

Understanding Your *Praxis*® Scores 2017–18

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.

For some tests, c-rater is one of the scorers. c-rater is an automated ETS scoring engine that scores responses to content-based, short-answer questions based on data from thousands of previously scored essays.

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 human 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. Both the Informative/Explanatory Essay and the Argumentative Essay are scored by a human reader and *e-rater*®, ETS software that computes a score based on data from thousands of previously scored essays. If the human score and the *e-rater* score agree, the two scores are added to become the final score for the

essay. If they differ by more than a specified amount, your response is rated by a different human scorer, whose rating is used to resolve the discrepancy. 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	919	169	160 - 177	5.2	0
Algebra I (5162)	100 - 200	1	303	168	154 - 179	i	i
American Sign Language (0634)	100 - 200	1	6	i	i	i	i
Art: Content and Analysis (5135)	100 - 200	1	2130	167	160 - 175	5.6	2.5
Art: Content Knowledge (5134)	100 - 200	1	3568	165	158 - 174	5.5	0
Audiology (5342)	100 - 200	1	1948	179	173 - 184	5	0
Biology: Content Knowledge (5235)	100 - 200	1	9256	163	153 - 175	4.3	0
Braille Proficiency (0633)	100 - 200	1	16	167	162 - 184	i	i
Business Education: Content Knowledge (5101)	100 - 200	1	4843	172	163 - 181	4.9	0
Chemistry: Content Knowledge (5245)	100 - 200	1	3814	160	149 - 175	5.6	0
Chinese (Mandarin): World Language (5665)	100 - 200	1	311	194	182 - 199	4.5	1.7
Citizenship Education: Content Knowledge (5087)	100 - 200	1	99	164	153 - 174	5	0
Computer Science (5651)	100 - 200	1	238	166	143 - 180	6.3	0
Core Academic Skills for Educators: Mathematics (5732)	100 - 200	2	68967	156	142 - 168	8.5	0
Core Academic Skills for Educators: Reading (5712)	100 - 200	2	63991	172	162 - 184	7.1	0
Core Academic Skills for Educators: Writing (5722)	100 - 200	2	66673	166	158 - 172	5.6	2.2
Early Childhood Education (5025)	100 - 200	1	4871	170	158 - 180	5.6	0
Earth and Space Sciences: Content Knowledge (5571)	100 - 200	1	1860	166	155 - 179	5.2	0
Economics (5911)	100 - 200	1	418	152	140 - 164	6.6	0
Education of Young Children (5024)	100 - 200	1	4245	169	162 - 178	5.4	1.6
Educational Leadership: Administration and Supervision (5411)	100 - 200	1	8134	165	156 - 173	5.8	0
Elementary Education: Content Knowledge (5018)	100 - 200	1	15074	170	160 - 180	5.7	0
Elementary Education: Curriculum, Instruction, and Assessment (5017)	100 - 200	1	9125	170	161 - 179	5.9	0
Elementary Education: Instructional Practice and Applications (5019)	100 - 200	1	5752	169	161 - 178	5.4	1.9
Elementary Education: Mathematics Subtest (5003)	100 - 200	1	29234	172	161 - 186	9.4	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	27889	170	161 - 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	28059	168	160 - 179	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	28148	166	156 - 177	7.9	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	6580	175	169 - 182	4.8	2.2
English Language Arts: Content Knowledge (5038)	100 - 200	1	15365	178	170 - 186	4.9	0
English to Speakers of Other Languages (5362)	100 - 200	1	2296	178	169 - 186	5	0
Environmental Education (0831)	100 - 200	1	18	176	169 - 182	4.9	0
Family and Consumer Sciences (5122)	100 - 200	1	2089	162	155 - 170	5	0
French: World Language (5174)	100 - 200	1	1051	172	160 - 184	5.1	2.5
Fundamental Subjects: Content Knowledge (5511)	100 - 200	1	4666	175	163 - 185	5.9	0
General Science: Content Knowledge (5435)	100 - 200	1	7249	165	152 - 178	5.4	0
Geography (5921)	100 - 200	1	304	174	162 - 182	5.1	0
German: World Language (5183)	100 - 200	1	295	175	158 - 193	5.1	2.6
Gifted Education (5358)	100 - 200	1	1080	164	158 - 170	5.4	0
Government/Political Science (5931)	100 - 200	1	775	167	154 - 179	5.4	0
Health and Physical Education: Content Knowledge (5857)	100 - 200	1	4591	165	159 - 172	5.6	0
Health Education (5551)	100 - 200	1	3414	166	158 - 174	5.4	0
Interdisciplinary Early Childhood Education (5023)	100 - 200	1	528	180	175 - 184	4.6	0
Journalism (5223)	100 - 200	1	207	170	161 - 177	6.5	0
Latin (5601)	100 - 200	1	160	180	164 - 195	5.1	0
Library Media Specialist (5311)	100 - 200	1	3310	164	156 - 171	4.7	0
Marketing Education (5561)	100 - 200	1	637	170	160 - 178	5.8	0
Mathematics: Content Knowledge (5161)	100 - 200	1	16461	159	136 - 169	7.3	0
Middle School English Language Arts (5047)	100 - 200	1	7298	165	155 - 172	5.9	2.4
Middle School Mathematics (5169)	100 - 200	1	13403	169	156 - 179	7.1	0
Middle School Science (5440)	100 - 200	1	6650	159	146 - 171	6.3	0
Middle School Social Studies (5089)	100 - 200	1	5216	166	154 - 179	6.3	2.5
Middle School: Content Knowledge (5146)	100 - 200	1	5403	163	152 - 174	6.2	0
Music: Content and Instruction (5114)	100 - 200	1	2702	167	160 - 174	6.5	2
Music: Content Knowledge (5113)	100 - 200	1	5308	168	161 - 176	5.6	0
ParaPro Assessment (1755)	420 - 480	1	68128	470	463 - 476	3.4	0
Pennsylvania Grades 4-8 Core Assessment: English Language Arts and Social Studies (5154)	100 - 200	1	3577	162	152 - 174	8.3	0
Pennsylvania Grades 4-8 Core Assessment: Mathematics and Science (5155)	100 - 200	1	3566	171	161 - 183	8.3	0
Pennsylvania Grades 4-8 Core Assessment: Pedagogy (5153)	100 - 200	1	2903	179	172 - 185	5.9	0
Pennsylvania Grades 4-8 Subject Concentration: English Language Arts (5156)	100 - 200	1	1307	169	158 - 181	7	0
Pennsylvania Grades 4-8 Subject Concentration: Mathematics (5158)	100 - 200	1	1632	173.5	156 - 184	8.1	0
Pennsylvania Grades 4-8 Subject Concentration: Science (5159)	100 - 200	1	807	161	151 - 173	6.9	0
Pennsylvania Grades 4-8 Subject Concentration: Social Studies (5157)	100 - 200	1	592	162	152 - 175	7.2	0
Physical Education: Content and Design (5095)	100 - 200	1	2764	170	163 - 176	5.4	1.5
Physical Education: Content Knowledge (5091)	100 - 200	1	4904	155	150 - 161	3.9	0
Physics: Content Knowledge (5265)	100 - 200	1	2039	152	138 - 168	5.9	0
Pre-Kindergarten Education (5531)	100 - 200	1	256	180	171 - 187	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	7501	169	162 - 177	5.6	2.2
Principles of Learning and Teaching: Grades 7-12 (5624)	100 - 200	1	33357	176	168 - 183	5.7	2.5
Principles of Learning and Teaching: Grades 5-9 (5623)	100 - 200	1	5585	175	168 - 182	5.4	2.3
Principles of Learning and Teaching: Grades K-6 (5622)	100 - 200	1	32031	177	169 - 183	5.2	2.1
Professional School Counselor (5421)	100 - 200	1	8696	170	162 - 176	4.4	0
Psychology (5391)	100 - 200	1	330	169	159 - 177	5.5	0
Reading for Virginia Educators: Elementary and Special Education (5306)	100 - 200	1	7818	176	167 - 185	5.7	1.6
Reading for Virginia Educators: Reading Specialist (5304)	100 - 200	1	768	182	172 - 190	5.9	c
Reading Specialist (5301)	100 - 200	1	4873	183	174 - 190	5.8	1.7
School Psychologist (5402)	100 - 200	1	5945	170	162 - 177	4.5	0
Social Studies: Content and Interpretation (5086)	100 - 200	1	3769	161	150 - 171	5.8	2.2
Social Studies: Content Knowledge (5081)	100 - 200	1	13246	166	157 - 177	4.8	0
Sociology (5952)	100 - 200	1	110	171	161 - 179	i	i
Spanish: World Language (5195)	100 - 200	1	5596	174	159 - 186	5.4	2.4
Special Education: Core Knowledge and Applications (5354)	100 - 200	1	13656	173	165 - 181	4.9	0
Special Education: Core Knowledge and Mild to Moderate Applications (5543)	100 - 200	1	12106	172	164 - 179	4.6	2
Special Education: Core Knowledge and Severe to Profound Applications (5545)	100 - 200	1	2197	177	170 - 183	4.9	2
Special Education: Education of Deaf and Hard of Hearing Students (5272)	100 - 200	1	358	169	163 - 176	5	0
Special Education: Preschool/Early Childhood (5691)	100 - 200	1	2062	175	168 - 182	4.6	0
Special Education: Teaching Speech to Students with Language Impairments (5881)	100 - 200	1	92	165.5	157 - 173	5.5	0
Special Education: Teaching Students with Behavioral Disorders/Emotional Disturbances (5372)	100 - 200	1	1810	179	172 - 185	5.1	0
Special Education: Teaching Students with Intellectual Disabilities (5322)	100 - 200	1	183	179	173 - 184	5.1	0
Special Education: Teaching Students with Learning Disabilities (5383)	100 - 200	1	595	170	161 - 177	5.2	0
Special Education: Teaching Students with Visual Impairments (5282)	100 - 200	1	405	170	163 - 176	5.3	0
Speech Communication: Content Knowledge (5221)	100 - 200	1	733	160	151 - 169	4.6	0
Speech-Language Pathology (5331)	100 - 200	1	19774	178	171 - 185	5	0
Teaching Reading (5204)	100 - 200	1	5079	169	161 - 177	4.7	1.6
Teaching Reading: Elementary Education (5203)	100 - 200	1	10347	176	169 - 182	4.6	1.7
Technology Education (5051)	100 - 200	1	1880	180	170 - 189	5.3	0
Theatre (5641)	100 - 200	1	803	169	161 - 179	5.3	0
World and U.S. History: Content Knowledge (5941)	100 - 200	1	2927	162	150 - 173	5.2	0
World Languages Pedagogy (5841)	100 - 200	1	667	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 2014 and July 2017, 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 2017–18 testing year.

c = Consensus scoring.

i = Insufficient data.

f = New test. Data not yet available.

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