

Understanding Your *Praxis*[®] Scores 2022–2023

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.

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 sixpoint 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

• 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.

• 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.

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.

• 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, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, 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.

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.

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.

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 (Test Code)	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	973	167	157 - 175	5.2	0
Algebra I (5162)	100 - 200	1	1216	165	151 - 176	7.2	0
American Sign Language (0634)	100 - 200	1	33	160	150 - 170	i	i
Art: Content and Analysis (5135)	100 - 200	1	1979	165	156 - 172	5.8	2.3
Art: Content Knowledge (5134)	100 - 200	1	3678	164	157 - 172	5.6	0
Audiology (5343)	100 - 200	1	1222	169	163 - 175	6.4	0
Biology (5236)	f	f	f	f	f	f	f
Biology: Content Knowledge (5235)	100 - 200	1	6658	163	153 - 173	4.3	0
Braille Proficiency (0633)	100 - 200	1	27	179	171 - 196	i	i
Business Education: Content Knowledge (5101)	100 - 200	1	4396	171	161 - 180	5.4	0
Chemistry (5246)	f	f	f	f	f	f	f
Chemistry: Content Knowledge (5245)	100 - 200	1	2552	159	148 - 173	5.6	0
Chinese (Mandarin): World Language (5665)	100 - 200	1	312	196	190 - 199	4.2	1.4
Citizenship Education: Content Knowledge (5087)	100 - 200	1	72	167	155 - 179	5	0
Communication and Literacy: Reading (5714)	100 - 200	2	15	168	146 - 192	i	i
Communication and Literacy: Writing (5724)	100 - 200	2	14	168	152 - 180	i	i
Computer Science (5652)	100 - 200	1	1040	166	149 - 187	6.1	0
Core Academic Skills for Educators Mathematics (5733)	100 - 200	2	30470	168	154 - 182	7.7	0
Core Academic Skills for Educators Reading (5713)	100 - 200	2	27530	170	158 - 184	7.5	0
Core Academic Skills for Educators Writing (5723)	100 - 200	2	30490	164	156 - 170	5.7	1.7
Early Childhood Education (5025)	100 - 200	1	9086	170	160 - 180	5.5	0
Early Childhood: Mathematics and Science (5028)	100 - 200	1	160	171	162 - 181	6.5	0
Early Childhood: Reading and Language Arts and Social Studies (5027)	100 - 200	1	161	171	165 - 180	6.4	0
Earth and Space Sciences (5572)	f	f	f	f	f	f	f
Earth and Space Sciences: Content Knowledge (5571)	100 - 200	1	1509	162	152 - 174	5.2	0
Economics (5911)	100 - 200	1	364	155	143 - 167	6.2	0
Education of Young Children (5024)	100 - 200	1	4858	168	161 - 176	5.4	1.9
Educational Leadership: Administration and Supervision (5412)	100 - 200	1	9918	168	159 - 175	5.7	0
Elementary Ed: Three Subject Bundle- Mathematics (5903)	100 - 200	1	2796	168	153 - 183	9.2	0
Elementary Ed: Three Subject Bundle-Science (5905)	100 - 200	1	2790	167	158 - 177	7.9	0
Elementary Ed: Three Subject Bundle-Social Studies (5904)	100 - 200	1	2776	163	154 - 176	7.9	0
Elementary Education: Content Knowledge (5018)	100 - 200	1	5115	167	156 - 177	5.5	0
Elementary Education: Curriculum, Instruction, and Assessment (5017)	100 - 200	1	3924	167	158 - 177	5.9	0
Elementary Education: Mathematics and Science (5008)	100 - 200	1	1562	166	153 - 176	6.6	0
Elementary Education: Math Specialist (5037)	f	f	f	f	f	f	f

Test Name (Test Code)	Possible Score Range	Score Interval	Number of Test Takers	Median	Average Performance Range	Standard Error of Measurement	Standard Error of Scoring
Elementary Education: Mathematics Subtest (5003)	100 - 200	1	41745	172	160 - 186	9.2	0
Elementary Education: Mathematics-CKT (7813)	100 - 200	1	12661	160	150 - 172	7.6	0
Elementary Education: Reading and Language Arts Subtest (5002)	100 - 200	1	41399	170	161 - 179	6.8	0
Elementary Education: Reading and Language Arts-CKT (7812)	100 - 200	1	5331	170	163 - 178	6.8	0
Elementary Education: Reading, Language Arts and Social Studies (5007)	100 - 200	1	1635	169	162 - 177	6.1	0
Elementary Education: Science Subtest (5005)	100 - 200	1	41834	169	161 - 179	7.9	0
Elementary Education: Science-CKT (7814)	100 - 200	1	5276	175	163 - 186	8	0
Elementary Education: Social Studies Subtest (5004)	100 - 200	1	42038	166	157 - 177	7.9	0
Elementary Education: Social Studies-CKT (7815)	100 - 200	1	5475	172	162 - 182	7.3	0
English Language Arts: Content and Analysis (5039)	100 - 200	1	5629	174	168 - 180	4.7	2.2
English Language Arts: Content Knowledge (5038)	100 - 200	1	13690	178	170 - 186	4.7	0
English to Speakers of Other Languages (5362)	100 - 200	1	13068	177	167 - 185	5.2	0
Family and Consumer Sciences (5122)	100 - 200	1	2624	163	156 - 170	4.7	0
French: World Language (5174)	100 - 200	1	724	170	156 - 184	5.2	2.4
Fundamental Subjects: Content Knowledge (5511)	100 - 200	1	5149	173	160 - 185	5.8	0
General Science (5436)	f	f	f	f	f	f	f
General Science: Content Knowledge (5435)	100 - 200	1	5062	161	150 - 176	5.4	0
Geography (5921)	100 - 200	1	212	172	160 - 183	5.1	0
Geometry (5163)	100 - 200	1	100	152	131 - 165	8.7	0
German: World Language (5183)	100 - 200	1	222	181.5	160 - 193	5.2	2.2
Gifted Education (5358)	100 - 200	1	1718	164	159 - 170	5	0
Government/ Political Science (5931)	100 - 200	1	604	168	156 - 179	5.2	0
Health and Physical Education: Content Knowledge (5857)	100 - 200	1	5556	165	158 - 172	5.6	0
Health Education (5551)	100 - 200	1	2370	166	157 - 174	5.1	0
Health Occupations (5052)	f	f	f	f	f	f	f
Interdisciplinary Early Childhood Education (5023)	100 - 200	1	749	179	173 - 184	4.6	0
Japanese: World Language (5661)	100 - 200	1	10	183	139 - 200	i	i
Journalism (5224)	100 - 200	1	54	182	176 - 187	i	i
Latin (5601)	100 - 200	1	110	180	157 - 196	5.1	0
Library Media Specialist (5311)	100 - 200	1	3193	164	157 - 172	4.5	0
Marketing Education (5561)	100 - 200	1	537	167	154 - 177	5.8	0
Mathematics (5165)	100 - 200	1	1114	167	150 - 182	7.3	0
Middle School English Language Arts (5047)	100 - 200	1	6077	164	153 - 171	5.7	2.3
Middle School Mathematics (5164)	100 - 200	1	921	164	148 - 177	7.2	0
Middle School Science (5442)	100 - 200	1	2190	161	145 - 176	6.1	0
Middle School Social Studies (5089)	100 - 200	1	4565	167	154 - 180	6.2	2.3
Middle School: Content Knowledge (5146)	100 - 200	1	746	158	148 - 170	6.2	0
Music Instrumental and General Knowledge (5115)	100 - 200	1	202	163	153 - 173	6	0

Test Name (Test Code)	Possible Score Range	Score Interval	Number of Test Takers	Median	Average Performance Range	Standard Error of Measurement	Standard Error of Scoring
Music Vocal and General Knowledge (5116)	100 - 200	1	119	167	154 - 176	5.7	0
Music: Content and Instruction (5114)	100 - 200	1	2814	165	157 - 172	6	1.7
Music: Content Knowledge (5113)	100 - 200	1	4640	166	159 - 175	5.7	0
ParaPro Assessment (1755)	420 - 480	1	72491	469	461 - 475	3.5	0
Pennsylvania Grades 4-8 Core Assessment: English Language Arts and Social Studies (5154)	100 - 200	1	3412	161	151 - 173	8.1	0
Pennsylvania Grades 4-8 Core Assessment: Mathematics and Science (5155)	100 - 200	1	3459	171	159 - 183	8.1	0
Pennsylvania Grades 4-8 Core Assessment: Pedagogy (5153)	100 - 200	1	1747	179	171 - 185	5.6	0
Pennsylvania Grades 4-8 Subject Concentration: English Language Arts (5156)	100 - 200	1	936	167	156 - 178	6.9	0
Pennsylvania Grades 4-8 Subject Concentration: Mathematics (5158)	100 - 200	1	1127	174	159 - 184	7.6	0
Pennsylvania Grades 4-8 Subject Concentration: Science (5159)	100 - 200	1	598	162	152 - 173	6.9	0
Pennsylvania Grades 4-8 Subject Concentration: Social Studies (5157)	100 - 200	1	510	161	150 - 177	7.4	0
Physical Education: Content and Design (5095)	100 - 200	1	2751	170	160 - 174	5.5	2.3
Physical Education: Content Knowledge (5091)	100 - 200	1	4192	154	150 - 159	3.9	0
Physical Science (5485)	100 - 200	1	41	154	133 - 164	i	i
Physics (5266)	f	f	f	f	f	f	f
Physics: Content Knowledge (5265)	100 - 200	1	1619	152	138 - 167	5.9	0
Pre-Kindergarten Education (5531)	100 - 200	1	192	175	163 - 181	5.7	0
Principles of Learning and Teaching: 5-9 (5623)	100 - 200	1	4754	176	168 - 182	5	2.1
Principles of Learning and Teaching: 7-12 (5624)	100 - 200	1	22412	176	168 - 183	5.4	2.3
Principles of Learning and Teaching: Early Childhood (5621)	100 - 200	1	4926	168	161 - 175	5	2.1
Principles of Learning and Teaching: K-6 (5622)	100 - 200	1	23005	176	168 - 182	5.1	2.1
Principles of Learning and Teaching: PreK-12 (5625)	100 - 200	1	1102	168	158 - 177	6.4	0
Professional School Counselor (5421)	100 - 200	1	10109	169	162 - 176	4.4	0
Psychology (5391)	100 - 200	1	308	169	158 - 180	5.1	0
Reading Specialist (5302)	100 - 200	1	931	170	163 - 177	5.6	2
Russian: World Language (5671)	f	f	f	f	f	f	f
School Counselor (5422)	f	f	f	f	f	f	f
School Librarian (5312)	f	f	f	f	f	f	f
School Psychologist (5402)	100 - 200	1	7511	168	160 - 175	4.6	0
School Psychologist (5403)	f	f	f	f	f	f	f
Social Studies: Content and Interpretation (5086)	100 - 200	1	3431	160	150 - 170	5.7	2.1
Social Studies: Content Knowledge (5081)	100 - 200	1	10981	167	157 - 178	4.6	0
Sociology (5952)	100 - 200	1	137	174	163 - 181	5.4	0
Spanish: World Language (5195)	100 - 200	1	4422	176	162 - 187	5.3	2.3
Special Education: Core Knowledge and Applications (5354)	100 - 200	1	16007	173	164 - 180	4.9	0

Test Name (Test Code)	Possible Score Range	Score Interval	Number of Test Takers	Median	Average Performance Range	Standard Error of Measurement	Standard Error of Scoring
Special Education: Core Knowledge and Mild to Moderate Applications (5543)	100 - 200	1	13617	172	164 - 179	4.6	2
Special Education: Core Knowledge and Severe to Profound Applications (5545)	100 - 200	1	2045	177	170 - 183	4.1	1.8
Special Education: Early Childhood/Early Intervention (5692)	f	f	f	f	f	f	f
Special Education: Education of Deaf and Hard of Hearing Students (5272)	100 - 200	1	426	166	161 - 173	5.5	0
Special Education: Preschool/Early Childhood (5691)	100 - 200	1	1814	173	166 - 179	4.4	0
Special Education: Teaching Speech to Students with Language Impairments (5881)	100 - 200	1	54	156	151 - 166	5.5	0
Special Education: Teaching Students with Behavioral Disorders/Emotional Disturbances (5372)	100 - 200	1	383	176	167 - 185	4.7	0
Special Education: Teaching Students with Intellectual Disabilities (5322)	100 - 200	1	162	179	172 - 185	4.9	0
Special Education: Teaching Students with Learning Disabilities (5383)	100 - 200	1	650	165	158 - 176	5.2	0
Special Education: Teaching Students with Visual Impairments (5282)	100 - 200	1	372	171	164 - 178	5.4	0
Speech Communication Content Knowledge (5221)	100 - 200	1	476	161	150 - 169	4.7	0
Speech-Language Pathology (5331)	100 - 200	1	24047	175	169 - 183	4.9	0
Teaching Reading K-12 (5206)	100 - 200	1	1495	164	158 - 172	5.1	1.8
Teaching Reading: Elementary (5205)	100 - 200	1	13361	166	160 - 174	5.1	1.5
Technology Education (5051)	100 - 200	1	1764	179	168 - 188	5.1	0
Theatre (5641)	100 - 200	1	866	169	161 - 178	5.2	0
World and U.S. History: Content Knowledge (5941)	100 - 200	1	2955	161	149 - 172	5.5	0
World Languages Pedagogy (5841)	100 - 200	1	469	178	166 - 188	6.8	1.9

Standard

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 2019 and July 2022, 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 and Communication and Literacy 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 2022–23 testing year.

c = Consensus scoring.

i = Insufficient data.

f = New test. Data not yet available.