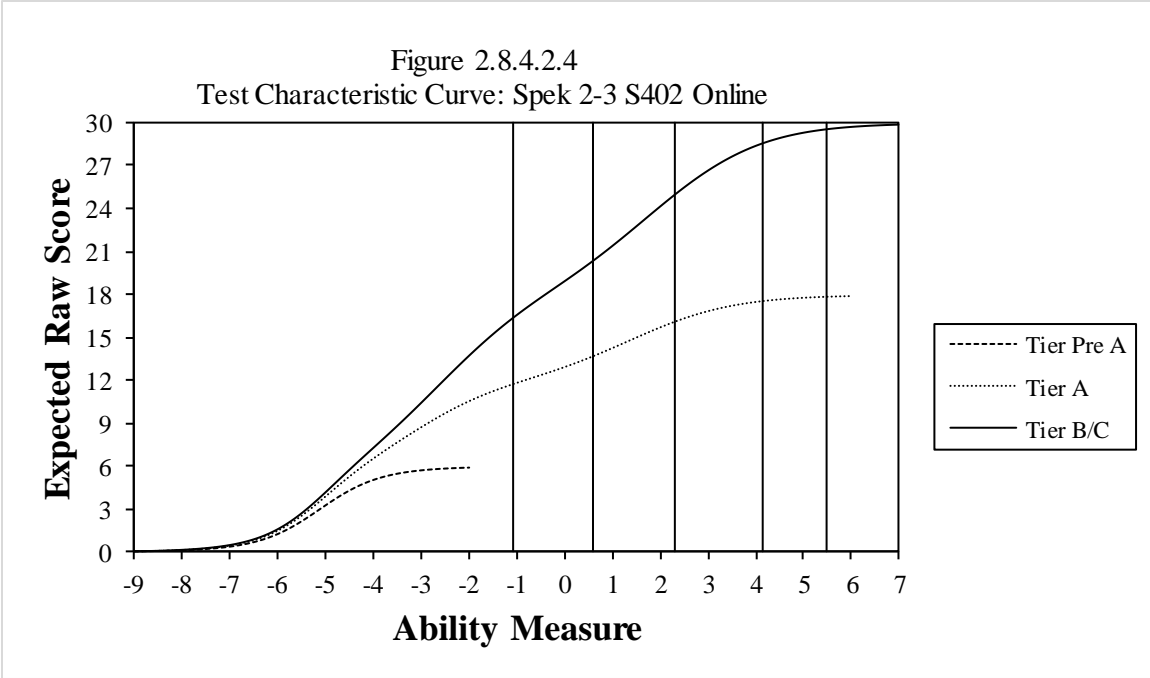
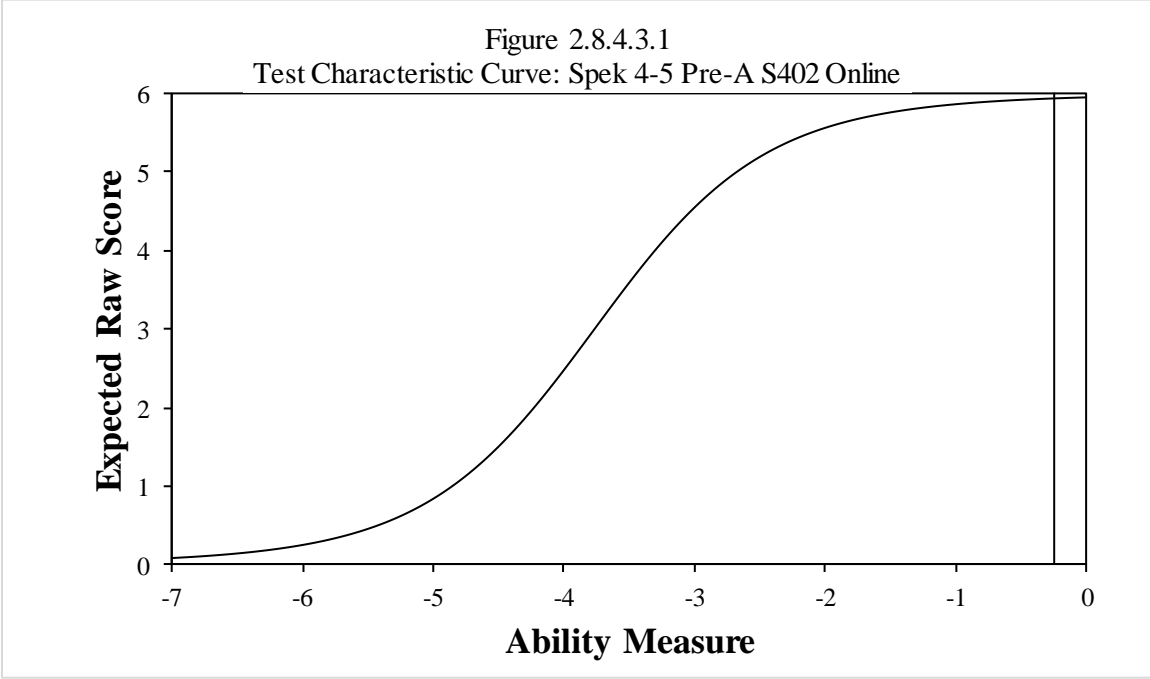


Figure 2.8.4.2.3
Test Characteristic Curve: Spek 2-3 B/C S402 Online





2.8.4.3 Grades 4-5



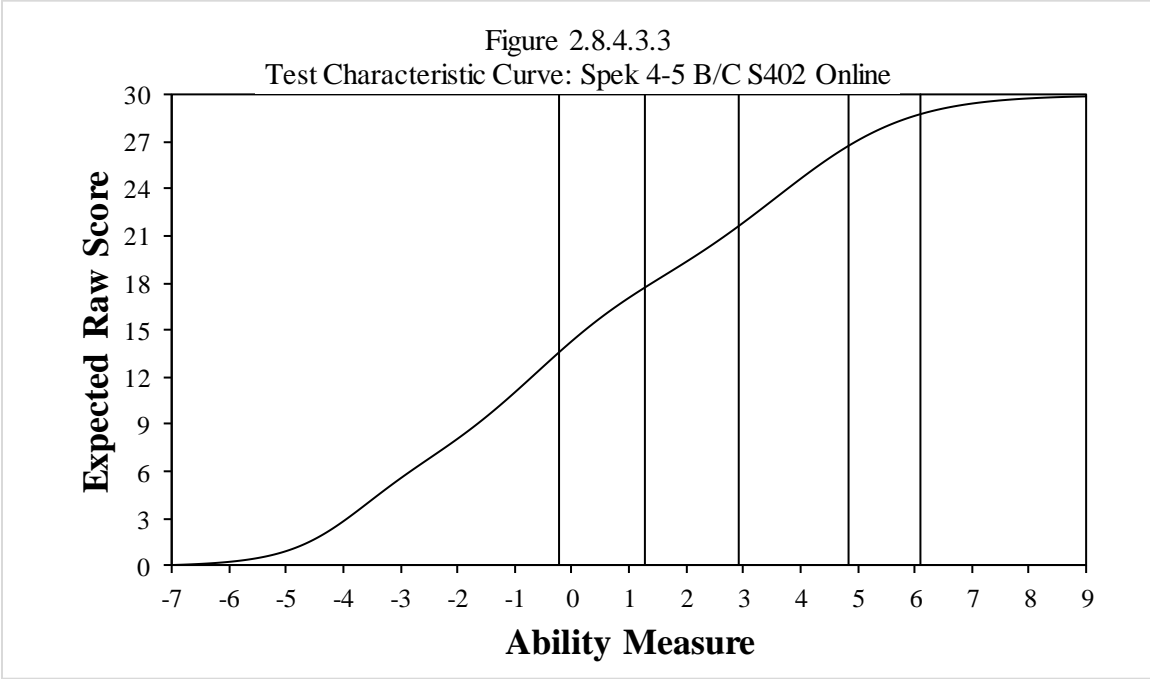
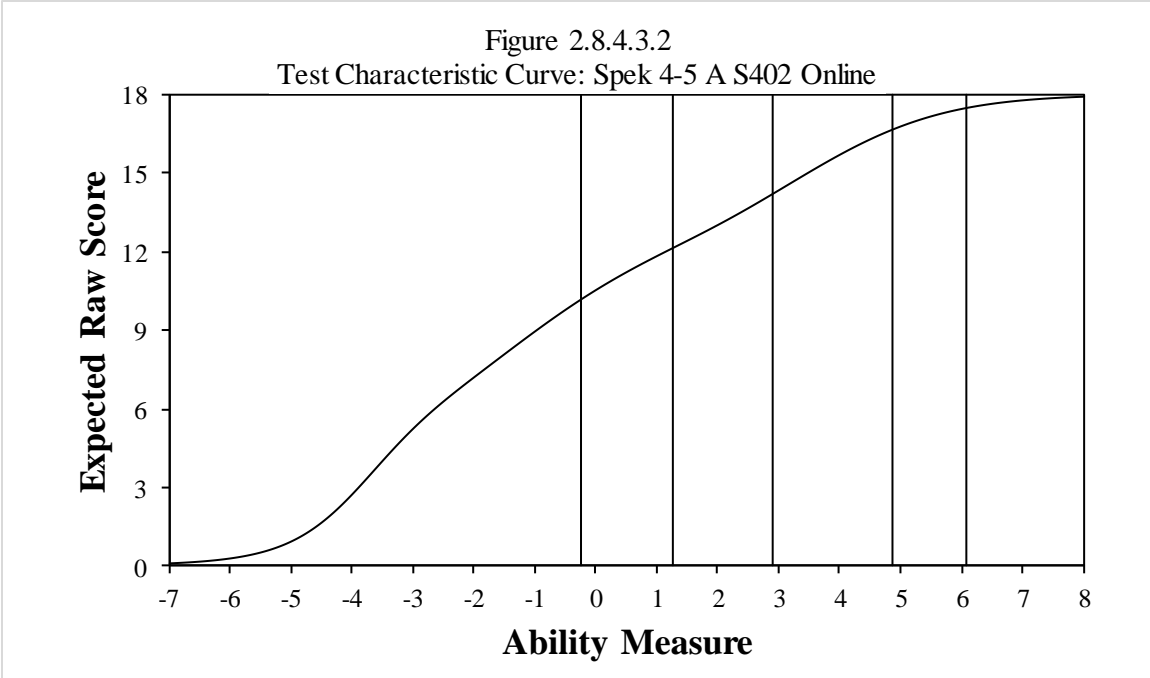
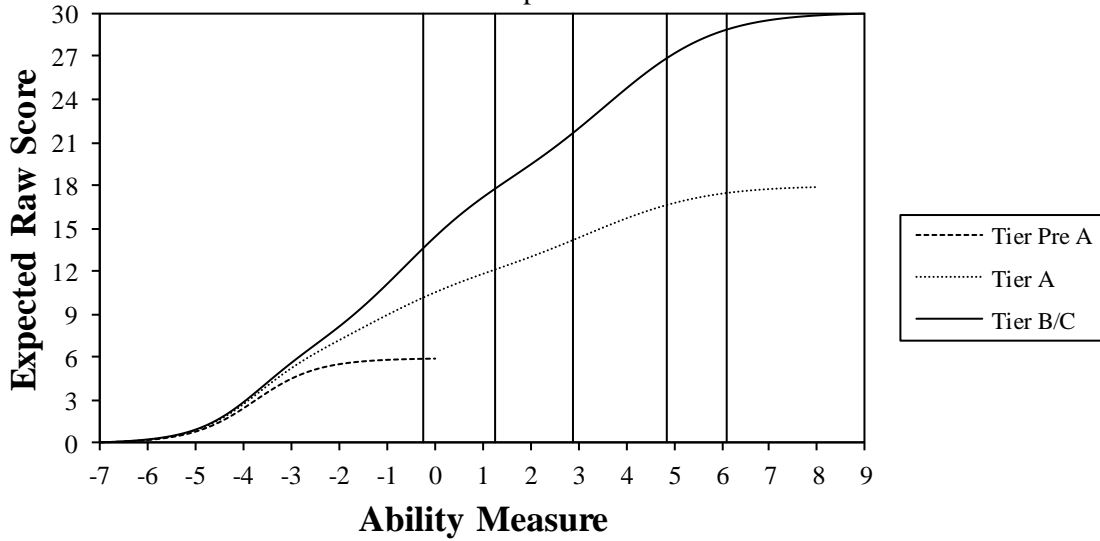


Figure 2.8.4.3.4
 Test Characteristic Curve: Spek 4-5 S402 Online



2.8.4.4 Grades 6-8

Figure 2.8.4.4.1
 Test Characteristic Curve: Spek 6-8 Pre-A S402 Online

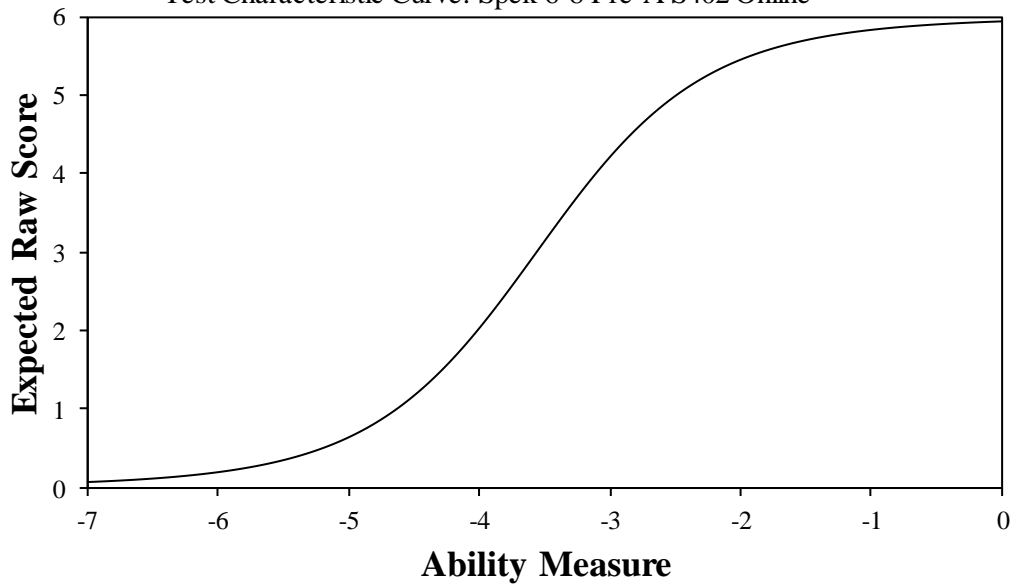


Figure 2.8.4.4.2
Test Characteristic Curve: Spek 6-8 A S402 Online

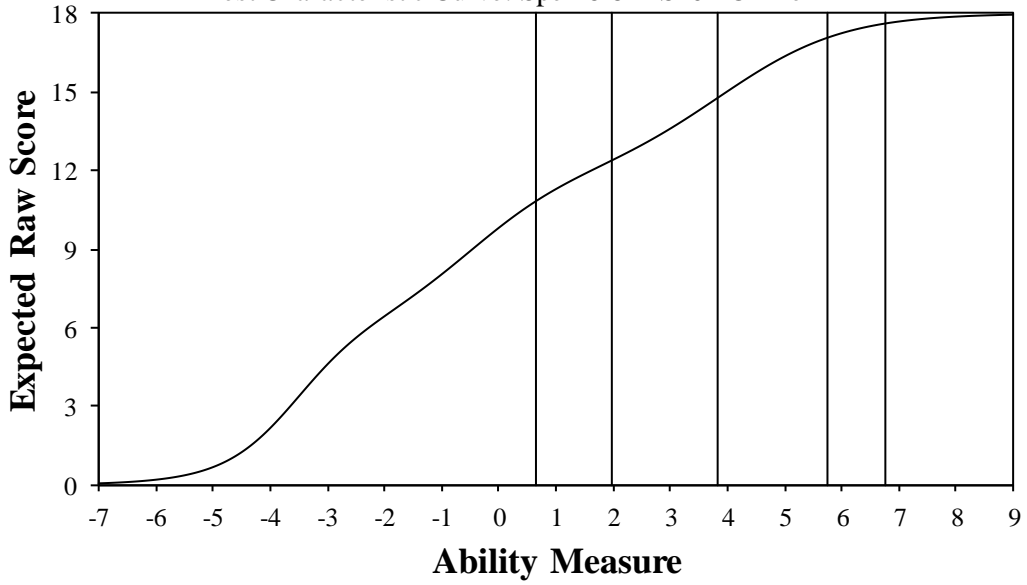
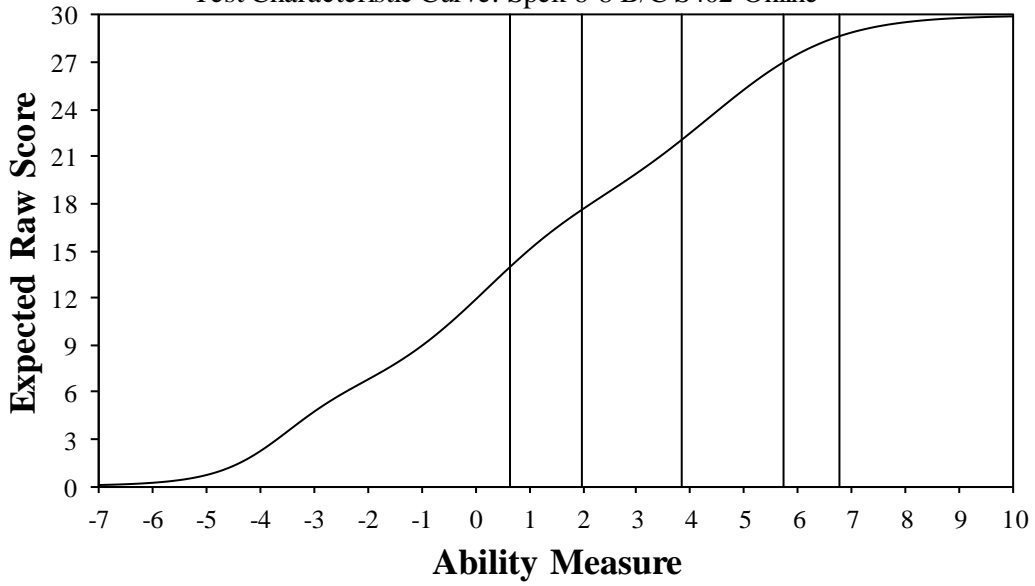
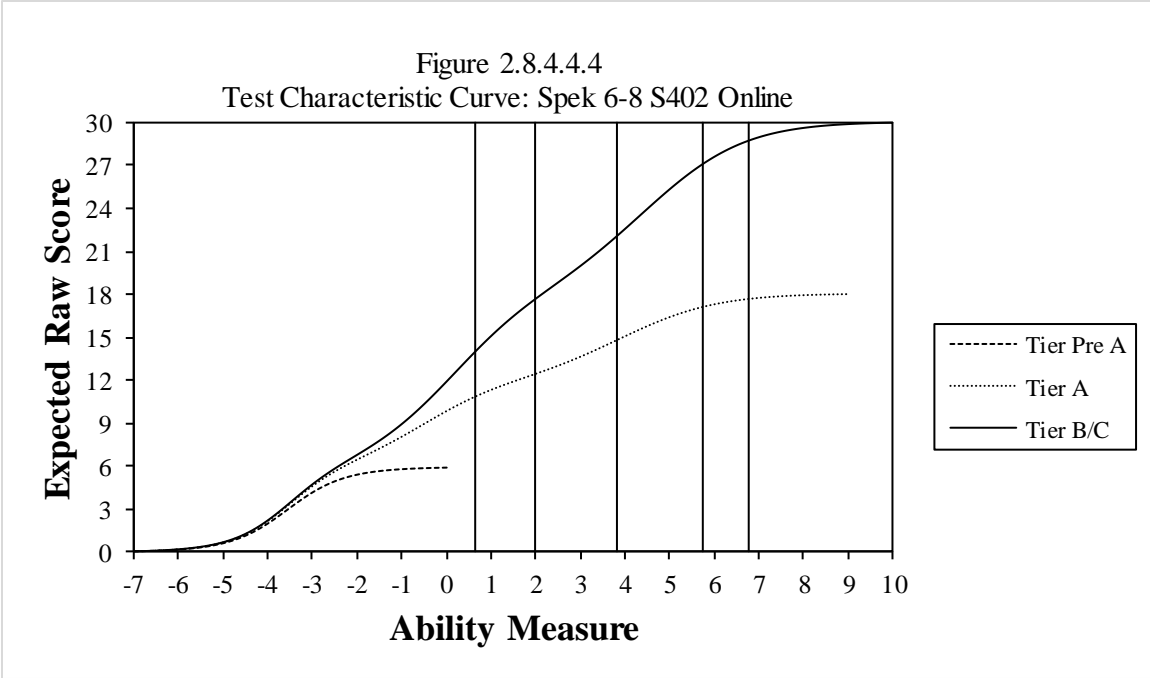


Figure 2.8.4.4.3
Test Characteristic Curve: Spek 6-8 B/C S402 Online





2.8.4.5 Grades 9-12

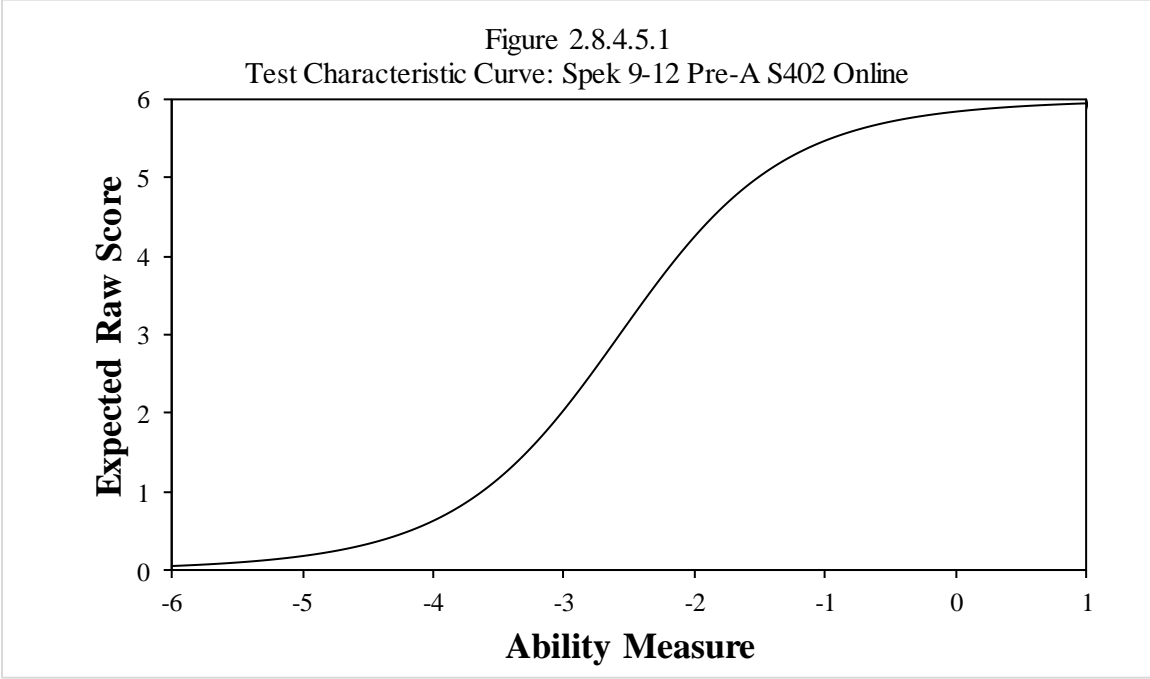


Figure 2.8.4.5.2
 Test Characteristic Curve: Spek 9-12 A S402 Online

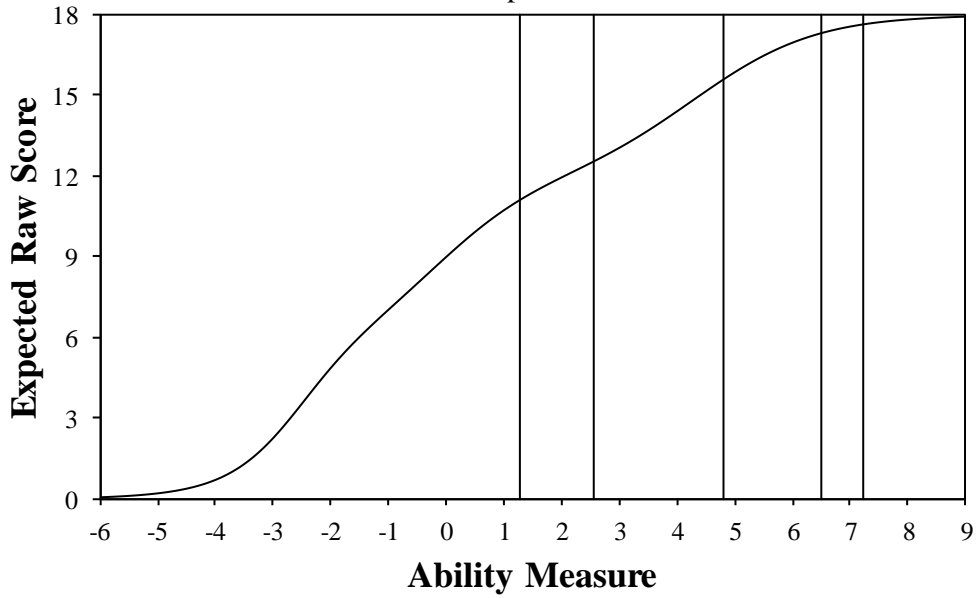


Figure 2.8.4.5.3
 Test Characteristic Curve: Spek 9-12 B/C S402 Online

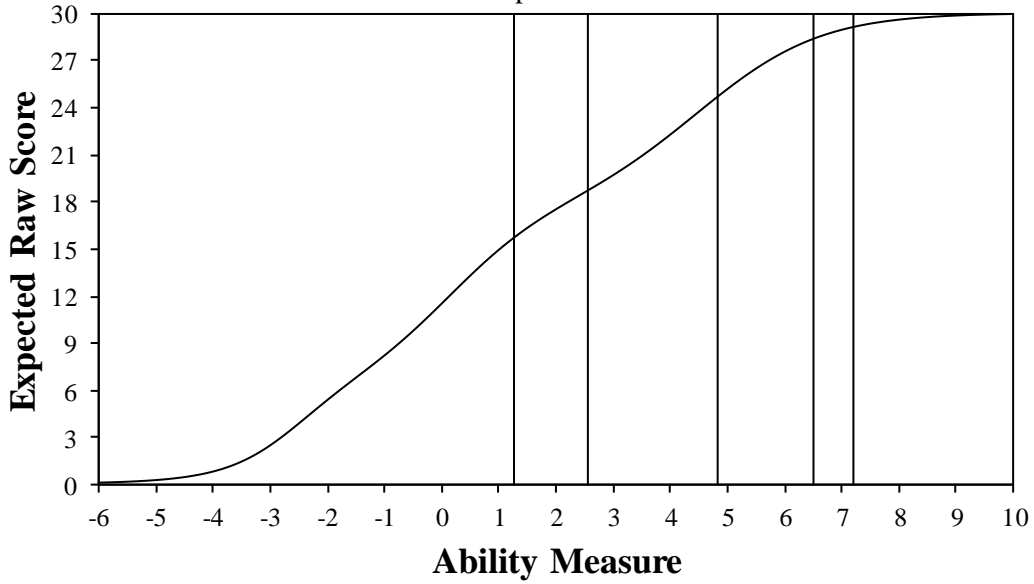
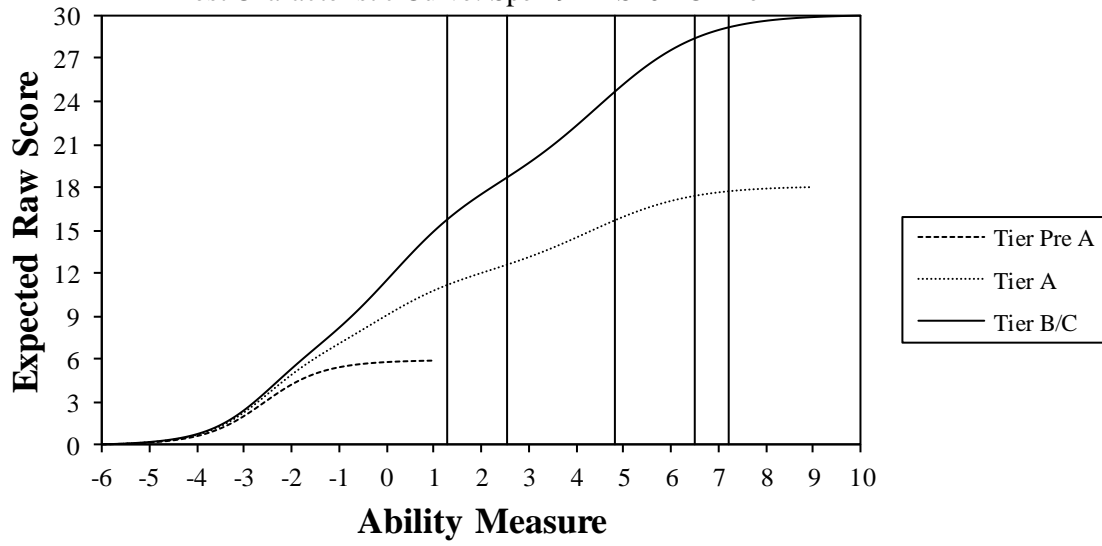


Figure 2.8.4.5.4
Test Characteristic Curve: Spek 9-12 S402 Online



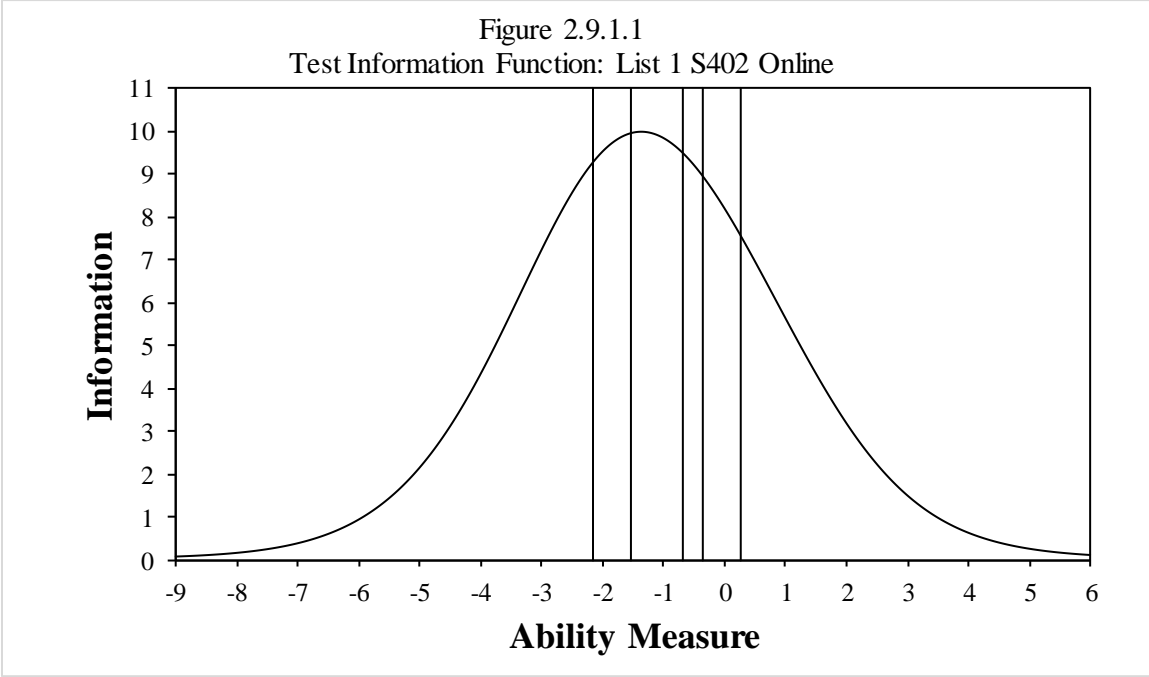
2.9 Test Information Function

With the Rasch measurement model, as with any measurement model following item response theory, the relationship between the ability measure (in logits) and the accuracy of test scores can be modeled. It is recognized that tests measure most accurately when the abilities of the examinees and the difficulty of the items are most appropriate for each other. If a test is too difficult for an examinee (i.e., the examinee scores close to zero), or if the test is too easy for an examinee (i.e., the examinee receives a perfect or near-perfect score), accurate measurement of the examinee's ability cannot be made. The figures in this section show graphically how well the test is measuring across the ability measure spectrum. High test information values indicate more accuracy in measurement. Figures show the relationship between the ability measure (in logits) on the horizontal axis and measurement accuracy, represented as the Fisher information value (which is the inverse squared of the standard error), on the vertical axis. The test information function, then, reflects the conditional standard errors of measurement.

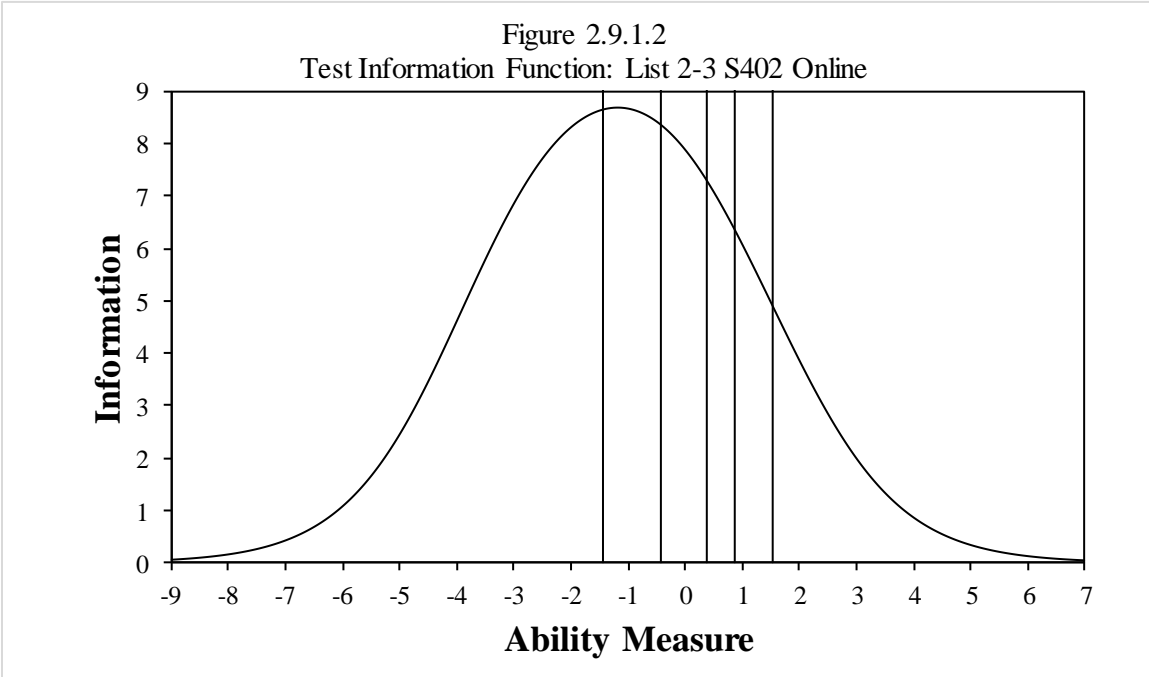
Five vertical lines in the figure indicate the five ACCESS cut scores for the highest grade in the grade-level cluster for the test form, dividing the figure into six sections for each of the WIDA proficiency levels (1–6) for the domain being tested. The ACCESS cut scores lines are presented along with the test information function to facilitate the interpretation of the test information curves. The test information curve and the corresponding ACCESS cut score lines are both expressed on the ACCESS logit scale. Note that for Speaking, in Tier Pre-A, all scores fall in the PL 1.0 range, so there are no vertical lines expressing the cuts between proficiency levels.

2.9.1 Listening

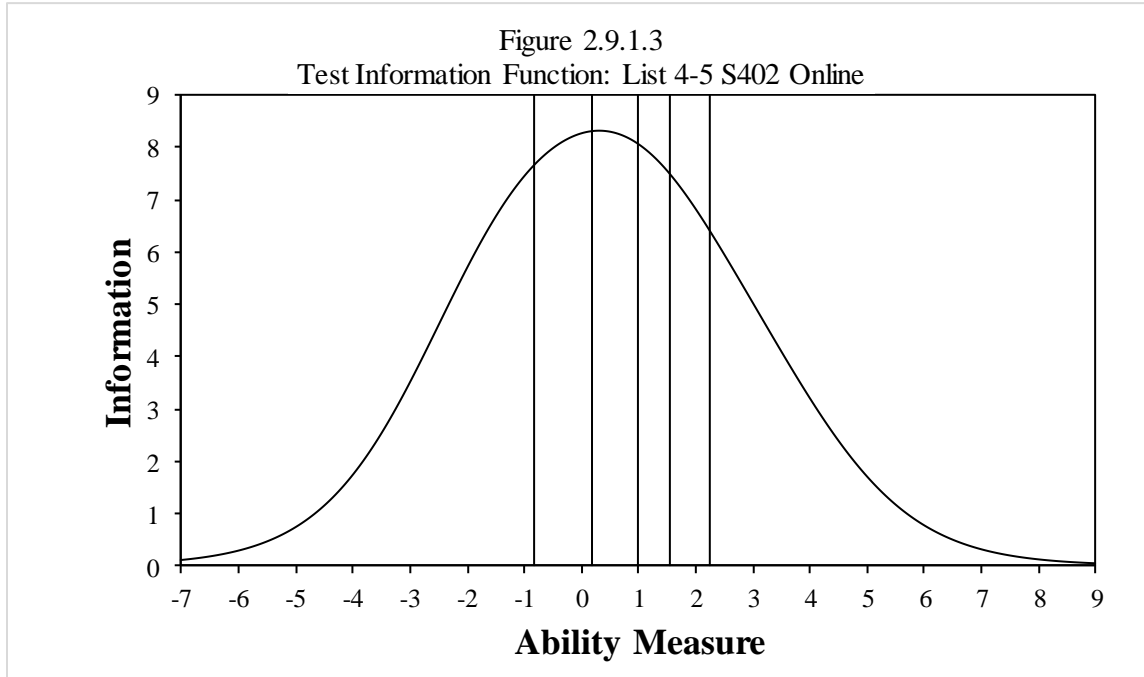
2.9.1.1 Grade 1



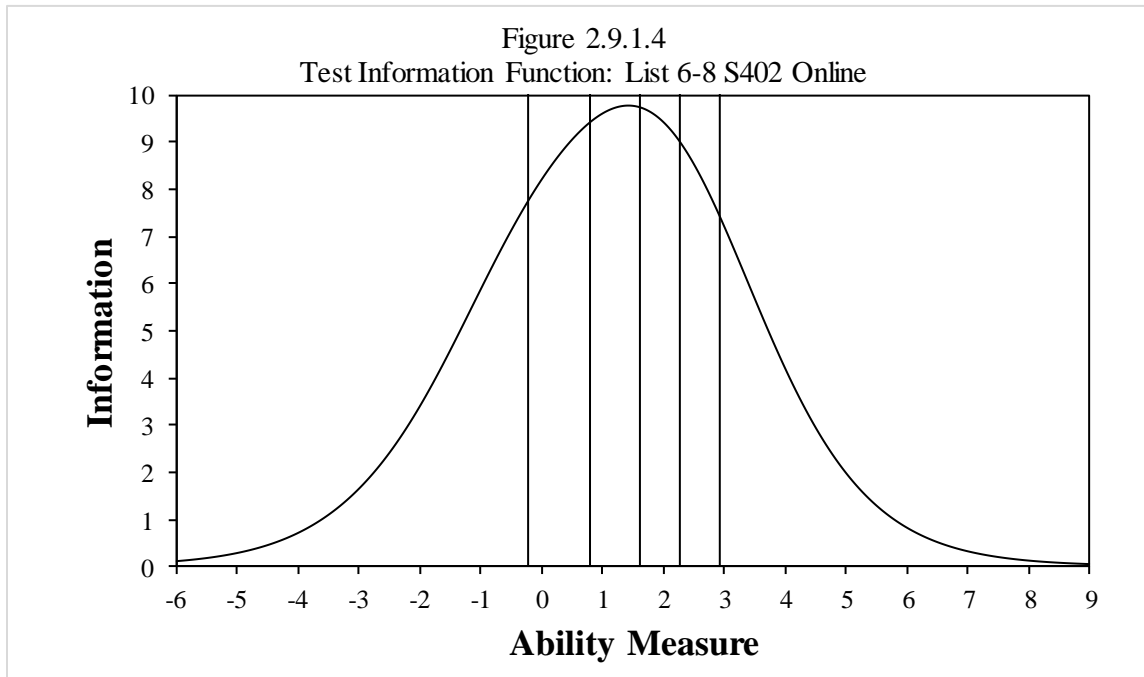
2.9.1.2 Grades 2–3



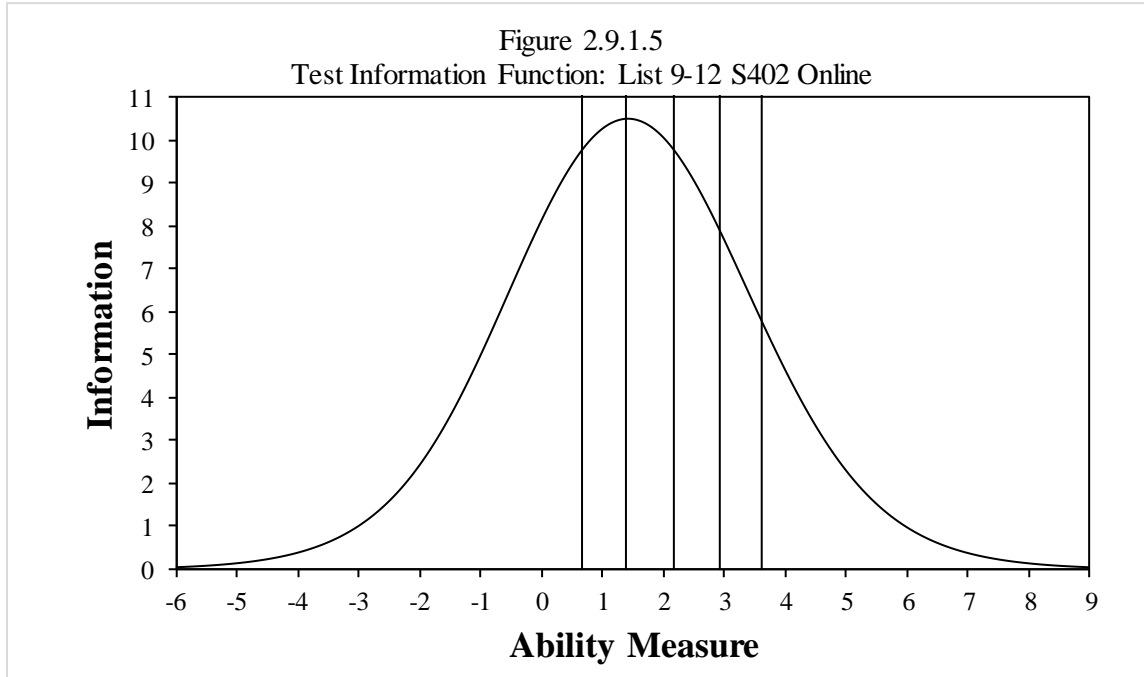
2.9.1.3 Grades 4–5



2.9.1.4 Grades 6–8

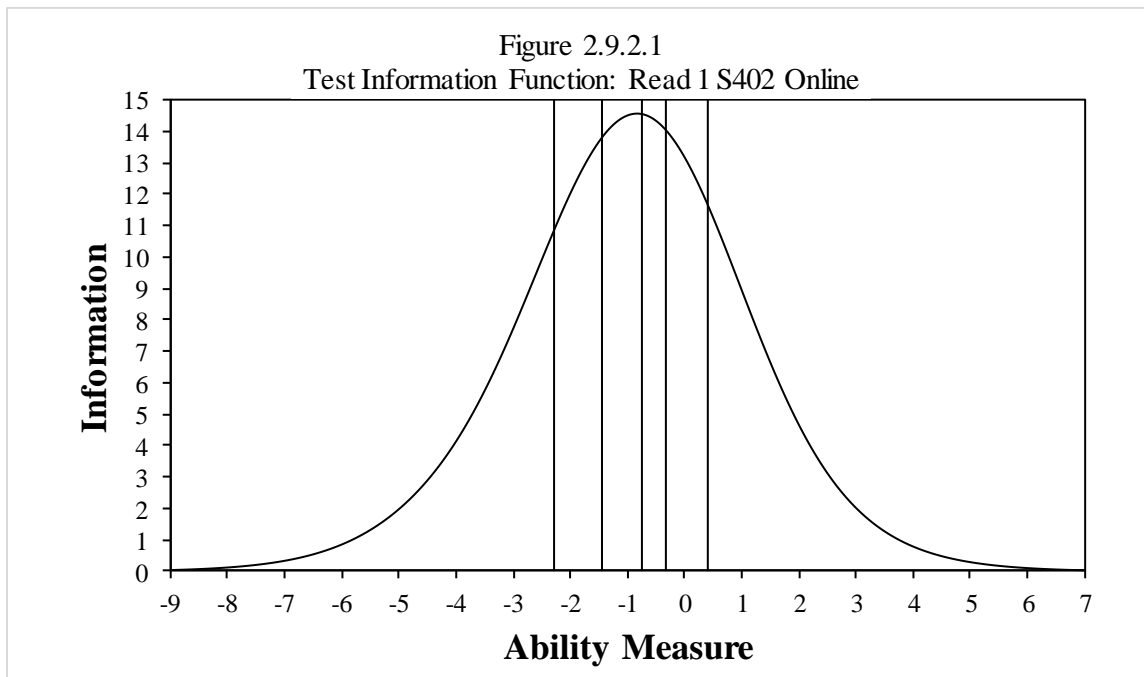


2.9.1.5 Grades 9–12

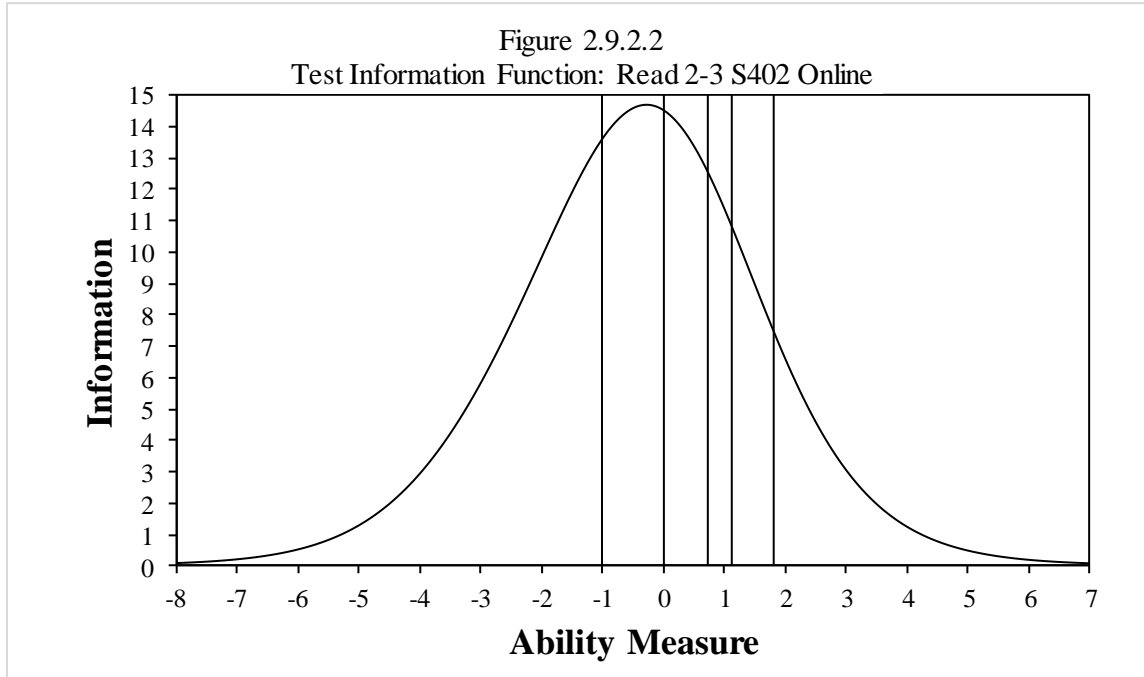


2.9.2 Reading

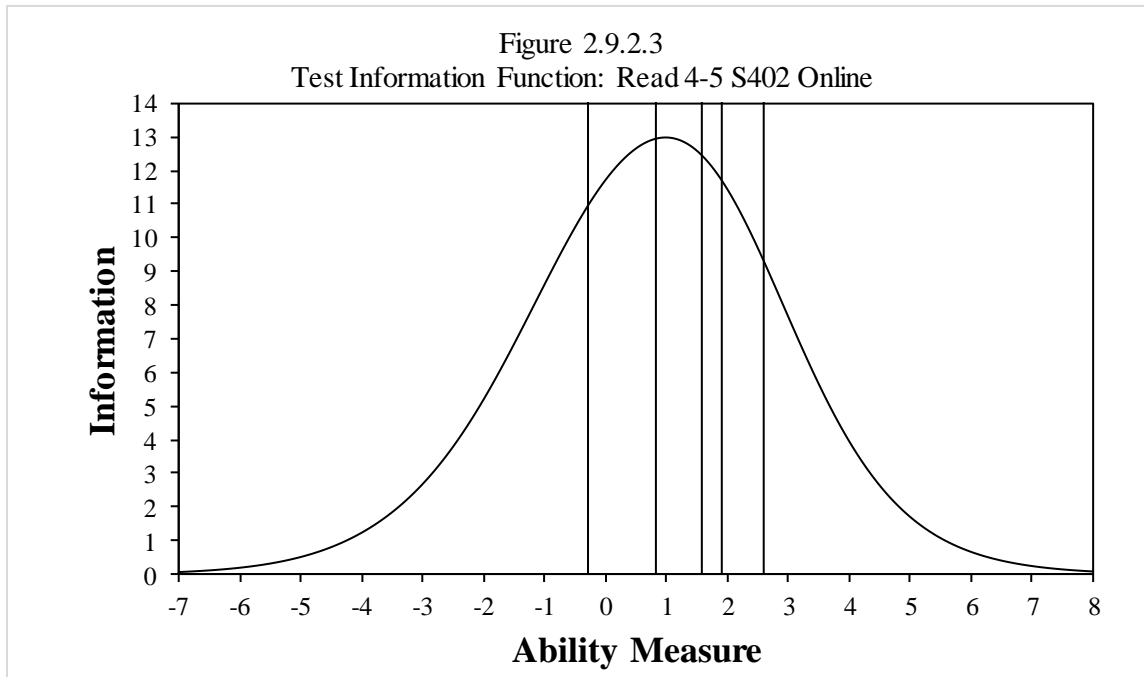
2.9.2.1 Grade 1



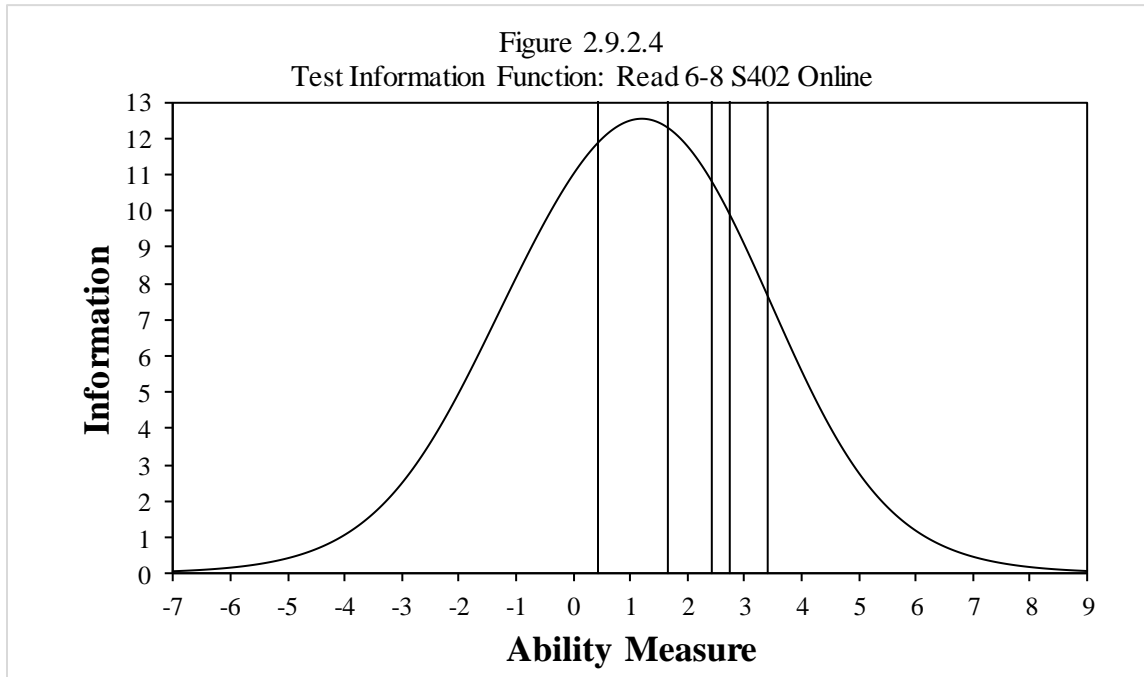
2.9.2.2 Grade 2–3



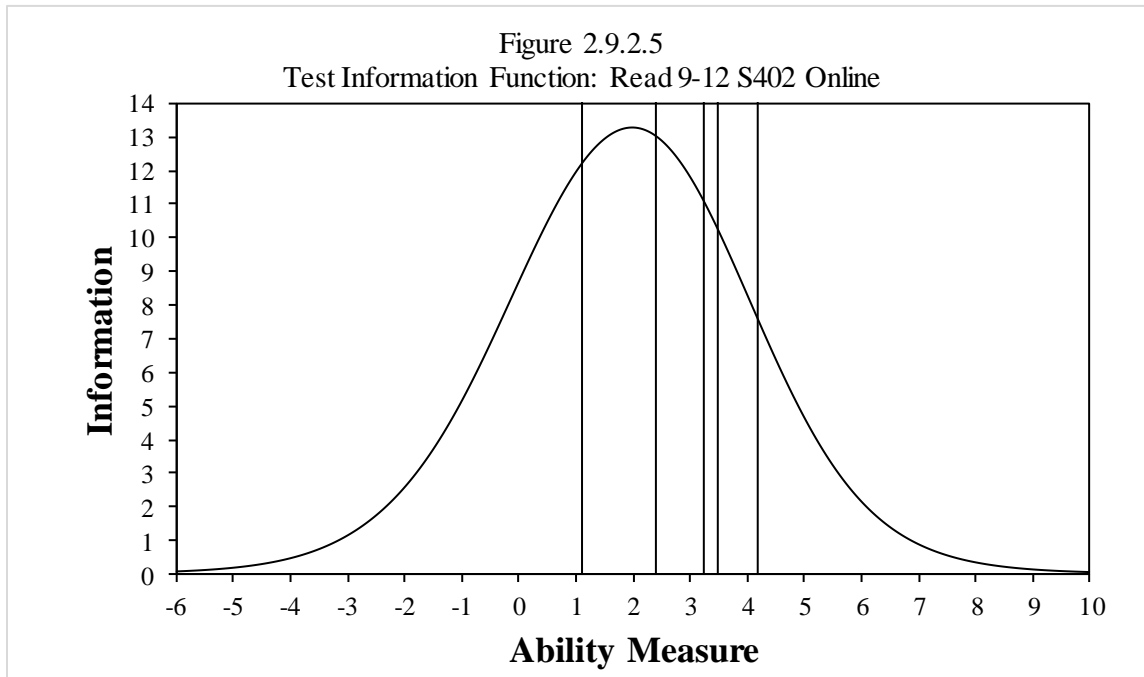
2.9.2.3 Grades 4–5



2.9.2.4 Grades 6–8

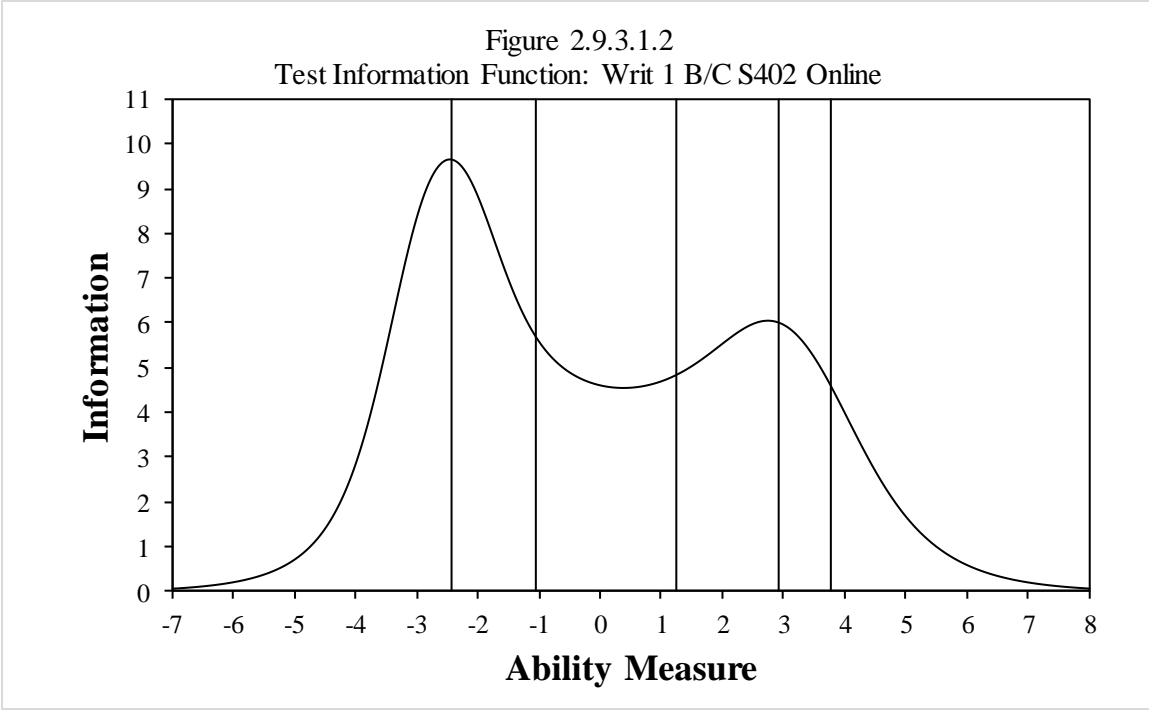
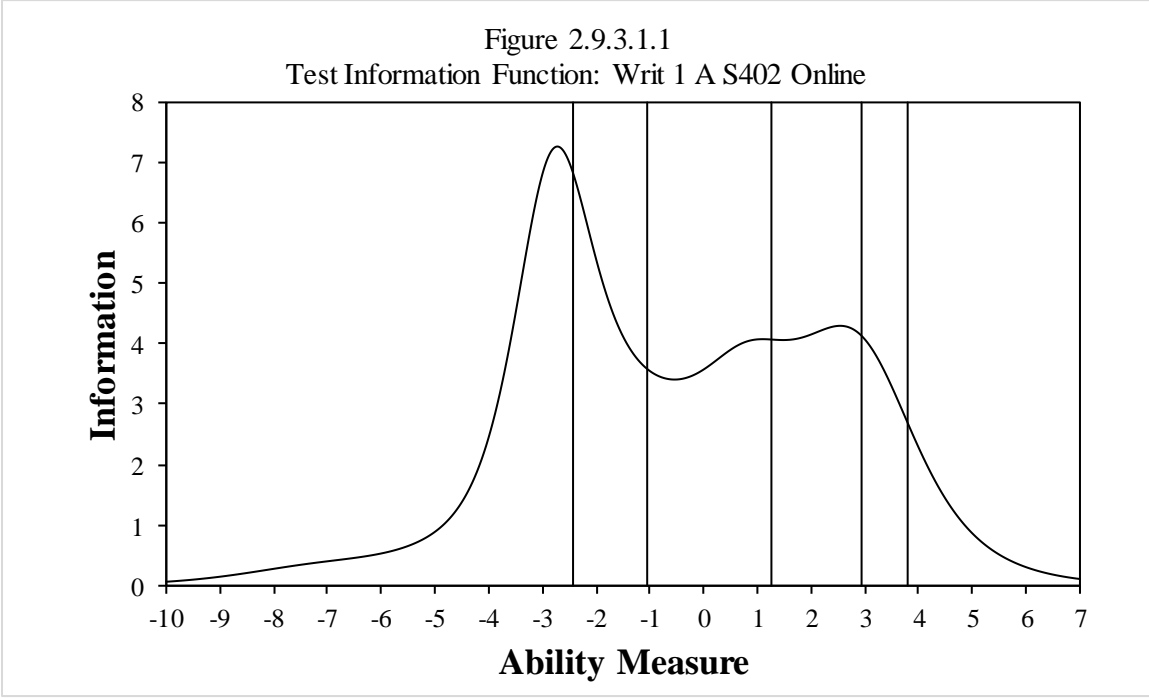


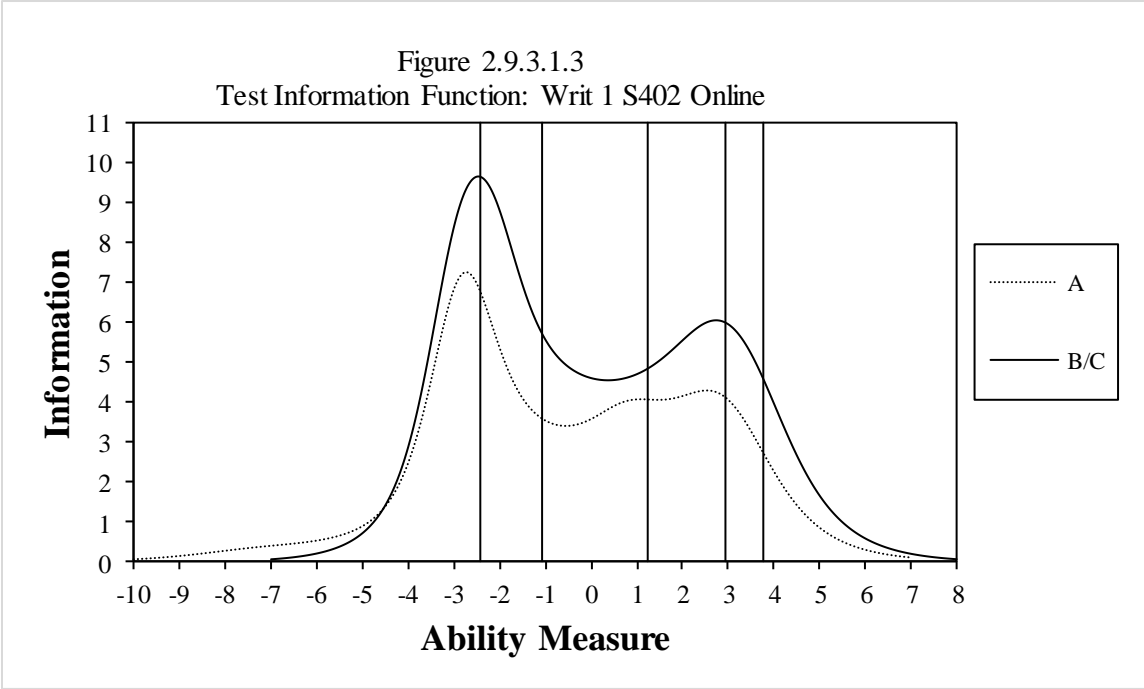
2.9.2.5 Grades 9–12



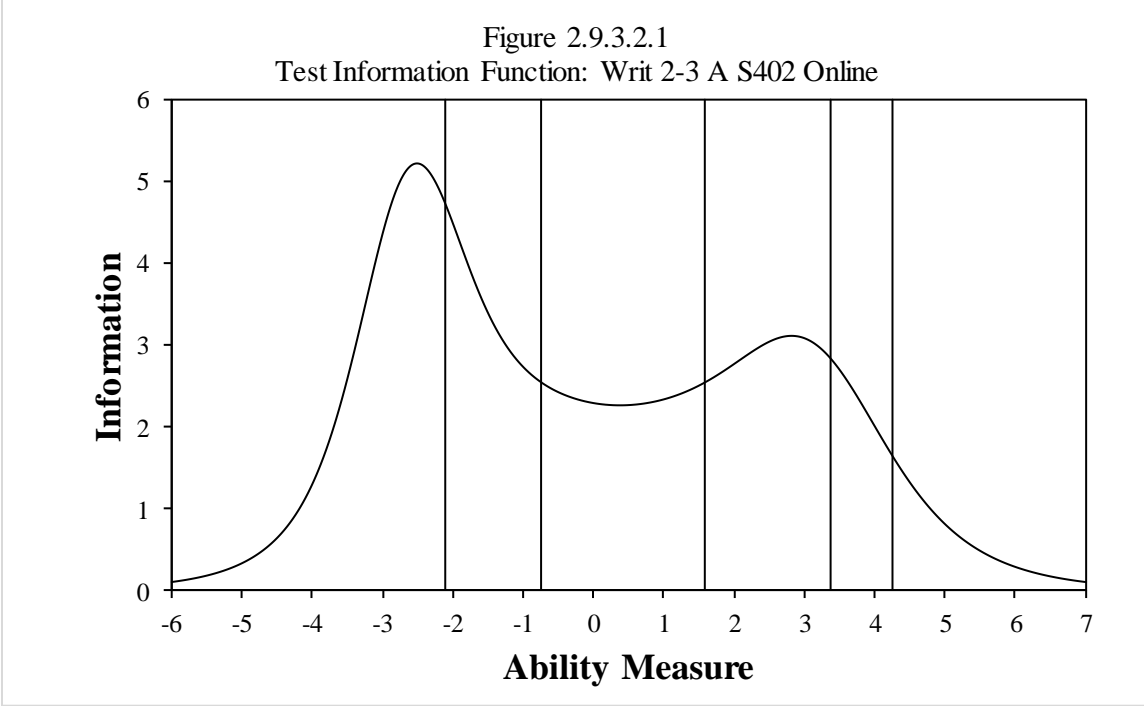
2.9.3 Writing

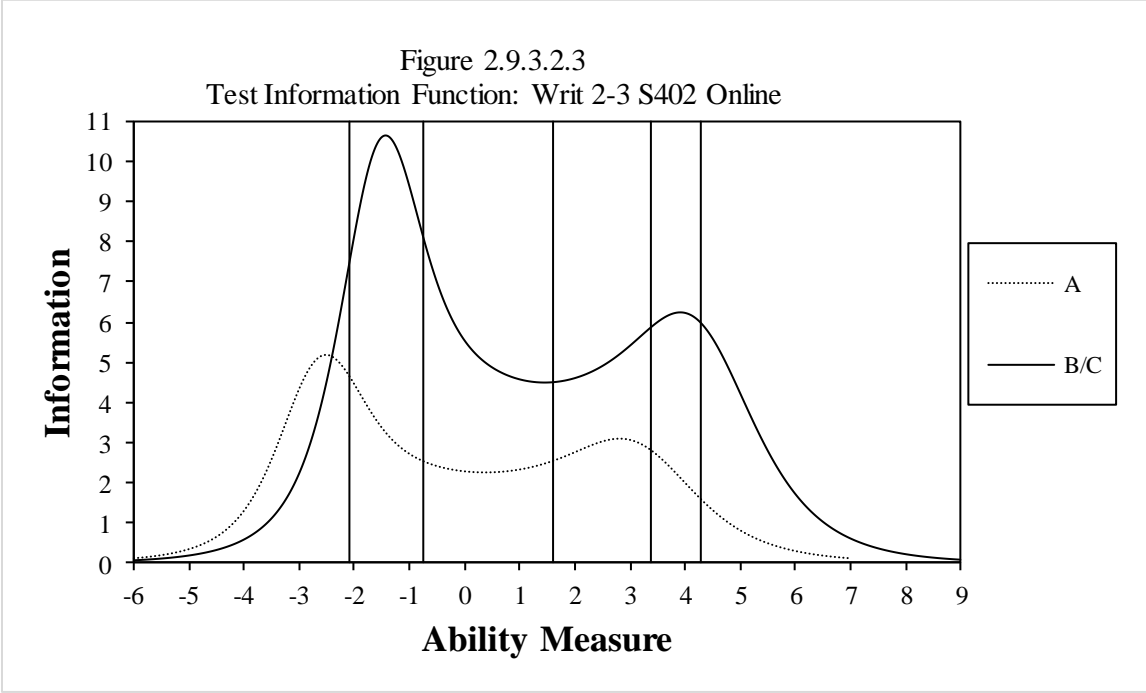
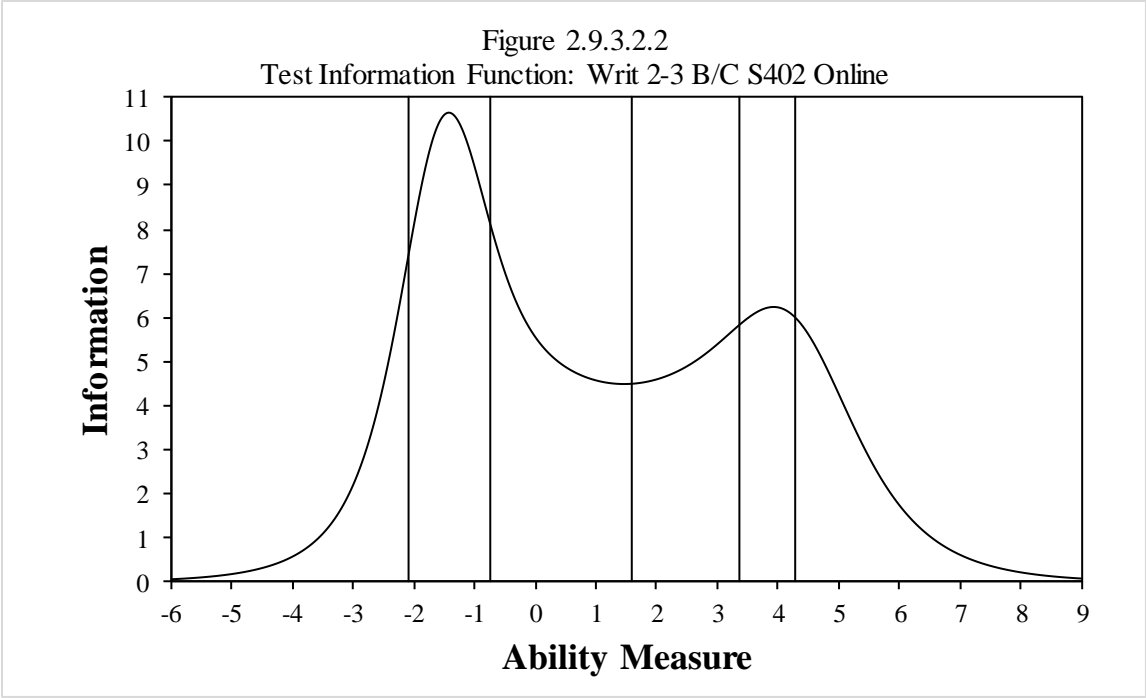
2.9.3.1 Grade 1



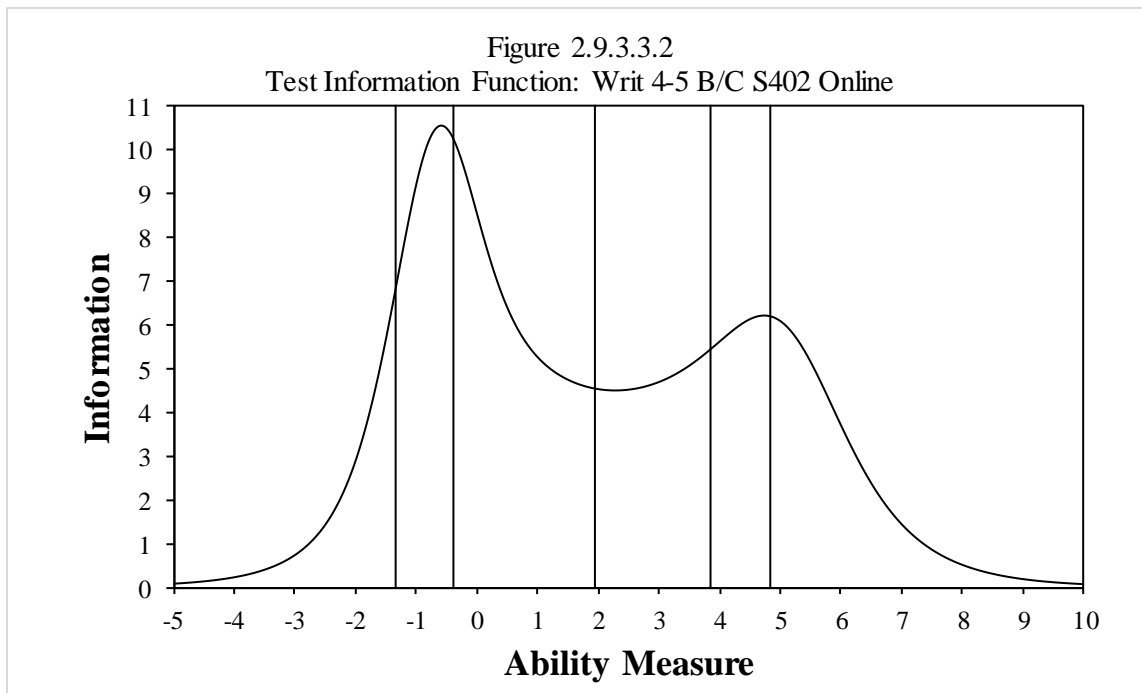
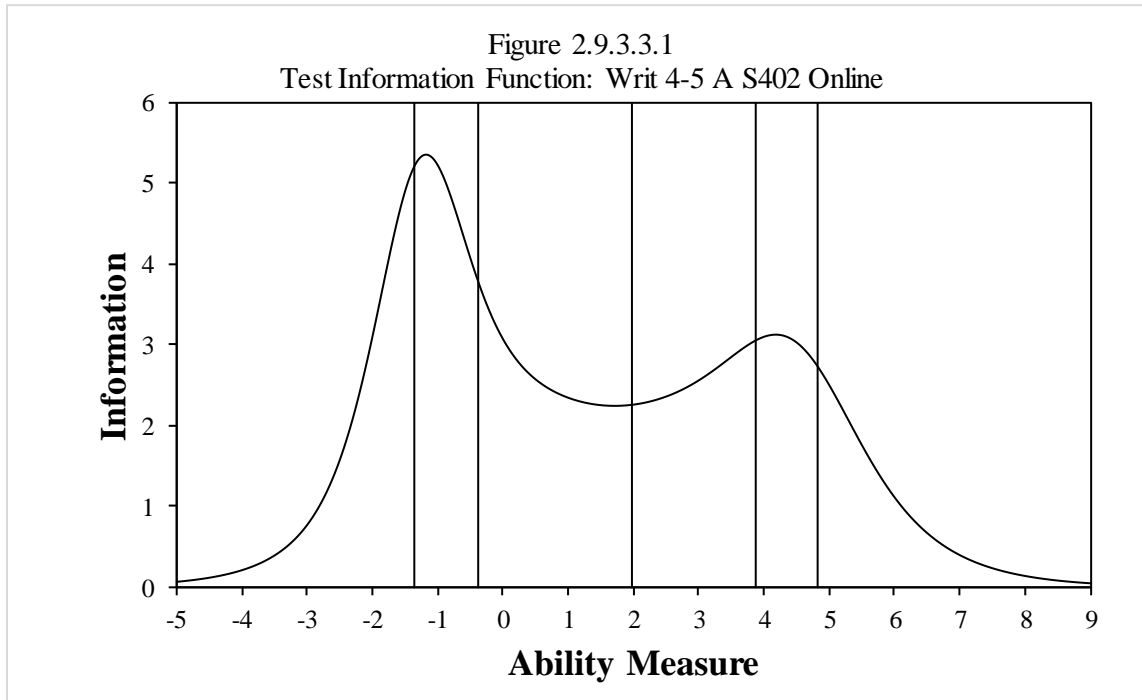


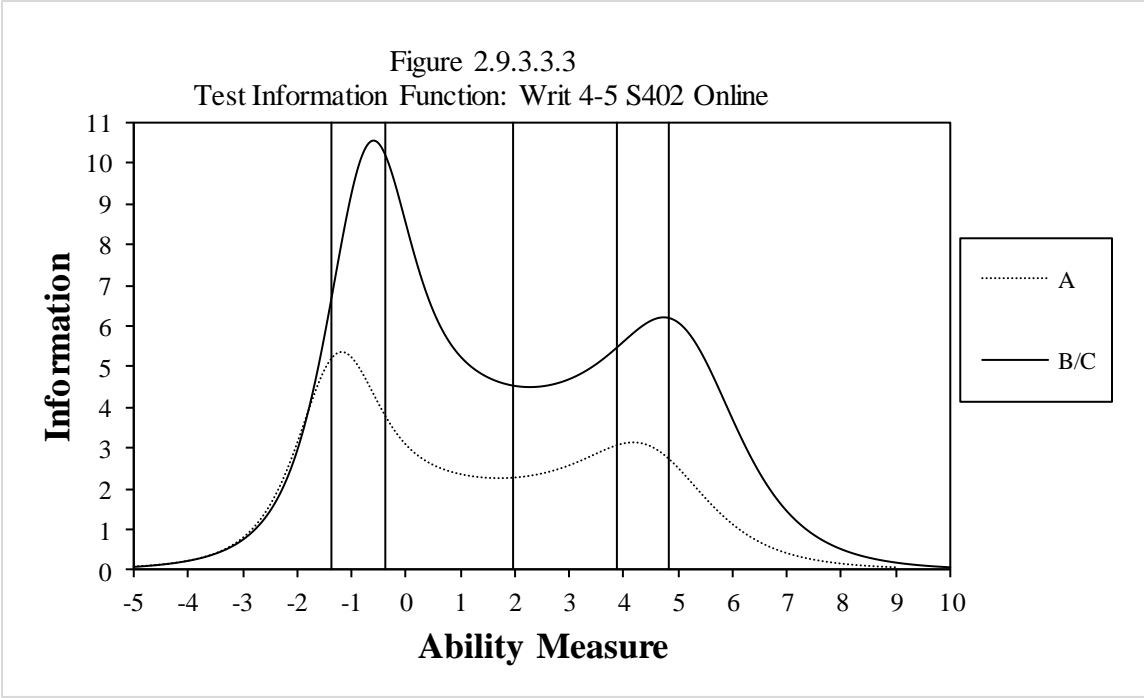
2.9.3.2 Grades 2–3





2.9.3.3 Grades 4–5





2.9.3.4 Grades 6–8

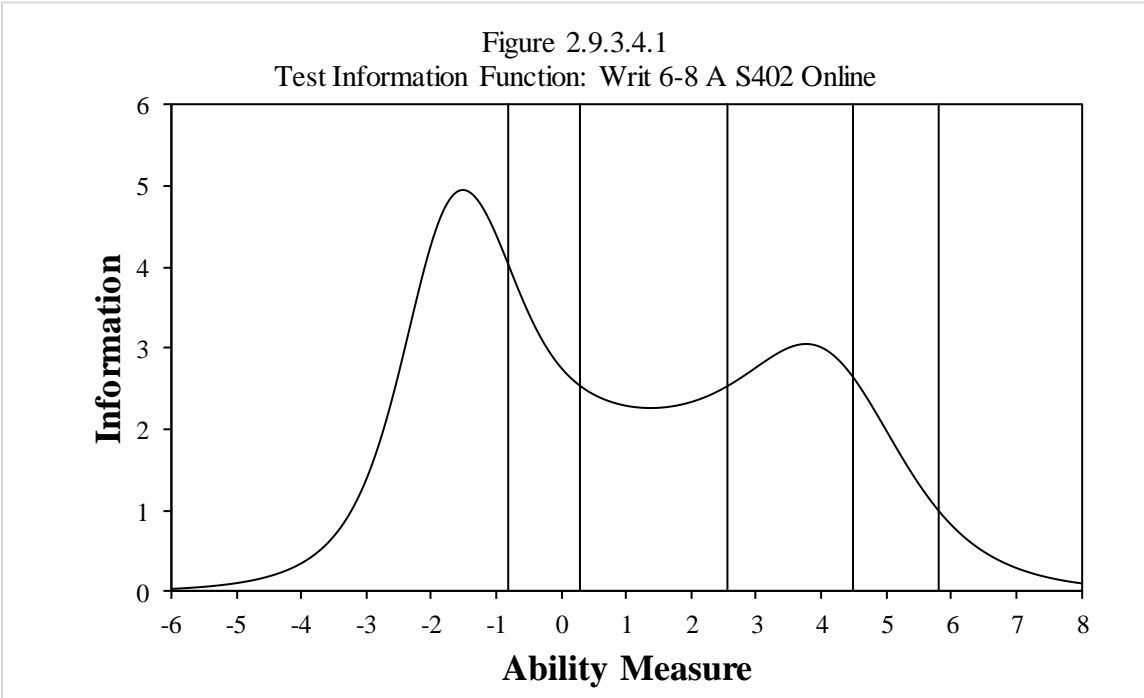


Figure 2.9.3.4.2
 Test Information Function: Writ 6-8 B/C S402 Online

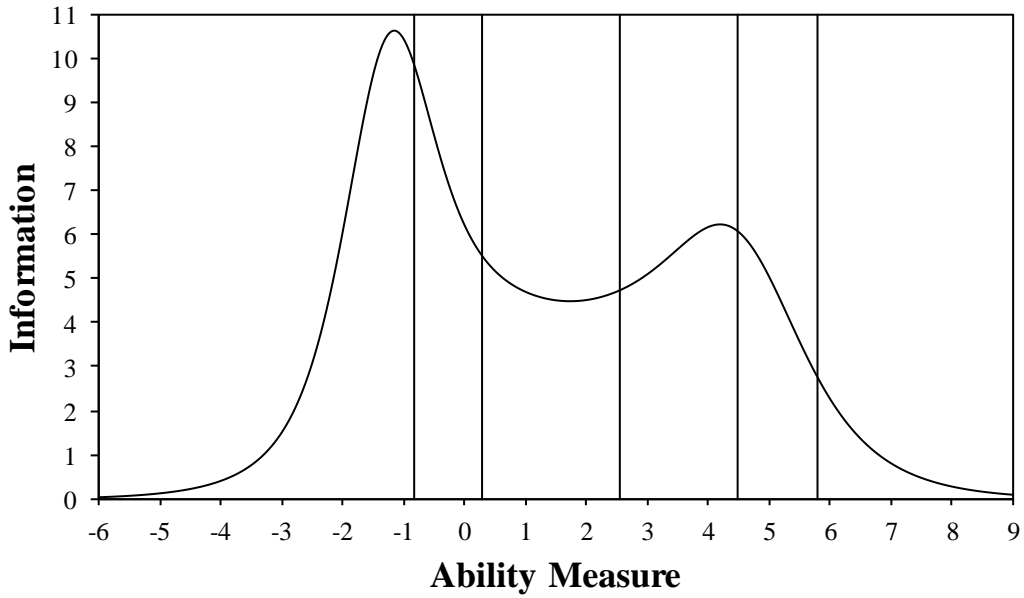
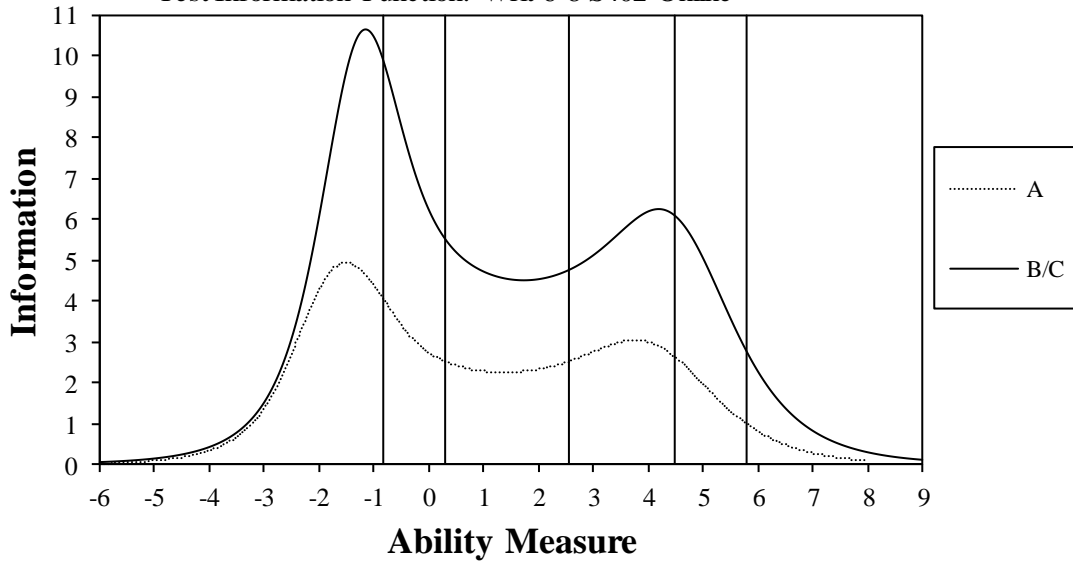
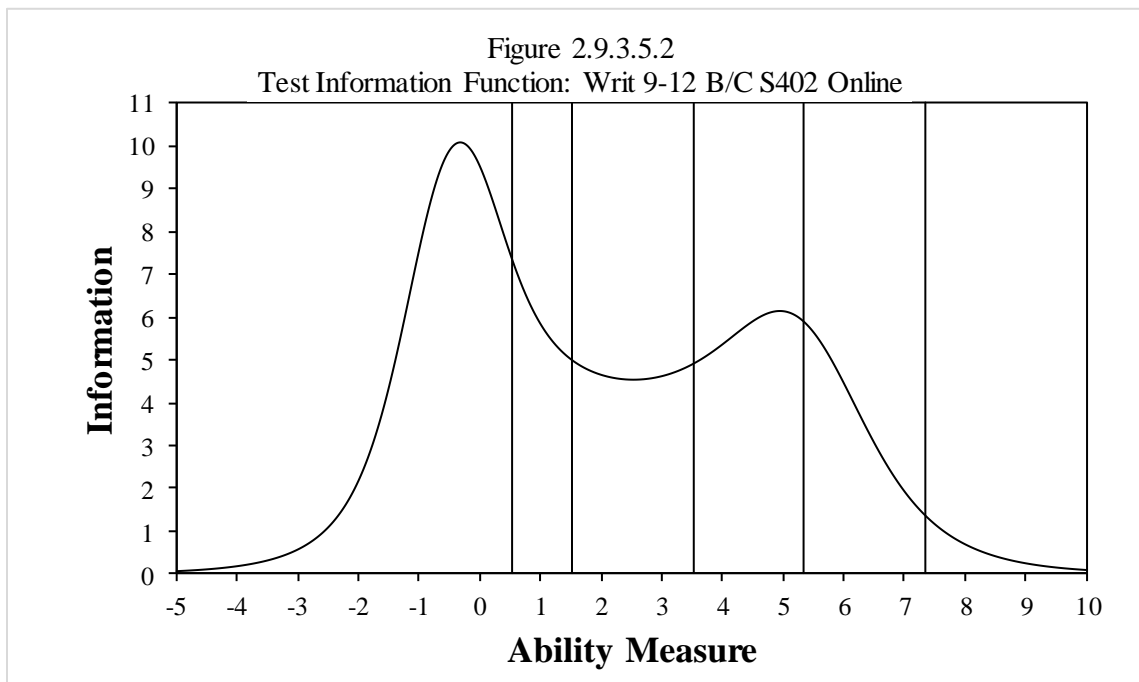
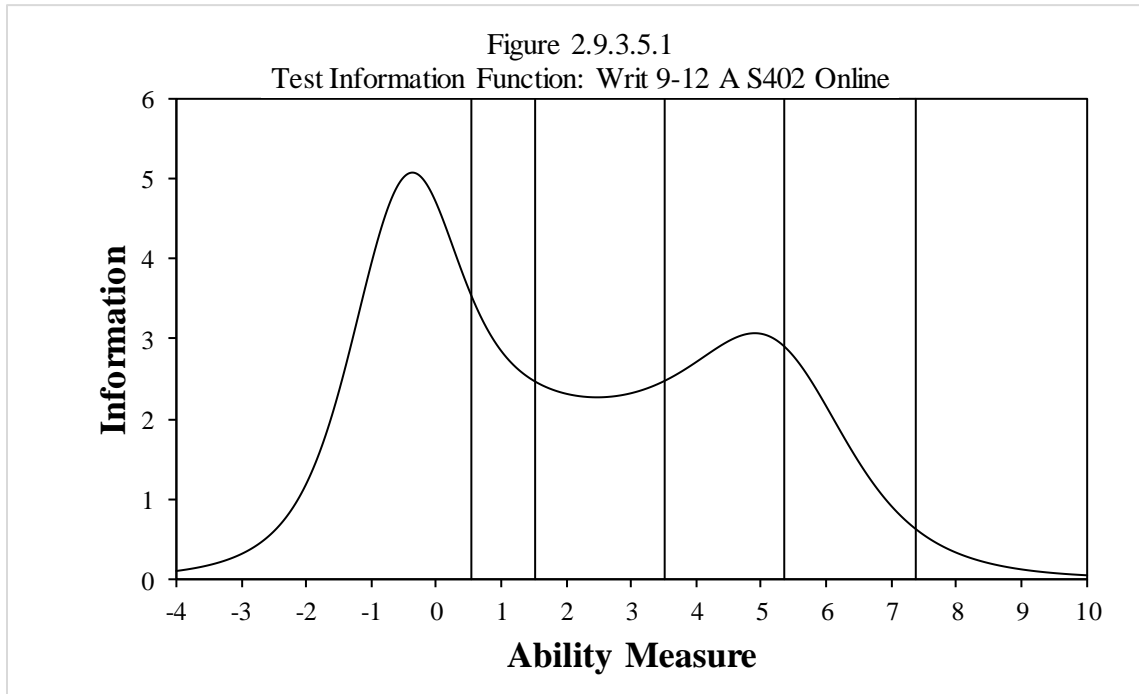
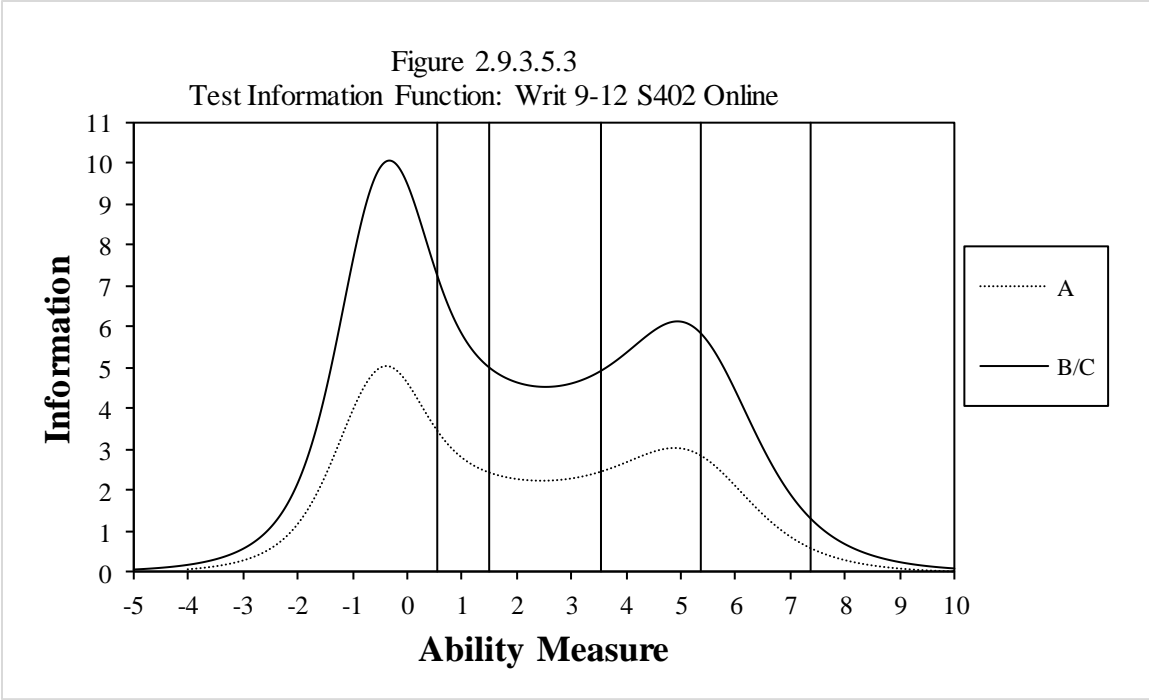


Figure 2.9.3.4.3
 Test Information Function: Writ 6-8 S402 Online



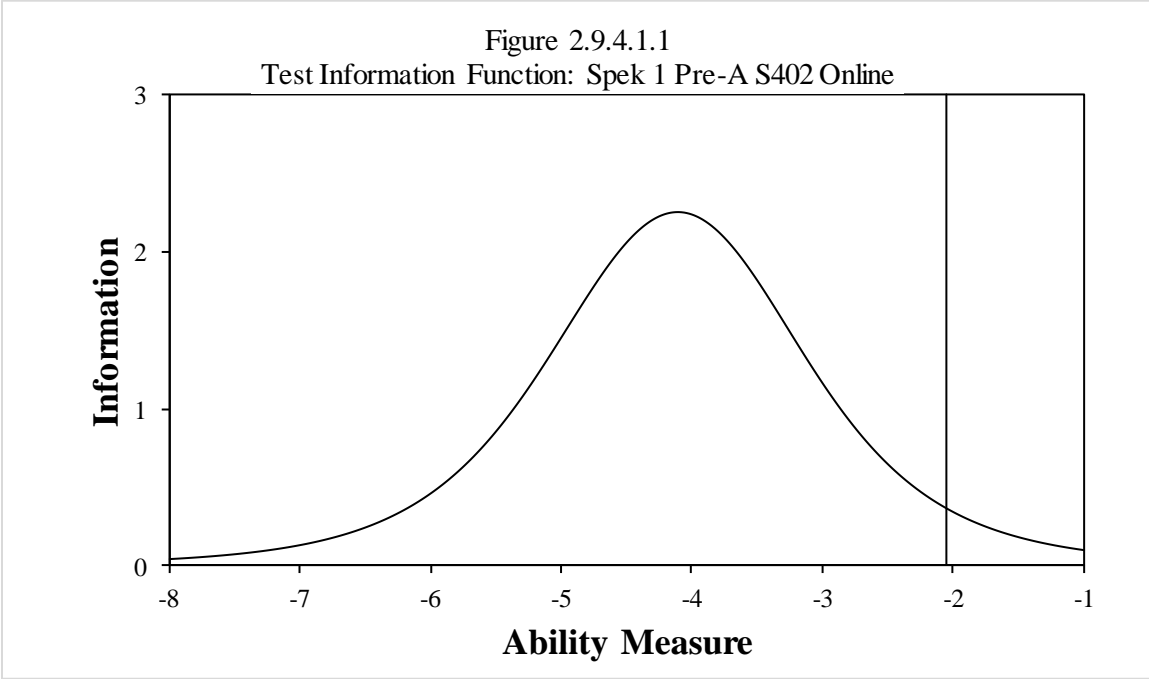
2.9.3.5 Grades 9–12

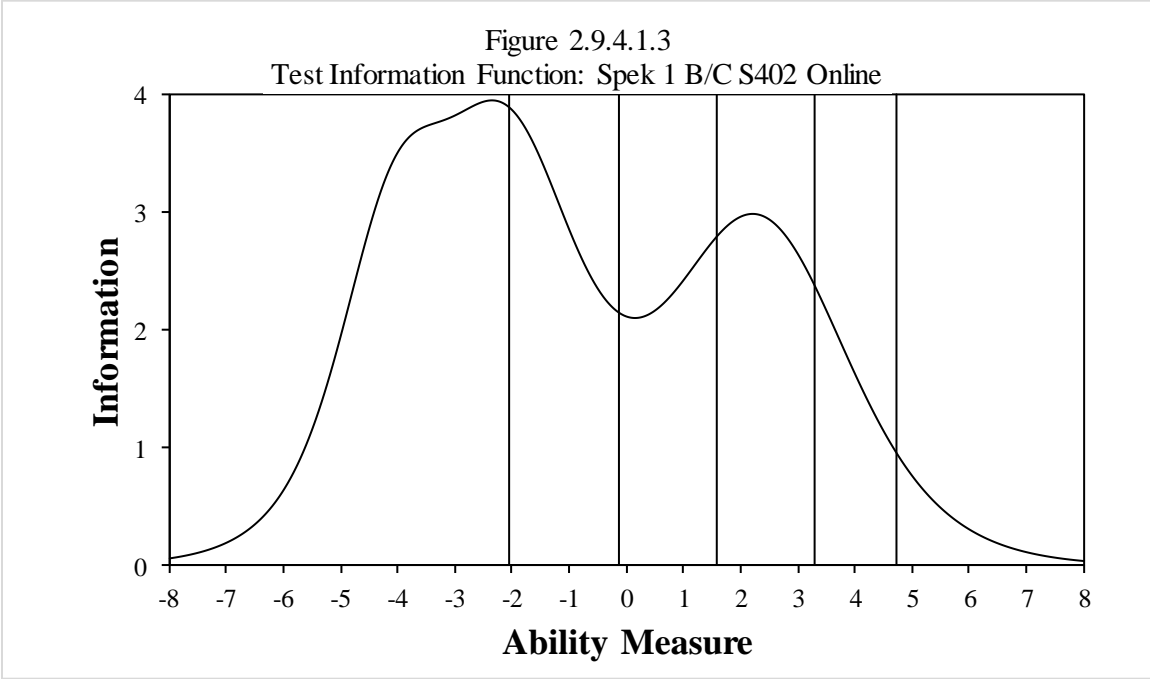
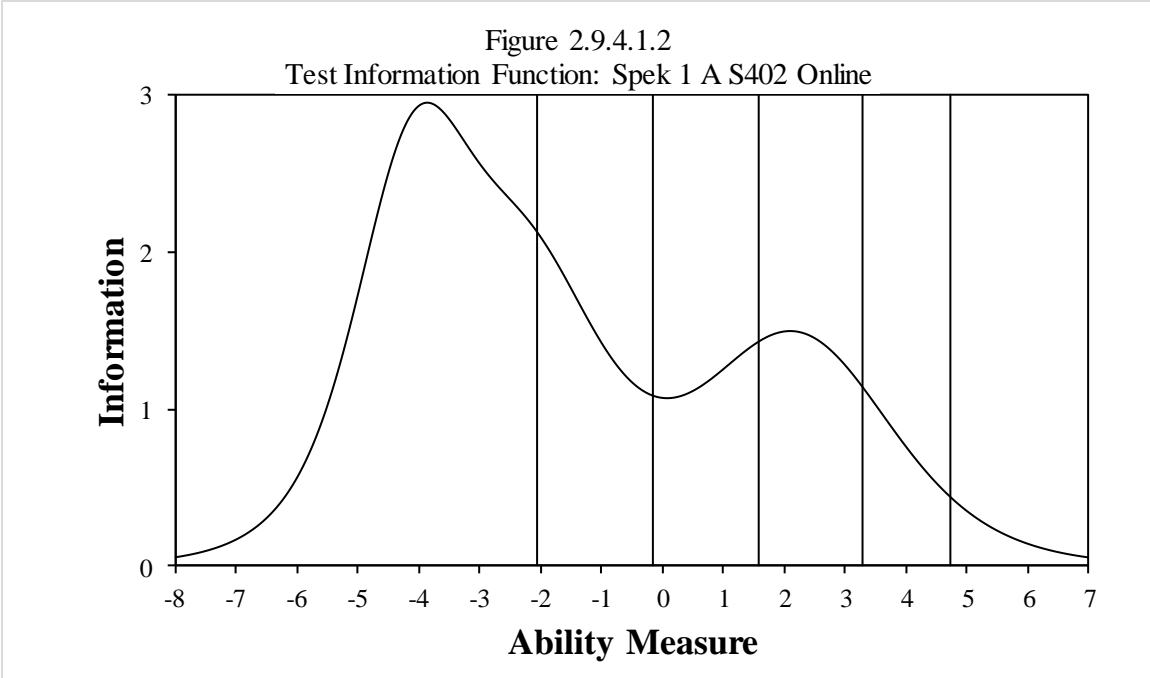


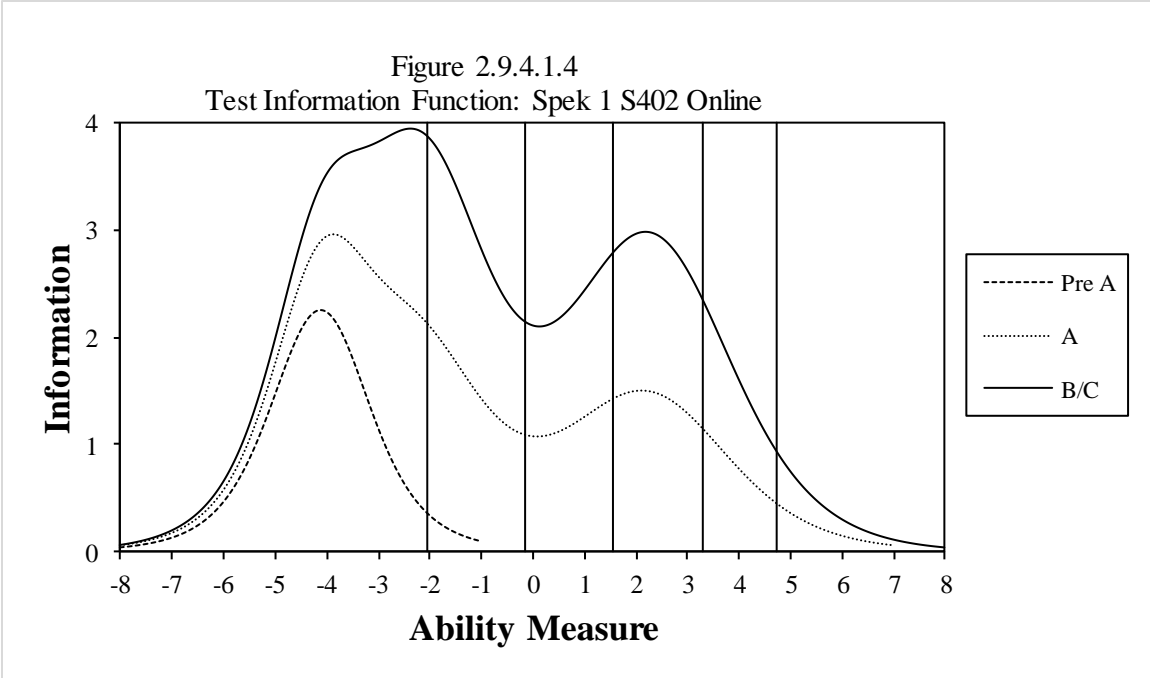


2.9.4 Speaking

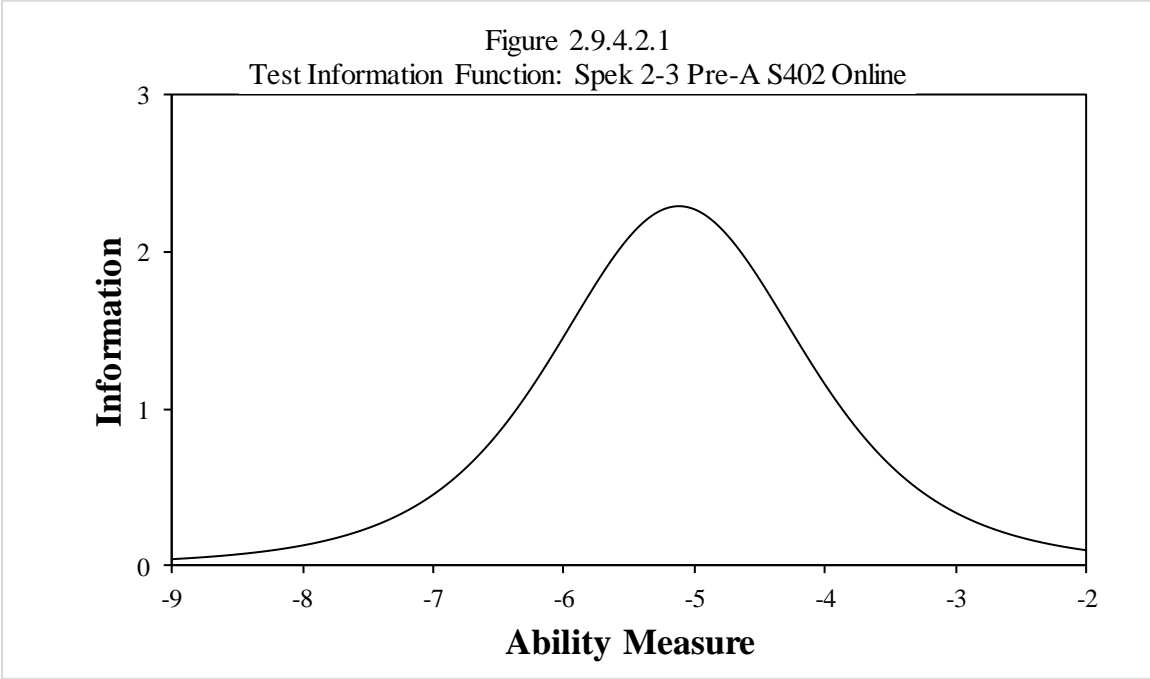
2.9.4.1 *Grade 1*

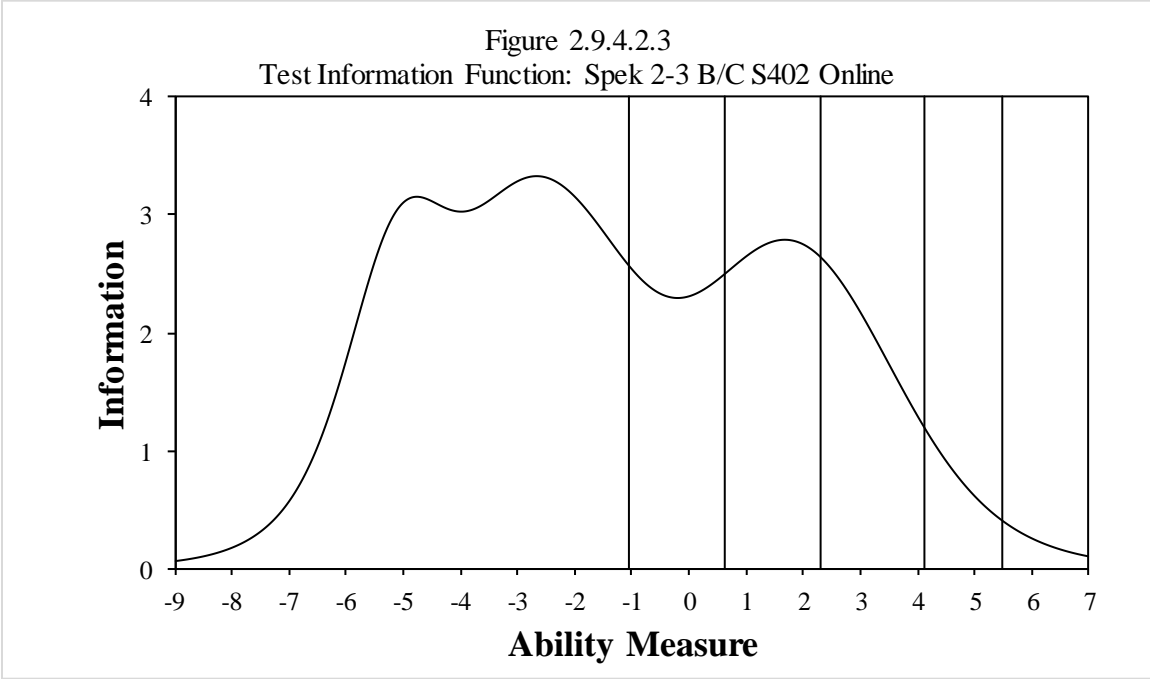
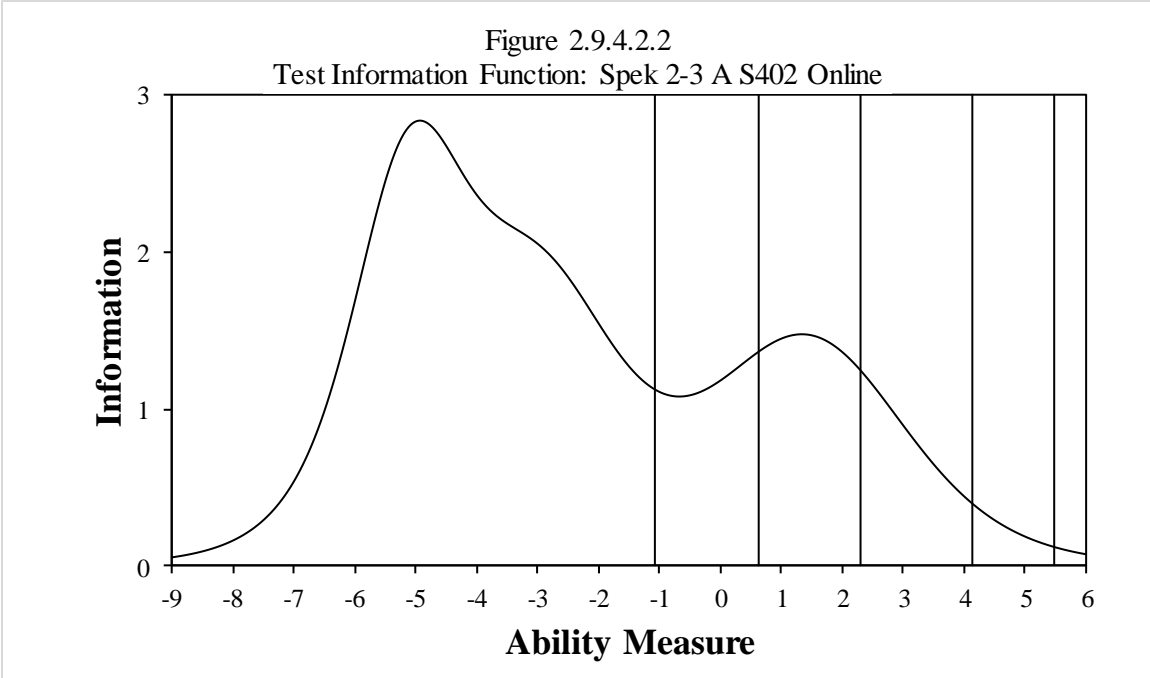


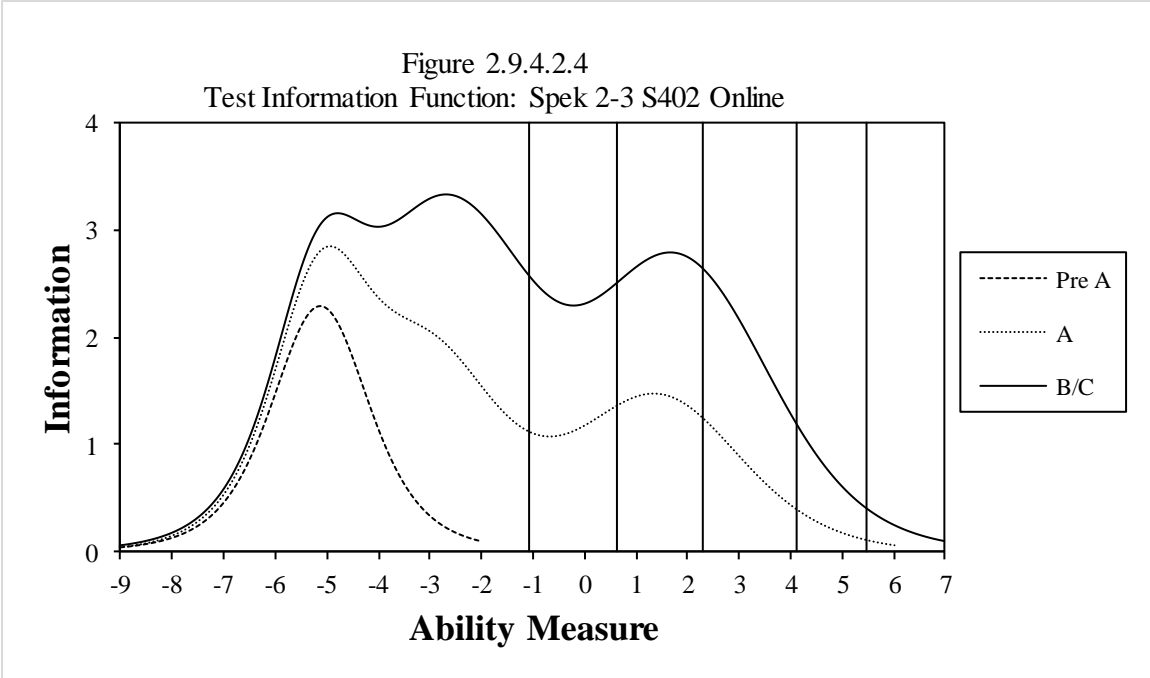




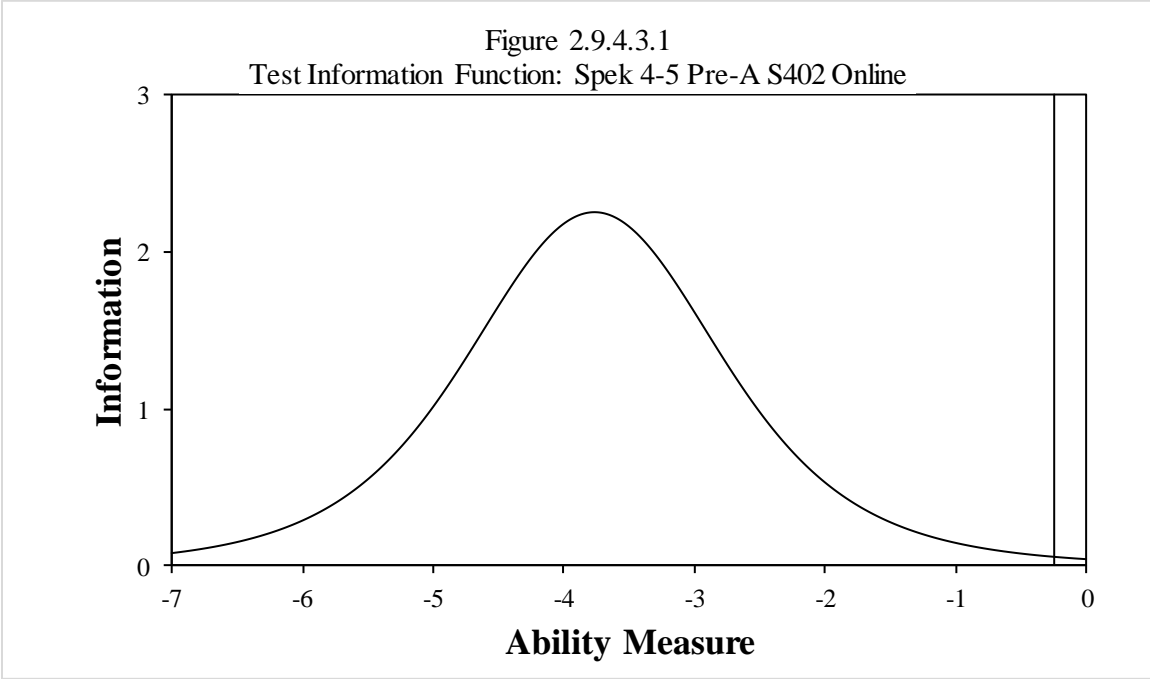
2.9.4.2 Grades 2–3

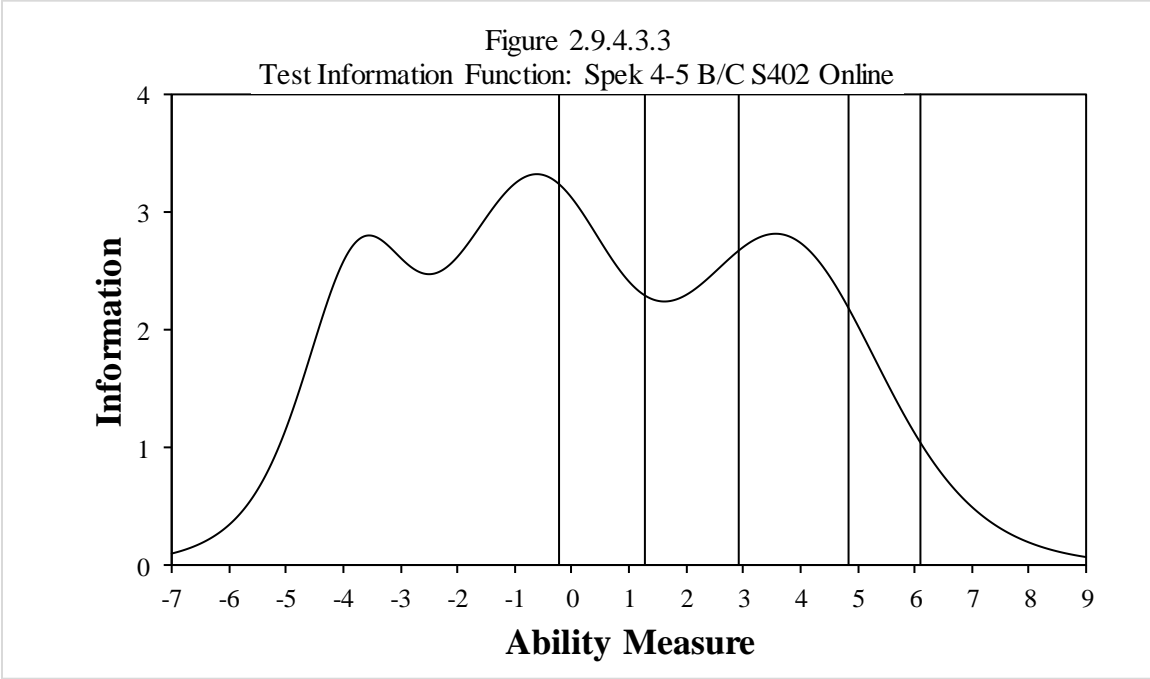
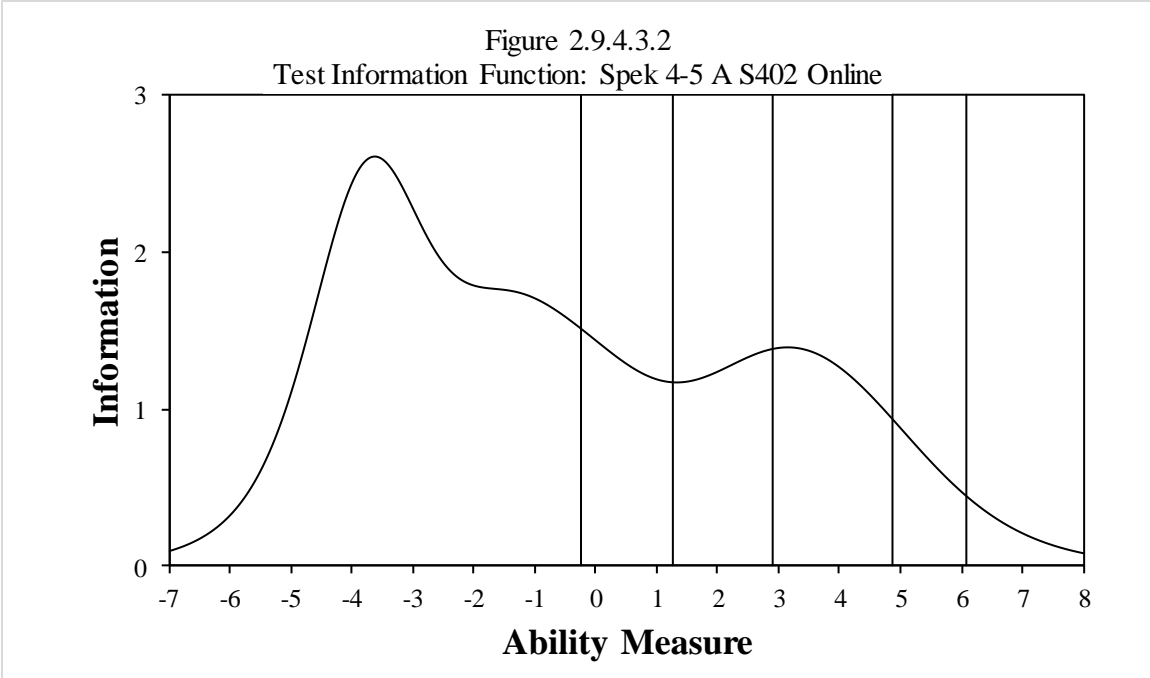


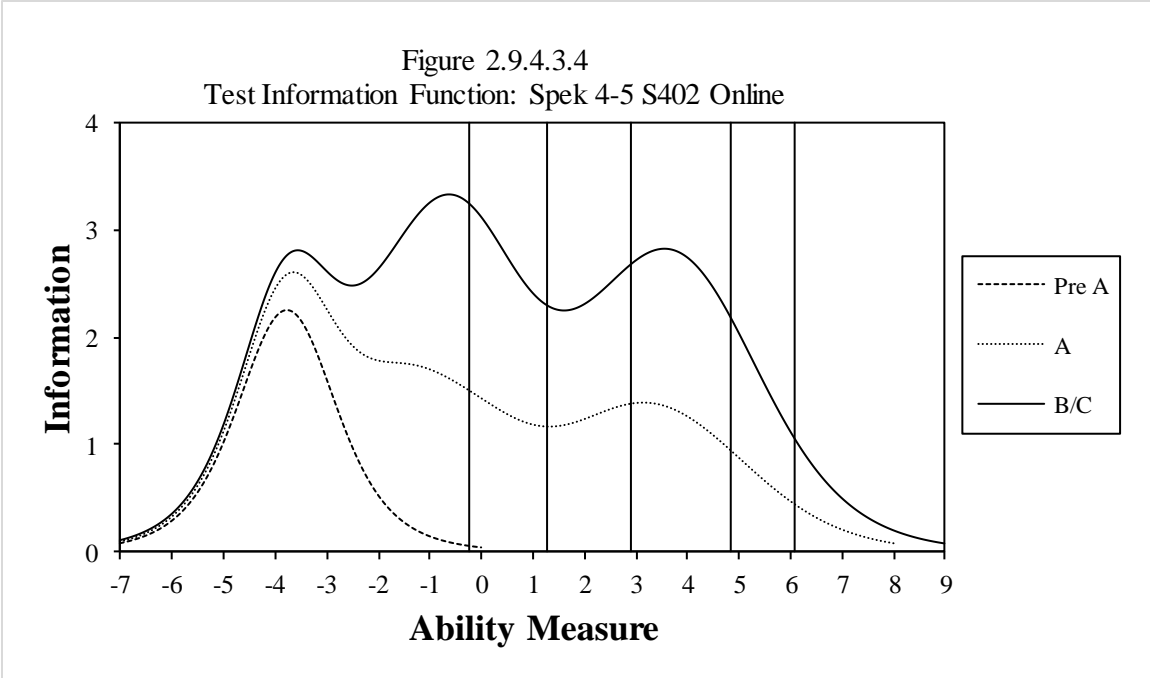




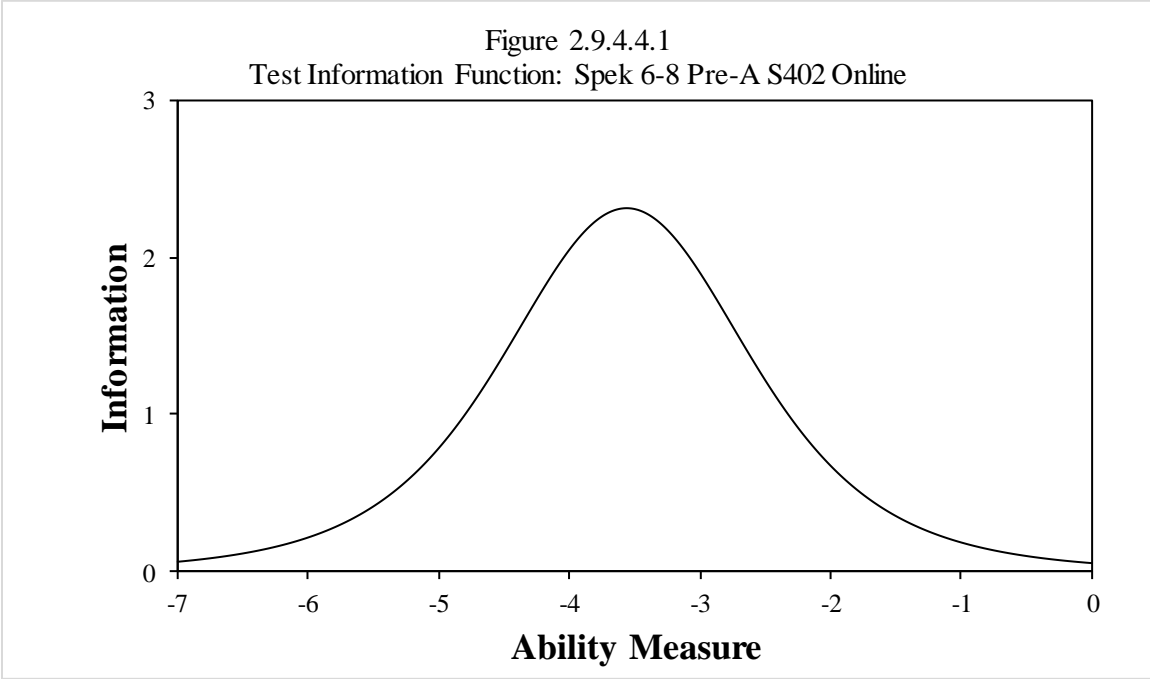
2.9.4.3 *Grades 4–5*

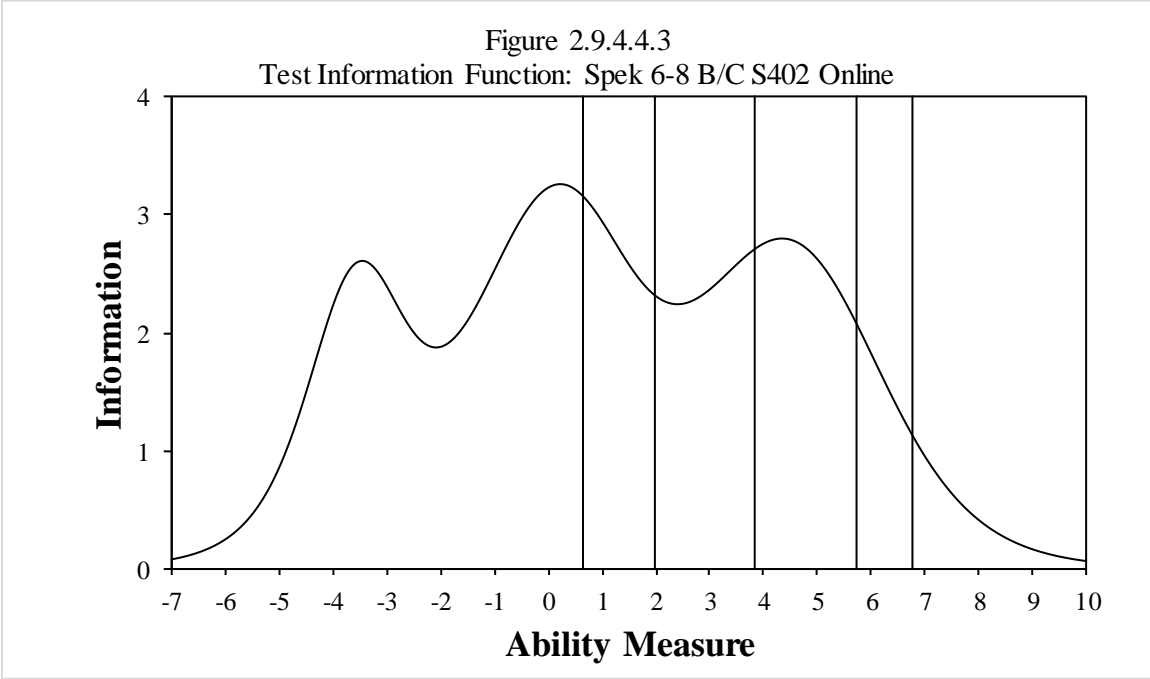
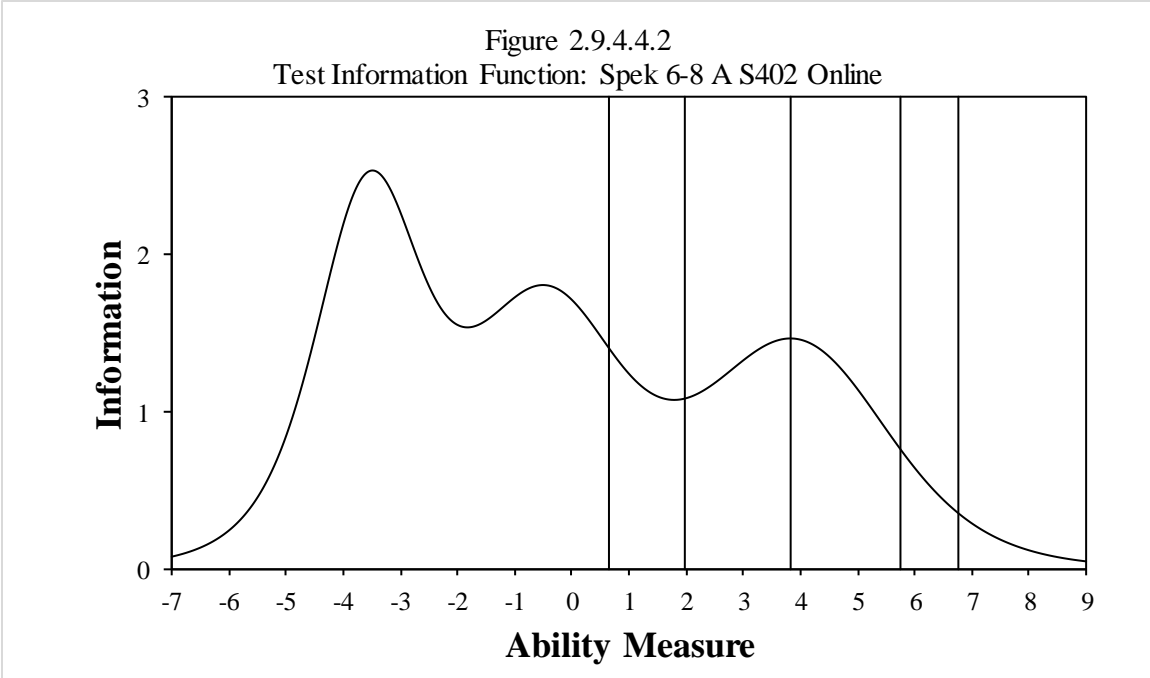


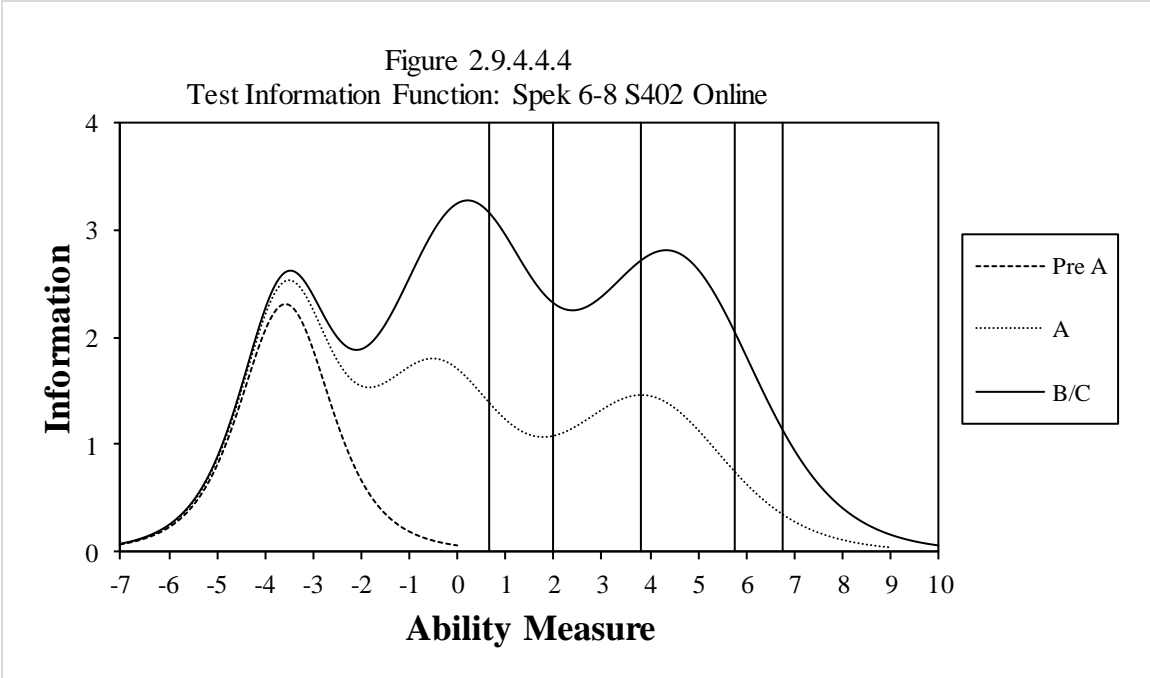




2.9.4.4 *Grades 6–8*







2.9.4.5 Grades 9–12

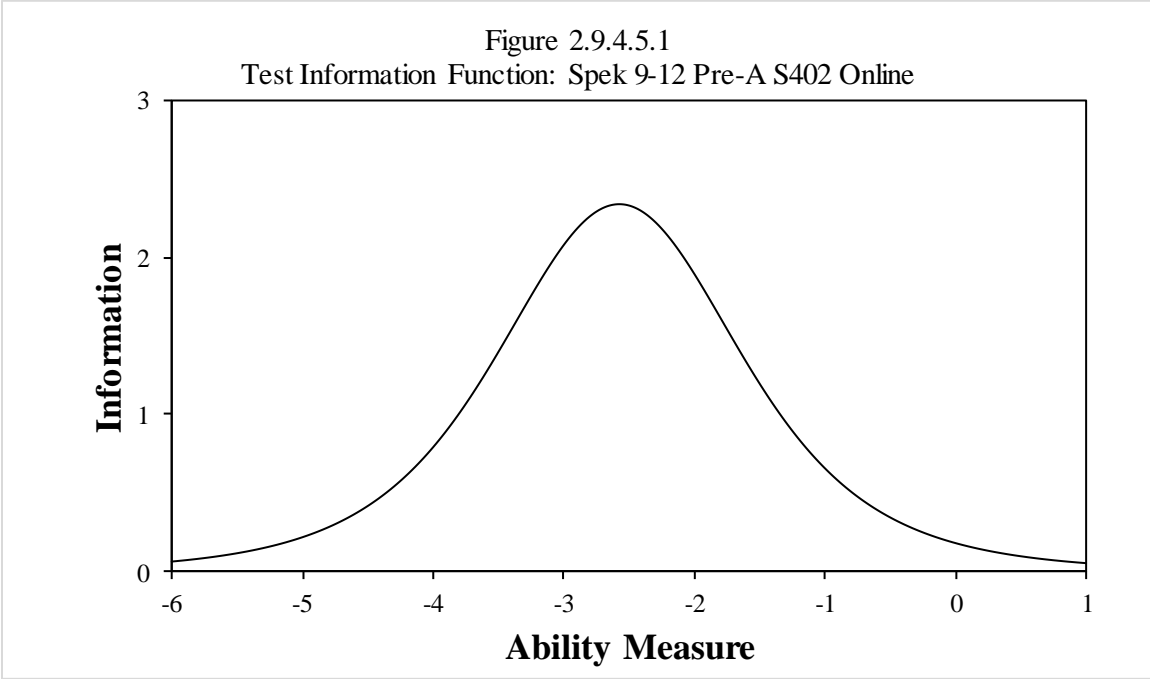


Figure 2.9.4.5.2
Test Information Function: Spek 9-12 A S402 Online

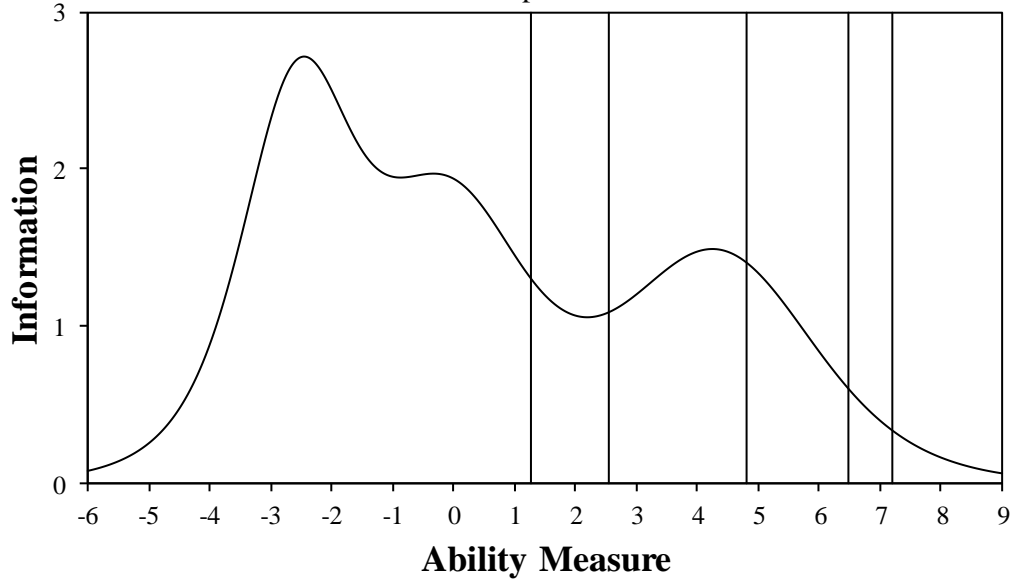


Figure 2.9.4.5.3
Test Information Function: Spek 9-12 B/C S402 Online

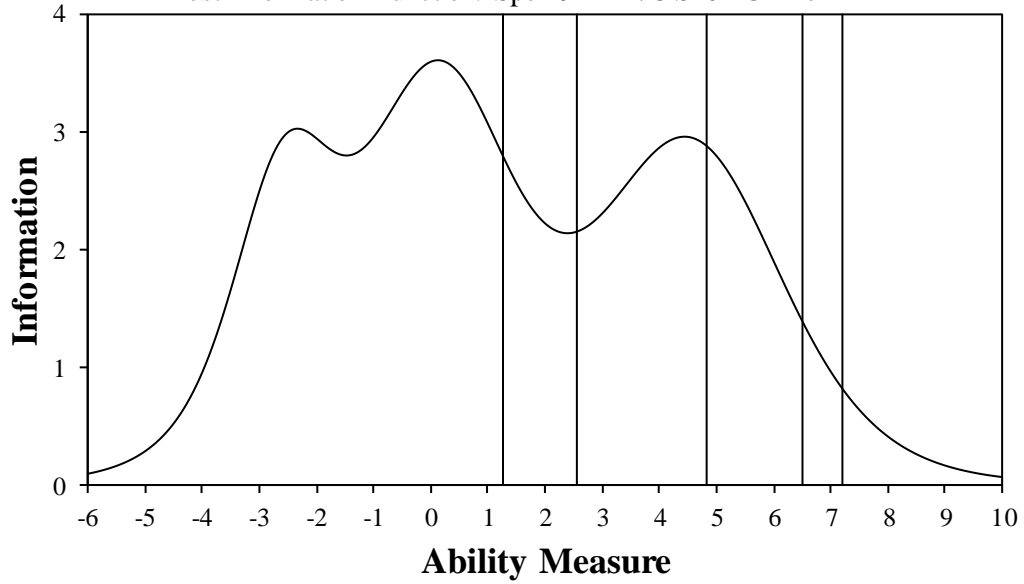
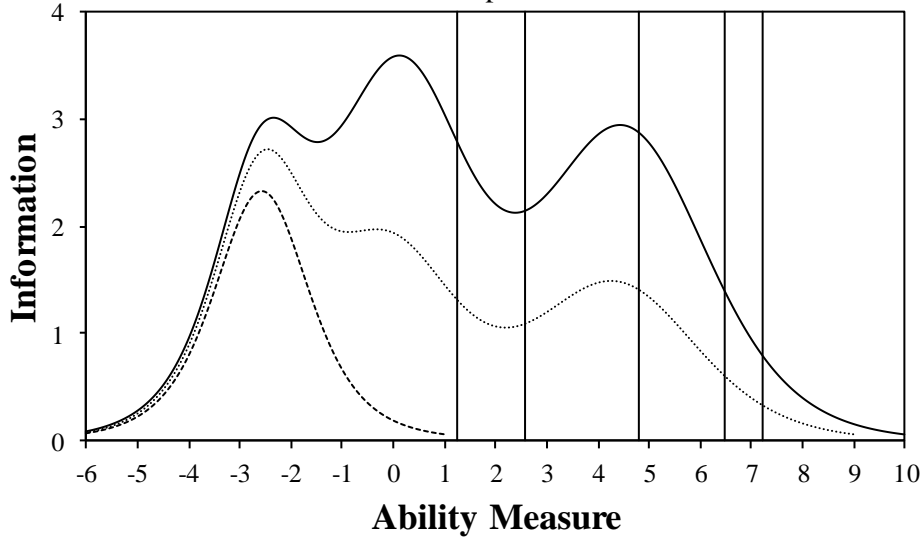


Figure 2.9.4.5.4
Test Information Function: Spek 9-12 S402 Online



2.10 Reliability of Domain Scores

In the Listening and Reading domains, tables in this section present test reliability information based on item response theory. The table shows

- The number of students (count)
- The number of items
- Rasch reliability (as a measure of internal consistency)

For tests administered using a multistage adaptive method, a reliability coefficient based on classical test theory such as Cronbach’s coefficient alpha cannot be applied because not all students take the same set of items. Reliability for Listening and Reading was estimated using a method by Thissen (2000) by grade-level cluster:

$$\bar{\rho} = \frac{\sigma_{\theta}^2 - \text{average}(CSEM_{observed}^2)}{\sigma_{\theta}^2}$$

where

$\bar{\rho}$ is the average reliability

σ_{θ}^2 is the variance of the distribution of student measure

$CSEM_{observed}^2$ is the squared observed conditional standard errors of measurement for each student

This estimate is equivalent to the Rasch separation reliability coefficient (Linacre, 1999). Like Cronbach’s alpha, the Rasch reliability coefficient is an estimate of the ratio of “true measure variance” to “observed measure variance.” To obtain these values, item parameters and population student data were used as inputs in the Winsteps program. The Rasch separation reliability coefficient can be interpreted like Cronbach’s coefficient alpha. It expresses how well the items on a test appear to measure the same construct.

In the Speaking and Writing domains, tables in this section present reliability and accuracy information based on classical test theory. Tables are provided for each tier and are also provided, in a different format, to express weighted reliability for each grade-level cluster.

For each tier, the table shows

- The number of students (count)
- The number of tasks
- For Writing, the response mode (keyboarded or handwritten)
- Cronbach’s coefficient alpha (as a measure of internal consistency)
- The classical standard error of measurement (SEM) in terms of raw scores.

Cronbach’s coefficient alpha is widely used as an estimate of reliability, particularly of the internal consistency of test items. It expresses how well the items on a test appear to measure the same construct. Conceptually, it may be thought of as the correlation obtained between performances on two halves of the test, if every possibility of dividing the test items in two were

attempted. Thus, Cronbach’s alpha may be low if some items are measuring something other than what the majority of the items are measuring. As with any reliability index, it is affected by the number of test items (or test score points that may be awarded). That is, all things being equal, the greater the number of items, the higher the reliability.

Cronbach’s alpha is also affected by the distribution of ability within the group of students tested. All things being equal, the greater the heterogeneity of abilities within the group of examinees (i.e., the more widely the scores are distributed), the higher the reliability. In this sense, Cronbach’s alpha is sample dependent. It is widely recognized that reliability can be as much a function of the test as of the sample of students tested. That is, the exact same test can produce widely disparate reliability indices based on the ability distribution of the group of examinees.

The formula for Cronbach’s alpha is

$$\alpha = \frac{n}{n-1} \left[1 - \frac{\sum_{i=1}^n \sigma_i^2}{\sigma_t^2} \right]$$

where

n = number of items i

σ_i^2 = variance of score on item i

σ_t^2 = variance of total score

For the Writing test, a slight modification was made in the estimation of the Cronbach’s alpha for tiered forms that have differential weighting across tasks. This modification is an attempt to take into account that some tasks are weighted more than others when deriving students’ ability measure for these tiered forms. For Writing tasks with a weight greater than one, students’ response to the tasks is replicated as a function of their weights. For example, the fourth task in Writing G1A is weighted three; therefore, students’ response to this task is repeated three times when computing the Cronbach’s alpha. This modification means that the number of pieces of information for Writing tasks that contribute to the estimation of the Cronbach’s alpha for G1A is actually six, not four.

For Writing and Speaking, tables in this section also present the SEM based on classical test theory. Unlike item response theory, in this approach, SEM is seen as a constant across the spread of test scores (ability continuum). Thus, it is not conditional on ability being measured. It is, however, a function of two statistics: the reliability of the test and the (observed) standard deviation (SD) of the test scores. It is calculated as

$$SEM = SD \sqrt{1 - reliability}$$

Traditionally, SEM has been used to create a band around an examinee’s observed score, with the assertion in the view of classical test theory that the examinee’s true score (i.e., what the examinee’s score would be if it could be measured without error) would lie with a certain degree of probability within this band. Statistically speaking, then, there is an expectation that an examinee’s true score has a 68% probability of falling within the band extending from the observed score minus 1 SEM to the observed score plus 1 SEM.

Interrater Agreement

For the Writing and Speaking tests, tables also provide information on interrater agreement for a sample of 20% of task raters. This portion of the table shows, for each of the tasks, the percent of agreement between two raters. In this part of the table, the first column shows the task and the second column shows the number of responses that were double scored. DRC selects a sample of 20% of all responses scored, chosen at random during the operational scoring process. The next column shows the rates of agreement: exact, adjacent, and nonadjacent. For Speaking, when the two raters agree on the rating, an exact agreement is counted (%EX). If the two raters differ by one point, an adjacent agreement is counted (%AD). Otherwise, the raters are nonadjacent (%NA). For Writing, with 0–6 as defined levels and the possibility of awarding a “plus” score between levels (e.g., 3, 3+, or 4 are all valid scores), scores that match or are contiguous are categorized as agreement (for example, if Rater 1 assigns a 3+ and Rater 2 assigns a score of 3, 3+, or 4) (%AG). Scores that are one whole score point apart are categorized as adjacent (for example, if Rater 1 assigns a 3+ and Rater 2 assigns a score of 2+ or 4+) (%AD). Otherwise, the raters are nonadjacent (%NA). Note that for Writing, interrater agreement is computed independently between ratings of keyboarded and handwritten responses.

For each grade-level cluster in Writing and Speaking, tables present a single reliability value for the grade-level cluster. To produce this single value, values for Cronbach’s alpha for each of the tiers in the grade-level cluster are weighted by the number of students who were administered the tier form, and a weighted average is expressed in the tables.

2.10.1 Listening

2.10.1.1 Grade 1

Table 2.10.1.1

Reliability: List 1 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
172,661	54	.86

2.10.1.2 Grades 2–3

Table 2.10.1.2

Reliability: List 2-3 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
358,910	54	.85

2.10.1.3 Grades 4–5

Table 2.10.1.3

Reliability: List 4-5 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
288,136	54	.81

2.10.1.4 Grades 6–8

Table 2.10.1.4

Reliability: List 6-8 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
243,851	54	.85

2.10.1.5 Grades 9–12

Table 2.10.1.5

Reliability: List 9-12 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
277,596	54	.86

2.10.2 Reading

2.10.2.1 Grade 1

Table 2.10.2.1

Reliability: Read 1 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
175,793	72	.89

2.10.2.2 Grades 2–3

Table 2.10.2.2

Reliability: Read 2-3 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
361,623	72	.89

2.10.2.3 Grades 4–5

Table 2.10.2.3

Reliability: Read 4-5 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
285,821	69	.88

2.10.2.4 Grades 6–8

Table 2.10.2.4

Reliability: Read 6-8 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
246,585	72	.92

2.10.2.5 Grades 9–12

Table 2.10.2.5

Reliability: Read 9-12 S402 Online

No. of Students	No. of Items	Rasch Reliability Estimate
275,639	72	.91

2.10.3 Writing

2.10.3.1 Grade 1

Table 2.10.3.1.1

Reliability: Writ 1 A S402 Online

Reliability	No. of Students	No. of Tasks	Response Mode	Cronbach's Alpha	SEM
		142,261	4	Hand-written (HW)	.862
Interrater Agreement	Task	No. in Sample	% AG	% AD	% NA
	1	62,520	100	0	0
	2	69,702	100	0	0
	3	74,018	97	3	0
	4	69,240	96	4	0

Table 2.10.3.1.2

Reliability: Writ 1 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Response Mode	Cronbach's Alpha	SEM
		39,883	3	Hand-written (HW)	.891
Interrater Agreement	Task	No. in Sample	% AG	% AD	% NA
	1	16,480	97	3	0
	2	16,902	96	4	0
	3	16,550	97	3	0

Table 2.10.3.1.3

Reliability: Writ 1 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
A	142,261	0.862	0.869
B/C	39,883	0.891	

2.10.3.2 Grade 2-3

Table 2.10.3.2.1

Reliability: Writ 2-3 A S402 Online

Reliability	No. of Students	No. of Tasks	Response Mode	Cronbach's Alpha	SEM
		93,389	3	Hand-written (HW)	.864
Interrater Agreement	Task	No. in Sample	% AG	% AD	% NA
	1	44,346	95	4	0
	2	44,876	97	3	0
	3	45,928	96	4	0

Table 2.10.3.2.2

Reliability: Writ 2-3 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Response Mode	Cronbach's Alpha	SEM
		286,458	3	Hand-written (HW)	.901
Interrater Agreement	Task	No. in Sample	% AG	% AD	% NA
	1	116,992	97	3	0
	2	117,720	96	4	0
	3	118,786	97	3	0

Table 2.10.3.2.3

Reliability: Writ 2-3 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
A	93,389	0.864	0.892
B/C	286,458	0.901	

2.10.3.3 Grades 4-5

Table 2.10.3.3.1

Reliability: Writ 4-5 A S402 Online

Reliability	No. of Students	No. of Tasks	Response Modes		Cronbach's Alpha	SEM
	43,175	3	Hand-written (HW)	Keyboarded (KB)	.880	1.455
Interrater Agreement	Task	Mode of Response	No. in Sample	% AG	% AD	% NA
	1	HW	8,072	97	3	0
		KB	13,352	95	5	0
	2	HW	6,332	98	2	0
		KB	13,568	96	4	0
	3	HW	7,422	98	2	0
KB		13,780	96	4	0	

Table 2.10.3.3.2

Reliability: Writ 4-5 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Response Modes		Cronbach's Alpha	SEM
	245,171	3	Hand-written (HW)	Keyboarded (KB)	.907	1.823
Interrater Agreement	Task	Mode of Response	No. in Sample	% AG	% AD	% NA
	1	HW	26,294	97	3	0
		KB	82,126	96	4	0
	2	HW	26,498	96	4	0
		KB	83,136	95	5	0
	3	HW	26,816	96	4	0
KB		84,488	97	3	0	

Table 2.10.3.3.3

Reliability: Writ 4-5 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
A	43,175	0.880	0.903
B/C	245,171	0.907	

2.10.3.4 Grades 6-8

Table 2.10.3.4.1

Reliability: Writ 6-8 A S402 Online

Reliability	No. of Students	No. of Tasks	Response Modes		Cronbach's Alpha	SEM
	99,695	3	Hand-written (HW)	Keyboarded (KB)	.882	1.407
Interrater Agreement	Task	Mode of Response	No. in Sample	% AG	% AD	% NA
	1	HW	302	99	1	0
		KB	40,969	95	4	0
	2	HW	282	96	4	0
		KB	41,676	96	4	0
	3	HW	278	98	2	0
KB		41,224	97	3	0	

Table 2.10.3.4.2

Reliability: Writ 6-8 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Response Modes		Cronbach's Alpha	SEM
	150,834	3	Hand-written (HW)	Keyboarded (KB)	.885	1.636
Interrater Agreement	Task	Mode of Response	No. in Sample	% AG	% AD	% NA
	1	HW	266	99	1	0
		KB	65,236	98	2	0
	2	HW	228	90	8	2
		KB	66,034	95	4	1
	3	HW	220	98	2	0
KB		66,052	98	2	0	

Table 2.10.3.4.3

Reliability: Writ 6-8 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
A	99,695	0.882	0.884
B/C	150,834	0.885	

2.10.3.5 Grades 9-12

Table 2.10.3.5.1

Reliability: Writ 9-12 A S402 Online

Reliability	No. of Students	No. of Tasks	Response Modes		Cronbach's Alpha	SEM
		110,608	3	Hand-written (HW)	Keyboarded (KB)	.874
Interrater Agreement	Task	Mode of Response	No. in Sample	% AG	% AD	% NA
	1	HW	508	96	4	0
		KB	45,608	94	6	0
	2	HW	442	95	5	0
		KB	45,704	95	5	0
	3	HW	416	93	7	0
KB		45,620	93	7	0	

Table 2.10.3.5.2

Reliability: Writ 9-12 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Response Modes		Cronbach's Alpha	SEM
		175,944	3	Hand-written (HW)	Keyboarded (KB)	.901
Interrater Agreement	Task	Mode of Response	No. in Sample	% AG	% AD	% NA
	1	HW	164	94	6	0
		KB	75,034	95	5	0
	2	HW	134	97	3	0
		KB	76,784	94	6	0
	3	HW	146	89	11	0
KB		79,142	93	7	0	

Table 2.10.3.5.3

Reliability: Writ 9-12 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
A	110,608	0.874	0.891
B/C	175,944	0.901	

2.10.4 Speaking

2.10.4.1 Grade 1

Table 2.10.4.1.1

Reliability: Spek 1 Pre-A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		4,437	3	.843	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	3,274	98	2	0
	2	3,378	98	2	0
	3	3,174	98	2	0

Table 2.10.4.1.2

Reliability: Spek 1 A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		59,144	6	.847	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	32,833	99	1	0
	2	32,833	88	11	0
	3	32,728	99	1	0
	4	32,728	92	8	0
	5	32,524	99	1	0
	6	32,530	89	11	0

Table 2.10.4.1.3

Reliability: Spek 1 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		111,017	6	.802	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	53,096	87	13	0
	2	53,094	82	18	0
	3	54,558	85	15	0
	4	54,568	84	16	0
	5	54,412	89	11	0
	6	54,418	83	17	0

Table 2.10.4.1.4

Reliability: Spek 1 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
Pre-A	4,437	0.843	0.818
A	59,144	0.847	
B/C	111,017	0.802	

2.10.4.2 *Grade 2-3***Table 2.10.4.2.1**

Reliability: Spek 2-3 Pre-A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		13,668	3	.851	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	9,008	99	1	0
	2	8,668	99	1	0
	3	8,758	99	1	0

Table 2.10.4.2.2

Reliability: Spek 2-3 A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		80,925	6	.777	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	39,785	99	1	0
	2	39,785	81	18	1
	3	39,440	99	1	0
	4	39,428	83	16	1
	5	40,044	99	1	0
	6	40,044	86	13	1

Table 2.10.4.2.3

Reliability: Spek 2-3 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		265,652	6	.758	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	114,166	77	22	1
	2	114,166	75	25	1
	3	124,287	85	14	0
	4	124,287	78	21	0
	5	124,016	88	12	0
	6	124,016	82	17	1

Table 2.10.4.2.4

Reliability: Spek 2-3 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
Pre-A	13,668	0.851	0.766
A	80,925	0.777	
B/C	265,652	0.758	

2.10.4.3 *Grades 4-5***Table 2.10.4.3.1**

Reliability: Spek 4-5 Pre-A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		4,965	3	.823	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	3,562	98	2	0
	2	2,864	97	3	0
	3	3,566	98	2	0

Table 2.10.4.3.2

Reliability: Spek 4-5 A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		27,818	6	.804	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	14,082	99	1	0
	2	14,082	88	12	0
	3	13,274	99	1	0
	4	13,276	88	12	0
	5	13,942	99	1	0
	6	13,942	85	15	0

Table 2.10.4.3.3

Reliability: Spek 4-5 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		259,682	6	.800	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	120,797	87	13	0
	2	120,795	83	17	0
	3	120,900	81	18	0
	4	120,900	79	21	0
	5	119,868	78	22	0
	6	119,868	75	24	0

Table 2.10.4.3.4

Reliability: Spek 4-5 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
Pre-A	4,965	0.823	0.801
A	27,818	0.804	
B/C	259,682	0.800	

2.10.4.4 Grades 6-8

Table 2.10.4.4.1

Reliability: Spek 6-8 Pre-A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		8,727	3	.800	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	4,936	99	1	0
	2	5,520	97	3	0
	3	4,982	97	3	0

Table 2.10.4.4.2

Reliability: Spek 6-8 A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		58,212	6	.806	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	28,664	99	1	0
	2	28,668	86	14	0
	3	30,572	99	1	0
	4	30,572	86	13	0
	5	29,558	99	1	0
	6	29,558	86	14	0

Table 2.10.4.4.3

Reliability: Spek 6-8 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		184,526	6	.805	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	90,774	84	15	0
	2	90,778	83	17	0
	3	90,730	80	20	0
	4	90,732	79	20	1
	5	90,870	84	15	0
6	90,870	80	19	1	

Table 2.10.4.4.4

Reliability: Spek 6-8 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
Pre-A	8,727	0.800	0.805
A	58,212	0.806	
B/C	184,526	0.805	

2.10.4.5 Grades 9-12

Table 2.10.4.5.1

Reliability: Spek 9-12 Pre-A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		18,123	3	.835	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	11,010	98	2	0
	2	10,870	99	1	0
	3	10,864	98	2	0

Table 2.10.4.5.2

Reliability: Spek 9-12 A S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		126,566	6	.832	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	65,506	99	1	0
	2	65,506	85	15	0
	3	65,735	99	1	0
	4	65,735	86	14	0
	5	65,586	99	1	0
	6	65,586	84	16	0

Table 2.10.4.5.3

Reliability: Spek 9-12 B/C S402 Online

Reliability	No. of Students	No. of Tasks	Cronbach's Alpha		SEM
		141,626	6	.838	
Interrater Agreement	Task	No. in Sample	% EX	% AD	% NA
	1	69,454	80	20	1
	2	69,452	76	23	1
	3	72,048	80	19	1
	4	72,048	79	20	0
	5	74,710	82	18	1
	6	74,710	75	24	1

Table 2.10.4.5.4

Reliability: Spek 9-12 Weighted Reliability S402 Online

Tiers	No. of Students	Reliability	Weighted Reliability
Pre-A	18,123	0.835	0.835
A	126,566	0.832	
B/C	141,626	0.838	

2.11 Conditional Standard Errors of Measurement at Cut Score

The tables in this section present information on the conditional standard errors of measurement (CSEM) at the most important points at which decisions are made about students based on performance on ACCESS—the cut points between language proficiency levels. Because the cut points depend on the grade level, information is provided for each grade level within a grade-level cluster.

Since the Listening and Reading tests are multistage adaptive tests, the CSEM will vary for the same scale score since students are routed to take different items; therefore, it is not possible to present a single value for the CSEM of the scale score which corresponds to each cut. In the tables for Listening and Reading, the leftmost column shows the cut (e.g., 1/2, which is the cut score between Proficiency Level 1 and Proficiency Level 2). The second column shows the grade level. The third column shows the cut score in the scale score metric (e.g., 305). The next columns present the mean, standard deviation, minimum, and maximum of the CSEM of all students at the cut scores. Note that there are some rare cases where there are no observed scale scores corresponding to the cut score values; therefore, these descriptive statistics cannot be provided.

For Writing and Speaking, the values are presented by tier. From these tables, it is possible to identify how well the different Writing and Speaking tiers are targeted for making decisions about students at the various cut scores. For example, Tier A is intended for students at the lowest end of the language proficiency continuum. Optimally, Tier A forms should have the lowest CSEM of any tier at the 1/2 cut point, and a relatively low CSEM at the 2/3 cut point. At the other end of the continuum, Tier B/C forms should optimally have the lowest CSEM at the 5/6 cut point, and a relatively low CSEM at the 4/5 cut point. Information from these tables provides comparable information on how well the two tier forms are targeted to provide the most accurate measure in order to place their intended examinees into the language proficiency levels that they target. In the tables for Writing and Speaking, the leftmost column shows the cut (e.g., 1/2, which is the cut score between Proficiency Level 1 and Proficiency Level 2). The second column shows the grade level. The third column shows the cut score in the scale score metric (e.g., 305). In the last column(s), the corresponding CSEM is given for each cut score in the scale score metric for Writing and Speaking.

2.11.1 Listening

2.11.1.1 Grade 1

Table 2.11.1.1

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: List 1 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	1	236	70	19.39	19.39	19.39	0.00
2/3	1	259	75	16.84	16.84	16.84	0.00
3/4	1	291	N/A	N/A	N/A	N/A	N/A
4/5	1	303	522	18.37	18.37	18.37	0.00
5/6	1	327	16	18.88	18.88	18.88	0.00

2.11.1.2 Grades 2–3

Table 2.11.1.2

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: List 2-3 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	2	245	1,044	20.41	20.92	20.51	0.21
	3	262	21	17.86	17.86	17.86	0.00
2/3	2	283	276	16.84	18.37	18.12	0.51
	3	300	5,453	17.35	18.37	18.27	0.30
3/4	2	314	N/A	N/A	N/A	N/A	N/A
	3	331	309	19.90	20.92	20.18	0.45
4/5	2	330	432	18.88	20.41	19.56	0.70
	3	349	281	19.90	22.45	21.37	0.86
5/6	2	354	1,198	20.41	21.94	20.55	0.27
	3	374	11	25.51	25.51	25.51	0.00

2.11.1.3 *Grades 4–5*

Table 2.11.1.3

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: List 4-5 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	4	275	128	17.86	20.41	20.20	0.56
	5	285	5	17.35	18.37	18.16	0.46
2/3	4	313	1	18.37	18.37	18.37	0.00
	5	323	30	18.37	18.88	18.54	0.24
3/4	4	343	170	18.37	20.41	20.33	0.27
	5	354	293	18.88	20.41	20.30	0.40
4/5	4	363	157	19.39	19.90	19.54	0.24
	5	375	87	19.39	20.92	19.46	0.32
5/6	4	388	286	18.88	20.41	19.84	0.29
	5	401	17	19.90	19.90	19.90	0.00

2.11.1.4 *Grades 6–8*

Table 2.11.1.4

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: List 6-8 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	6	294	17	16.84	16.84	16.84	0.00
	7	302	13	16.84	16.84	16.84	0.00
	8	308	3	17.86	17.86	17.86	0.00
2/3	6	332	165	16.84	16.84	16.84	0.00
	7	340	2,304	16.84	17.35	17.34	0.04
	8	347	8	17.86	17.86	17.86	0.00
3/4	6	363	3,058	16.84	17.86	16.87	0.19
	7	370	43	17.35	17.35	17.35	0.00
	8	377	111	17.35	17.35	17.35	0.00
4/5	6	385	389	16.84	17.35	17.03	0.25
	7	394	105	16.84	17.86	17.38	0.14
	8	402	69	16.84	18.37	17.68	0.42
5/6	6	411	165	17.35	17.35	17.35	0.00
	7	420	1,208	17.35	17.35	17.35	0.00
	8	427	104	17.86	17.86	17.86	0.00

2.11.1.5 Grades 9–12

Table 2.11.1.5

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: List 9-12 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	9	314	1	17.35	17.35	17.35	0.00
	10	325	119	17.86	17.86	17.86	0.00
	11	335	23	16.84	16.84	16.84	0.00
	12	342	1,592	16.33	19.39	19.37	0.20
2/3	9	353	N/A	N/A	N/A	N/A	N/A
	10	358	427	16.33	16.84	16.59	0.26
	11	364	2,609	16.33	16.84	16.38	0.15
	12	368	6	16.84	16.84	16.84	0.00
3/4	9	383	68	16.84	16.84	16.84	0.00
	10	389	25	16.84	17.35	17.33	0.10
	11	394	2,710	16.84	16.84	16.84	0.00
	12	398	5	16.84	16.84	16.84	0.00
4/5	9	409	499	17.35	17.86	17.82	0.14
	10	415	174	17.35	19.39	17.89	0.76
	11	420	570	17.35	19.39	18.75	0.88
	12	426	185	17.86	21.43	18.22	0.36
5/6	9	434	3	18.88	19.39	19.05	0.29
	10	441	101	19.39	20.41	19.52	0.34
	11	447	2,234	18.88	19.39	18.90	0.11
	12	452	N/A	N/A	N/A	N/A	N/A

2.11.2 Reading

2.11.2.1 Grade 1

Table 2.11.2.1

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: Read 1 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	1	264	932	10.20	11.22	10.85	0.29
2/3	1	286	2,813	9.69	10.71	9.81	0.24
3/4	1	304	709	9.69	10.20	10.17	0.13
4/5	1	315	68	10.20	10.20	10.20	0.00
5/6	1	334	5	10.71	10.71	10.71	0.00

2.11.2.2 Grades 2–3

Table 2.11.2.2

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: Read 2-3 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	2	283	616	10.20	12.24	11.09	0.31
	3	297	2,267	10.20	10.71	10.20	0.01
2/3	2	307	1,558	9.69	10.71	10.18	0.18
	3	323	869	9.69	10.71	10.07	0.23
3/4	2	326	490	9.69	10.20	9.90	0.25
	3	342	438	9.69	10.71	10.23	0.23
4/5	2	337	301	9.69	10.20	10.20	0.04
	3	352	389	10.71	11.73	10.78	0.18
5/6	2	355	43	11.22	11.22	11.22	0.00
	3	370	35	12.76	12.76	12.76	0.00

2.11.2.3 Grades 4–5

Table 2.11.2.3

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: Read 4-5 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	4	307	103	11.22	11.73	11.26	0.13
	5	316	108	10.71	11.73	10.87	0.30
2/3	4	335	2,005	10.20	11.22	10.73	0.51
	5	345	374	10.20	10.71	10.54	0.24
3/4	4	354	580	10.20	10.71	10.31	0.21
	5	364	2,003	10.20	10.71	10.22	0.09
4/5	4	364	8,997	10.20	10.71	10.21	0.04
	5	373	61	10.20	11.22	10.46	0.27
5/6	4	382	23	10.71	11.22	10.87	0.24
	5	391	56	11.22	11.73	11.62	0.22

2.11.2.4 Grades 6–8

Table 2.11.2.4

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: Read 6-8 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	6	323	116	10.20	12.24	11.06	0.42
	7	329	514	10.20	12.24	11.72	0.23
	8	335	512	10.71	12.24	11.77	0.16
2/3	6	353	1,870	10.20	11.73	10.22	0.10
	7	360	1,176	10.20	11.22	10.21	0.08
	8	366	47	10.20	10.71	10.25	0.14
3/4	6	373	217	10.20	11.22	10.52	0.30
	7	380	551	10.20	11.22	10.70	0.13
	8	386	500	10.71	13.27	11.07	0.28
4/5	6	382	153	10.71	11.22	10.96	0.26
	7	389	232	10.71	12.24	11.04	0.30
	8	395	226	10.71	12.24	10.85	0.32
5/6	6	399	83	10.71	11.73	10.95	0.43
	7	406	49	11.73	12.24	12.04	0.25
	8	412	2,094	11.22	13.78	11.25	0.20

2.11.2.5 Grades 9–12

Table 2.11.2.5

Descriptive Statistics of Conditional Standard Error of Measurement at Cut Scores: Read 9-12 S402 Online

Proficiency Level	Grade	Cut Score	No. of Students	Min.	Max.	Mean	Std. Dev.
1/2	9	340	268	11.22	12.24	11.24	0.11
	10	344	324	11.22	11.73	11.30	0.18
	11	348	313	10.20	12.24	11.27	0.18
	12	352	240	11.22	12.24	11.31	0.21
2/3	9	372	345	10.20	10.71	10.21	0.04
	10	377	2,566	9.69	11.22	10.10	0.23
	11	382	253	9.69	11.22	10.30	0.29
	12	386	336	9.69	11.22	10.36	0.31
3/4	9	392	138	10.20	11.22	10.39	0.25
	10	397	414	10.20	11.73	10.56	0.35
	11	402	890	10.20	11.73	10.40	0.38
	12	407	880	10.20	12.24	10.32	0.34
4/5	9	401	164	10.20	11.73	10.46	0.31
	10	406	148	10.71	11.73	10.80	0.23
	11	410	77	10.71	12.76	11.43	0.46
	12	414	39	10.71	11.73	11.02	0.35
5/6	9	418	515	10.71	11.73	10.86	0.35
	10	423	8	12.24	12.24	12.24	0.00
	11	427	131	11.22	12.24	11.89	0.29
	12	432	55	11.73	11.73	11.73	0.00

2.11.3 Writing

2.11.3.1 Grade 1

Table 2.11.3.1

Conditional Standard Error of Measurement at Cut Scores: Writ 1 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	1	238	10.31	8.65
2/3	1	275	14.23	11.28
3/4	1	337	13.43	12.08
4/5	1	382	13.16	11.01
5/6	1	405	16.65	12.62

2.11.3.2 Grades 2–3

Table 2.11.3.2

Conditional Standard Error of Measurement at Cut Scores: Writ 2-3 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	2	242	12.08	10.74
	3	247	12.35	9.69
2/3	2	279	16.65	9.13
	3	283	16.92	9.40
3/4	2	341	17.18	12.62
	3	346	16.92	12.62
4/5	2	388	15.57	11.33
	3	394	16.11	11.01
5/6	2	411	19.33	10.74
	3	418	21.48	11.01

2.11.3.3 Grades 4–5

Table 2.11.3.3

Conditional Standard Error of Measurement at Cut Scores: Writ 4-5 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	4	266	11.79	10.50
	5	267	11.81	10.20
2/3	4	288	13.16	8.32
	5	293	13.96	8.32
3/4	4	351	17.99	12.62
	5	356	17.72	12.62
4/5	4	401	15.57	11.81
	5	407	15.31	11.55
5/6	4	425	15.57	10.74
	5	433	16.38	10.74

2.11.3.4 Grades 6–8

Table 2.11.3.4

Conditional Standard Error of Measurement at Cut Scores: Writ 6-8 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	6	268	12.35	8.32
	7	273	12.51	8.32
	8	281	13.43	8.59
2/3	6	298	15.57	10.20
	7	305	16.38	11.01
	8	311	16.92	11.55
3/4	6	361	17.45	12.62
	7	367	17.18	12.35
	8	372	16.92	12.35
4/5	6	413	15.57	10.77
	7	419	16.11	10.74
	8	424	16.65	11.01
5/6	6	441	20.14	12.62
	7	450	23.36	14.23
	8	459	27.12	16.38

2.11.3.5 Grades 9–12

Table 2.11.3.5

Conditional Standard Error of Measurement at Cut Scores: Writ 9-12 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	9	289	12.08	8.59
	10	298	12.08	8.54
	11	308	13.02	9.13
	12	318	14.50	9.93
2/3	9	319	14.50	10.20
	10	326	15.57	10.74
	11	335	16.38	11.55
	12	344	17.18	12.06
3/4	9	378	17.72	12.62
	10	385	17.72	12.49
	11	391	17.45	12.35
	12	398	16.92	12.08
4/5	9	430	15.31	10.90
	10	436	15.31	10.74
	11	441	15.57	11.01
	12	447	15.84	11.01
5/6	9	469	19.87	13.69
	10	479	23.09	15.84
	11	490	28.19	19.33
	12	501	34.37	23.63

2.11.4 Speaking

2.11.4.1 Grade 1

Table 2.11.4.1

Conditional Standard Error of Measurement at Cut Scores: Spek 1 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	1	205	20.18	14.92
2/3	1	261	28.08	19.89
3/4	1	311	24.57	17.55
4/5	1	361	27.49	19.01
5/6	1	403	44.16	30.13

Note: Tier Pre-A is not presented as it is not possible for Tier Pre-A students to receive a proficiency level higher than 2.

2.11.4.2 Grades 2–3

Table 2.11.4.2

Conditional Standard Error of Measurement at Cut Scores: Spek 2-3 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	2	220	25.74	17.26
	3	234	27.79	18.43
2/3	2	273	26.03	19.01
	3	283	25.15	18.43
3/4	2	322	24.86	17.55
	3	332	26.32	18.13
4/5	2	374	39.78	23.69
	3	386	47.09	26.91
5/6	2	415	73.12	39.78
	3	425	85.70	46.21

Note: Tier Pre-A is not presented as it is not possible for Tier Pre-A students to receive a proficiency level higher than 2.

2.11.4.3 Grades 4–5

Table 2.11.4.3

Conditional Standard Error of Measurement at Cut Scores: Spek 4-5 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	4	246	23.11	16.09
	5	258	23.98	16.38
2/3	4	293	26.91	18.72
	5	302	26.91	19.30
3/4	4	342	25.15	18.13
	5	350	24.86	17.84
4/5	4	397	28.37	18.72
	5	407	30.42	19.89
5/6	4	435	40.36	26.03
	5	443	44.46	28.66

Note: Tier Pre-A is not presented as it is not possible for Tier Pre-A students to receive a proficiency level higher than 2.

2.11.4.4 Grades 6–8

Table 2.11.4.4

Conditional Standard Error of Measurement at Cut Scores: Spek 6-8 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	6	268	22.52	16.09
	7	277	23.69	16.38
	8	284	24.86	16.38
2/3	6	310	28.08	18.43
	7	317	28.37	19.01
	8	323	28.08	19.30
3/4	6	360	24.86	18.72
	7	369	24.28	18.13
	8	377	24.28	17.84
4/5	6	417	28.66	18.43
	7	425	31.00	19.30
	8	433	33.63	20.47
5/6	6	451	42.41	23.98
	7	457	45.92	25.74
	8	463	50.31	27.79

Note: Tier Pre-A is not presented as it is not possible for Tier Pre-A students to receive a proficiency level higher than 2.

2.11.4.5 *Grades 9–12*

Table 2.11.4.5

Conditional Standard Error of Measurement at Cut Scores: Spek 9-12 S402 Online

Proficiency Level	Grade	Cut Score	SEM	
			Tier A	Tier B/C
1/2	9	290	23.69	16.38
	10	295	24.57	16.67
	11	299	25.15	17.26
	12	302	25.74	17.55
2/3	9	328	28.37	19.89
	10	333	28.37	20.18
	11	337	28.08	20.18
	12	340	28.08	19.89
3/4	9	385	23.98	17.26
	10	393	23.98	16.96
	11	400	24.28	16.96
	12	406	24.86	17.26
4/5	9	440	32.17	21.35
	10	446	34.22	22.81
	11	451	36.56	23.98
	12	455	38.31	25.15
5/6	9	468	45.63	29.54
	10	471	47.97	30.71
	11	474	49.72	31.88
	12	476	51.18	33.05

Note: Tier Pre-A is not presented as it is not possible for Tier Pre-A students to receive a proficiency level higher than 2.

2.12 Accuracy and Consistency

One of the main purposes of the WIDA ACCESS program is to identify the English language proficiency level of students with respect to the WIDA ELD Standards. Because of the emphasis on the classification of student performance, a psychometric property of interest is how accurately and consistently ACCESS can classify students into WIDA proficiency categories. The analyses that were used utilize the methods outlined and implemented by Livingston and Lewis (1995) and Young and Yoon (1998), as implemented in the software program BB-CLASS (Brennan, 2004; cf. also Lee, Hanson, & Brennan, 2002).

Classification accuracy is defined conceptually as the extent to which the proficiency classifications of students based on the assessment would agree with those made on the basis of their true scores. True scores are, of course, unknown. A common practice is to estimate the true scores based on observed scores and the parameters of the model used in estimating the true scores. Classification consistency is defined conceptually as the extent to which the proficiency classifications of students agree given two independent administrations of the same or two parallel test forms. However, it is impractical to obtain repeated administrations of the same or parallel test forms because of cost, testing burden, and effects of student memory and practice. A common approach is to estimate classification consistency from a single administration of a test.

Tables in this section present three pieces of information related to the accuracy and consistency of placement into the WIDA language proficiency levels for each domain. A separate table is provided for each grade in a grade-level cluster.

The first section provides overall indices related to the accuracy and consistency of classification, as well as Cohen's kappa. Overall accuracy indicates the percentage of all students who would be classified into the same language proficiency level by both the administered test and the true score distribution. For example, an overall accuracy of .774 means that an estimated 77% of students would be classified into the correct performance level according to student observed and true scores. Overall consistency indicates the percentage of all students who would be classified into the same language proficiency level by both the administered test and by a parallel test. For example, an overall classification consistency of .664 means that an estimated 66% of students would be classified into the same performance level if two parallel forms were administered. Cohen's kappa assesses the proportion of consistency classifications after removing the proportion of consistent classifications that would be expected by chance. Due to this correction, Cohen's kappa tends to be lower than overall consistency.

The second section of the table shows accuracy and consistency information conditional on proficiency level. The conditional accuracy indices examine the percentage of students classified by both tests into a proficiency level, divided by all students classified into that proficiency level according to the true score distribution. For example, an accuracy of .774 at Proficiency Level 3 means that an estimated 77% of students are classified into Proficiency Level 3 when their true scores suggest that they would be in Proficiency Level 3. The conditional consistency indices examine the percentage of students classified by both tests into a proficiency level, divided by all

students classified into that proficiency level according to a parallel test. For example, a classification consistency of .664 at Proficiency Level 4 means that an estimated 66% of students would be classified into Proficiency Level 4 when a parallel form suggests that these students would be classified in Proficiency Level 4.

The third section of the table provides indices of classification accuracy, including the false-positives and the false-negatives, and consistency at the cut points. These indices are perhaps the most important of all when using any of these as an absolute cut point (e.g., determining which students have reached Proficiency Level 5). For example, to evaluate the degree of confidence that one can have in a decision made based on the domain scores as to whether or not students are being accurately (consistently) classified into Proficiency Level 5 (“Bridging”), one can look at the accuracy (consistency) index provided in the table for the cut score 4/5. Note that the accuracy and consistency is generally higher at the cut points than over the proficiency levels.

In terms of classifications around a single cut point, students can be misclassified in one of two ways. Students who were below the proficiency level cut score (based on their “true score”) but were classified based on the observed score as being above the cut score are considered to be false-positives. Students who were above the proficiency level cut score (based on their “true score”) but were classified as being below a cut score based on the observed score are considered to be false-negatives. All other students are considered to be accurately placed either above or below the cut score. The accuracy indices at the cut score examine the percentage of students who are accurately placed above and below the cut score.

The consistency indices at the cut examine the percentage of students classified consistently above and below the cut score.

There are several cases where there were no test takers who were placed into the proficiency level, and accuracy and consistency of classification conditional on that level cannot be computed. Also, when the number of test takers placed into the proficiency level is smaller than 100, BB-CLASS produced estimates that are out of bounds (for example, a negative estimated percentage of students placed in the proficiency level). In these cases, ‘N/A’ has been placed in the table. In addition, there are a few cases where, due to the small percentage of test takers placed into the proficiency level and the range of observed scale scores, accuracy of classification conditional on that level cannot be estimated by BB-CLASS. In such cases, a hyphen (-) has been placed in the table.

The approach taken by Livingston and Lewis (1995) and implemented here uses information about the reliability of the test, the cut scores, and the observed distribution of scores. Then, using a four-parameter beta distribution, the distribution of the true scores and of scores on a parallel form is modeled. The Livingston and Lewis procedure requires that the reliability estimate of the test form be provided in estimating the classification consistency and accuracy statistics. For Listening and Reading, the Rasch reliability estimates by grade-level clusters were used in the procedure. Since the Writing and Speaking tests were tiered, it was necessary to

produce a single reliability estimate across tiers for the Livingston and Lewis procedure. This is a weighted reliability estimate across tiers (see Section 2.10).

2.12.1 Listening

2.12.1.1 Grade 1

Table 2.12.1.1

Accuracy and Consistency of Classification Indices: List (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.712	0.651		0.437
Conditional on Level	Level	Accuracy		Consistency	
	1	0.828		0.675	
	2	0.279		0.199	
	3	0.508		0.388	
	4	0.202		0.146	
	5	0.300		0.220	
	6	0.918		0.883	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.962	0.011	0.027	0.945
	2/3	0.946	0.023	0.030	0.922
	3/4	0.914	0.033	0.053	0.882
	4/5	0.909	0.035	0.056	0.871
	5/6	0.896	0.057	0.048	0.850

2.12.1.2 Grade 2

Table 2.12.1.2

Accuracy and Consistency of Classification Indices: List (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.629	0.547		0.397
Conditional on Level	Level	Accuracy		Consistency	
	1	0.790		0.620	
	2	0.501		0.385	
	3	0.567		0.449	
	4	0.160		0.114	
	5	0.330		0.240	
	6	0.895		0.836	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.960	0.014	0.026	0.942
	2/3	0.916	0.038	0.047	0.884
	3/4	0.894	0.033	0.074	0.852
	4/5	0.902	0.049	0.049	0.852
	5/6	0.882	0.076	0.042	0.835

2.12.1.3 Grade 3

Table 2.12.1.3

Accuracy and Consistency of Classification Indices: List (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.631	0.550		0.392
Conditional on Level	Level	Accuracy		Consistency	
	1	0.818		0.660	
	2	0.447		0.334	
	3	0.543		0.418	
	4	0.186		0.135	
	5	0.404		0.303	
	6	0.872		0.812	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.963	0.012	0.026	0.946
	2/3	0.930	0.033	0.038	0.901
	3/4	0.900	0.034	0.066	0.861
	4/5	0.896	0.055	0.049	0.848
	5/6	0.873	0.072	0.055	0.824

2.12.1.4 Grade 4

Table 2.12.1.4

Accuracy and Consistency of Classification Indices: List (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.823	0.777		0.425
Conditional on Level	Level	Accuracy		Consistency	
	1	0.875		0.706	
	2	0.381		0.270	
	3	0.483		0.332	
	4	0.244		0.166	
	5	0.398		0.283	
	6	0.934		0.922	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.989	0.002	0.009	0.986
	2/3	0.982	0.006	0.011	0.973
	3/4	0.962	0.012	0.026	0.946
	4/5	0.948	0.022	0.030	0.922
	5/6	0.910	0.038	0.052	0.872

2.12.1.5 Grade 5

Table 2.12.1.5

Accuracy and Consistency of Classification Indices: List (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.788	0.734		0.418
Conditional on Level	Level	Accuracy		Consistency	
	1	0.881		0.734	
	2	0.341		0.243	
	3	0.467		0.320	
	4	0.215		0.146	
	5	0.394		0.280	
	6	0.920		0.904	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.983	0.003	0.014	0.978
	2/3	0.976	0.010	0.015	0.963
	3/4	0.954	0.015	0.031	0.934
	4/5	0.938	0.029	0.033	0.908
	5/6	0.896	0.045	0.059	0.853

2.12.1.6 Grade 6

Table 2.12.1.6

Accuracy and Consistency of Classification Indices: List (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.621	0.523		0.384
Conditional on Level	Level	Accuracy		Consistency	
	1	0.839		0.623	
	2	0.522		0.371	
	3	0.594		0.469	
	4	0.475		0.375	
	5	0.455		0.356	
	6	0.858		0.775	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.985	0.002	0.013	0.980
	2/3	0.954	0.020	0.026	0.930
	3/4	0.891	0.047	0.062	0.851
	4/5	0.876	0.052	0.071	0.827
	5/6	0.888	0.066	0.045	0.843

2.12.1.7 Grade 7

Table 2.12.1.7

Accuracy and Consistency of Classification Indices: List (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.613	0.519		0.376
Conditional on Level	Level	Accuracy		Consistency	
	1	0.839		0.603	
	2	0.403		0.274	
	3	0.622		0.500	
	4	0.439		0.347	
	5	0.386		0.292	
	6	0.881		0.803	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.981	0.003	0.016	0.974
	2/3	0.946	0.030	0.024	0.916
	3/4	0.878	0.047	0.076	0.838
	4/5	0.883	0.049	0.068	0.832
	5/6	0.890	0.070	0.040	0.846

2.12.1.8 Grade 8

Table 2.12.1.8

Accuracy and Consistency of Classification Indices: List (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.599	0.510		0.370
Conditional on Level	Level	Accuracy		Consistency	
	1	0.827		0.612	
	2	0.389		0.274	
	3	0.558		0.442	
	4	0.439		0.347	
	5	0.355		0.266	
	6	0.880		0.800	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.970	0.006	0.025	0.958
	2/3	0.935	0.035	0.030	0.902
	3/4	0.876	0.052	0.072	0.836
	4/5	0.882	0.051	0.068	0.831
	5/6	0.892	0.068	0.041	0.846

2.12.1.9 Grade 9

Table 2.12.1.9

Accuracy and Consistency of Classification Indices: List (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.586	0.485		0.363
Conditional on Level	Level	Accuracy		Consistency	
	1	0.614		0.347	
	2	0.516		0.426	
	3	0.577		0.474	
	4	0.510		0.393	
	5	0.363		0.260	
	6	0.904		0.818	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.947	0.004	0.048	0.930
	2/3	0.884	0.067	0.049	0.837
	3/4	0.874	0.065	0.062	0.828
	4/5	0.918	0.038	0.044	0.878
	5/6	0.937	0.044	0.019	0.911

2.12.1.10 *Grade 10*

Table 2.12.1.10

Accuracy and Consistency of Classification Indices: List (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.566	0.469		0.351
Conditional on Level	Level	Accuracy		Consistency	
	1	0.639		0.422	
	2	0.429		0.351	
	3	0.582		0.473	
	4	0.449		0.339	
	5	0.397		0.286	
	6	0.896		0.812	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.920	0.017	0.063	0.894
	2/3	0.876	0.073	0.051	0.828
	3/4	0.880	0.058	0.062	0.835
	4/5	0.919	0.041	0.040	0.879
	5/6	0.937	0.043	0.021	0.911

2.12.1.11 *Grade 11*

Table 2.12.1.11

Accuracy and Consistency of Classification Indices: List (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.566	0.467		0.352
Conditional on Level	Level	Accuracy		Consistency	
	1	0.736		0.543	
	2	0.341		0.263	
	3	0.599		0.491	
	4	0.486		0.376	
	5	0.362		0.260	
	6	0.899		0.808	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.919	0.022	0.059	0.890
	2/3	0.886	0.074	0.039	0.839
	3/4	0.872	0.064	0.064	0.828
	4/5	0.916	0.038	0.045	0.875
	5/6	0.936	0.045	0.019	0.910

2.12.1.12 *Grade 12*

Table 2.12.1.12

Accuracy and Consistency of Classification Indices: List (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.563	0.458		0.342
Conditional on Level	Level	Accuracy		Consistency	
	1	0.664		0.499	
	2	0.401		0.317	
	3	0.602		0.492	
	4	0.436		0.328	
	5	0.452		0.331	
	6	0.869		0.770	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.905	0.040	0.054	0.865
	2/3	0.868	0.080	0.052	0.820
	3/4	0.885	0.052	0.063	0.840
	4/5	0.924	0.043	0.033	0.888
	5/6	0.944	0.037	0.019	0.921

2.12.2 Reading

2.12.2.1 Grade 1

Table 2.12.2.1

Accuracy and Consistency of Classification Indices: Read (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.614	0.505		0.392
Conditional on Level	Level	Accuracy		Consistency	
	1	0.688		0.568	
	2	0.665		0.561	
	3	0.486		0.372	
	4	0.350		0.258	
	5	0.635		0.508	
	6	0.816		0.705	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.900	0.055	0.045	0.861
	2/3	0.891	0.052	0.057	0.847
	3/4	0.915	0.050	0.035	0.878
	4/5	0.923	0.048	0.029	0.893
	5/6	0.957	0.023	0.020	0.937

2.12.2.2 Grade 2

Table 2.12.2.2

Accuracy and Consistency of Classification Indices: Read (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.621	0.511		0.399
Conditional on Level	Level	Accuracy		Consistency	
	1	0.707		0.562	
	2	0.693		0.591	
	3	0.518		0.411	
	4	0.455		0.348	
	5	0.570		0.446	
	6	0.834		0.716	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.929	0.034	0.037	0.898
	2/3	0.895	0.049	0.057	0.852
	3/4	0.901	0.061	0.039	0.863
	4/5	0.918	0.044	0.038	0.886
	5/6	0.957	0.025	0.018	0.937

2.12.2.3 Grade 3

Table 2.12.2.3

Accuracy and Consistency of Classification Indices: Read (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.618	0.513		0.406
Conditional on Level	Level	Accuracy		Consistency	
	1	0.726		0.602	
	2	0.671		0.566	
	3	0.486		0.373	
	4	0.280		0.205	
	5	0.618		0.496	
	6	0.816		0.708	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.922	0.040	0.038	0.889
	2/3	0.896	0.048	0.056	0.855
	3/4	0.910	0.050	0.040	0.870
	4/5	0.911	0.057	0.032	0.877
	5/6	0.941	0.032	0.027	0.915

2.12.2.4 Grade 4

Table 2.12.2.4

Accuracy and Consistency of Classification Indices: Read (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.603	0.498		0.385
Conditional on Level	Level	Accuracy		Consistency	
	1	0.773		0.610	
	2	0.683		0.565	
	3	0.491		0.378	
	4	0.298		0.225	
	5	0.640		0.531	
	6	0.767		0.648	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.962	0.014	0.025	0.945
	2/3	0.913	0.035	0.052	0.877
	3/4	0.893	0.059	0.048	0.846
	4/5	0.877	0.076	0.047	0.834
	5/6	0.916	0.041	0.043	0.880

2.12.2.5 Grade 5

Table 2.12.2.5

Accuracy and Consistency of Classification Indices: Read (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.597	0.495		0.385
Conditional on Level	Level	Accuracy		Consistency	
	1	0.798		0.670	
	2	0.648		0.537	
	3	0.480		0.378	
	4	0.315		0.239	
	5	0.550		0.435	
	6	0.790		0.658	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.936	0.025	0.039	0.910
	2/3	0.896	0.050	0.054	0.853
	3/4	0.886	0.067	0.047	0.843
	4/5	0.892	0.060	0.048	0.853
	5/6	0.937	0.035	0.028	0.907

2.12.2.6 Grade 6

Table 2.12.2.6

Accuracy and Consistency of Classification Indices: Read (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.712	0.622		0.507
Conditional on Level	Level	Accuracy		Consistency	
	1	0.899		0.848	
	2	0.674		0.572	
	3	0.633		0.518	
	4	0.298		0.219	
	5	0.601		0.466	
	6	0.765		0.612	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.923	0.033	0.044	0.892
	2/3	0.917	0.048	0.035	0.884
	3/4	0.934	0.036	0.030	0.906
	4/5	0.945	0.034	0.021	0.923
	5/6	0.973	0.016	0.011	0.960

2.12.2.7 Grade 7

Table 2.12.2.7

Accuracy and Consistency of Classification Indices: Read (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.700	0.612		0.499
Conditional on Level	Level	Accuracy		Consistency	
	1	0.897		0.844	
	2	0.659		0.556	
	3	0.603		0.489	
	4	0.286		0.208	
	5	0.510		0.384	
	6	0.826		0.697	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.922	0.033	0.044	0.891
	2/3	0.914	0.050	0.036	0.880
	3/4	0.930	0.037	0.033	0.901
	4/5	0.944	0.032	0.024	0.919
	5/6	0.966	0.022	0.012	0.951

2.12.2.8 Grade 8

Table 2.12.2.8

Accuracy and Consistency of Classification Indices: Read (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.694	0.605		0.497
Conditional on Level	Level	Accuracy		Consistency	
	1	0.884		0.826	
	2	0.671		0.567	
	3	0.570		0.451	
	4	0.264		0.190	
	5	0.523		0.401	
	6	0.841		0.730	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.922	0.035	0.042	0.891
	2/3	0.915	0.046	0.039	0.881
	3/4	0.931	0.037	0.033	0.901
	4/5	0.940	0.036	0.024	0.914
	5/6	0.958	0.027	0.015	0.941

2.12.2.9 Grade 9

Table 2.12.2.9

Accuracy and Consistency of Classification Indices: Read (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.681	0.586		0.481
Conditional on Level	Level	Accuracy		Consistency	
	1	0.835		0.753	
	2	0.689		0.592	
	3	0.586		0.461	
	4	0.214		0.152	
	5	0.563		0.436	
	6	0.858		0.770	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.917	0.037	0.046	0.884
	2/3	0.911	0.048	0.041	0.875
	3/4	0.933	0.034	0.033	0.902
	4/5	0.938	0.041	0.022	0.912
	5/6	0.953	0.028	0.019	0.935

2.12.2.10 Grade 10

Table 2.12.2.10

Accuracy and Consistency of Classification Indices: Read (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.671	0.577		0.476
Conditional on Level	Level	Accuracy		Consistency	
	1	0.835		0.750	
	2	0.685		0.585	
	3	0.546		0.423	
	4	0.216		0.157	
	5	0.575		0.453	
	6	0.844		0.756	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.921	0.034	0.045	0.890
	2/3	0.915	0.045	0.041	0.880
	3/4	0.927	0.039	0.034	0.895
	4/5	0.928	0.048	0.025	0.900
	5/6	0.945	0.031	0.024	0.923

2.12.2.11 *Grade 11*

Table 2.12.2.11

Accuracy and Consistency of Classification Indices: Read (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.677	0.583		0.478
Conditional on Level	Level	Accuracy		Consistency	
	1	0.812		0.719	
	2	0.749		0.658	
	3	0.462		0.347	
	4	0.250		0.182	
	5	0.582		0.466	
	6	0.841		0.748	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.920	0.037	0.043	0.888
	2/3	0.918	0.036	0.046	0.882
	3/4	0.930	0.044	0.026	0.899
	4/5	0.927	0.047	0.026	0.901
	5/6	0.948	0.029	0.023	0.926

2.12.2.12 *Grade 12*

Table 2.12.2.12

Accuracy and Consistency of Classification Indices: Read (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.680	0.584		0.475
Conditional on Level	Level	Accuracy		Consistency	
	1	0.814		0.724	
	2	0.760		0.670	
	3	0.448		0.340	
	4	0.280		0.208	
	5	0.586		0.473	
	6	0.824		0.716	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.916	0.040	0.044	0.882
	2/3	0.919	0.035	0.046	0.883
	3/4	0.927	0.050	0.024	0.898
	4/5	0.927	0.045	0.028	0.902
	5/6	0.954	0.025	0.020	0.935

2.12.3 Writing

2.12.3.1 Grade 1

Table 2.12.3.1

Accuracy and Consistency of Classification Indices: Writ (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
	0.763	0.676		0.484	
Conditional on Level	Level	Accuracy		Consistency	
	1	0.759		0.643	
	2	0.864		0.802	
	3	0.608		0.526	
	4	-		-	
	5	N/A		N/A	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.920	0.048	0.032	0.882
	2/3	0.858	0.035	0.107	0.808
	3/4	0.984	0.016	0.000	0.985
	4/5	N/A	N/A	N/A	N/A
	5/6	N/A	N/A	N/A	N/A

2.12.3.2 Grade 2

Table 2.12.3.2

Accuracy and Consistency of Classification Indices: Writ (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.799	0.730		0.503
Conditional on Level	Level	Accuracy		Consistency	
	1	0.785		0.688	
	2	0.769		0.659	
	3	0.826		0.811	
	4	0.565		0.386	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.972	0.014	0.014	0.962
	2/3	0.928	0.029	0.044	0.902
	3/4	0.896	0.080	0.023	0.866
	4/5	0.998	0.002	0.000	1.000
	5/6	N/A	N/A	N/A	N/A

2.12.3.3 Grade 3

Table 2.12.3.3

Accuracy and Consistency of Classification Indices: Writ (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.807	0.732		0.522
Conditional on Level	Level	Accuracy		Consistency	
	1	0.836		0.727	
	2	0.685		0.550	
	3	0.875		0.826	
	4	0.693		0.597	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.984	0.006	0.010	0.977
	2/3	0.953	0.022	0.025	0.932
	3/4	0.875	0.051	0.074	0.827
	4/5	0.995	0.005	0.000	0.995
	5/6	N/A	N/A	N/A	N/A

2.12.3.4 Grade 4

Table 2.12.3.4

Accuracy and Consistency of Classification Indices: Writ (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.772	0.700		0.499
Conditional on Level	Level	Accuracy		Consistency	
	1	0.740		0.645	
	2	0.620		0.469	
	3	0.870		0.778	
	4	0.698		0.652	
	5	-		-	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.983	0.011	0.006	0.976
	2/3	0.961	0.018	0.021	0.948
	3/4	0.842	0.038	0.120	0.788
	4/5	0.981	0.019	0.000	0.982
	5/6	0.998	0.002	0.000	1.000

2.12.3.5 Grade 5

Table 2.12.3.5

Accuracy and Consistency of Classification Indices: Writ (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.788	0.717		0.540
Conditional on Level	Level	Accuracy		Consistency	
	1	0.806		0.713	
	2	0.601		0.454	
	3	0.872		0.790	
	4	0.731		0.686	
	5	-		-	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.983	0.009	0.008	0.976
	2/3	0.961	0.019	0.020	0.945
	3/4	0.868	0.037	0.095	0.818
	4/5	0.975	0.025	0.000	0.974
	5/6	0.998	0.002	0.000	1.000

2.12.3.6 Grade 6

Table 2.12.3.6

Accuracy and Consistency of Classification Indices: Writ (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.757	0.686		0.454
Conditional on Level	Level	Accuracy		Consistency	
	1	0.842		0.742	
	2	0.689		0.561	
	3	0.781		0.766	
	4	0.573		0.425	
	5	N/A		N/A	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.968	0.015	0.017	0.954
	2/3	0.936	0.024	0.040	0.910
	3/4	0.853	0.111	0.036	0.819
	4/5	N/A	N/A	N/A	N/A
	5/6	N/A	N/A	N/A	N/A

2.12.3.7 Grade 7

Table 2.12.3.7

Accuracy and Consistency of Classification Indices: Writ (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.763	0.679		0.478
Conditional on Level	Level	Accuracy		Consistency	
	1	0.798		0.679	
	2	0.732		0.613	
	3	0.794		0.750	
	4	0.638		0.493	
	5	N/A		N/A	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.963	0.019	0.018	0.946
	2/3	0.920	0.028	0.051	0.891
	3/4	0.879	0.073	0.048	0.840
	4/5	N/A	N/A	N/A	N/A
	5/6	N/A	N/A	N/A	N/A

2.12.3.8 Grade 8

Table 2.12.3.8

Accuracy and Consistency of Classification Indices: Writ (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.766	0.683		0.485
Conditional on Level	Level	Accuracy		Consistency	
	1	0.875		0.787	
	2	0.622		0.491	
	3	0.817		0.769	
	4	0.626		0.495	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.963	0.014	0.022	0.948
	2/3	0.933	0.030	0.037	0.905
	3/4	0.870	0.071	0.059	0.826
	4/5	0.999	0.001	0.000	0.999
	5/6	N/A	N/A	N/A	N/A

2.12.3.9 Grade 9

Table 2.12.3.9

Accuracy and Consistency of Classification Indices: Writ (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.756	0.666		0.512
Conditional on Level	Level	Accuracy		Consistency	
	1	0.791		0.665	
	2	0.681		0.552	
	3	0.788		0.713	
	4	0.738		0.672	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.966	0.017	0.017	0.949
	2/3	0.927	0.028	0.045	0.899
	3/4	0.891	0.050	0.059	0.847
	4/5	0.971	0.029	0.000	0.963
	5/6	N/A	N/A	N/A	N/A

2.12.3.10 *Grade 10*

Table 2.12.3.10

Accuracy and Consistency of Classification Indices: Writ (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.770	0.681		0.534
Conditional on Level	Level	Accuracy		Consistency	
	1	0.797		0.664	
	2	0.678		0.555	
	3	0.771		0.702	
	4	0.806		0.742	
	5	0.558		0.263	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.965	0.015	0.020	0.949
	2/3	0.928	0.025	0.046	0.902
	3/4	0.898	0.058	0.044	0.858
	4/5	0.978	0.020	0.002	0.967
	5/6	N/A	N/A	N/A	N/A

2.12.3.11 *Grade 11*

Table 2.12.3.11

Accuracy and Consistency of Classification Indices: Writ (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.768	0.680		0.524
Conditional on Level	Level	Accuracy		Consistency	
	1	0.783		0.647	
	2	0.673		0.545	
	3	0.805		0.743	
	4	0.753		0.678	
	5	0.621		0.273	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.964	0.017	0.019	0.946
	2/3	0.922	0.030	0.048	0.892
	3/4	0.902	0.047	0.050	0.862
	4/5	0.980	0.020	0.000	0.973
	5/6	N/A	N/A	N/A	N/A

2.12.3.12 *Grade 12*

Table 2.12.3.12

Accuracy and Consistency of Classification Indices: Writ (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.766	0.678		0.529
Conditional on Level	Level	Accuracy		Consistency	
	1	0.844		0.739	
	2	0.613		0.487	
	3	0.806		0.743	
	4	0.745		0.656	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.954	0.018	0.027	0.935
	2/3	0.921	0.034	0.045	0.889
	3/4	0.903	0.049	0.048	0.864
	4/5	0.986	0.014	0.000	0.982
	5/6	N/A	N/A	N/A	N/A

2.12.4 Speaking

2.12.4.1 Grade 1

Table 2.12.4.1

Accuracy and Consistency of Classification Indices: Spek (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency	Kappa (k)			
	0.715	0.604	0.401			
Conditional on Level	Level	Accuracy	Consistency			
	1	0.856	0.755			
	2	0.710	0.548			
	3	0.686	0.652			
	4	-	-			
	5	-	-			
	6	N/A	N/A			
Indices at Cut Points		Accuracy				
		Cut Point	Accuracy	False Positives		False Negatives
		1/2	0.952	0.020	0.028	0.930
		2/3	0.856	0.048	0.096	0.789
		3/4	0.908	0.092	0.000	0.866
		4/5	0.998	0.002	0.000	0.998
		5/6	N/A	N/A	N/A	N/A

2.12.4.2 Grade 2

Table 2.12.4.2

Accuracy and Consistency of Classification Indices: Spek (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.644	0.547		0.318
Conditional on Level	Level	Accuracy		Consistency	
	1	0.846		0.732	
	2	0.712		0.533	
	3	0.562		0.526	
	4	-		-	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.946	0.023	0.032	0.920
	2/3	0.765	0.048	0.187	0.688
	3/4	0.931	0.069	0.000	0.904
	4/5	0.999	0.001	0.000	0.999
	5/6	N/A	N/A	N/A	N/A

2.12.4.3 Grade 3

Table 2.12.4.3

Accuracy and Consistency of Classification Indices: Spek (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.620	0.524		0.271
Conditional on Level	Level	Accuracy		Consistency	
	1	0.838		0.712	
	2	0.693		0.492	
	3	0.554		0.526	
	4	-		-	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.953	0.021	0.026	0.927
	2/3	0.729	0.042	0.229	0.652
	3/4	0.935	0.065	0.000	0.902
	4/5	0.998	0.002	0.000	0.998
	5/6	N/A	N/A	N/A	N/A

2.12.4.4 *Grade 4*

Table 2.12.4.4

Accuracy and Consistency of Classification Indices: Spek (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.611	0.534		0.301
Conditional on Level	Level	Accuracy		Consistency	
	1	0.798		0.667	
	2	0.694		0.529	
	3	0.581		0.544	
	4	0.570		0.479	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.969	0.014	0.016	0.954
	2/3	0.908	0.030	0.062	0.867
	3/4	0.735	0.192	0.072	0.697
	4/5	0.997	0.003	0.000	0.996
	5/6	N/A	N/A	N/A	N/A

2.12.4.5 *Grade 5*

Table 2.12.4.5

Accuracy and Consistency of Classification Indices: Spek (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.630	0.528		0.311
Conditional on Level	Level	Accuracy		Consistency	
	1	0.827		0.714	
	2	0.657		0.477	
	3	0.590		0.567	
	4	-		-	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.953	0.022	0.026	0.931
	2/3	0.871	0.035	0.094	0.816
	3/4	0.805	0.195	0.000	0.748
	4/5	0.996	0.004	0.000	0.995
	5/6	N/A	N/A	N/A	N/A

2.12.4.6 Grade 6

Table 2.12.4.6

Accuracy and Consistency of Classification Indices: Spek (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.648	0.537		0.301
Conditional on Level	Level	Accuracy		Consistency	
	1	0.796		0.676	
	2	0.687		0.487	
	3	0.616		0.591	
	4	-		-	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.954	0.024	0.021	0.932
	2/3	0.853	0.033	0.114	0.795
	3/4	0.838	0.162	0.000	0.775
	4/5	0.996	0.004	0.000	0.996
	5/6	N/A	N/A	N/A	N/A

2.12.4.7 Grade 7

Table 2.12.4.7

Accuracy and Consistency of Classification Indices: Spek (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.642	0.534		0.323
Conditional on Level	Level	Accuracy		Consistency	
	1	0.820		0.713	
	2	0.676		0.489	
	3	0.586		0.554	
	4	-		-	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.938	0.031	0.031	0.909
	2/3	0.808	0.032	0.160	0.747
	3/4	0.891	0.109	0.000	0.831
	4/5	0.998	0.002	0.000	0.998
	5/6	N/A	N/A	N/A	N/A

2.12.4.8 Grade 8

Table 2.12.4.8

Accuracy and Consistency of Classification Indices: Spek (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.670	0.547		0.322
Conditional on Level	Level	Accuracy		Consistency	
	1	0.827		0.715	
	2	0.608		0.413	
	3	0.644		0.615	
	4	-		-	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.938	0.030	0.031	0.908
	2/3	0.812	0.038	0.150	0.743
	3/4	0.912	0.088	0.000	0.845
	4/5	0.999	0.001	0.000	0.999
	5/6	N/A	N/A	N/A	N/A

2.12.4.9 Grade 9

Table 2.12.4.9

Accuracy and Consistency of Classification Indices: Spek (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.685	0.600		0.410
Conditional on Level	Level	Accuracy		Consistency	
	1	0.881		0.795	
	2	0.602		0.475	
	3	0.587		0.528	
	4	-		-	
	5	N/A		N/A	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.904	0.039	0.057	0.862
	2/3	0.796	0.055	0.149	0.734
	3/4	0.977	0.023	0.000	0.969
	4/5	N/A	N/A	N/A	N/A
	5/6	N/A	N/A	N/A	N/A

2.12.4.10 *Grade 10*

Table 2.12.4.10

Accuracy and Consistency of Classification Indices: Spek (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.674	0.588		0.395
Conditional on Level	Level	Accuracy		Consistency	
	1	0.839		0.743	
	2	0.676		0.549	
	3	0.557		0.497	
	4	-		-	
	5	N/A		N/A	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.903	0.048	0.050	0.859
	2/3	0.784	0.049	0.167	0.727
	3/4	0.981	0.019	0.000	0.974
	4/5	N/A	N/A	N/A	N/A
	5/6	N/A	N/A	N/A	N/A

2.12.4.11 *Grade 11*

Table 2.12.4.11

Accuracy and Consistency of Classification Indices: Spek (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.692	0.603		0.41
Conditional on Level	Level	Accuracy		Consistency	
	1	0.863		0.768	
	2	0.618		0.484	
	3	0.625		0.568	
	4	-		-	
	5	N/A		N/A	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.909	0.040	0.051	0.867
	2/3	0.785	0.056	0.159	0.722
	3/4	0.991	0.009	0.000	0.985
	4/5	N/A	N/A	N/A	N/A
	5/6	N/A	N/A	N/A	N/A

2.12.4.12 *Grade 12*

Table 2.12.4.12

Accuracy and Consistency of Classification Indices: Spek (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.708	0.621		0.433
Conditional on Level	Level	Accuracy		Consistency	
	1	0.909		0.828	
	2	0.520		0.399	
	3	0.653		0.595	
	4	-		-	
	5	N/A		N/A	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.907	0.031	0.062	0.866
	2/3	0.801	0.063	0.136	0.733
	3/4	0.990	0.010	0.000	0.987
	4/5	N/A	N/A	N/A	N/A
	5/6	N/A	N/A	N/A	N/A

3 Analyses of Composite Scores

In this section of the report, analyses of the four composites—Oral Language, Literacy, Comprehension, and Overall Composite—are presented. Tables and figures pertaining to the composite scores are presented by grade-level cluster.

3.1 Scale Score Distribution for Composites

Figures and tables in this section provide scale score distributions for each of the composites, for each grade-level cluster.

For each cluster, the figure shows the distribution of the scale scores for the composite. The scale score distribution is presented as an ungrouped bar graph where observed scale score between the lowest possible to the highest possible scale score is plotted on the horizontal axis and the frequency of occurrence of each observed scale score is plotted on the vertical axis. Since ACCESS has a vertical scale that spans a very wide range, an artifact of showing the frequencies of every observed scale score on the bar graph is that vertical lines in these graphs will appear darker if the observed scale scores are consecutive and lighter if the observed scale scores are further apart.

Each table shows, by grade and by total for the grade-level cluster:

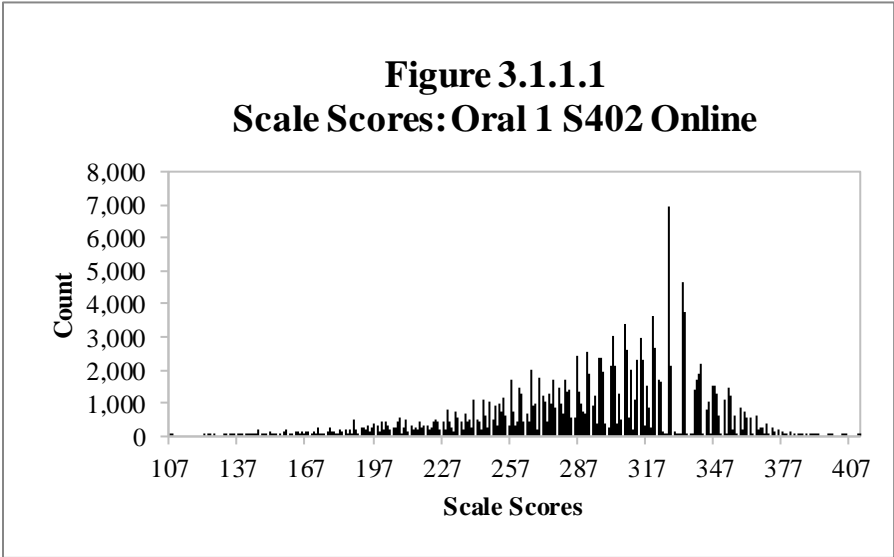
- The number of students in the analyses (count)
- The minimum observed scale score
- The maximum observed scale score
- The mean (average) scale score
- The standard deviation (std. dev.) of the scale scores

3.1.1 Oral

3.1.1.1 Grade 1

Table 3.1.1.1
Scale Score Descriptive Statistics: Oral 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	165,934	107	411	291.49	45.67
Total	165,934	107	411	291.49	45.67

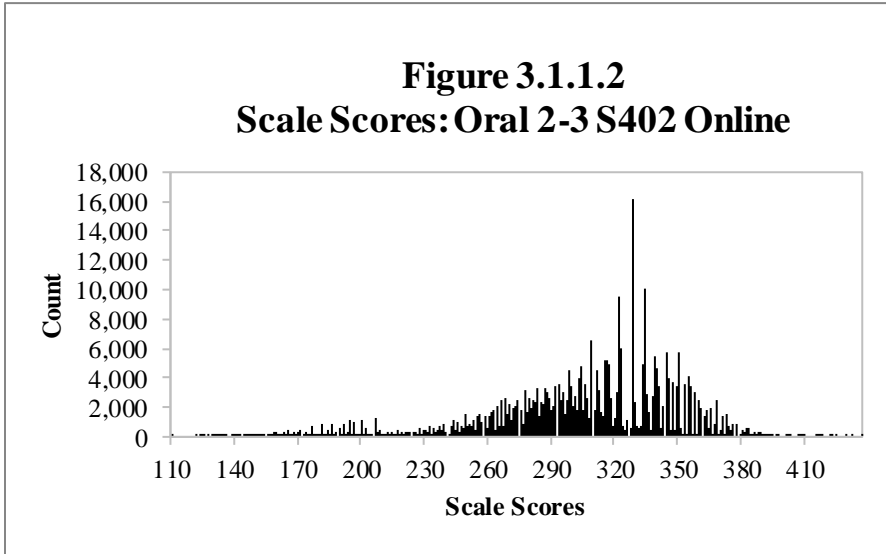


3.1.1.2 Grades 2–3

Table 3.1.1.2

Scale Score Descriptive Statistics: Oral 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	167,167	110	432	295.82	43.63
3	174,035	124	437	312.26	45.08
Total	341,202	110	437	304.20	45.13

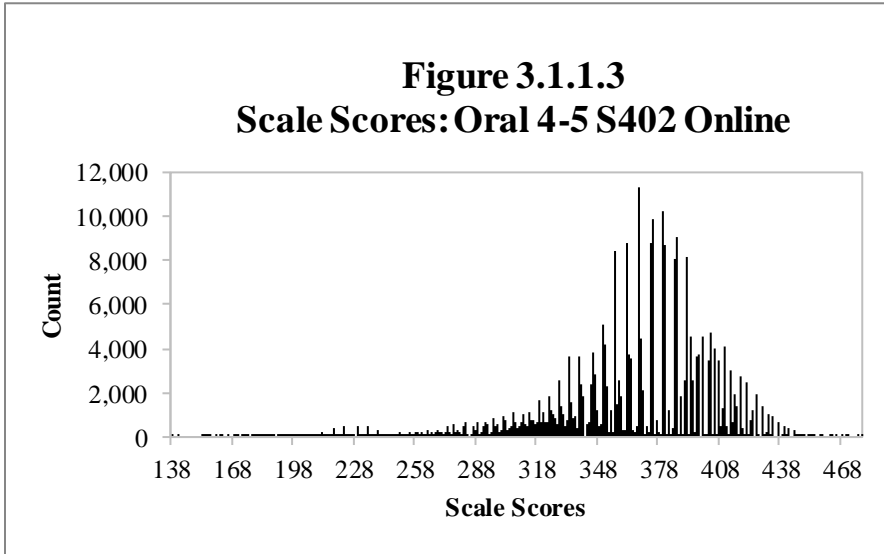


3.1.1.3 Grades 4–5

Table 3.1.1.3

Scale Score Descriptive Statistics: Oral 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	166,703	138	478	363.03	41.24
5	109,706	141	478	363.96	45.55
Total	276,409	138	478	363.40	43.00



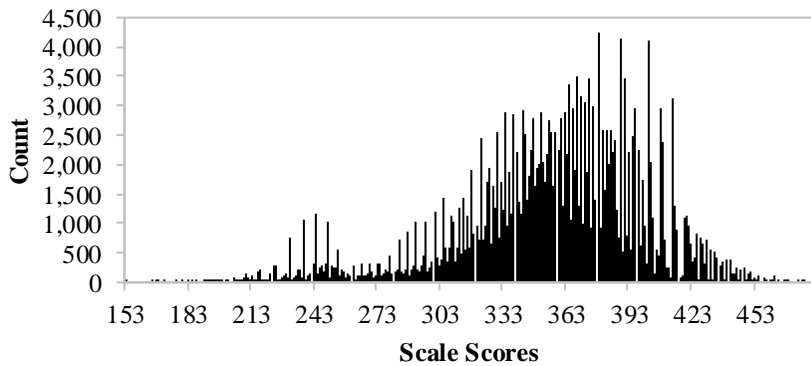
3.1.1.4 Grades 6–8

Table 3.1.1.4

Scale Score Descriptive Statistics: Oral 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	80,286	165	482	352.02	40.52
7	77,188	168	482	356.64	44.50
8	75,650	153	482	360.50	48.48
Total	233,124	153	482	356.30	44.67

Figure 3.1.1.4
Scale Scores: Oral 6-8 S402 Online



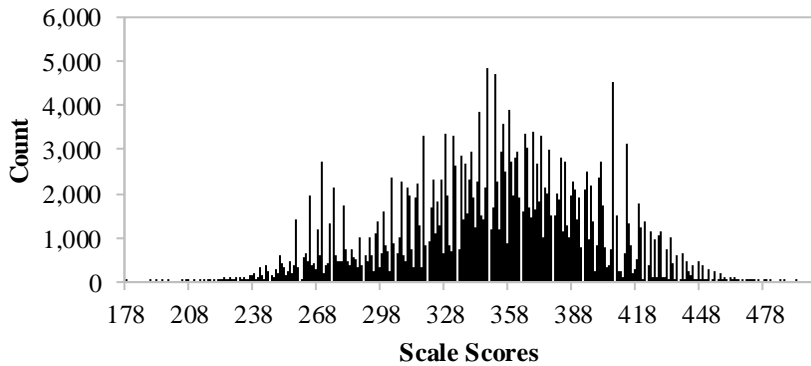
3.1.1.5 Grades 9–12

Table 3.1.1.5

Scale Score Descriptive Statistics: Oral 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	87,923	189	493	345.38	44.71
10	80,457	178	493	351.33	46.18
11	58,010	195	502	354.21	45.40
12	40,725	198	493	353.97	45.04
Total	267,115	178	502	350.40	45.51

Figure 3.1.1.5
Scale Scores: Oral 9-12 S402 Online



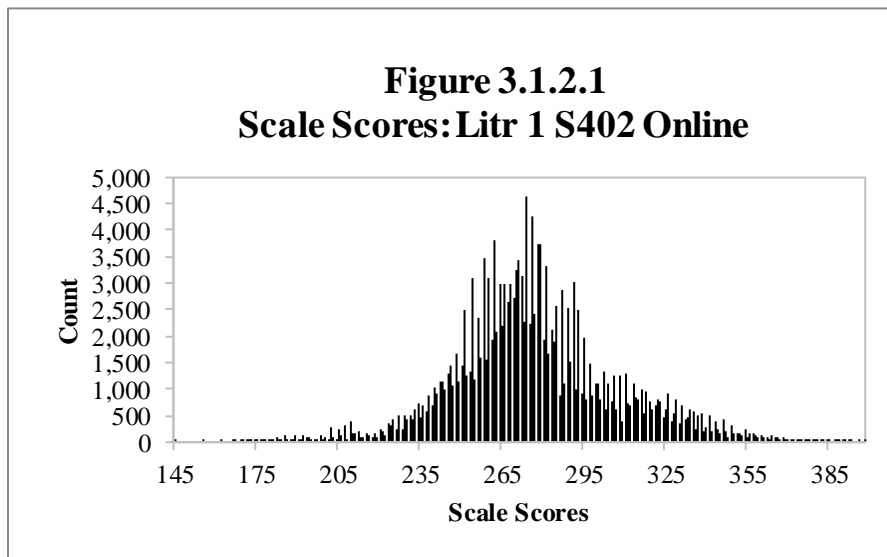
3.1.2 Literacy

3.1.2.1 Grade 1

Table 3.1.2.1

Scale Score Descriptive Statistics: Litr 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	175,741	145	398	276.86	29.66
Total	175,741	145	398	276.86	29.66

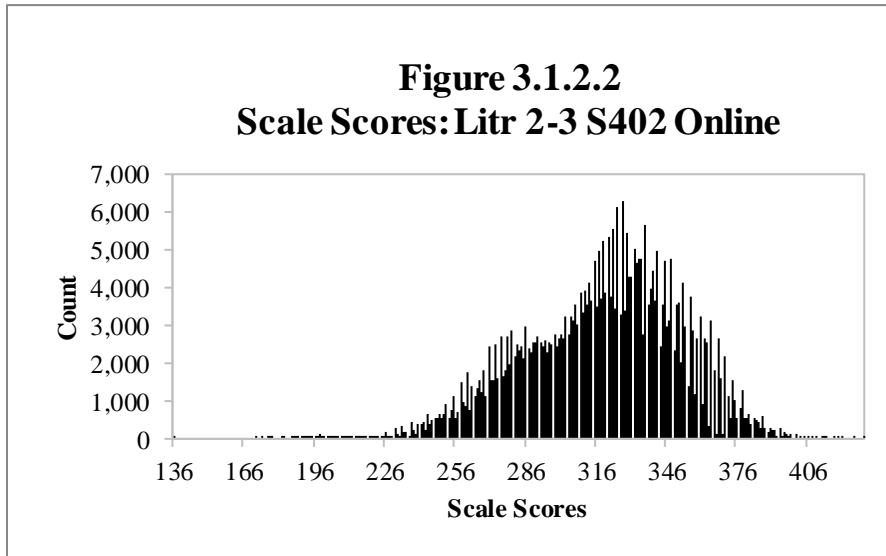


3.1.2.2 Grades 2–3

Table 3.1.2.2

Scale Score Descriptive Statistics: Litr 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	177,928	136	417	309.24	30.82
3	183,557	176	430	327.11	33.00
Total	361,485	136	430	318.31	33.17

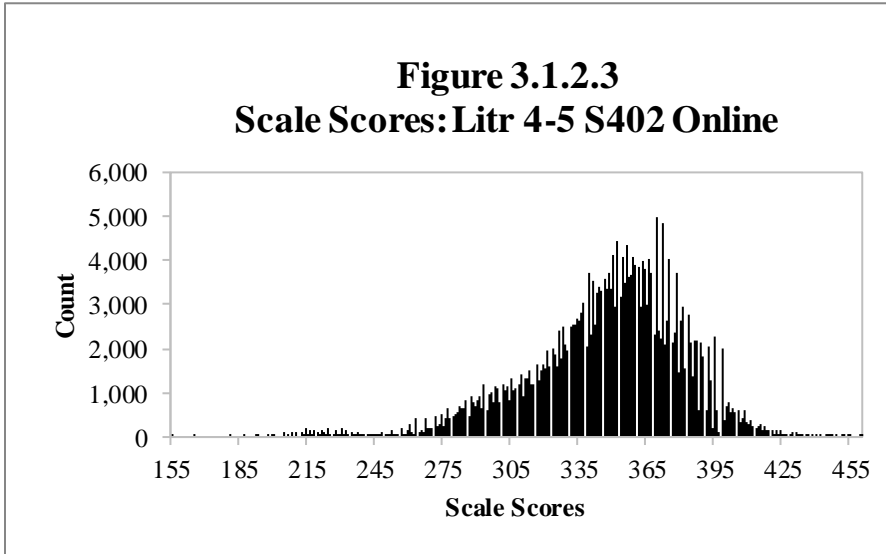


3.1.2.3 Grades 4–5

Table 3.1.2.3

Scale Score Descriptive Statistics: Litr 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	163,340	155	459	345.83	32.92
5	108,414	165	460	348.51	35.47
Total	271,754	155	460	346.90	33.99



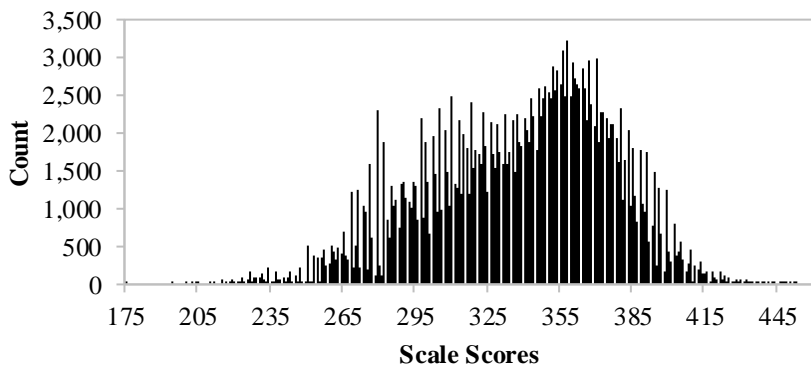
3.1.2.4 Grades 6–8

Table 3.1.2.4

Scale Score Descriptive Statistics: Litr 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	81,680	175	461	332.16	35.30
7	78,291	200	452	338.11	37.50
8	76,398	205	460	345.32	39.07
Total	236,369	175	461	338.38	37.67

Figure 3.1.2.4
Scale Scores: Litr 6-8 S402 Online

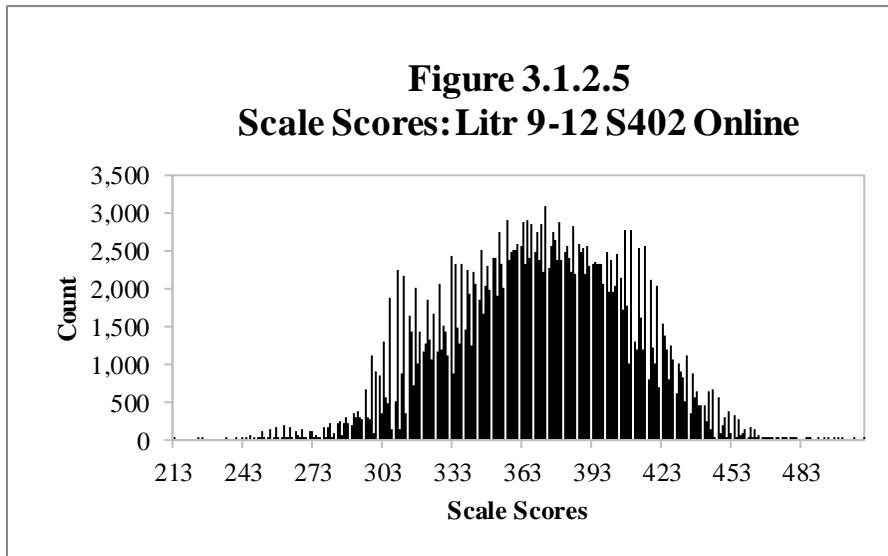


3.1.2.5 Grades 9–12

Table 3.1.2.5

Scale Score Descriptive Statistics: Litr 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	88,074	225	490	362.17	38.87
10	80,252	213	510	370.30	38.06
11	57,978	223	501	374.98	36.56
12	40,507	258	510	375.96	35.53
Total	266,811	213	510	369.49	38.04



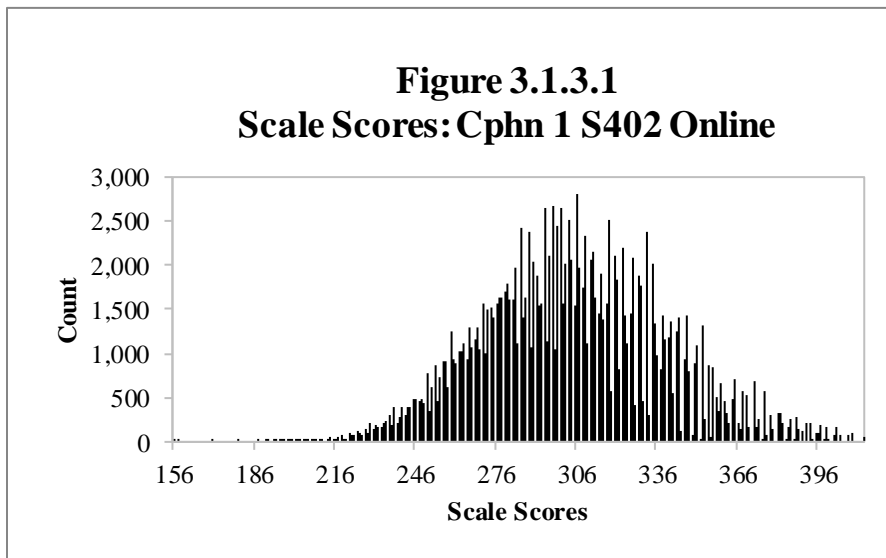
3.1.3 Comprehension

3.1.3.1 Grade 1

Table 3.1.3.1

Scale Score Descriptive Statistics: Cphn 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	167,530	156	413	304.16	34.07
Total	167,530	156	413	304.16	34.07

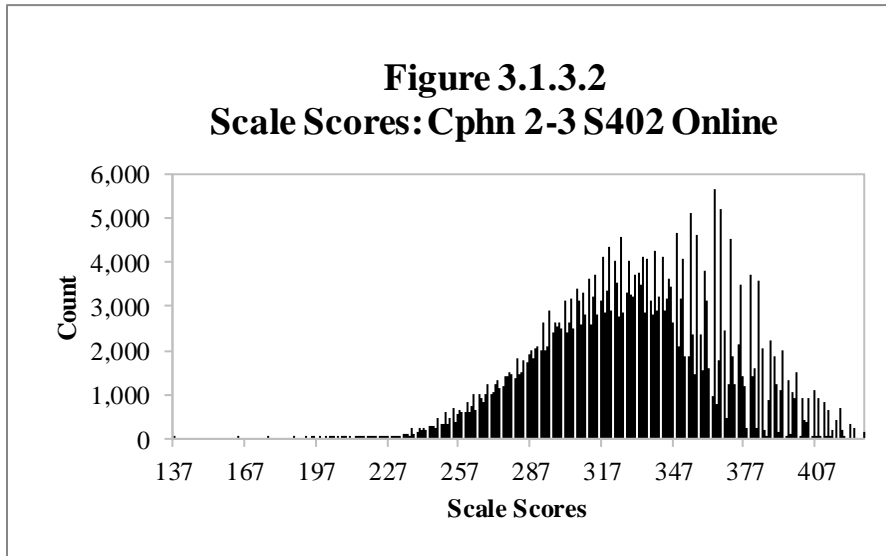


3.1.3.2 Grades 2–3

Table 3.1.3.2

Scale Score Descriptive Statistics: Cphn 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	169,156	137	427	321.18	33.84
3	175,468	176	427	339.03	37.34
Total	344,624	137	427	330.27	36.76

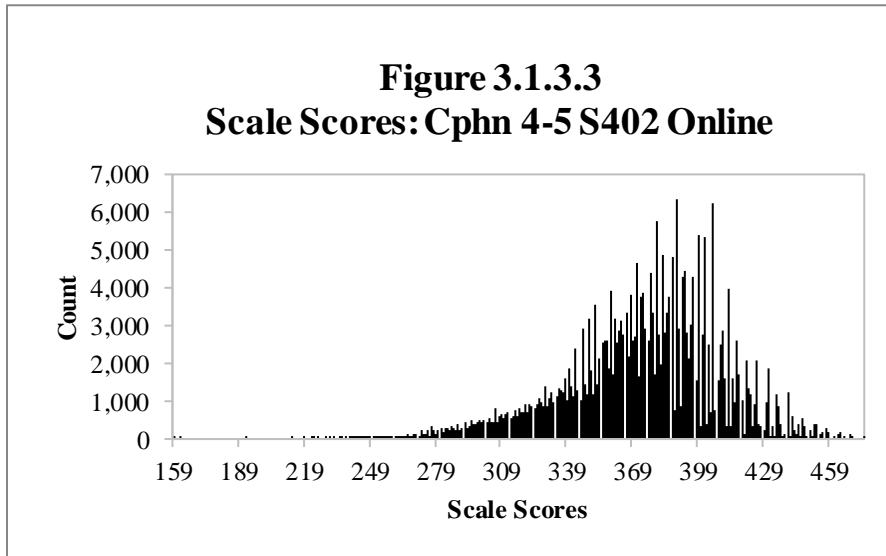


3.1.3.3 Grades 4–5

Table 3.1.3.3

Scale Score Descriptive Statistics: Cphn 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	164,217	162	475	373.26	33.73
5	108,139	159	475	374.57	36.95
Total	272,356	159	475	373.78	35.05

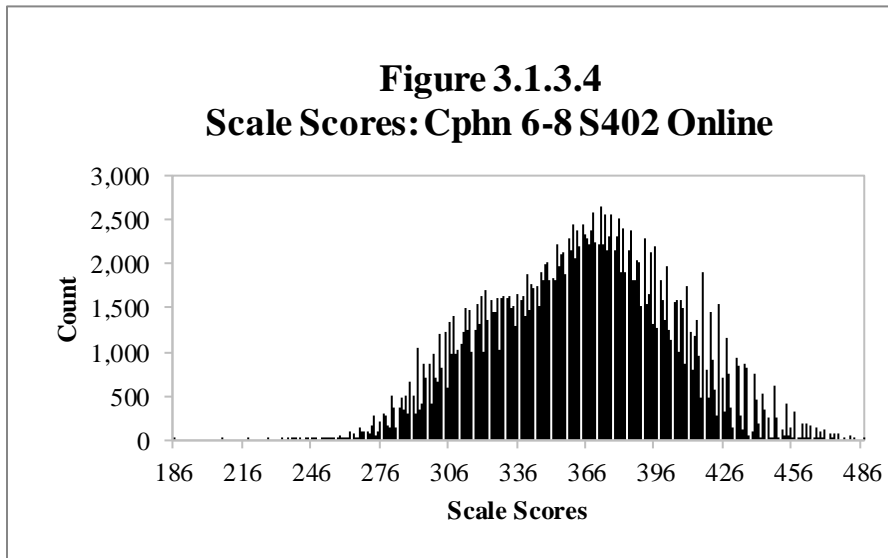


3.1.3.4 Grades 6–8

Table 3.1.3.4

Scale Score Descriptive Statistics: Cphn 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	79,762	186	487	355.95	35.60
7	76,553	233	487	363.47	39.19
8	74,707	207	487	371.03	41.97
Total	231,022	186	487	363.32	39.42



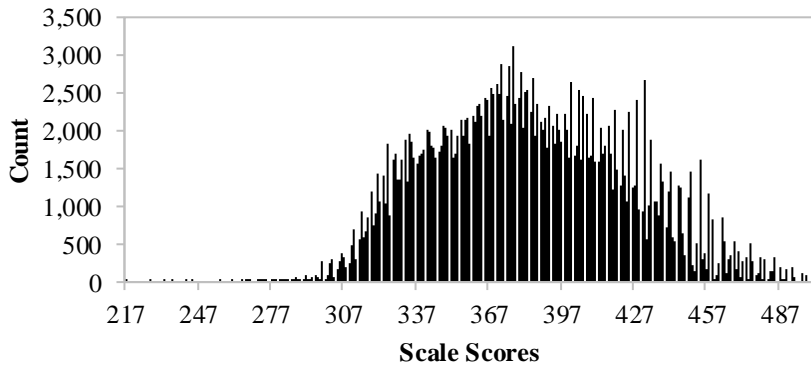
3.1.3.5 Grades 9–12

Table 3.1.3.5

Scale Score Descriptive Statistics: Cphn 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	85,615	236	502	377.21	38.95
10	78,259	217	502	384.39	40.77
11	56,589	233	502	387.62	39.59
12	39,424	261	502	388.17	38.78
Total	259,887	217	502	383.30	39.87

Figure 3.1.3.5
Scale Scores: Cphn 9-12 S402 Online

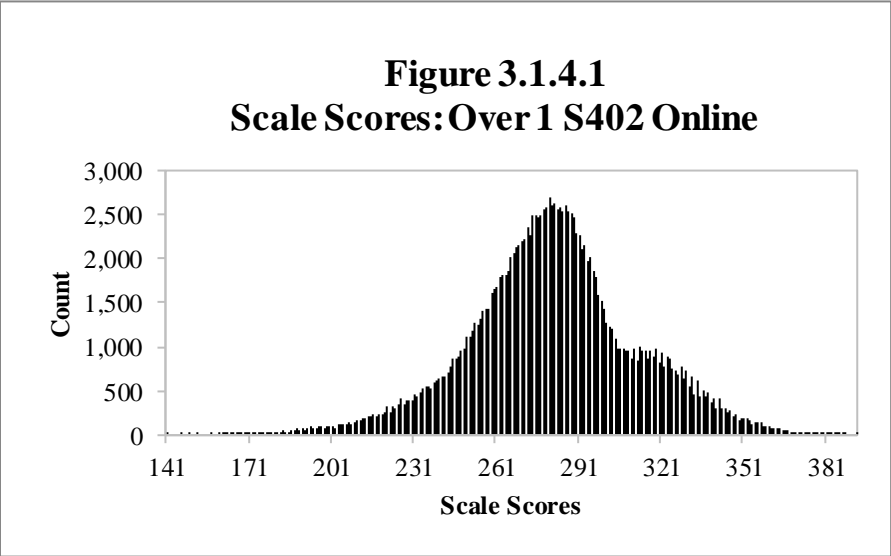


3.1.4 Overall

3.1.4.1 Grade 1

Table 3.1.4.1
Scale Score Descriptive Statistics: Over 1 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
1	161,137	141	392	280.99	30.57
Total	161,137	141	392	280.99	30.57

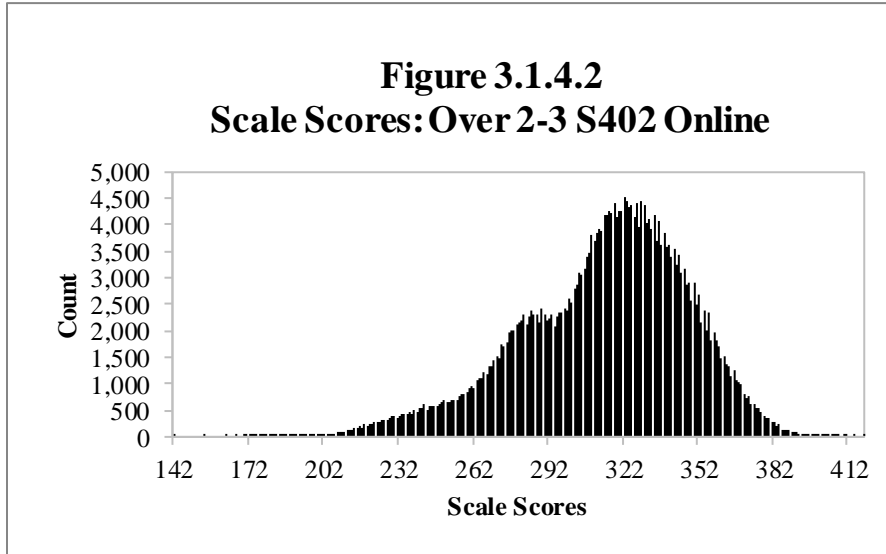


3.1.4.2 Grades 2–3

Table 3.1.4.2

Scale Score Descriptive Statistics: Over 2-3 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
2	160,695	142	407	304.81	31.86
3	167,198	163	418	322.26	33.98
Total	327,893	142	418	313.71	34.09

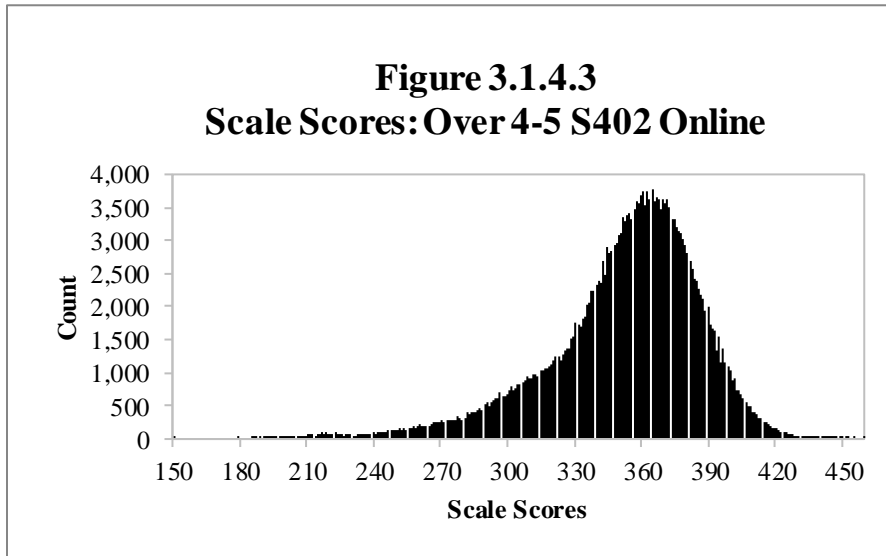


3.1.4.3 Grades 4–5

Table 3.1.4.3

Scale Score Descriptive Statistics: Over 4-5 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
4	150,177	150	452	350.76	33.24
5	99,761	179	459	352.83	36.31
Total	249,938	150	459	351.58	34.51

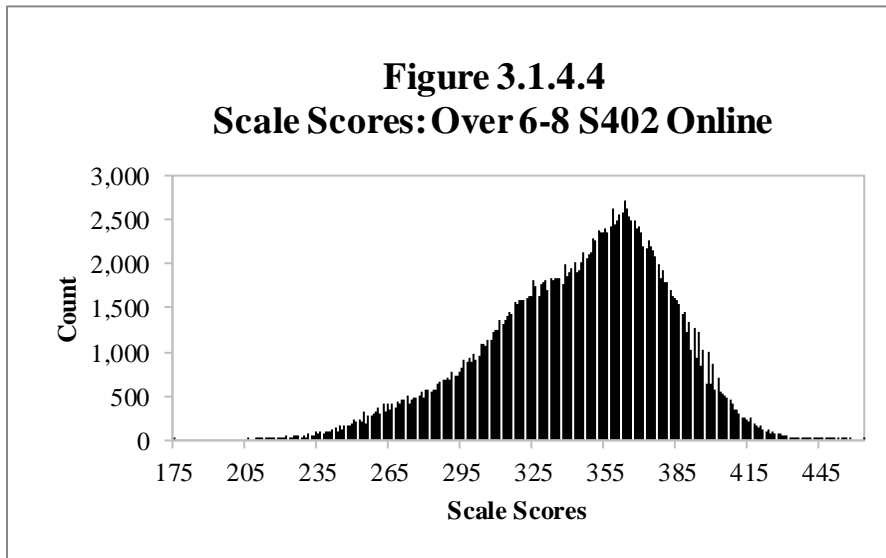


3.1.4.4 Grades 6–8

Table 3.1.4.4

Scale Score Descriptive Statistics: Over 6-8 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
6	73,410	175	454	337.93	34.36
7	70,787	212	455	343.42	37.40
8	69,451	210	463	349.55	39.80
Total	213,648	175	463	343.53	37.51

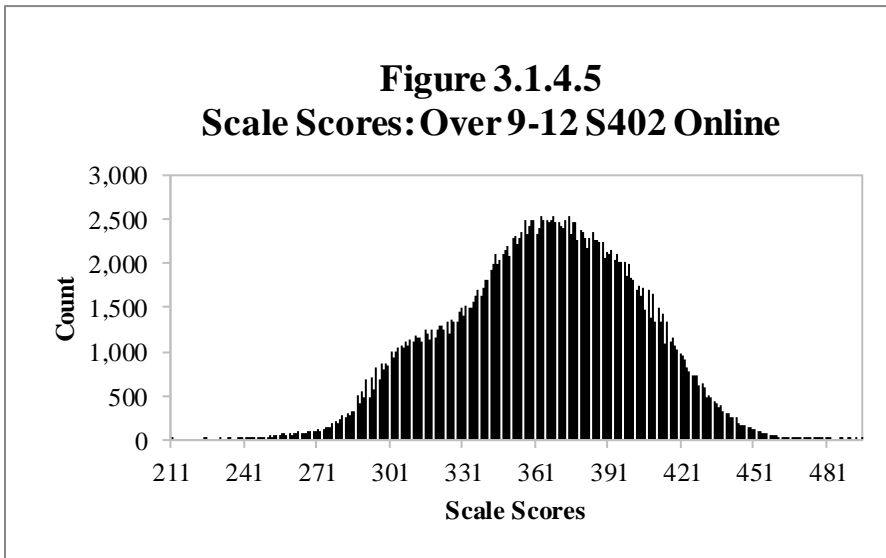


3.1.4.5 Grades 9–12

Table 3.1.4.5

Scale Score Descriptive Statistics: Over 9-12 S402 Online

Grade	No. of Students	Min.	Max.	Mean	Std. Dev.
9	80,406	231	480	356.95	38.53
10	73,439	211	490	364.32	38.43
11	52,807	224	493	368.46	37.01
12	37,110	253	495	369.04	35.88
Total	243,762	211	495	363.50	38.10



3.2 Proficiency Level Distribution for Composites

Figures and tables in this section provide information on the proficiency level distribution for each of the composites for each grade-level cluster.

In each figure, the horizontal axis shows the six WIDA proficiency levels. The vertical axis shows the percentage of students. Each bar shows the percentage of students who were placed into each proficiency level in the domain being tested on this test form.

The tables in this section present, by grade and by total for the grade-level cluster:

- The WIDA proficiency level designation (1–6)
- The number of students (count) whose performance on the test form placed them into that proficiency level in the domain being tested
- The percentage of students, out of the total number of students taking the form, who were placed into that proficiency level in the domain being tested.

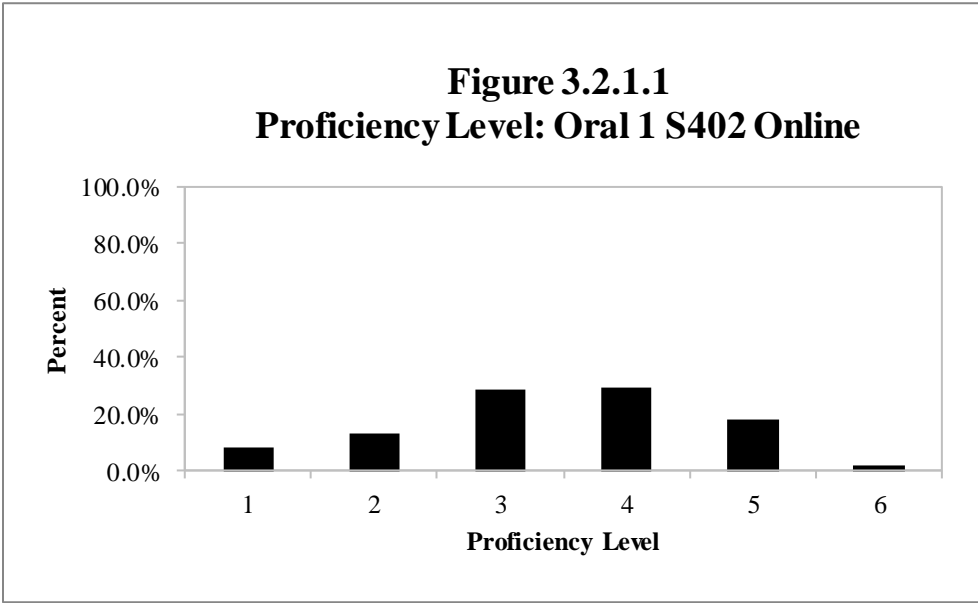
3.2.1 Oral

3.2.1.1 Grade 1

Table 3.2.1.1

Proficiency Level Distribution: Oral 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	14,372	8.66%	14,372	8.66%
2	21,915	13.21%	21,915	13.21%
3	47,285	28.50%	47,285	28.50%
4	49,174	29.63%	49,174	29.63%
5	30,207	18.20%	30,207	18.20%
6	2,981	1.80%	2,981	1.80%
Total	165,934	100.00%	165,934	100.00%

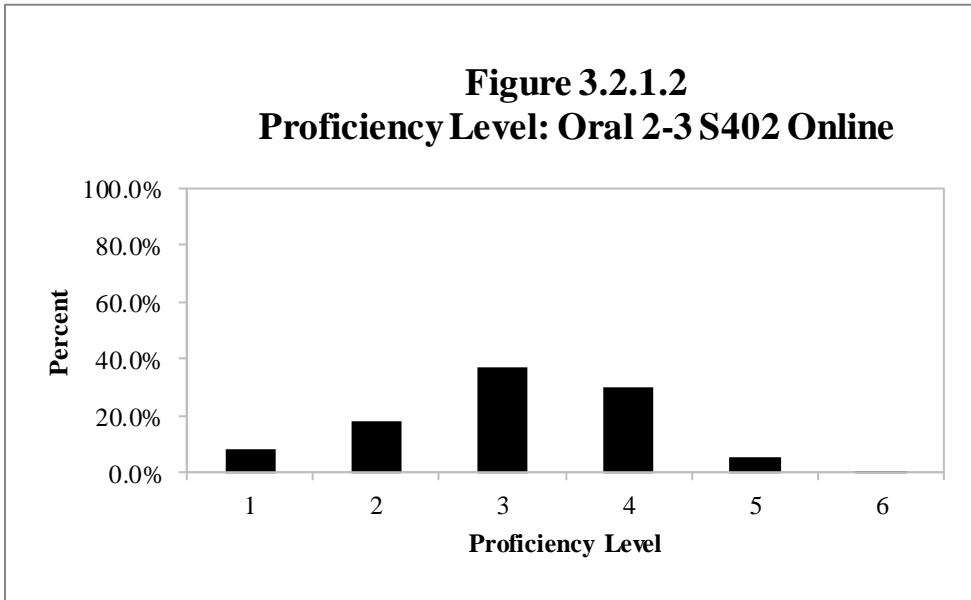


3.2.1.2 Grades 2–3

Table 3.2.1.2

Proficiency Level Distribution: Oral 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	14,005	8.38%	14,112	8.11%	28,117	8.24%
2	33,526	20.06%	29,327	16.85%	62,853	18.42%
3	63,721	38.12%	62,781	36.07%	126,502	37.08%
4	45,581	27.27%	57,770	33.19%	103,351	30.29%
5	9,949	5.95%	9,799	5.63%	19,748	5.79%
6	385	0.23%	246	0.14%	631	0.18%
Total	167,167	100.00%	174,035	100.00%	341,202	100.00%

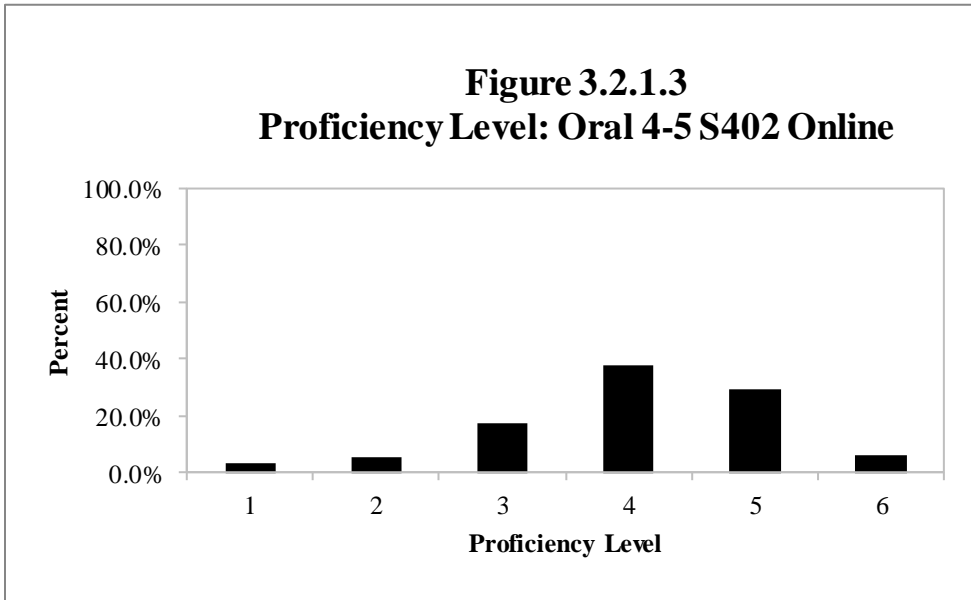


3.2.1.3 Grades 4–5

Table 3.2.1.3

Proficiency Level Distribution: Oral 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	4,651	2.79%	5,460	4.98%	10,111	3.66%
2	8,480	5.09%	7,099	6.47%	15,579	5.64%
3	26,867	16.12%	21,070	19.21%	47,937	17.34%
4	59,983	35.98%	43,567	39.71%	103,550	37.46%
5	54,250	32.54%	27,439	25.01%	81,689	29.55%
6	12,472	7.48%	5,071	4.62%	17,543	6.35%
Total	166,703	100.00%	109,706	100.00%	276,409	100.00%

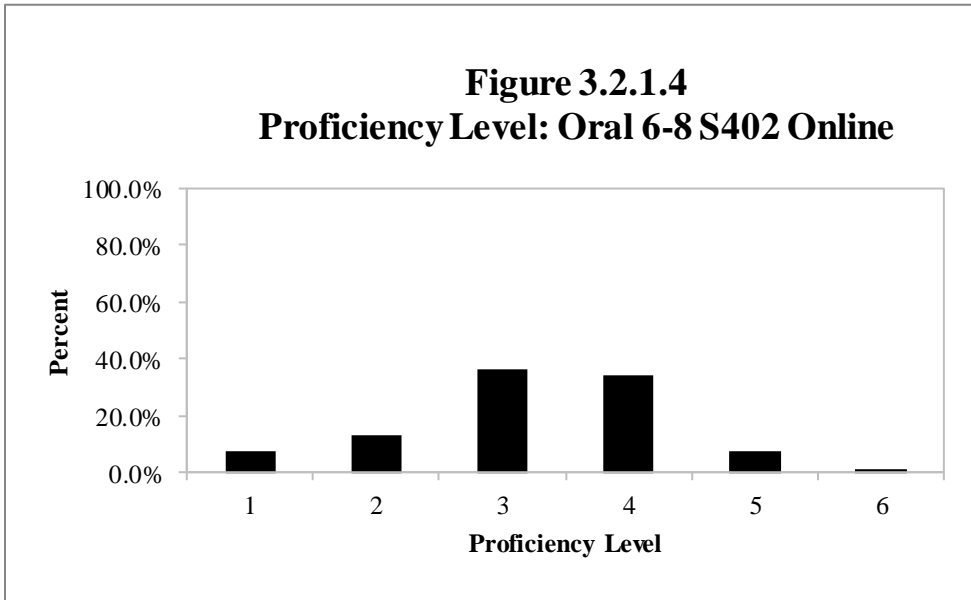


3.2.1.4 Grades 6–8

Table 3.2.1.4

Proficiency Level Distribution: Oral 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	4,565	5.69%	5,954	7.71%	7,493	9.90%	18,012	7.73%
2	9,273	11.55%	10,860	14.07%	10,996	14.54%	31,129	13.35%
3	30,836	38.41%	27,687	35.87%	25,730	34.01%	84,253	36.14%
4	28,690	35.73%	26,117	33.84%	24,960	32.99%	79,767	34.22%
5	6,268	7.81%	5,699	7.38%	5,664	7.49%	17,631	7.56%
6	654	0.81%	871	1.13%	807	1.07%	2,332	1.00%
Total	80,286	100.00%	77,188	100.00%	75,650	100.00%	233,124	100.00%

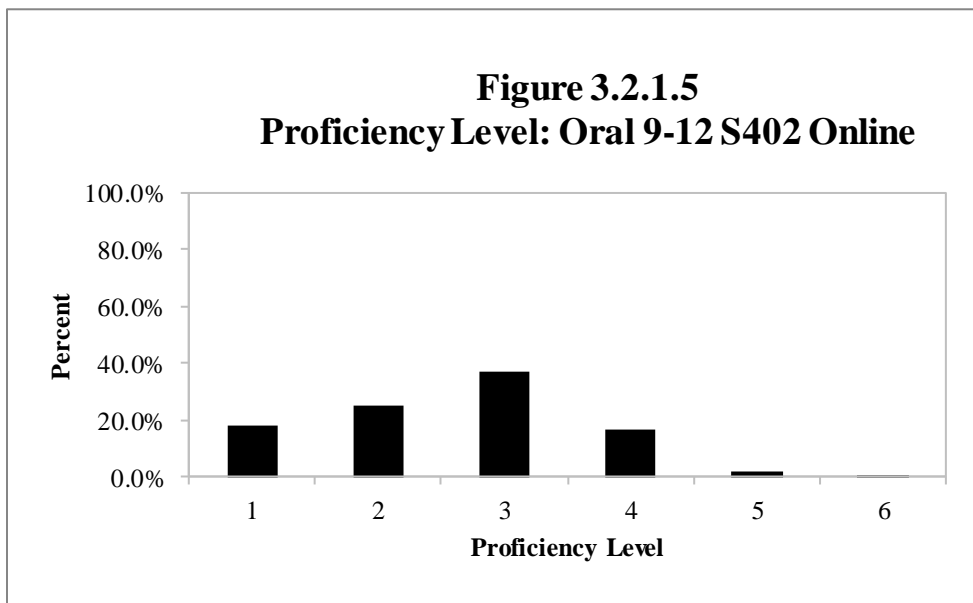


3.2.1.5 Grades 9–12

Table 3.2.1.5

Proficiency Level Distribution: Oral 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	14,777	16.81%	14,580	18.12%	11,073	19.09%	8,835	21.69%	49,265	18.44%
2	23,298	26.50%	19,367	24.07%	14,146	24.39%	10,138	24.89%	66,949	25.06%
3	31,755	36.12%	29,788	37.02%	22,520	38.82%	15,945	39.15%	100,008	37.44%
4	15,834	18.01%	14,278	17.75%	8,923	15.38%	5,080	12.47%	44,115	16.52%
5	2,013	2.29%	2,161	2.69%	1,218	2.10%	656	1.61%	6,048	2.26%
6	246	0.28%	283	0.35%	130	0.22%	71	0.17%	730	0.27%
Total	87,923	100.00%	80,457	100.00%	58,010	100.00%	40,725	100.00%	267,115	100.00%



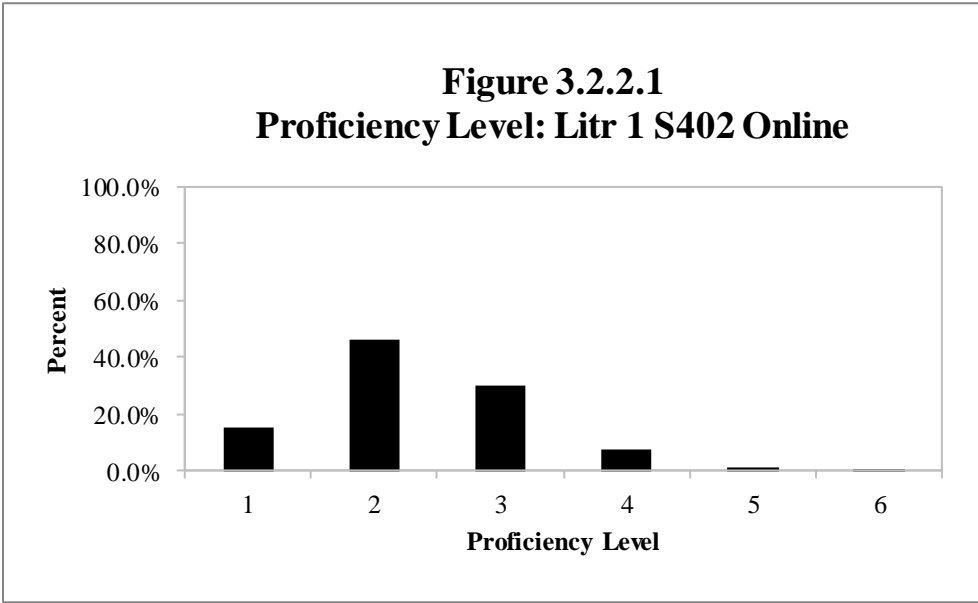
3.2.2 Literacy

3.2.2.1 Grade 1

Table 3.2.2.1

Proficiency Level Distribution: Litr 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	26,650	15.16%	26,650	15.16%
2	80,699	45.92%	80,699	45.92%
3	52,594	29.93%	52,594	29.93%
4	12,994	7.39%	12,994	7.39%
5	2,462	1.40%	2,462	1.40%
6	342	0.19%	342	0.19%
Total	175,741	100.00%	175,741	100.00%

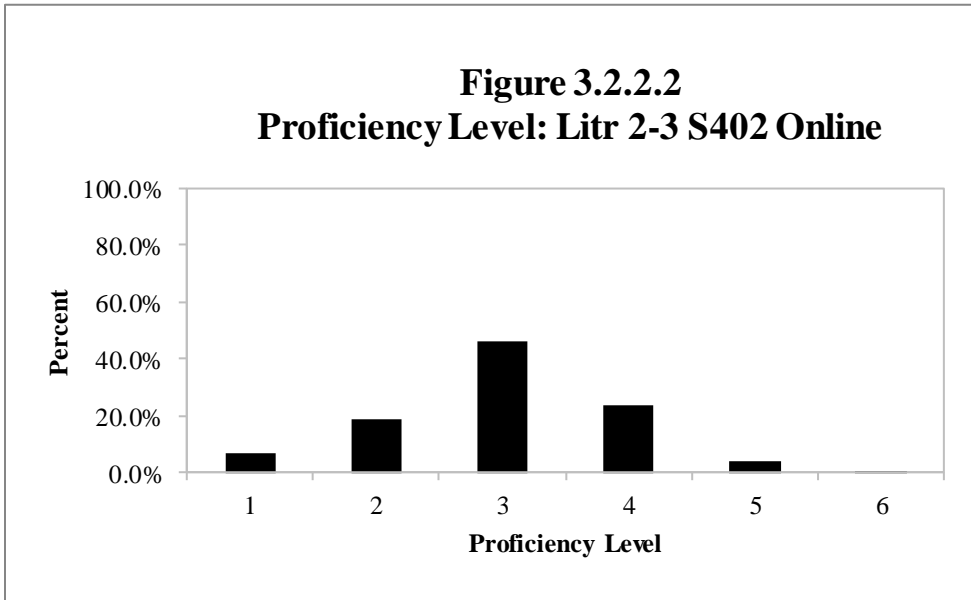


3.2.2.2 Grades 2–3

Table 3.2.2.2

Proficiency Level Distribution: Litr 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	12,959	7.28%	12,068	6.57%	25,027	6.92%
2	39,318	22.10%	27,636	15.06%	66,954	18.52%
3	86,399	48.56%	81,236	44.26%	167,635	46.37%
4	34,441	19.36%	51,679	28.15%	86,120	23.82%
5	4,266	2.40%	9,853	5.37%	14,119	3.91%
6	545	0.31%	1,085	0.59%	1,630	0.45%
Total	177,928	100.00%	183,557	100.00%	361,485	100.00%



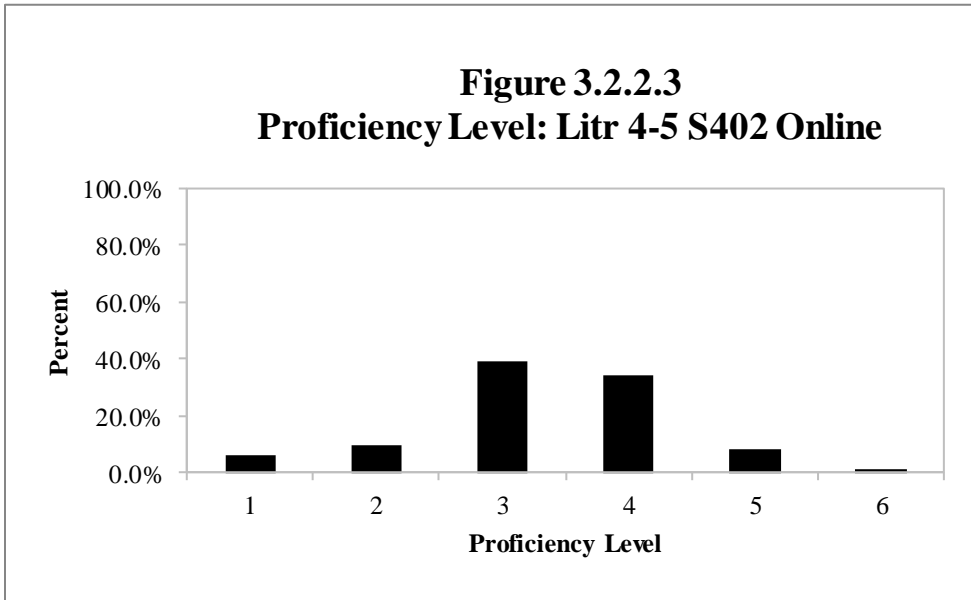
3.2.2.3 Grades 4–5

Table 3.2.2.3

Proficiency Level Distribution: Litr 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	8,306	5.09%	8,053	7.43%	16,359	6.02%
2	14,339	8.78%	12,086	11.15%	26,425	9.72%
3	64,893	39.73%	42,490	39.19%	107,383	39.51%
4	58,590	35.87%	35,568	32.81%	94,158	34.65%
5	14,439	8.84%	8,638	7.97%	23,077	8.49%
6	2,773	1.70%	1,579	1.46%	4,352	1.60%
Total	163,340	100.00%	108,414	100.00%	271,754	100.00%

Figure 3.2.2.3
Proficiency Level: Litr 4-5 S402 Online

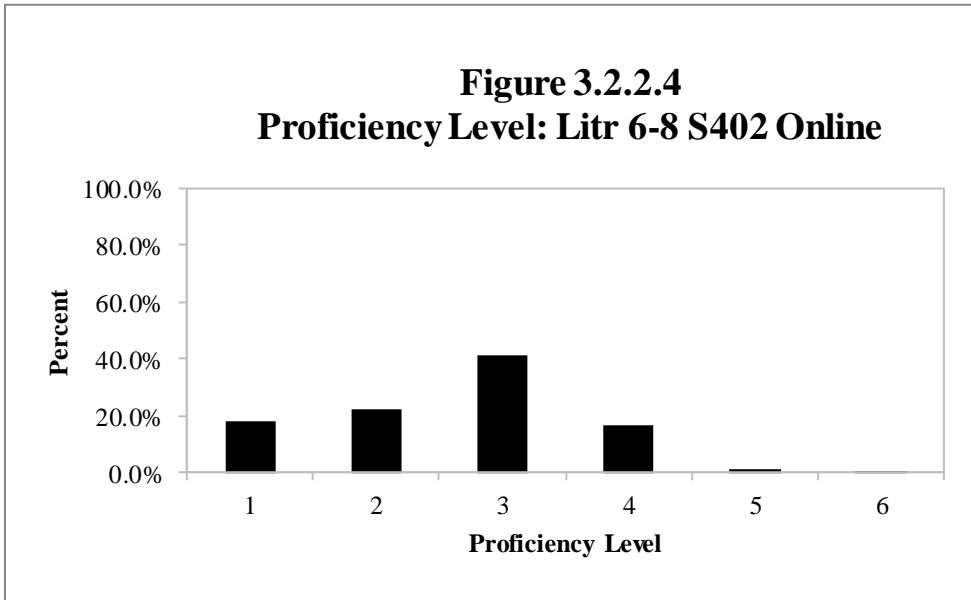


3.2.2.4 Grades 6–8

Table 3.2.2.4

Proficiency Level Distribution: Litr 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	14,024	17.17%	14,133	18.05%	14,264	18.67%	42,421	17.95%
2	17,670	21.63%	18,167	23.20%	16,587	21.71%	52,424	22.18%
3	36,923	45.20%	32,229	41.17%	29,264	38.30%	98,416	41.64%
4	12,248	15.00%	12,415	15.86%	14,710	19.25%	39,373	16.66%
5	744	0.91%	1,241	1.59%	1,497	1.96%	3,482	1.47%
6	71	0.09%	106	0.14%	76	0.10%	253	0.11%
Total	81,680	100.00%	78,291	100.00%	76,398	100.00%	236,369	100.00%

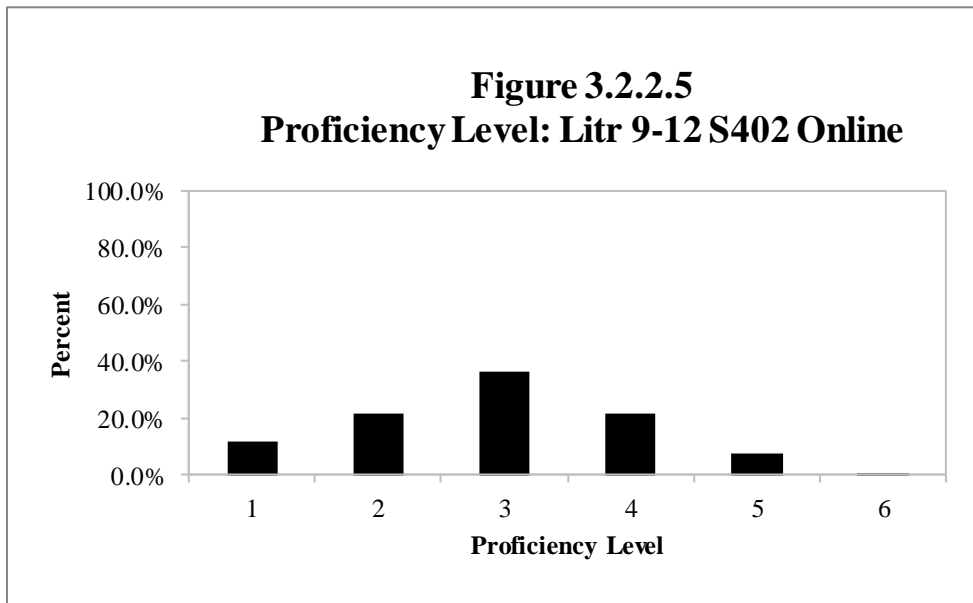


3.2.2.5 Grades 9–12

Table 3.2.2.5

Proficiency Level Distribution: Litr 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	11,164	12.68%	9,002	11.22%	6,408	11.05%	5,204	12.85%	31,778	11.91%
2	18,021	20.46%	16,549	20.62%	12,694	21.89%	10,226	25.25%	57,490	21.55%
3	32,172	36.53%	28,596	35.63%	21,404	36.92%	15,207	37.54%	97,379	36.50%
4	19,480	22.12%	18,478	23.02%	12,862	22.18%	7,424	18.33%	58,244	21.83%
5	6,449	7.32%	6,977	8.69%	4,343	7.49%	2,376	5.87%	20,145	7.55%
6	788	0.89%	650	0.81%	267	0.46%	70	0.17%	1,775	0.67%
Total	88,074	100.00%	80,252	100.00%	57,978	100.00%	40,507	100.00%	266,811	100.00%

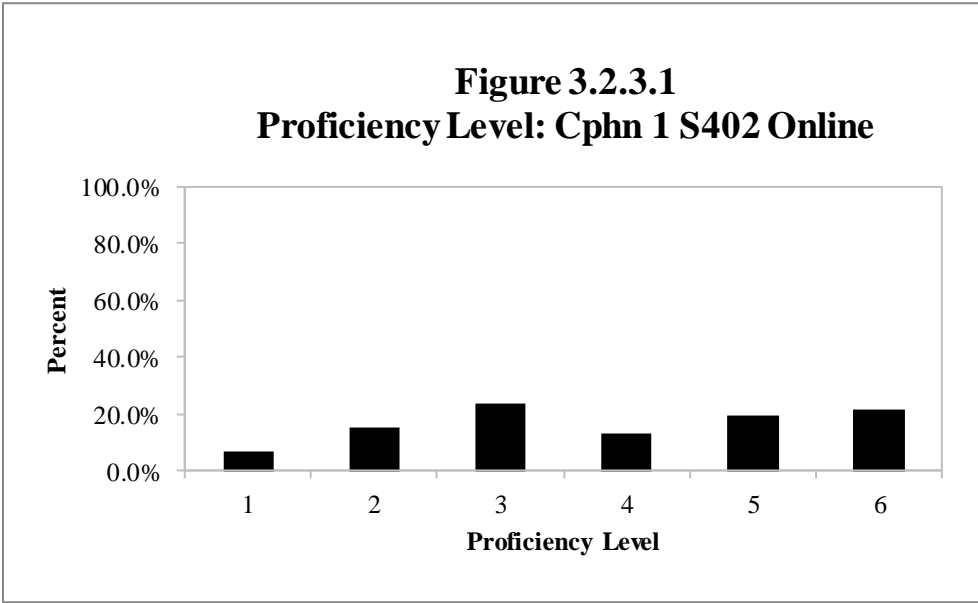


3.2.3 Comprehension

3.2.3.1 Grade 1

Table 3.2.3.1
Proficiency Level Distribution: Cphn 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	11,571	6.91%	11,571	6.91%
2	25,718	15.35%	25,718	15.35%
3	39,404	23.52%	39,404	23.52%
4	22,288	13.30%	22,288	13.30%
5	32,763	19.56%	32,763	19.56%
6	35,786	21.36%	35,786	21.36%
Total	167,530	100.00%	167,530	100.00%

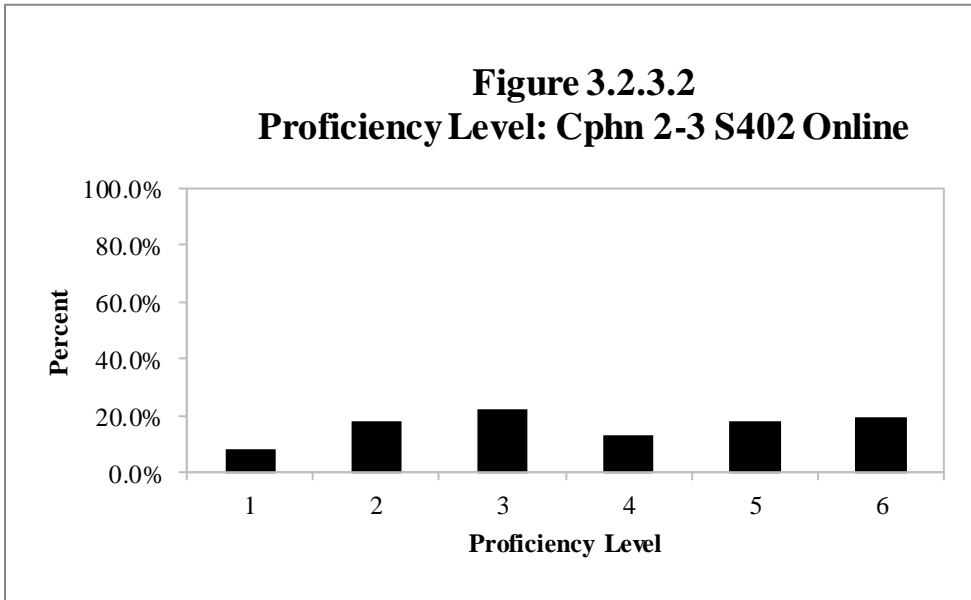


3.2.3.2 Grades 2–3

Table 3.2.3.2

Proficiency Level Distribution: Cphn 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	12,348	7.30%	16,137	9.20%	28,485	8.27%
2	33,426	19.76%	30,020	17.11%	63,446	18.41%
3	39,957	23.62%	37,813	21.55%	77,770	22.57%
4	24,106	14.25%	21,036	11.99%	45,142	13.10%
5	31,268	18.48%	31,412	17.90%	62,680	18.19%
6	28,051	16.58%	39,050	22.25%	67,101	19.47%
Total	169,156	100.00%	175,468	100.00%	344,624	100.00%

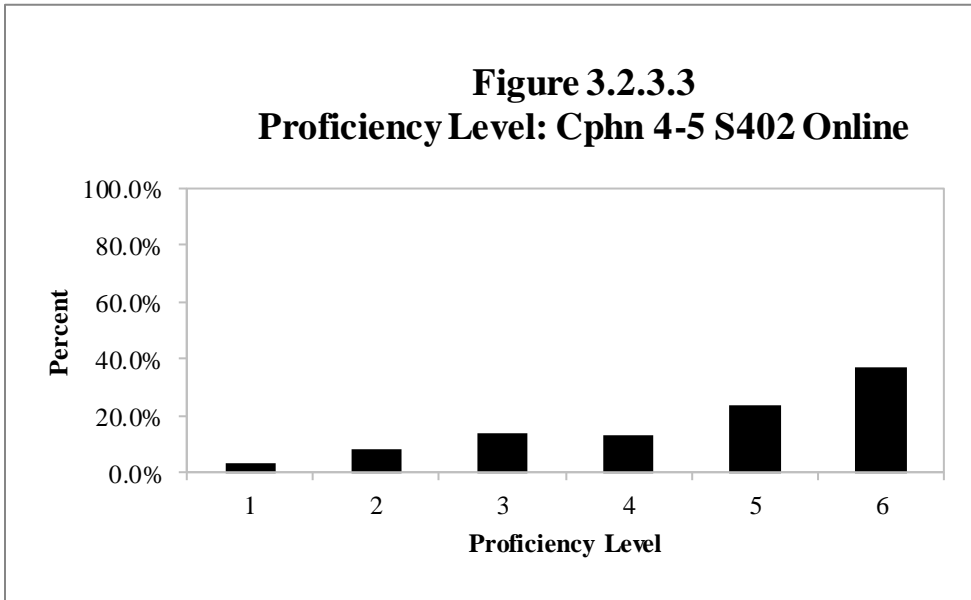


3.2.3.3 Grades 4–5

Table 3.2.3.3

Proficiency Level Distribution: Cphn 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	4,021	2.45%	5,951	5.50%	9,972	3.66%
2	12,012	7.31%	10,590	9.79%	22,602	8.30%
3	21,233	12.93%	16,471	15.23%	37,704	13.84%
4	19,990	12.17%	16,054	14.85%	36,044	13.23%
5	39,850	24.27%	24,557	22.71%	64,407	23.65%
6	67,111	40.87%	34,516	31.92%	101,627	37.31%
Total	164,217	100.00%	108,139	100.00%	272,356	100.00%

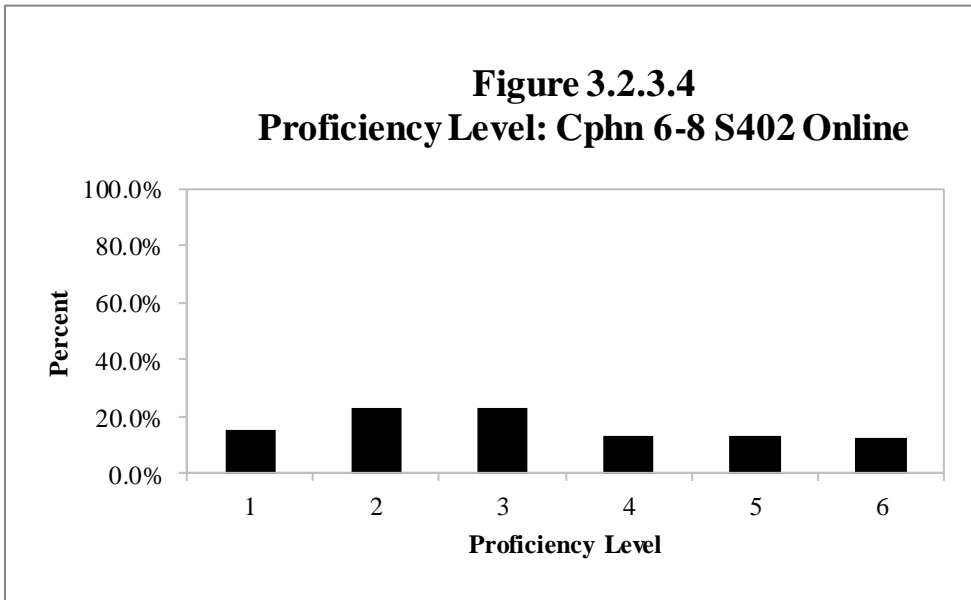


3.2.3.4 Grades 6–8

Table 3.2.3.4

Proficiency Level Distribution: Cphn 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	10,709	13.43%	12,109	15.82%	12,392	16.59%	35,210	15.24%
2	19,819	24.85%	17,615	23.01%	15,657	20.96%	53,091	22.98%
3	19,977	25.05%	17,199	22.47%	15,603	20.89%	52,779	22.85%
4	10,930	13.70%	10,164	13.28%	9,472	12.68%	30,566	13.23%
5	10,904	13.67%	9,862	12.88%	10,388	13.90%	31,154	13.49%
6	7,423	9.31%	9,604	12.55%	11,195	14.99%	28,222	12.22%
Total	79,762	100.00%	76,553	100.00%	74,707	100.00%	231,022	100.00%

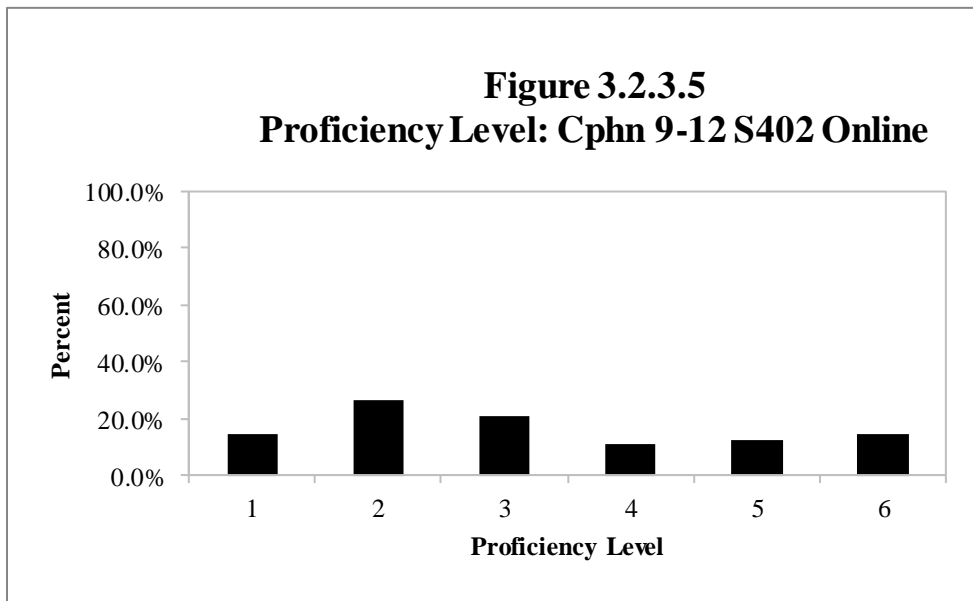


3.2.3.5 Grades 9–12

Table 3.2.3.5

Proficiency Level Distribution: Cphn 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	11,386	13.30%	11,279	14.41%	8,372	14.79%	6,483	16.44%	37,520	14.44%
2	23,309	27.23%	19,349	24.72%	15,088	26.66%	11,441	29.02%	69,187	26.62%
3	18,651	21.78%	16,145	20.63%	11,507	20.33%	7,896	20.03%	54,199	20.85%
4	9,126	10.66%	8,561	10.94%	5,922	10.46%	4,427	11.23%	28,036	10.79%
5	11,190	13.07%	9,892	12.64%	7,540	13.32%	4,559	11.56%	33,181	12.77%
6	11,953	13.96%	13,033	16.65%	8,160	14.42%	4,618	11.71%	37,764	14.53%
Total	85,615	100.00%	78,259	100.00%	56,589	100.00%	39,424	100.00%	259,887	100.00%



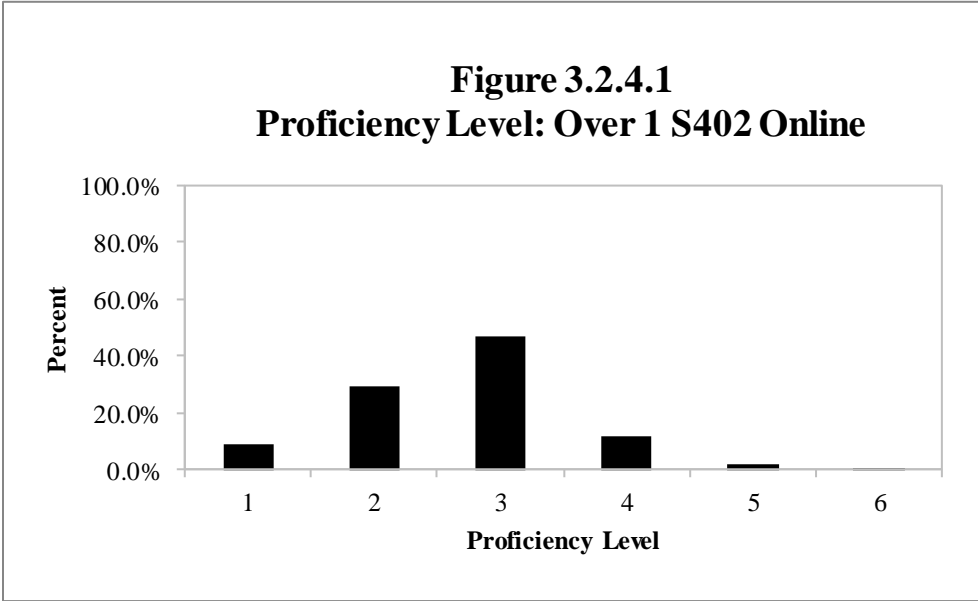
3.2.4 Overall

3.2.4.1 Grade 1

Table 3.2.4.1

Proficiency Level Distribution: Over 1 S402 Online

Level	Grade 1		Total	
	Count	Percent	Count	Percent
1	14,446	8.97%	14,446	8.97%
2	47,874	29.71%	47,874	29.71%
3	76,064	47.20%	76,064	47.20%
4	19,099	11.85%	19,099	11.85%
5	3,407	2.11%	3,407	2.11%
6	247	0.15%	247	0.15%
Total	161,137	100.00%	161,137	100.00%

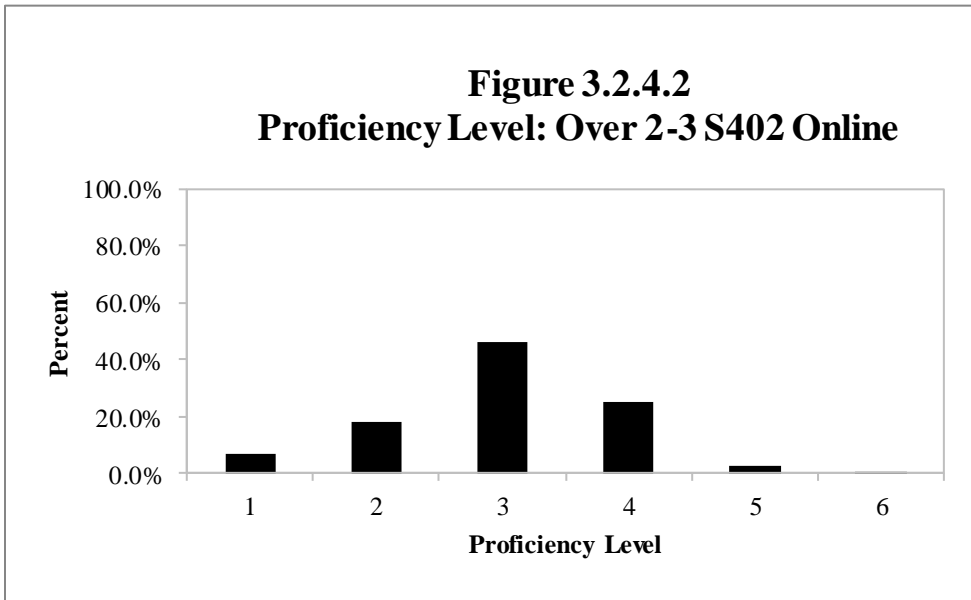


3.2.4.2 Grades 2–3

Table 3.2.4.2

Proficiency Level Distribution: Over 2-3 S402 Online

Level	Grade 2		Grade 3		Total	
	Count	Percent	Count	Percent	Count	Percent
1	10,664	6.64%	11,450	6.85%	22,114	6.74%
2	35,400	22.03%	24,788	14.83%	60,188	18.36%
3	77,001	47.92%	74,759	44.71%	151,760	46.28%
4	33,875	21.08%	49,668	29.71%	83,543	25.48%
5	3,622	2.25%	6,387	3.82%	10,009	3.05%
6	133	0.08%	146	0.09%	279	0.09%
Total	160,695	100.00%	167,198	100.00%	327,893	100.00%

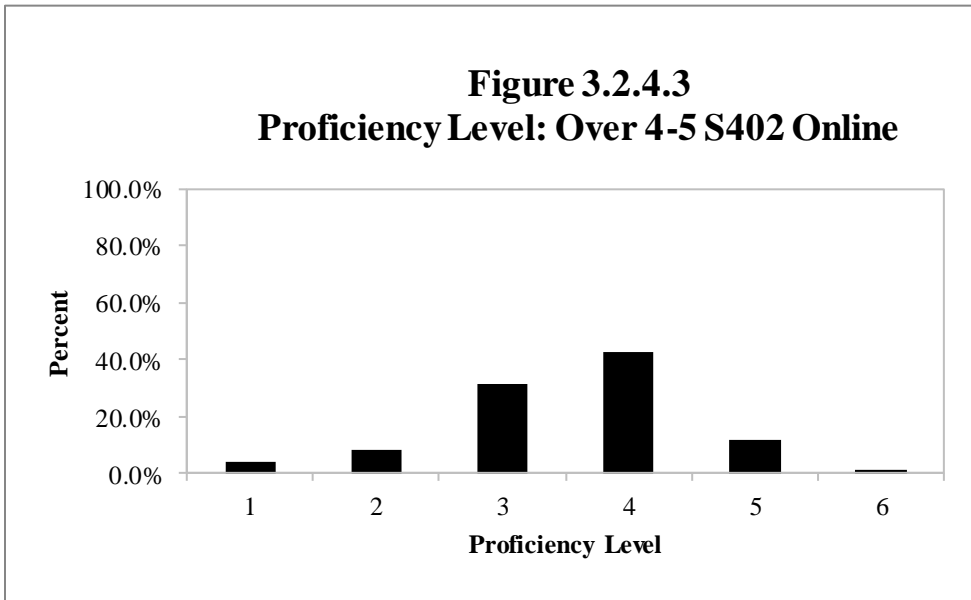


3.2.4.3 Grades 4–5

Table 3.2.4.3

Proficiency Level Distribution: Over 4-5 S402 Online

Level	Grade 4		Grade 5		Total	
	Count	Percent	Count	Percent	Count	Percent
1	5,296	3.53%	5,654	5.67%	10,950	4.38%
2	10,539	7.02%	9,423	9.45%	19,962	7.99%
3	46,014	30.64%	32,212	32.29%	78,226	31.30%
4	66,082	44.00%	40,662	40.76%	106,744	42.71%
5	19,632	13.07%	10,559	10.58%	30,191	12.08%
6	2,614	1.74%	1,251	1.25%	3,865	1.55%
Total	150,177	100.00%	99,761	100.00%	249,938	100.00%

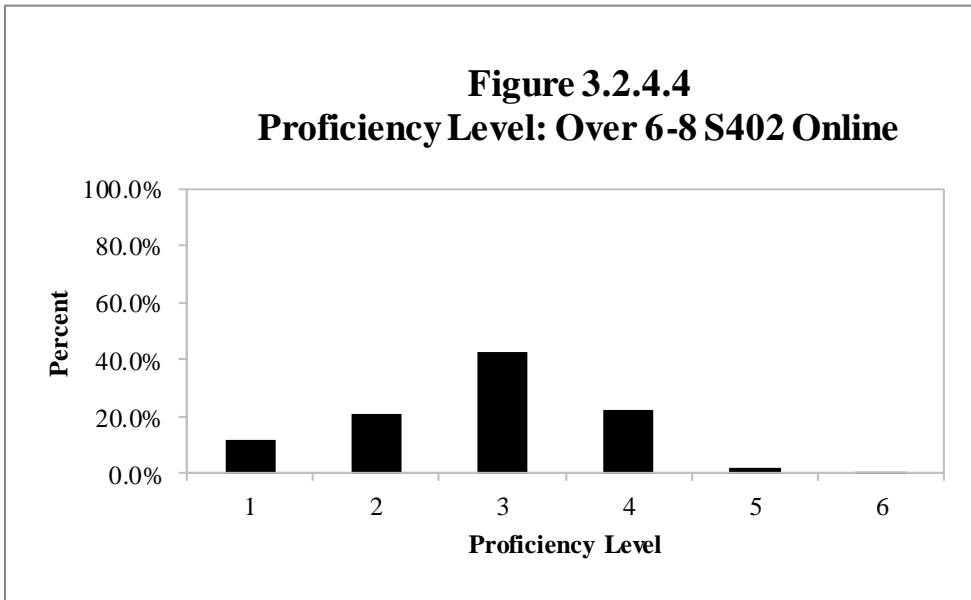


3.2.4.4 Grades 6–8

Table 3.2.4.4

Proficiency Level Distribution: Over 6-8 S402 Online

Level	Grade 6		Grade 7		Grade 8		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	7,255	9.88%	8,827	12.47%	9,587	13.80%	25,669	12.01%
2	15,658	21.33%	15,424	21.79%	13,965	20.11%	45,047	21.08%
3	34,112	46.47%	29,400	41.53%	27,313	39.33%	90,825	42.51%
4	15,266	20.80%	15,531	21.94%	16,761	24.13%	47,558	22.26%
5	1,041	1.42%	1,507	2.13%	1,741	2.51%	4,289	2.01%
6	78	0.11%	98	0.14%	84	0.12%	260	0.12%
Total	73,410	100.00%	70,787	100.00%	69,451	100.00%	213,648	100.00%

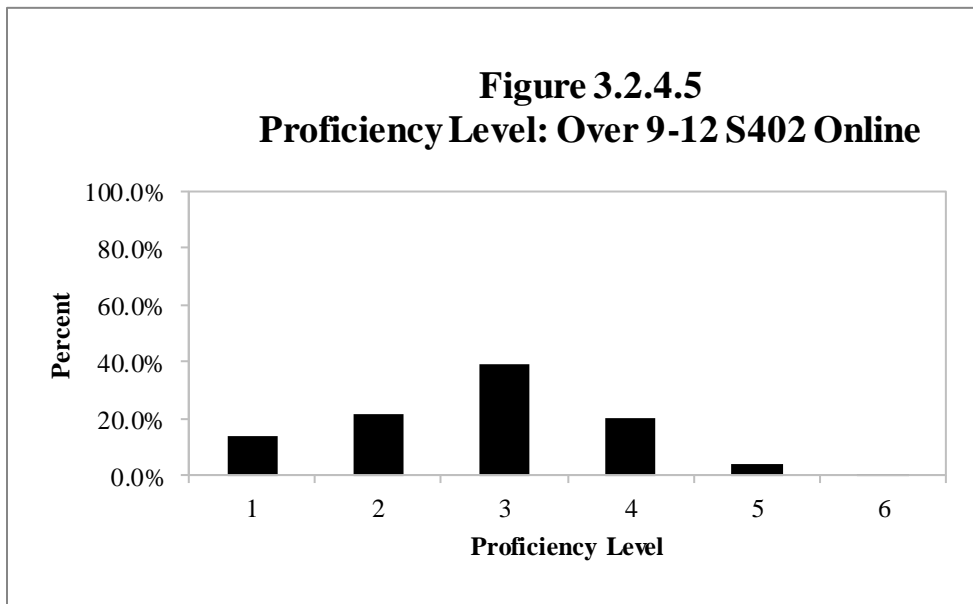


3.2.4.5 Grades 9–12

Table 3.2.4.5

Proficiency Level Distribution: Over 9-12 S402 Online

Level	Grade 9		Grade 10		Grade 11		Grade 12		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1	10,976	13.65%	10,035	13.66%	7,164	13.57%	5,565	15.00%	33,740	13.84%
2	17,014	21.16%	15,326	20.87%	11,647	22.06%	9,623	25.93%	53,610	21.99%
3	31,992	39.79%	28,150	38.33%	21,179	40.11%	14,811	39.91%	96,132	39.44%
4	16,703	20.77%	16,068	21.88%	10,557	19.99%	5,987	16.13%	49,315	20.23%
5	3,427	4.26%	3,607	4.91%	2,156	4.08%	1,091	2.94%	10,281	4.22%
6	294	0.37%	253	0.34%	104	0.20%	33	0.09%	684	0.28%
Total	80,406	100.00%	73,439	100.00%	52,807	100.00%	37,110	100.00%	243,762	100.00%



3.3 Reliability of Composites

To estimate the score reliability of the composite scores, a stratified Cronbach's alpha coefficient (e.g., Rudner, 2001; Kamata, Turhan, & Darandari, 2003; Kane & Case, 2004) is computed, weighted by the contribution of each domain score into the composite. Specifically, the formula is

$$\alpha_c = 1 - \frac{\sum_{j=1}^k w_j^2 \sigma_j^2 (1 - \rho_j)}{\sigma_c^2}$$

where

k = number of components j

w_j = weight of component j

σ_j^2 = variance of component j

σ_c^2 = variance of composite

ρ_j = reliability coefficient of component j

The data used to compute the stratified Cronbach's alpha is provided in the tables in this section. The first column shows the components forming the composite, the second column shows the weight of the composite in the total score, the third shows the variance of the scale scores, and the fourth shows the reliability of the domains forming the composite (note that these are the weighted reliabilities across the tiers for Speaking and Writing) and the reliability of the composite. Unlike the weighted composite, which is an average, the stratified alpha reflects the fact that there are two to four measures being combined into one single measure. Thus, the reliability of the composite score will be higher than the reliability of any single subscore within the composite.

The stratified Cronbach's alpha, presented in the tables in this section, was also used to produce the *Accuracy and Consistency* classification tables of the composites (Section 3.4).

3.3.1 Oral

3.3.1.1 Grade 1

Table 3.3.1.1

Reliability: Oral 1 S402 Online

Component	Weight	Variance	Reliability
Listening	0.50	3277.309	0.860
Speaking	0.50	2253.737	0.818
Oral		2087.310	0.896

*Variances from students who had results in all four domains

3.3.1.2 Grades 2–3

Table 3.3.1.2

Reliability: Oral 2-3 S402 Online

Component	Weight	Variance	Reliability
Listening	0.50	3287.417	0.850
Speaking	0.50	2188.979	0.766
Oral		2049.765	0.877

*Variances from students who had results in all four domains

3.3.1.3 Grades 4–5

Table 3.3.1.3

Reliability: Oral 4-5 S402 Online

Component	Weight	Variance	Reliability
Listening	0.50	2587.296	0.810
Speaking	0.50	2208.481	0.801
Oral		1888.277	0.877

*Variances from students who had results in all four domains

3.3.1.4 Grades 6–8

Table 3.3.1.4

Reliability: Oral 6-8 S402 Online

Component	Weight	Variance	Reliability
Listening	0.50	2378.086	0.850
Speaking	0.50	2834.434	0.805
Oral		2020.441	0.887

*Variances from students who had results in all four domains

3.3.1.5 Grades 9–12

Table 3.3.1.5

Reliability: Oral 9-12 S402 Online

Component	Weight	Variance	Reliability
Listening	0.50	2639.596	0.860
Speaking	0.50	2804.293	0.835
Oral		2088.112	0.900

*Variances from students who had results in all four domains

3.3.2 Literacy

3.3.2.1 Grade 1

Table 3.3.2.1

Reliability: Litr 1 S402 Online

Component	Weight	Variance	Reliability
Reading	0.50	1104.079	0.890
Writing	0.50	1202.434	0.869
Literacy		882.945	0.921

*Variances from students who had results in all four domains

3.3.2.2 Grades 2–3

Table 3.3.2.2

Reliability: Litr 2-3 S402 Online

Component	Weight	Variance	Reliability
Reading	0.50	1180.840	0.890
Writing	0.50	1503.658	0.892
Literacy		1107.041	0.934

*Variances from students who had results in all four domains

3.3.2.3 Grades 4–5

Table 3.3.2.3

Reliability: Litr 4-5 S402 Online

Component	Weight	Variance	Reliability
Reading	0.50	1123.921	0.880
Writing	0.50	1740.959	0.903
Literacy		1155.208	0.934

*Variances from students who had results in all four domains

3.3.2.4 Grades 6–8

Table 3.3.2.4

Reliability: Litr 6-8 S402 Online

Component	Weight	Variance	Reliability
Reading	0.50	1601.528	0.920
Writing	0.50	1661.503	0.884
Literacy		1419.064	0.943

*Variances from students who had results in all four domains

3.3.2.5 Grades 9–12

Table 3.3.2.5

Reliability: Litr 9-12 S402 Online

Component	Weight	Variance	Reliability
Reading	0.50	1544.319	0.910
Writing	0.50	1935.181	0.891
Literacy		1440.447	0.939

*Variances from students who had results in all four domains

3.3.3 Comprehension

3.3.3.1 Grade 1

Table 3.3.3.1

Reliability: Cphn 1 S402 Online

Component	Weight	Variance	Reliability
Listening	0.30	3277.309	0.860
Reading	0.70	1104.079	0.890
Comprehension		1165.761	0.914

*Variances from students who had results in all four domains

3.3.3.2 Grades 2–3

Table 3.3.3.2

Reliability: Cphn 2-3 S402 Online

Component	Weight	Variance	Reliability
Listening	0.30	3287.417	0.850
Reading	0.70	1180.840	0.890
Comprehension		1362.365	0.921

*Variances from students who had results in all four domains

3.3.3.3 Grades 4–5

Table 3.3.3.3

Reliability: Cphn 4-5 S402 Online

Component	Weight	Variance	Reliability
Listening	0.30	2587.296	0.810
Reading	0.70	1123.921	0.880
Comprehension		1243.180	0.911

*Variances from students who had results in all four domains

3.3.3.4 Grades 6–8

Table 3.3.3.4

Reliability: Cphn 6-8 S402 Online

Component	Weight	Variance	Reliability
Listening	0.30	2378.086	0.850
Reading	0.70	1601.528	0.920
Comprehension		1564.592	0.939

*Variances from students who had results in all four domains

3.3.3.5 Grades 9–12

Table 3.3.3.5

Reliability: Cphn 9-12 S402 Online

Component	Weight	Variance	Reliability
Listening	0.30	2639.596	0.860
Reading	0.70	1544.319	0.910
Comprehension		1589.483	0.936

*Variances from students who had results in all four domains

3.3.4 Overall

3.3.4.1 Grade 1

Table 3.3.4.1

Reliability: Over 1 S402 Online

Component	Weight	Variance	Reliability
Listening	0.15	3277.309	0.860
Reading	0.35	1104.079	0.890
Speaking	0.15	2253.737	0.818
Writing	0.35	1202.434	0.869
Overall Composite		934.682	0.943

*Variances from students who had results in all four domains

3.3.4.2 Grades 2–3

Table 3.3.4.2

Reliability: Over 2-3 S402 Online

Component	Weight	Variance	Reliability
Listening	0.15	3287.417	0.850
Reading	0.35	1180.840	0.890
Speaking	0.15	2188.979	0.766
Writing	0.35	1503.658	0.892
Overall Composite		1162.131	0.950

*Variances from students who had results in all four domains

3.3.4.3 Grades 4–5

Table 3.3.4.3

Reliability: Over 4-5 S402 Online

Component	Weight	Variance	Reliability
Listening	0.15	2587.296	0.810
Reading	0.35	1123.921	0.880
Speaking	0.15	2208.481	0.801
Writing	0.35	1740.959	0.903
Overall Composite		1191.280	0.951

*Variances from students who had results in all four domains

3.3.4.4 Grades 6–8

Table 3.3.4.4

Reliability: Over 6-8 S402 Online

Component	Weight	Variance	Reliability
Listening	0.15	2378.086	0.850
Reading	0.35	1601.528	0.920
Speaking	0.15	2834.434	0.805
Writing	0.35	1661.503	0.884
Overall Composite		1406.646	0.958

*Variances from students who had results in all four domains

3.3.4.5 Grades 9–12

Table 3.3.4.5

Reliability: Over 9-12 S402 Online

Component	Weight	Variance	Reliability
Listening	0.15	2639.596	0.860
Reading	0.35	1544.319	0.910
Speaking	0.15	2804.293	0.835
Writing	0.35	1935.181	0.891
Overall Composite		1451.733	0.958

*Variances from students who had results in all four domains

3.4 Accuracy and Consistency of Composites

Tables below present three sections of information related to the accuracy and consistency of placement into the WIDA language proficiency levels for each composite score. The first section provides overall indices related to the accuracy and consistency of classification, as well as Cohen's kappa. The second section shows accuracy and consistency information conditional per proficiency level. The third section provides indices of classification accuracy, including the false-positives and false-negatives, and consistency at the cut points. These indices are perhaps the most important of all when using any of these as an absolute cut point (e.g., determining which students have reached Proficiency Level 5). Note that the consistency is generally higher at the cut points than for the proficiency levels. For practical purposes, the primary score used for such decisions is the overall composite score.

As noted above in Section 2.12, there may be cases where the number of test takers placed into the proficiency level is fewer than 100 and accuracy and consistency of classification conditional on that level either cannot be computed or the software produced estimates that are out of bound. In these cases 'N/A' has been placed in the table. In addition, there may be cases where due to the small percentage of test takers placed into the proficiency level and the range of observed scale scores, accuracy of classification conditional on that level cannot be estimated by the software program that is used. In such cases, a hyphen (-) has been placed in the table.

3.4.1 Oral

3.4.1.1 Grade 1

Table 3.4.1.1

Accuracy and Consistency of Classification Indices: Oral (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.677	0.566		0.438
Conditional on Level	Level	Accuracy		Consistency	
	1	0.862		0.762	
	2	0.653		0.527	
	3	0.710		0.601	
	4	0.634		0.529	
	5	0.642		0.536	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.970	0.011	0.019	0.958
	2/3	0.939	0.028	0.033	0.912
	3/4	0.895	0.049	0.056	0.852
	4/5	0.889	0.059	0.052	0.845
	5/6	0.982	0.018	0.000	0.976

3.4.1.2 Grade 2

Table 3.4.1.2

Accuracy and Consistency of Classification Indices: Oral (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.686	0.578		0.422
Conditional on Level	Level	Accuracy		Consistency	
	1	0.827		0.717	
	2	0.724		0.602	
	3	0.724		0.612	
	4	0.600		0.535	
	5	-		-	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.969	0.014	0.017	0.955
	2/3	0.916	0.037	0.047	0.882
	3/4	0.861	0.052	0.087	0.805
	4/5	0.938	0.062	0.000	0.917
	5/6	0.998	0.002	0.000	0.998

3.4.1.3 *Grade 3*

Table 3.4.1.3

Accuracy and Consistency of Classification Indices: Oral (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.678	0.569		0.398
Conditional on Level	Level	Accuracy		Consistency	
	1	0.832		0.729	
	2	0.721		0.591	
	3	0.699		0.556	
	4	0.621		0.570	
	5	-		-	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.972	0.014	0.014	0.959
	2/3	0.928	0.030	0.042	0.898
	3/4	0.834	0.052	0.115	0.768
	4/5	0.942	0.058	0.000	0.921
	5/6	0.999	0.001	0.000	0.999

3.4.1.4 *Grade 4*

Table 3.4.1.4

Accuracy and Consistency of Classification Indices: Oral (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.667	0.556		0.388
Conditional on Level	Level	Accuracy		Consistency	
	1	0.874		0.767	
	2	0.631		0.489	
	3	0.699		0.566	
	4	0.712		0.585	
	5	0.618		0.564	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.990	0.003	0.007	0.986
	2/3	0.973	0.013	0.014	0.960
	3/4	0.926	0.032	0.042	0.895
	4/5	0.852	0.053	0.096	0.791
	5/6	0.925	0.075	0.000	0.900

3.4.1.5 Grade 5

Table 3.4.1.5

Accuracy and Consistency of Classification Indices: Oral (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.636	0.527		0.354
Conditional on Level	Level	Accuracy		Consistency	
	1	0.877		0.780	
	2	0.582		0.439	
	3	0.695		0.561	
	4	0.678		0.560	
	5	0.544		0.477	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.984	0.005	0.011	0.977
	2/3	0.962	0.019	0.018	0.945
	3/4	0.911	0.034	0.055	0.876
	4/5	0.820	0.065	0.115	0.757
	5/6	0.954	0.046	0.000	0.938

3.4.1.6 Grade 6

Table 3.4.1.6

Accuracy and Consistency of Classification Indices: Oral (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.715	0.618		0.456
Conditional on Level	Level	Accuracy		Consistency	
	1	0.855		0.751	
	2	0.648		0.512	
	3	0.794		0.700	
	4	0.660		0.617	
	5	-		-	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.980	0.007	0.013	0.971
	2/3	0.941	0.031	0.028	0.914
	3/4	0.880	0.045	0.076	0.833
	4/5	0.914	0.086	0.000	0.896
	5/6	0.992	0.008	0.000	0.992

3.4.1.7 Grade 7

Table 3.4.1.7

Accuracy and Consistency of Classification Indices: Oral (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.698	0.593		0.440
Conditional on Level	Level	Accuracy		Consistency	
	1	0.839		0.725	
	2	0.643		0.510	
	3	0.752		0.652	
	4	0.666		0.606	
	5	0.470		0.319	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.971	0.012	0.017	0.959
	2/3	0.929	0.035	0.036	0.898
	3/4	0.881	0.048	0.072	0.834
	4/5	0.921	0.070	0.010	0.897
	5/6	0.989	0.011	0.000	0.988

3.4.1.8 Grade 8

Table 3.4.1.8

Accuracy and Consistency of Classification Indices: Oral (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.684	0.578		0.428
Conditional on Level	Level	Accuracy		Consistency	
	1	0.843		0.736	
	2	0.618		0.486	
	3	0.726		0.621	
	4	0.646		0.594	
	5	0.469		0.307	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.965	0.015	0.021	0.949
	2/3	0.924	0.037	0.039	0.891
	3/4	0.880	0.049	0.072	0.832
	4/5	0.916	0.081	0.003	0.894
	5/6	0.989	0.011	0.000	0.988

3.4.1.9 Grade 9

Table 3.4.1.9

Accuracy and Consistency of Classification Indices: Oral (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.743	0.644		0.518
Conditional on Level	Level	Accuracy		Consistency	
	1	0.847		0.751	
	2	0.703		0.599	
	3	0.748		0.664	
	4	0.716		0.608	
	5	0.559		0.361	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.942	0.024	0.033	0.918
	2/3	0.903	0.048	0.050	0.863
	3/4	0.920	0.044	0.036	0.887
	4/5	0.980	0.017	0.003	0.972
	5/6	0.997	0.003	0.000	0.997

3.4.1.10 Grade 10

Table 3.4.1.10

Accuracy and Consistency of Classification Indices: Oral (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.737	0.637		0.510
Conditional on Level	Level	Accuracy		Consistency	
	1	0.846		0.752	
	2	0.664		0.553	
	3	0.754		0.672	
	4	0.716		0.602	
	5	0.583		0.399	
	6	1.000		0.280	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.938	0.027	0.035	0.912
	2/3	0.901	0.049	0.050	0.862
	3/4	0.921	0.044	0.035	0.888
	4/5	0.979	0.016	0.005	0.970
	5/6	0.996	0.004	0.000	0.996

3.4.1.11 *Grade 11*

Table 3.4.1.11

Accuracy and Consistency of Classification Indices: Oral (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.740	0.641		0.510
Conditional on Level	Level	Accuracy		Consistency	
	1	0.844		0.752	
	2	0.665		0.552	
	3	0.767		0.689	
	4	0.681		0.567	
	5	0.565		0.351	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.937	0.029	0.034	0.909
	2/3	0.899	0.049	0.052	0.859
	3/4	0.924	0.041	0.035	0.892
	4/5	0.980	0.017	0.002	0.974
	5/6	0.998	0.002	0.000	0.997

3.4.1.12 *Grade 12*

Table 3.4.1.12

Accuracy and Consistency of Classification Indices: Oral (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.745	0.650		0.517
Conditional on Level	Level	Accuracy		Consistency	
	1	0.843		0.756	
	2	0.654		0.542	
	3	0.776		0.702	
	4	0.663		0.546	
	5	0.750		0.420	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.929	0.034	0.037	0.899
	2/3	0.896	0.050	0.054	0.855
	3/4	0.935	0.037	0.029	0.906
	4/5	0.984	0.016	0.001	0.980
	5/6	N/A	N/A	N/A	N/A

3.4.2 Literacy

3.4.2.1 Grade 1

Table 3.4.2.1

Accuracy and Consistency of Classification Indices: Litr (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
	0.806	0.724		0.596	
Conditional on Level	Level	Accuracy		Consistency	
	1	0.755		0.643	
	2	0.845		0.786	
	3	0.786		0.707	
	4	0.781		0.675	
	5	0.763		0.626	
	6	0.861		0.660	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.931	0.040	0.030	0.899
	2/3	0.912	0.038	0.050	0.875
	3/4	0.972	0.019	0.010	0.961
	4/5	0.993	0.005	0.002	0.991
	5/6	0.999	0.001	0.000	0.999

3.4.2.2 Grade 2

Table 3.4.2.2

Accuracy and Consistency of Classification Indices: Litr (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.822	0.749		0.628
Conditional on Level	Level	Accuracy		Consistency	
	1	0.835		0.729	
	2	0.790		0.701	
	3	0.852		0.807	
	4	0.792		0.704	
	5	0.654		0.501	
	6	0.889		0.611	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.973	0.011	0.015	0.962
	2/3	0.932	0.030	0.038	0.904
	3/4	0.935	0.036	0.029	0.908
	4/5	0.985	0.011	0.004	0.979
	5/6	0.997	0.003	0.000	0.997

3.4.2.3 Grade 3

Table 3.4.2.3

Accuracy and Consistency of Classification Indices: Litr (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.800	0.721		0.600
Conditional on Level	Level	Accuracy		Consistency	
	1	0.867		0.778	
	2	0.751		0.647	
	3	0.846		0.791	
	4	0.773		0.697	
	5	0.620		0.469	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.979	0.008	0.013	0.970
	2/3	0.947	0.025	0.028	0.925
	3/4	0.918	0.041	0.041	0.885
	4/5	0.962	0.026	0.012	0.946
	5/6	0.994	0.006	0.000	0.994

3.4.2.4 *Grade 4*

Table 3.4.2.4

Accuracy and Consistency of Classification Indices: Litr (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.780	0.700		0.568
Conditional on Level	Level	Accuracy		Consistency	
	1	0.860		0.775	
	2	0.693		0.566	
	3	0.854		0.793	
	4	0.769		0.698	
	5	0.555		0.444	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.984	0.007	0.009	0.978
	2/3	0.962	0.018	0.020	0.945
	3/4	0.914	0.037	0.049	0.880
	4/5	0.935	0.041	0.024	0.908
	5/6	0.983	0.017	0.000	0.983

3.4.2.5 *Grade 5*

Table 3.4.2.5

Accuracy and Consistency of Classification Indices: Litr (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.775	0.690		0.567
Conditional on Level	Level	Accuracy		Consistency	
	1	0.875		0.794	
	2	0.692		0.571	
	3	0.835		0.770	
	4	0.767		0.690	
	5	0.562		0.446	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.978	0.009	0.013	0.969
	2/3	0.954	0.022	0.024	0.934
	3/4	0.914	0.040	0.046	0.879
	4/5	0.943	0.035	0.022	0.918
	5/6	0.985	0.015	0.000	0.985

3.4.2.6 Grade 6

Table 3.4.2.6

Accuracy and Consistency of Classification Indices: Litr (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.824	0.754		0.649
Conditional on Level	Level	Accuracy		Consistency	
	1	0.904		0.846	
	2	0.744		0.648	
	3	0.859		0.812	
	4	0.760		0.670	
	5	0.688		0.334	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.960	0.016	0.024	0.944
	2/3	0.933	0.034	0.033	0.905
	3/4	0.941	0.031	0.028	0.916
	4/5	0.990	0.010	0.000	0.988
	5/6	N/A	N/A	N/A	N/A

3.4.2.7 Grade 7

Table 3.4.2.7

Accuracy and Consistency of Classification Indices: Litr (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.814	0.740		0.639
Conditional on Level	Level	Accuracy		Consistency	
	1	0.894		0.838	
	2	0.751		0.659	
	3	0.842		0.788	
	4	0.756		0.669	
	5	0.663		0.379	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.956	0.018	0.025	0.940
	2/3	0.931	0.035	0.034	0.903
	3/4	0.940	0.032	0.028	0.916
	4/5	0.985	0.014	0.002	0.981
	5/6	0.999	0.001	0.000	1.000

3.4.2.8 Grade 8

Table 3.4.2.8

Accuracy and Consistency of Classification Indices: Litr (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.804	0.726		0.628
Conditional on Level	Level	Accuracy		Consistency	
	1	0.897		0.838	
	2	0.740		0.642	
	3	0.823		0.760	
	4	0.763		0.687	
	5	0.631		0.354	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.957	0.019	0.025	0.939
	2/3	0.933	0.033	0.034	0.905
	3/4	0.934	0.034	0.032	0.907
	4/5	0.981	0.017	0.002	0.974
	5/6	N/A	N/A	N/A	N/A

3.4.2.9 Grade 9

Table 3.4.2.9

Accuracy and Consistency of Classification Indices: Litr (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.783	0.696		0.598
Conditional on Level	Level	Accuracy		Consistency	
	1	0.875		0.794	
	2	0.738		0.639	
	3	0.805		0.736	
	4	0.760		0.669	
	5	0.730		0.606	
	6	0.767		0.501	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.962	0.015	0.023	0.947
	2/3	0.933	0.032	0.035	0.905
	3/4	0.929	0.038	0.033	0.901
	4/5	0.966	0.021	0.013	0.951
	5/6	0.993	0.006	0.001	0.991

3.4.2.10 *Grade 10*

Table 3.4.2.10

Accuracy and Consistency of Classification Indices: Litr (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.784	0.697		0.600
Conditional on Level	Level	Accuracy		Consistency	
	1	0.861		0.772	
	2	0.748		0.653	
	3	0.801		0.732	
	4	0.767		0.677	
	5	0.756		0.639	
	6	0.720		0.451	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.963	0.014	0.022	0.948
	2/3	0.935	0.031	0.034	0.908
	3/4	0.930	0.039	0.031	0.902
	4/5	0.962	0.022	0.015	0.946
	5/6	0.994	0.005	0.001	0.991

3.4.2.11 *Grade 11*

Table 3.4.2.11

Accuracy and Consistency of Classification Indices: Litr (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.791	0.706		0.608
Conditional on Level	Level	Accuracy		Consistency	
	1	0.861		0.771	
	2	0.758		0.666	
	3	0.804		0.737	
	4	0.775		0.685	
	5	0.779		0.658	
	6	0.774		0.513	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.964	0.014	0.022	0.949
	2/3	0.932	0.032	0.036	0.904
	3/4	0.931	0.039	0.030	0.903
	4/5	0.968	0.019	0.013	0.954
	5/6	0.997	0.003	0.001	0.996

3.4.2.12 Grade 12

Table 3.4.2.12

Accuracy and Consistency of Classification Indices: Litr (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.796	0.714		0.614
Conditional on Level	Level	Accuracy		Consistency	
	1	0.861		0.774	
	2	0.777		0.690	
	3	0.808		0.744	
	4	0.752		0.655	
	5	0.811		0.677	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.960	0.017	0.023	0.943
	2/3	0.927	0.034	0.039	0.898
	3/4	0.937	0.035	0.028	0.911
	4/5	0.973	0.017	0.010	0.961
	5/6	N/A	N/A	N/A	N/A

3.4.3 Comprehension

3.4.3.1 Grade 1

Table 3.4.3.1

Accuracy and Consistency of Classification Indices: Cphn (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency			Kappa (k)
	0.651	0.549			0.446
Conditional on Level	Level	Accuracy			Consistency
	1	0.743			0.570
	2	0.605			0.490
	3	0.628			0.519
	4	0.416			0.317
	5	0.618			0.501
	6	0.872			0.794
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.958	0.014	0.028	0.940
	2/3	0.922	0.038	0.040	0.889
	3/4	0.903	0.052	0.045	0.865
	4/5	0.910	0.046	0.044	0.874
	5/6	0.939	0.034	0.026	0.914

3.4.3.2 Grade 2

Table 3.4.3.2

Accuracy and Consistency of Classification Indices: Cphn (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.675	0.570		0.475
Conditional on Level	Level	Accuracy		Consistency	
	1	0.785		0.640	
	2	0.703		0.599	
	3	0.649		0.539	
	4	0.470		0.361	
	5	0.647		0.529	
	6	0.860		0.773	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.963	0.014	0.024	0.947
	2/3	0.922	0.037	0.040	0.891
	3/4	0.912	0.046	0.042	0.876
	4/5	0.920	0.044	0.036	0.887
	5/6	0.948	0.030	0.022	0.926

3.4.3.3 Grade 3

Table 3.4.3.3

Accuracy and Consistency of Classification Indices: Cphn (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.668	0.569		0.475
Conditional on Level	Level	Accuracy		Consistency	
	1	0.826		0.708	
	2	0.671		0.557	
	3	0.628		0.517	
	4	0.403		0.305	
	5	0.588		0.472	
	6	0.875		0.797	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.962	0.014	0.023	0.946
	2/3	0.927	0.035	0.039	0.896
	3/4	0.911	0.044	0.045	0.876
	4/5	0.916	0.044	0.040	0.881
	5/6	0.935	0.039	0.026	0.908

3.4.3.4 *Grade 4*

Table 3.4.3.4

Accuracy and Consistency of Classification Indices: Cphn (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.711	0.624		0.489
Conditional on Level	Level	Accuracy		Consistency	
	1	0.842		0.698	
	2	0.693		0.561	
	3	0.609		0.480	
	4	0.439		0.332	
	5	0.620		0.511	
	6	0.880		0.827	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.989	0.003	0.008	0.984
	2/3	0.965	0.013	0.021	0.950
	3/4	0.933	0.032	0.036	0.904
	4/5	0.910	0.044	0.046	0.874
	5/6	0.902	0.049	0.049	0.862

3.4.3.5 *Grade 5*

Table 3.4.3.5

Accuracy and Consistency of Classification Indices: Cphn (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.667	0.573		0.458
Conditional on Level	Level	Accuracy		Consistency	
	1	0.864		0.749	
	2	0.641		0.511	
	3	0.568		0.446	
	4	0.452		0.350	
	5	0.580		0.473	
	6	0.859		0.788	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.978	0.006	0.016	0.970
	2/3	0.952	0.021	0.027	0.931
	3/4	0.914	0.045	0.041	0.879
	4/5	0.896	0.049	0.055	0.857
	5/6	0.908	0.047	0.045	0.869

3.4.3.6 *Grade 6*

Table 3.4.3.6

Accuracy and Consistency of Classification Indices: Cphn (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.719	0.622		0.534
Conditional on Level	Level	Accuracy		Consistency	
	1	0.874		0.793	
	2	0.754		0.668	
	3	0.697		0.596	
	4	0.529		0.413	
	5	0.656		0.534	
	6	0.850		0.749	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.958	0.015	0.027	0.941
	2/3	0.927	0.038	0.035	0.897
	3/4	0.923	0.043	0.035	0.892
	4/5	0.938	0.033	0.029	0.912
	5/6	0.968	0.019	0.013	0.954

3.4.3.7 *Grade 7*

Table 3.4.3.7

Accuracy and Consistency of Classification Indices: Cphn (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.705	0.609		0.523
Conditional on Level	Level	Accuracy		Consistency	
	1	0.885		0.811	
	2	0.730		0.636	
	3	0.665		0.557	
	4	0.504		0.392	
	5	0.593		0.471	
	6	0.859		0.766	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.955	0.017	0.028	0.937
	2/3	0.928	0.038	0.035	0.898
	3/4	0.921	0.042	0.036	0.890
	4/5	0.935	0.035	0.031	0.908
	5/6	0.959	0.025	0.017	0.941

3.4.3.8 Grade 8

Table 3.4.3.8

Accuracy and Consistency of Classification Indices: Cphn (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.699	0.603		0.520
Conditional on Level	Level	Accuracy		Consistency	
	1	0.883		0.811	
	2	0.706		0.604	
	3	0.646		0.535	
	4	0.482		0.372	
	5	0.595		0.475	
	6	0.868		0.783	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.953	0.018	0.028	0.935
	2/3	0.929	0.037	0.034	0.899
	3/4	0.922	0.041	0.037	0.891
	4/5	0.932	0.035	0.032	0.904
	5/6	0.954	0.028	0.019	0.935

3.4.3.9 Grade 9

Table 3.4.3.9

Accuracy and Consistency of Classification Indices: Cphn (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.708	0.611		0.522
Conditional on Level	Level	Accuracy		Consistency	
	1	0.827		0.725	
	2	0.748		0.662	
	3	0.667		0.555	
	4	0.457		0.346	
	5	0.631		0.508	
	6	0.875		0.797	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.947	0.021	0.032	0.926
	2/3	0.923	0.040	0.037	0.892
	3/4	0.930	0.036	0.034	0.901
	4/5	0.941	0.034	0.025	0.917
	5/6	0.960	0.023	0.017	0.944

3.4.3.10 *Grade 10*

Table 3.4.3.10

Accuracy and Consistency of Classification Indices: Cphn (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.703	0.607		0.520
Conditional on Level	Level	Accuracy		Consistency	
	1	0.830		0.733	
	2	0.726		0.633	
	3	0.652		0.538	
	4	0.465		0.354	
	5	0.596		0.474	
	6	0.885		0.814	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.944	0.023	0.033	0.922
	2/3	0.926	0.038	0.036	0.895
	3/4	0.930	0.037	0.033	0.901
	4/5	0.939	0.034	0.027	0.914
	5/6	0.956	0.026	0.018	0.938

3.4.3.11 *Grade 11*

Table 3.4.3.11

Accuracy and Consistency of Classification Indices: Cphn (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.706	0.608		0.520
Conditional on Level	Level	Accuracy		Consistency	
	1	0.827		0.731	
	2	0.742		0.653	
	3	0.643		0.529	
	4	0.452		0.343	
	5	0.629		0.507	
	6	0.876		0.799	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.943	0.024	0.033	0.920
	2/3	0.924	0.039	0.037	0.893
	3/4	0.930	0.038	0.032	0.902
	4/5	0.939	0.034	0.027	0.915
	5/6	0.960	0.023	0.017	0.943

3.4.3.12 *Grade 12*

Table 3.4.3.12

Accuracy and Consistency of Classification Indices: Cphn (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.710	0.612		0.521
Conditional on Level	Level	Accuracy		Consistency	
	1	0.823		0.731	
	2	0.757		0.670	
	3	0.635		0.522	
	4	0.500		0.384	
	5	0.616		0.493	
	6	0.873		0.790	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.939	0.028	0.033	0.913
	2/3	0.923	0.039	0.039	0.891
	3/4	0.932	0.038	0.030	0.905
	4/5	0.945	0.030	0.025	0.922
	5/6	0.965	0.021	0.014	0.951

3.4.4 Overall

3.4.4.1 Grade 1

Table 3.4.4.1

Accuracy and Consistency of Classification Indices: Over (Grade 1) S402 Online

Overall Indices	Accuracy	Consistency			Kappa (k)
	0.840	0.774			0.663
Conditional on Level	Level	Accuracy			Consistency
	1	0.835			0.734
	2	0.818			0.747
	3	0.871			0.828
	4	0.783			0.684
	5	0.817			0.691
	6	0.891			0.722
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.968	0.014	0.018	0.954
	2/3	0.925	0.037	0.038	0.895
	3/4	0.958	0.024	0.018	0.940
	4/5	0.990	0.008	0.002	0.987
	5/6	0.999	0.001	0.000	0.999

3.4.4.2 *Grade 2*

Table 3.4.4.2

Accuracy and Consistency of Classification Indices: Over (Grade 2) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.838	0.779		0.671
Conditional on Level	Level	Accuracy		Consistency	
	1	0.853		0.778	
	2	0.830		0.756	
	3	0.872		0.829	
	4	0.775		0.714	
	5	0.799		0.493	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.980	0.010	0.011	0.972
	2/3	0.943	0.027	0.030	0.920
	3/4	0.935	0.032	0.032	0.910
	4/5	0.979	0.020	0.001	0.977
	5/6	0.999	0.001	0.000	1.000

3.4.4.3 *Grade 3*

Table 3.4.4.3

Accuracy and Consistency of Classification Indices: Over (Grade 3) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.822	0.760		0.649
Conditional on Level	Level	Accuracy		Consistency	
	1	0.883		0.828	
	2	0.785		0.694	
	3	0.875		0.824	
	4	0.761		0.717	
	5	-		-	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.982	0.008	0.010	0.976
	2/3	0.955	0.023	0.022	0.936
	3/4	0.922	0.033	0.045	0.891
	4/5	0.961	0.039	0.000	0.957
	5/6	0.999	0.001	0.000	1.000

3.4.4.4 *Grade 4*

Table 3.4.4.4

Accuracy and Consistency of Classification Indices: Over (Grade 4) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.805	0.733		0.614
Conditional on Level	Level	Accuracy		Consistency	
	1	0.867		0.821	
	2	0.756		0.648	
	3	0.859		0.797	
	4	0.833		0.772	
	5	0.623		0.527	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.990	0.005	0.005	0.987
	2/3	0.974	0.013	0.013	0.965
	3/4	0.933	0.031	0.036	0.907
	4/5	0.921	0.038	0.040	0.890
	5/6	0.983	0.017	0.000	0.983

3.4.4.5 *Grade 5*

Table 3.4.4.5

Accuracy and Consistency of Classification Indices: Over (Grade 5) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.790	0.716		0.597
Conditional on Level	Level	Accuracy		Consistency	
	1	0.876		0.832	
	2	0.758		0.654	
	3	0.853		0.787	
	4	0.797		0.736	
	5	0.561		0.449	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.985	0.007	0.008	0.981
	2/3	0.967	0.017	0.016	0.955
	3/4	0.929	0.031	0.039	0.902
	4/5	0.916	0.049	0.035	0.886
	5/6	0.987	0.013	0.000	0.989

3.4.4.6 *Grade 6*

Table 3.4.4.6

Accuracy and Consistency of Classification Indices: Over (Grade 6) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.848	0.790		0.694
Conditional on Level	Level	Accuracy		Consistency	
	1	0.890		0.826	
	2	0.818		0.742	
	3	0.878		0.835	
	4	0.797		0.740	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.976	0.011	0.013	0.966
	2/3	0.946	0.026	0.028	0.924
	3/4	0.941	0.029	0.031	0.916
	4/5	0.985	0.015	0.000	0.984
	5/6	N/A	N/A	N/A	N/A

3.4.4.7 *Grade 7*

Table 3.4.4.7

Accuracy and Consistency of Classification Indices: Over (Grade 7) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.833	0.771		0.680
Conditional on Level	Level	Accuracy		Consistency	
	1	0.894		0.833	
	2	0.809		0.730	
	3	0.861		0.810	
	4	0.778		0.728	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.972	0.013	0.015	0.960
	2/3	0.945	0.026	0.029	0.922
	3/4	0.940	0.029	0.032	0.915
	4/5	0.977	0.023	0.000	0.975
	5/6	N/A	N/A	N/A	N/A

3.4.4.8 Grade 8

Table 3.4.4.8

Accuracy and Consistency of Classification Indices: Over (Grade 8) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.825	0.760		0.670
Conditional on Level	Level	Accuracy		Consistency	
	1	0.901		0.844	
	2	0.791		0.705	
	3	0.851		0.795	
	4	0.778		0.731	
	5	-		-	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.970	0.013	0.016	0.958
	2/3	0.946	0.026	0.028	0.923
	3/4	0.936	0.030	0.034	0.909
	4/5	0.974	0.026	0.000	0.970
	5/6	N/A	N/A	N/A	N/A

3.4.4.9 Grade 9

Table 3.4.4.9

Accuracy and Consistency of Classification Indices: Over (Grade 9) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.831	0.763		0.677
Conditional on Level	Level	Accuracy		Consistency	
	1	0.903		0.844	
	2	0.781		0.698	
	3	0.858		0.807	
	4	0.811		0.735	
	5	0.723		0.605	
	6	-		-	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.968	0.013	0.019	0.955
	2/3	0.944	0.029	0.027	0.920
	3/4	0.944	0.029	0.027	0.920
	4/5	0.979	0.013	0.008	0.971
	5/6	0.996	0.004	0.000	0.996

3.4.4.10 *Grade 10*

Table 3.4.4.10

Accuracy and Consistency of Classification Indices: Over (Grade 10) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.830	0.762		0.679
Conditional on Level	Level	Accuracy		Consistency	
	1	0.897		0.836	
	2	0.775		0.691	
	3	0.851		0.798	
	4	0.826		0.755	
	5	0.759		0.647	
	6	0.823		0.538	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.966	0.013	0.021	0.953
	2/3	0.944	0.028	0.028	0.921
	3/4	0.945	0.030	0.025	0.922
	4/5	0.979	0.012	0.009	0.970
	5/6	0.997	0.003	0.000	0.997

3.4.4.11 *Grade 11*

Table 3.4.4.11

Accuracy and Consistency of Classification Indices: Over (Grade 11) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.836	0.768		0.683
Conditional on Level	Level	Accuracy		Consistency	
	1	0.895		0.832	
	2	0.786		0.704	
	3	0.856		0.806	
	4	0.825		0.750	
	5	0.782		0.660	
	6	0.855		0.570	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.967	0.014	0.020	0.953
	2/3	0.942	0.029	0.029	0.918
	3/4	0.947	0.029	0.024	0.925
	4/5	0.982	0.011	0.007	0.975
	5/6	0.998	0.002	0.000	0.998

3.4.4.12 *Grade 12*

Table 3.4.4.12

Accuracy and Consistency of Classification Indices: Over (Grade 12) S402 Online

Overall Indices	Accuracy	Consistency		Kappa (k)	
		0.839	0.773		0.687
Conditional on Level	Level	Accuracy		Consistency	
	1	0.890		0.826	
	2	0.807		0.732	
	3	0.859		0.809	
	4	0.802		0.721	
	5	0.822		0.678	
	6	N/A		N/A	
Indices at Cut Points	Cut Point	Accuracy			Consistency
		Accuracy	False Positives	False Negatives	
	1/2	0.964	0.016	0.020	0.949
	2/3	0.938	0.031	0.031	0.912
	3/4	0.952	0.025	0.022	0.932
	4/5	0.985	0.010	0.004	0.980
	5/6	N/A	N/A	N/A	N/A

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