

Understanding Your *Praxis*® Scores 2016–17

The *Praxis*® Assessments are developed and administered by Educational Testing Service (ETS®).

Praxis® Core Academic Skills for Educators (Core) tests measure academic skills in reading, writing and mathematics. They are designed to provide comprehensive assessments that measure the skills and content knowledge of candidates entering teacher preparation programs.

The *Praxis* Subject Assessments include the Subject Assessment/ Specialty Area tests. The Content Knowledge for Teaching tests, the Principles of Learning and Teaching (PLT) tests and the ParaPro Assessment are also considered *Praxis* Subject Assessments.

I How The *Praxis*® Tests Are Scored

Selected-Response (SR) Questions

On most *Praxis*® tests, each selected-response question answered correctly is worth one raw point, and your total raw score is the number of questions answered correctly on the full test. Selected-response questions are scored by computer.

Constructed-Response (CR) Questions

Constructed-response questions are scored by education professionals in the appropriate content area. These individuals are carefully trained and supervised to assure they apply ETS scoring methods in a fair and accurate manner. Additional statistical checks are made to account for differences in difficulty across editions of a test.

Two scorers rate your responses to CR questions. Each one works independently and does not know what the other scorer's ratings are. If the two ratings disagree by more than a specified amount, a third scorer rates your response. Under no circumstances does your total score depend entirely on one individual scorer.

Mixed-Format Tests

Some tests consist of one or more essays and a selected-response portion. For some of the *Praxis* tests that contain both SR and CR items, the ratings assigned by the scorers are simply added together to contribute to your total raw score. On others, the ratings are first multiplied by scoring weights, which can be different for different questions, and the weighted ratings are added to contribute to your total raw score. Your raw point score is then converted to a scaled score that adjusts for the difficulty of that particular edition of the test.

For the Core Academic Skills for Educators: Writing test, each essay receives a score from at least one trained reader, using a six-point holistic scale. In holistic scoring, readers are trained to assign scores on the basis of the overall quality of an essay in response to the assigned task. For the Informative/Explanatory Essay, a second trained reader then scores the essay, and if the scores differ by more than a certain amount, a third reader is brought in to adjudicate. After adjudication, the scores that are in agreement are added and become the final score for the essay. For the Argumentative Essay, the essay is scored by a trained reader and by e-rater®, a computerized program developed by ETS that computes a score based on data from thousands of previously scored essays. If the e-rater score and the human score agree, the two scores are added to become the final score for the essay. If they disagree by more than a certain amount,

a second human rater scores the essay, and the scores that are in agreement are added to become the final score for the essay. For a list of tests that include both essay and selected-response questions, go to www.ets.org/praxis.

Conversion of Raw Scores to Scaled Scores

For most *Praxis* assessments, ETS develops multiple editions of the same test that contain different sets of test questions conforming to predefined content and statistical specifications. These different editions are commonly called *forms*. To ensure that scores obtained from different forms of the same test are comparable, raw scores are converted to *scaled scores* that carry the same meaning regardless of which form was administered. Scaled scores are used to determine whether test takers have passed the test. The summary statistics shown in section IV are presented in the scaled score metric.

A Word of Caution

The adjustment for difficulty makes it possible to give the same interpretation to identical scores on different editions of the *same* test. For example, a reported score of 150 on the Mathematics: Content Knowledge test will reflect approximately the same level of knowledge, regardless of which edition of the test was administered.

However, identical scores on *different* tests do not necessarily have the same meaning. A score of 150 on the Mathematics: Content Knowledge test, for example, does not reflect the same level of knowledge as a score of 150 on the Physical Science: Content Knowledge test.

II Glossary of Terms

Average Performance Range—The range of scaled scores earned by the middle 50 percent of the test takers taking the test. It provides an indication of the difficulty of the test.

Decision Reliability—The tendency of pass/fail decisions made on the basis of test takers' test scores to be consistent from one edition of the test to another. ETS computes decision reliability statistics for a number of different combinations of test taker groups and passing scores.

Median—The score that separates the lower half of the scores from the upper half.

Passing Score—A qualifying score for a single test that is set by the state or licensing agency.

Possible Score Range—The lowest to the highest scaled score possible on any edition of the test.

Raw Points—On a selected-response test, each raw point corresponds to a single question. On a constructed-response test, the raw points refer to the ratings assigned by the scorers. Raw points on different forms of a test should not be compared; they are not adjusted for differences in the difficulty of the test questions.

Reliability—The tendency of individual scores to be consistent from one edition of the test to another.

Scaled Score—The reported score that determines whether a test taker has passed the test. Scaled scores are derived from raw scores and take into account the difficulty of the test form administered.

Score Interval—The number of points separating the possible score levels. If the score interval is 10, only scores divisible by 10 are possible.

Standard Error of Measurement—A statistic that is often used to describe the reliability of the scores of a group of test takers. A test taker's score on a single edition of a test will differ somewhat from the score the test taker would get on a different edition of the test. The more consistent the scores from one edition of the test to another, the smaller the standard error of measurement. If a large number of test takers take

a test for which the standard error of measurement is 3 points, about two-thirds of the test takers will receive scores within 3 points of the scores that they would get by averaging over many editions of the test. The Summary Statistics section shows the standard error of measurement for many of the *Praxis* tests, estimated for the group of all test takers taking the test. On some tests, the standard error of measurement could not be estimated because there was no edition of the test that had been taken by a sufficient number of test takers. On other tests, the standard error of measurement could not be adequately estimated because the test consists of a very small number of questions or tasks, each measuring a different type of knowledge or skill.

Standard Error of Scoring—For tests in which the scoring involves human judgment, this statistic describes the reliability of the process of scoring the test takers' responses. A test taker's score on one of these tests will depend to some extent on the particular scorers who rate the test taker's responses. The more consistent the ratings assigned to the same responses by different scorers, the smaller the standard error of scoring. If a large number of test takers take a test for which the standard error of scoring is 4 points, about two-thirds of the test takers will receive scores within 4 points of the scores that they would get if their responses were scored by all possible scorers. The *Summary Statistics* section shows the standard error of scoring for several of the *Praxis* constructed-response tests, estimated for the group of all test takers taking the test. For some constructed-response tests, the standard error of scoring could not be estimated because there was no edition of the test that had been taken by a sufficient number of test takers. The standard error of scoring for a selected-response test is zero, because selected-response scoring is a purely mechanical process with no possibility of disagreement between scorers.

Validity—The extent to which test scores actually reflect what they are intended to measure. The *Praxis* tests are intended to measure the knowledge, skills, or abilities that groups of experts determine to be important for a beginning teacher.

III Frequently Asked Questions About *Praxis*® Scores

Q Did I pass?

A Your Test Taker Score Report will indicate a PASSED or NOT PASSED status for the highest score earned on each test taken. Your highest score will be compared to the state or agency's passing score indicated on your score report.

The passing scores used in the Test Taker Score Reports are the passing scores in effect, according to our records, at either the date the test was taken (Test Date) or at the time the score reports are produced (Report Date). You can find more about passing scores at www.ets.org/praxis. ETS does not set passing scores for the *Praxis* tests. Each state or agency sets its own passing score for a *Praxis* test. If you have additional questions regarding the establishment of passing scores or want to verify passing scores, please contact the appropriate state or agency directly.

Q How many questions do I need to get right to pass the test?

A Unfortunately, there is no way to predict this. There are several editions of each of the *Praxis* tests, and each edition contains different questions. The questions on one edition may be slightly more difficult (or easier) than those on another edition. To make all editions of a test comparable, raw scores are converted to scaled scores that adjust for difficulty among editions. There is no way to predict which edition of the test you will take next.

Q Can I have my selected-response, essay, or constructed-response test score verified?

A Yes. The *Praxis* score verification service is described in the *Praxis Information Bulletin* and at www.ets.org/praxis.

Q Who receives a copy of my score report?

A If you take a *Praxis* test in Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, or Wyoming, your scores are automatically reported to the state education agency responsible for teacher licensure. Some additional situations under which scores are reported are listed in the *Information Bulletin*. Aside from these, your scores will be sent only to you and the institutions or agencies you designated as score recipients.

Q How can I send my scores to recipients other than those listed on my score report?

A Sign in to your *My Praxis* account at www.ets.org/praxis and select “Order Score Reports,” or download and complete the Additional Score Report Request Form at www.ets.org/praxis and mail it with the appropriate fee to the address listed on the form.

Q Why didn't I receive scores for all the tests I took on a particular day?

A Some tests, particularly those including essay questions, take longer to score than others. Because important decisions often depend on your scores, some *Praxis* test scores are reported earlier than others. If all of your scores were not reported, you will receive the rest of your test scores in a second report.

Q I need to take one of the *Praxis* tests again. What should I study to improve my score?

A The best preparation for taking any *Praxis* test is the knowledge and experience you acquired in college. The detailed information in your score report may help you identify the content categories that offer the greatest opportunity to improve your score. ETS publishes a variety of study aids to help you do your best. Study Companions are available to download at www.ets.org/praxis, and include content outlines and sample questions. Interactive Practice Tests are also available for many of the tests. Interactive Practice Tests are full-length tests that include correct answers and explanations of answers.

Q What is the ETS Recognition of Excellence (ROE)?

A The ETS Recognition of Excellence honors test takers who have earned a high score on selected *Praxis* tests—one that is equivalent to the scaled score earned by approximately the top 15 percent of candidates who took the test in previous years. Candidates who earn the Recognition of Excellence receive a formal recognition certificate and congratulatory letter from ETS. The honor is also indicated on score reports that are sent to test takers and designated institutions. Summary data on ROE scores are also included on the annual summary reports issued to state agencies and institutions of higher education. The Recognition of Excellence is a means of recognizing outstanding individual performance on the *Praxis* tests, not a criterion for licensure, hiring, or promotion decisions. A list of tests that have ROE target scores can be found at www.ets.org/praxis.

IV Summary Statistics

This section gives the Possible Score Range, Score Interval, Number of Test Takers, Median, Average Performance Range, Standard Error of Measurement, and Standard Error of Scoring for many of The *Praxis* tests. Notes at the end of the section provide information about the statistics themselves.

Test Name	Possible Score Range	Score Interval	Number of Test Takers	Median	Average Performance Range	Standard Error of Measurement	Standard Error of Scoring
Agriculture (5701)	100 - 200	1	592	170	160 - 178	5.4	0
Algebra I (5162)	100 - 200	1	f	f	f	f	f
American Sign Language (0634)	1 - 5	1	f	f	f	f	f
Art: Content and Analysis (5135)	100 - 200	1	1417	167	159 - 175	5.6	2.5
Art: Content Knowledge (5134)	100 - 200	1	3580	166	158 - 175	5.5	0
Audiology (5342)	100 - 200	1	1701	178	172 - 184	5	0
Biology: Content Knowledge (5235)	100 - 200	1	9247	163	153 - 174	4.3	0
Braille Proficiency (0633)	100 - 200	1	f	f	f	f	f
Business Education: Content Knowledge (5101)	100 - 200	1	4396	172	163 - 181	4.9	0
Chemistry: Content Knowledge (5245)	100 - 200	1	3818	160	148 - 175	5.6	0
Chinese (Mandarin): World Language (5665)	100 - 200	1	328	192	176 - 197	5.2	c
Citizenship Education: Content Knowledge (5087)	100 - 200	1	86	164	153 - 174	5	0
Computer Science (5651)	100 - 200	1	83	162	137 - 184	6.3	0
Core Academic Skills for Educators: Mathematics (5732)	100 - 200	2	54081	156	140 - 168	8.5	0
Core Academic Skills for Educators: Reading (5712)	100 - 200	2	51544	172	160 - 184	7.1	0
Core Academic Skills for Educators: Writing (5722)	100 - 200	2	52385	166	158 - 172	5.6	2.2
Early Childhood Education (5025)	100 - 200	1	2048	169	156 - 179	5.9	0
Earth and Space Sciences: Content Knowledge (5571)	100 - 200	1	1968	165	153 - 179	5	0
Economics (5911)	100 - 200	1	298	150	139 - 163	6.6	0
Education of Young Children (5024)	100 - 200	1	2591	169	162 - 178	5.3	1.5
Educational Leadership: Administration and Supervision (5411)	100 - 200	1	7092	166	157 - 174	5.9	0
Elementary Education: Content Knowledge (5018)	100 - 200	1	9061	170	160 - 180	5.6	0
Elementary Education: Curriculum, Instruction, and Assessment (5017)	100 - 200	1	5989	170	161 - 179	5.9	0
Elementary Education: Instructional Practice and Applications (5019)	100 - 200	1	4008	169	160 - 178	5.4	1.9
Elementary Education: Mathematics Subtest (5003)	100 - 200	1	15838	171	158 - 186	9.3	0
Elementary Education: Mathematics—Applied CKT (7903)	100 - 200	1	f	f	f	f	f
Elementary Education: Mathematics—CKT (7803)	100 - 200	1	f	f	f	f	f
Elementary Education: Reading and Language Arts Subtest (5002)	100 - 200	1	14674	170	160 - 179	7.4	0
Elementary Education: Reading and Language Arts—Applied CKT (7902)	100 - 200	1	f	f	f	f	f
Elementary Education: Reading and Language Arts—CKT (7802)	100 - 200	1	f	f	f	f	f
Elementary Education: Science (7804)	100 - 200	1	f	f	f	f	f
Elementary Education: Science (7904)	100 - 200	1	f	f	f	f	f
Elementary Education: Science Subtest (5005)	100 - 200	1	14898	168	159 - 178	8	0
Elementary Education: Social Studies (7805)	100 - 200	1	f	f	f	f	f
Elementary Education: Social Studies (7905)	100 - 200	1	f	f	f	f	f
Elementary Education: Social Studies Subtest (5004)	100 - 200	1	14906	165	155 - 177	7.7	0

Test Name	Possible Score Range	Score Interval	Number of Test Takers	Median	Average Performance Range	Standard Error of Measurement	Standard Error of Scoring
English Language Arts: Content and Analysis (5039)	100 - 200	1	5052	175	168 - 181	4.8	2.2
English Language Arts: Content Knowledge (5038)	100 - 200	1	14075	178	170 - 186	4.9	0
English to Speakers of Other Languages (5361)	100 - 200	1	8678	158	149 - 168	5.2	0
English to Speakers of Other Languages (5362)	100 - 200	1	f	f	f	f	f
Environmental Education (0831)	100 - 200	1	94	177	169 - 188	4.9	0
Family and Consumer Sciences (5122)	100 - 200	1	1232	162	154 - 169	5	0
French: World Language (5174)	100 - 200	1	1136	171	160 - 185	5.1	2.5
Fundamental Subjects: Content Knowledge (5511)	100 - 200	1	6211	175	163 - 185	5.7	0
General Science: Content Knowledge (5435)	100 - 200	1	6686	164	152 - 178	5.4	0
Geography (5921)	100 - 200	1	194	174	162 - 182	5.5	0
German: World Language (5183)	100 - 200	1	286	174.5	156 - 193	4.8	c
Gifted Education (5358)	100 - 200	1	651	164	157 - 171	5.4	0
Government/Political Science (5931)	100 - 200	1	497	166	153 - 179	6	0
Health and Physical Education: Content Knowledge (5857)	100 - 200	1	2916	165	158 - 172	5.5	0
Health Education (5551)	100 - 200	1	3632	167	159 - 174	5.5	0
Interdisciplinary Early Childhood Education (5023)	100 - 200	1	408	180	175 - 184	5.3	0
Journalism (5223)	100 - 200	1	139	168	161 - 177	6.5	0
Latin (5601)	100 - 200	1	117	180	164 - 195	5.1	0
Library Media Specialist (5311)	100 - 200	1	3412	164	156 - 171	4.7	0
Marketing Education (5561)	100 - 200	1	425	170	159 - 178	5.6	0
Mathematics: Content Knowledge (5161)	100 - 200	1	14182	158	136 - 169	7.4	0
Middle School English Language Arts (5047)	100 - 200	1	6318	165	154 - 172	5.9	2.4
Middle School Mathematics (5169)	100 - 200	1	12025	169	154 - 179	7.1	0
Middle School Science (5440)	100 - 200	1	4363	157	143 - 170	6.4	0
Middle School Social Studies (5089)	100 - 200	1	5458	166	155 - 179	6.4	2.6
Middle School: Content Knowledge (5146)	100 - 200	1	5878	163	152 - 175	5.9	0
Music: Content and Instruction (5114)	100 - 200	1	2580	167	160 - 174	6.5	2
Music: Content Knowledge (5113)	100 - 200	1	5474	168	160 - 176	5.5	0
ParaPro Assessment (1755)	420 - 480	1	61755	470	463 - 476	3.4	0
Pennsylvania Grades 4-8 Core Assessment: English Language Arts and Social Studies (5154)	100 - 200	1	2649	162	154 - 176	8.3	0
Pennsylvania Grades 4-8 Core Assessment: Mathematics and Science (5155)	100 - 200	1	2636	172	163 - 185	8.3	0
Pennsylvania Grades 4-8 Core Assessment: Pedagogy (5153)	100 - 200	1	2599	179	172 - 185	6	0
Pennsylvania Grades 4-8 Subject Concentration: English Language Arts (5156)	100 - 200	1	1093	169	159 - 182	7	0
Pennsylvania Grades 4-8 Subject Concentration: Mathematics (5158)	100 - 200	1	1450	172	155 - 182	7.6	0
Pennsylvania Grades 4-8 Subject Concentration: Science (5159)	100 - 200	1	699	161	150 - 173	7.1	0
Pennsylvania Grades 4-8 Subject Concentration: Social Studies (5157)	100 - 200	1	559	161	150 - 174	7.2	0
Physical Education: Content and Design (5095)	100 - 200	1	2737	170	163 - 176	5.4	1
Physical Education: Content Knowledge (5091)	100 - 200	1	5458	155	150 - 161	3.8	0
Physics: Content Knowledge (5265)	100 - 200	1	2012	151	137 - 168	6	0
Pre-Kindergarten Education (5531)	100 - 200	1	218	181	171 - 188	5.7	0

Test Name	Possible Score Range	Score Interval	Number of Test Takers	Median	Average Performance Range	Standard Error of Measurement	Standard Error of Scoring
Principles of Learning and Teaching: Early Childhood (5621)	100 - 200	1	8111	169	162 - 176	5.8	2.3
Principles of Learning and Teaching: Grades 7-12 (5624)	100 - 200	1	32141	176	168 - 183	5.7	2.5
Principles of Learning and Teaching: Grades 5-9 (5623)	100 - 200	1	5677	175	168 - 181	5.4	2.2
Principles of Learning and Teaching: Grades K-6 (5622)	100 - 200	1	32658	177	169 - 183	5.2	2.1
Professional School Counselor (5421)	100 - 200	1	7699	170	162 - 176	4.7	0
Psychology (5391)	100 - 200	1	239	169	159 - 177	5.5	0
Reading for Virginia Educators: Elementary and Special Education (5306)	100 - 200	1	8031	177	167 - 185	5.7	1.6
Reading for Virginia Educators: Reading Specialist (5304)	100 - 200	1	774	182	172 - 190	5.9	c
Reading Specialist (5301)	100 - 200	1	5009	183	174 - 190	5.8	1.7
School Psychologist (5402)	100 - 200	1	3718	170	162 - 177	5	0
Social Studies: Content and Interpretation (5086)	100 - 200	1	3670	161	150 - 171	5.8	2.2
Social Studies: Content Knowledge (5081)	100 - 200	1	13291	166	157 - 177	4.9	0
Sociology (5952)	100 - 200	1	76	170	161 - 179	i	i
Spanish: World Language (5195)	100 - 200	1	5806	173	157 - 186	5.4	2.4
Special Education: Core Knowledge and Applications (5354)	100 - 200	1	13030	173	165 - 181	5	0
Special Education: Core Knowledge and Mild to Moderate Applications (5543)	100 - 200	1	12623	172	164 - 179	5.3	2
Special Education: Core Knowledge and Severe to Profound Applications (5545)	100 - 200	1	1762	177	170 - 183	4.9	2
Special Education: Education of Deaf and Hard of Hearing Students (5272)	100 - 200	1	281	170	163 - 176	5.6	0
Special Education: Preschool/Early Childhood (5691)	100 - 200	1	1508	176	169 - 183	4.9	0
Special Education: Teaching Speech to Students with Language Impairments (5881)	100 - 200	1	72	165	155 - 170	5.5	0
Special Education: Teaching Students with Behavioral Disorders/Emotional Disturbances (5372)	100 - 200	1	1441	179	172 - 186	4.8	0
Special Education: Teaching Students with Intellectual Disabilities (5322)	100 - 200	1	130	179	173 - 184	5.1	0
Special Education: Teaching Students with Learning Disabilities (5383)	100 - 200	1	486	170	161 - 177	5.3	0
Special Education: Teaching Students with Visual Impairments (5282)	100 - 200	1	326	170	163 - 176	5.7	0
Speech Communication: Content Knowledge (5221)	100 - 200	1	711	160	151 - 169	4.6	0
Speech-Language Pathology (5331)	100 - 200	1	12498	178	171 - 185	5	0
Teaching Reading (5204)	100 - 200	1	6005	169	162 - 178	5.1	2
Teaching Reading: Elementary Education (5203)	100 - 200	1	12443	176	169 - 183	4.6	1.7
Technology Education (5051)	100 - 200	1	1317	180	170 - 189	5.2	0
Theatre (5641)	100 - 200	1	558	169	160 - 177	5.2	0
World and U.S. History: Content Knowledge (5941)	100 - 200	1	2770	161	150 - 172	5.2	0
World Languages Pedagogy (5841)	100 - 200	1	473	183	172 - 190	6.9	2.1

NOTES: (Section II. Glossary of Terms, provides definitions for each of the statistics provided.)

“Number of Test Takers,” “Median,” and “Average Performance Range” were calculated from the records of test takers who took the test between August 2013 and July 2016, and who are in the particular educational group described below. If a test taker took the test more than once in this period, the most recent score was used. Test takers were selected according to their responses to the question, “What is the highest educational level you have reached?”

The Median and Average Performance Range for the Core tests were calculated on college freshmen, sophomores, and juniors. The Median and Average Performance Range for the ParaPro Assessment were calculated on test takers from all educational levels.

The Median and Average Performance Range for all other tests were calculated on test takers who were college seniors, college graduates, graduate students, or holders of master’s or doctoral degrees.

Summary Statistics are not available for new tests administered for the first time in the 2015–16 testing year.

c = Consensus scoring.

i = Insufficient data.

f = New test. Data not yet available.

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