



Texas

Educator Certification
Examination Program

TEXAS EDUCATOR CERTIFICATION EXAMINATION PROGRAM

Annual Technical Administration Manual 2022-2023

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Table of Contents

Preface	4
I. Purpose of the Texas Educator Certification Examination Program	5
Introduction.....	5
Program Policy	5
Composition of the Texas Educator Certification Examination Program	8
II. Examination Development and Design	8
General Exam Design	8
III. Examination Administration	9
IV. Psychometrics	9
Item Analyses	9
Item Analysis for Selected-Response Items	9
Item Analysis for Constructed-Response Items	10
Differential Item Functioning (DIF)	10
Exam Form Construction	10
Exam Equating	11
Equating Design	11
V. Technical Properties of the Scores	13
Scoring	13
Scoring Selected-response Items.....	13
Scoring Constructed-Response Items	13
Scaled Scores	15
Calculation of Scaled Scores	15
Introductory Pass/Fail Periods	16
Reliability	16
VI. Exam Administration Statistics	19
Exam Form Statistics Reports	19
Exam Statistics Report for Exam Fields with Constructed-Response Items.....	20
Total Scaled Score Distribution by Exam Field	21
Total Scaled Score Summary Statistics by Exam Field.....	21
VII. Score Reporting	22
Candidate Score Reports.....	22
Other Score Recipients	23
Title II Reporting	23
References	24
Appendix 1. Exam Form Statistics Report	25
Appendix 2. Exam Statistics Report for Exam Fields with Constructed-Response Items	46
Appendix 3. Total Scaled Score Distribution by Exam Field	49
Appendix 4. Total Scaled Score Summary Statistics by Exam Field	145
Appendix 5. Sample Candidate Score Report	151

Preface

The Texas Education Agency (TEA) has contracted with the Evaluation Systems group of Pearson (Pearson) to plan, develop and administer the Texas Educator Certification Examination Program.

This annual technical administration manual provides information on the technical characteristics of the examinations and score reporting for the Texas Educator Certification Examination Program examinations. It provides performance data specific to those examinations that were administered during the 2022-2023 academic year. The academic year is defined as September 1, 2022, to August 31, 2023.

I. Purpose of the Texas Educator Certification Examination Program

Introduction

The purpose of the Texas Educator Certification Examination Program is to verify that each educator has the prerequisite content and professional knowledge, skills, and abilities necessary for an entry-level position in Texas public schools and has the capability of becoming a highly effective educator. In the 2022-2023 academic year, i.e., September 1, 2022 to August 31, 2023, the Texas Educator Certification Examination Program, administered by Pearson, included five categories of exams for educator certification: the Texas Examinations of Educator Standards (TExES), the Texas Assessments of Sign Communications (TASC), the Texas Assessments of Sign Communications—American Sign Language (TASC-ASL), the Pre-Admission Content Test (PACT) exams, and the American Association of Family & Consumer Sciences (AAFCS) examinations.

Exams in the Texas Educator Certification Examination Program were previously validated for use in Texas in accordance with the practices recommended by the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014), hereafter referred to as the “Standards.” The Standards require a clear definition of content domain and a rationale to support a claim that the knowledge, skills, and abilities being assessed in a licensure exam are required for credential-worthy performance.

Program Policy

Texas law requires that educators pass appropriate exams to become certified. The exam(s) required for certification are specified in Texas Administrative Code, §230.21(e) (see <http://ritter.tea.state.tx.us/sbecrules/tac/chapter230/ch230c.html>). The certification exams are aligned to standards for beginning educators. These standards are created and approved by the State Board for Educator Certification (SBEC)¹ (see <https://tea.texas.gov/node/106009>). These standards are focused upon the Texas Essential Knowledge and Skills (TEKS), the required statewide public-school curriculum. They reflect current research on the developmental stages and needs of children Early Childhood (EC) through Grade 12. Additionally, the Commissioner of the Texas Education Agency (TEA) has adopted new rules pertaining to Texas teaching standards: Texas Teaching Standards Adopted in Chapter 149 (see [http://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rl oc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=2&ch=149&rl=1001](http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rl oc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=2&ch=149&rl=1001)). Approved educator standards are available on the TEA website (see <https://tea.texas.gov/texas-educators/preparation-and-continuing-education/approved-educator-standards>).

¹ SBEC was created by the Texas Legislature in 1995 to recognize public school educators as professionals and grant educators the authority to govern the standards of their profession. The Board oversees all aspects of the preparation, certification and standards of conduct of public-school educators. SBEC's mission statement is "SBEC is dedicated to improving student achievement and ensuring the safety and welfare of Texas school children by upholding the highest level of educator preparation, performance, continuing education, and standards of conduct."

Table 1. 2022-23 Texas Educator Certification Examination Program Composition

TEGES™	292 Early Childhood: PK-3
113 English Language Arts and Reading/Social Studies 4-8	293 Science of Teaching Reading (STR)
114 Mathematics/Science 4-8	370 Pedagogy and Professional Responsibilities for Trade and Industrial Education 6-12
115 Mathematics 4-8	610 Languages Other Than English (LOTE) French
116 Science 4-8	611 Languages Other Than English (LOTE) German
118 Social Studies 4-8	612 Languages Other Than English (LOTE) Latin
129 Speech 7-12	613 Languages Other Than English (LOTE) Spanish
150 School Librarian	806 Core Subjects 4-8 English Language Arts & Reading
151 Reading Specialist	807 Core Subjects 4-8 Mathematics
154 English as a Second Language Supplemental (ESL)	808 Core Subjects 4-8 Social Studies
157 Health EC-12	809 Core Subjects 4-8 Science
158 Physical Education EC-12	901 Core Subjects EC-6 English Language Arts & Reading
160 Pedagogy and Professional Responsibilities EC-12	902 Core Subjects EC-6 Mathematics
161 Special Education EC-12	903 Core Subjects EC-6 Social Studies
162 Gifted and Talented Supplemental	904 Core Subjects EC-6 Science
163 Special Education Supplemental	905 Core Subjects EC-6 Fine Arts, Health and Physical Education
164 Bilingual Education Supplemental	
171 Technology Education 6-12	TASC™
177 Music EC-12	072 Texas Assessment of Sign Communication (TASC)
178 Art EC-12	
180 Theatre EC-12	TASC-ASL™
181 Deaf and Hard-of-Hearing	073 Texas Assessment of Sign Communication—American Sign Language (TASC-ASL)
182 Visually Impaired	
184 American Sign Language (ASL)	AAFCS
190 Bilingual Target Language Proficiency Test (BTLPT) Spanish	200 AAFCS Family and Consumer Sciences, Composite
195 Superintendent	201 AAFCS Hospitality, Nutrition, and Food Science
217 English Language Arts and Reading 4-8	202 AAFCS Human Development and Family Studies
231 English Language Arts and Reading 7-12	
232 Social Studies 7-12	PACT
233 History 7-12	701 TX PACT: Essential Academic Skills (Subtest I: Reading)
235 Mathematics 7-12	702 TX PACT: Essential Academic Skills (Subtest II: Writing)
236 Science 7-12	703 TX PACT: Essential Academic Skills (Subtest III: Mathematics)
237 Physical Science 6-12	710 TX PACT: LOTE French: Early Childhood-Grade 12
238 Life Science 7-12	
240 Chemistry 7-12	
241 Computer Science 8-12	
242 Technology Applications EC-12	
243 Physics/Mathematics 7-12	
252 School Counselor	
253 Educational Diagnostician	
256 Journalism 7-12	
268 Principal as Instructional Leader (PAIL)	
272 Agriculture, Food and Natural Resources 6-12	
273 Health Science 6-12	
274 Mathematics/Physical Science/Engineering 6-12	
275 Marketing 6-12	
276 Business and Finance 6-12	
279 Dance 6-12	
283 Braille (UEB)	

- 711 TX PACT: LOTE German: Early Childhood-Grade 12
- 712 TX PACT: LOTE Latin: Early Childhood-Grade 12
- 713 TX PACT: LOTE Spanish: Early Childhood-Grade 12
- 714 TX PACT: LOTE Chinese: Early Childhood-Grade 12
- 715 TX PACT: Mathematics: Grades 4-8
- 716 TX PACT: Science: Grades 4-8
- 717 TX PACT: English Language Arts and Reading: Grades 4-8
- 718 TX PACT: Social Studies: Grades 4-8
- 721 TX PACT: Family and Consumer Sciences
- 729 TX PACT: Speech: Grades 7-12
- 731 TX PACT: English Language Arts and Reading: Grades 7-12
- 732 TX PACT: Social Studies: Grades 7-12
- 733 TX PACT: History: Grades 7-12
- 735 TX PACT: Mathematics: Grades 7-12
- 736 TX PACT: Science: Grades 7-12
- 737 TX PACT: Physical Science: Grades 6-12
- 738 TX PACT: Life Science: Grades 7-12
- 739 TX PACT: Physics: Grades 7-12
- 740 TX PACT: Chemistry: Grades 7-12
- 741 TX PACT: Computer Science: Grades 8-12
- 742 TX PACT: Technology Applications: Early Childhood-Grade 12
- 756 TX PACT: Journalism: Grades 7-12
- 757 TX PACT: Health: Early Childhood-Grade 12
- 758 TX PACT: Physical Education: Early Childhood-Grade 12
- 771 TX PACT: Technology Education: Grades 6-12
- 772 TX PACT: Agriculture, Food, and Natural Resources: Grades 6-12
- 776 TX PACT: Business and Finance: Grades 6-12
- 777 TX PACT: Music: Early Childhood-Grade 12
- 778 TX PACT: Art: Early Childhood-Grade 12
- 779 TX PACT: Dance: Grades 6-12
- 780 TX PACT: Theatre: Early Childhood-Grade 12
- 784 TX PACT: American Sign Language (ASL): Early Childhood-Grade 12 (Subtest I)
- 785 TX PACT: American Sign Language (ASL): Early Childhood-Grade 12 (Subtest II)
- 790 TX PACT: Core Subjects: Grades 4-8

Composition of the Texas Educator Certification Examination Program

As of August 31, 2023, Texas Educator Certification Examination Program comprises 71 certification exams and 39 PACT exams. The AAFCS examinations are developed by the AAFCS and delivered and scored by Pearson. The available exams for the 2022-2023 academic year are listed in Table 1 by category and exam code number.

The Texas Educator Certification Examination Program exams are computer-administered and delivered through a national network of Pearson testing centers. Several web-based resources to help candidates prepare for the exams are offered. These resources include online study guides, practice exams, detailed score reports, and computer-administered testing tutorials. In addition, a suite of faculty resources and interactive worksheets is available to assist in candidate preparation. The TEA and educator preparation program (EPP) faculty have access to an interactive, electronic database that allows them to create customized reports of candidate exam results and EPP performance or to perform customized data queries.

II. Examination Development and Design

Exam development involves a comprehensive process of defining and structuring an exam field, collecting validity evidence regarding the exam content, reviewing content for potential issues with equity, fairness, and/or diversity, developing and pilot testing items, and establishing an appropriate passing score through guided standard setting activities. Details of the exam development activities performed by Pearson can be found in the *Texas Educator Certification Examination Program Annual Technical Development Manual, 2022-2023*. The Texas Educator Certification Examination Program Technical Manuals are available under Educator Preparation Programs (EPPs) on the program website (see https://www.tx.nesinc.com/PageView.aspx?f=HTML_FRAG/GENRB_TechnicalManual.html).

General Exam Design

Exam Specifications are developed for each field to inform the details and features of each exam and to guide item development needs. This includes the number and types of exam items on each form, the proportion or weighting of items from each competency, the allotted time to complete the exam, the proportion of scorable and non-scorable items and other guidelines relevant to form development. Most exams in the Texas Educator Certification Examination Program consist of selected-response items. Some exams also include a constructed-response section where candidates provide an open-ended response, typically in an essay format, to presented data and/or video stimuli. Information about each exam is located at the Texas Educator Certification Examination Program website (see).

https://www.tx.nesinc.com/PageView.aspx?f=HTML_FRAG/GENRB_TechnicalManual.html).

III. Examination Administration

The Texas Educator Certification Examination Program exams are administered under standardized, consistent procedures in a national network of Pearson computer-administered testing centers. Exam administrations are designed to provide a professional, equitable, and secure testing environment for all candidates, including those with needs for alternative testing arrangements. Testing centers are screened and selected based on criteria relating to exam security, accessibility, and appropriate testing conditions and facilities.

Exam administrators are oriented and provided with procedural manuals to use before and during exam administrations. The orientation and the manuals are designed to facilitate secure, efficient, and professional exam administrations for all candidates.

In order to take a certification exam, educator candidates must be approved by their EPP. EPP faculty use TEA's Educator Certification Online System (ECOS) to authorize specific exams for educator candidates within their program. Once approval has been provided, educator candidates are able to register to take the exam.

IV. Psychometrics

This section describes the processes used to establish and reinforce the psychometric properties of the exams administered during the academic year.

Item Analyses

Item analyses are conducted on selected-response items to assess their accuracy and psychometric quality. Additionally, data from constructed-response items are reviewed to confirm that items in the item bank for each field are comparable in terms of difficulty and score distribution.

Item Analysis for Selected-Response Items

Data are collected on each item, allowing for the empirical consideration of item difficulty, item discrimination, content accuracy, and the plausibility of distractors. These item statistics are calculated and evaluated cumulatively (i.e., using combined statistics for previous operational exam administrations) every six months.

The item statistics calculated and evaluated for each selected-response item include:

- Item difficulty (p-value);
- Distribution of responses (percentages of participants selecting each response option);
- Item-to-total test point biserial correlation (correlation of performance on the item to performance on the total exam); and

- Mean score by response choice (average score on the total selected-response set achieved by all participants selecting each response option).

Those items that do not perform within defined statistical parameters are flagged and reviewed. Flagged items are reviewed by content specialists, exam development specialists, psychometricians, and editors. The review confirms that the wording on the exam forms matches the wording validated by Content Advisory Committees (CACs). During the review, there is a check of content, topicality, and correct response. Item reviews may result in revision and additional pilot testing, deletion from the operational item bank, or approval for use without revision.

Item Analysis for Constructed-Response Items

Constructed-response item data are regularly reviewed to monitor their difficulty across administrations. Throughout the scoring process, monitor reports containing mean scores and standard deviations are reviewed. The monitor reports also contain distribution of scores assigned by the first two scorers, distribution of score differences, and distribution of score combinations assigned by two scorers.

Differential Item Functioning (DIF)

Mantel-Haenszel differential item functioning (DIF) analysis is performed on an annual basis to determine statistically whether specific subgroups of test-takers are performing differently compared to other subgroups of test-takers in the test-taking population. The subgroups typically compared in this analysis are gender (i.e., male/female) and ethnicity (e.g., White/Hispanic; White/African American). The analyses are performed when each subgroup contains a minimum of 100 responses for a given test question. When evaluating item performance during pilot testing, the minimum number of responses is 30).

The results of the Mantel-Haenszel procedure are converted to a delta scale to allow for interpretation of the magnitude of DIF using the A/B/C classification scheme developed by Longford, Holland and Thayer (1993). The absolute value of the M-H D-DIF statistic and significance level are evaluated according to the following A/B/C classification scheme.

A = Negligible. MH D-DIF not significantly different from 0 (.05 level), OR Absolute value less than 1

B = Moderate. MH D-DIF significantly different from 0 (.05 level) AND EITHER

- Absolute value at least 1 but less than 1.5, OR
- Absolute value at least 1 but not significantly greater than 1 (.05 level)

C = Large. Absolute value of MH D-DIF at least 1.5 and significantly greater than 1 (.05 level)

Items exhibiting large DIF statistics are reviewed and evaluated by content specialists, exam development specialists, and psychometricians.

Exam Form Construction

Selected-response items are identified for inclusion on a form to meet the exam form blueprint (exam specifications), as well as using available operational and/or

pilot test item data. A primary focus in item selection is on content coverage and meeting the exam form blueprint. Item statistics (e.g., p-values and point-biserial correlations) are also considered and are based on an appropriate number of candidates. This process helps to establish continuity and consistency among the different forms of an exam.

- **Content Relationships.** Each exam form is constructed to be comparable to previous exam forms with respect to content coverage. This is accomplished by reviewing the proportion of scorable selected-response items for each competency and distributing them in accordance with the test design. Constructed-response items are also reviewed for similarity of structure and are assigned to the same exam competency across forms.
- **Statistical Relationships.** Each exam form is constructed to be comparable to the previous exam form in overall difficulty of scorable selected-response items. The exam form difficulty is determined by averaging the p-values for the scorable items on the previous form and the new form using previously accumulated examinee item data. In addition, using an equating model that is appropriate for the construction model and examinee incidence, the exam results for each form are statistically equated to those of the previous form to enable comparability of passing decisions across administrations.

Comparability of the constructed-response scoring across exam forms is established through several activities such as pilot testing, identifying responses that exemplify the various score points, and the training and calibration of scorers to a historic anchor set of responses written to each constructed-response item.

Exam Equating

Equating refers to the process of placing scores from alternate, parallel, or equivalent forms of an exam on a common scale (AERA, APA, & NCME, 2014). The central purpose of statistical equating methods is to compensate statistically for possible variability in the characteristics of exam forms that may affect candidates' scores (e.g., differences in the overall difficulty of a new exam form compared to a previous exam form). Statistical equating methods facilitate the adjustment of a candidate's scaled score for the relative difficulty of the specific exam form that was taken. Equating thus allows exam developers to attribute differences in scores across exam forms to differences in knowledge or skills, and not differences in the exams. Equating supports comparability among different exam forms and allows final scores from multiple exam forms to be used interchangeably.

Equating Design

Different models for selecting items for exam forms (i.e., item substitution) and performing associated test score equating may be employed for the Texas Educator Certification Examination Program, depending on the number of examinees who are expected to take the exams and other factors in the observed score distributions for the two exam forms that are to be equated.

Generally, new test forms are created so that all scorable items were present on the previous forms as either scorable or nonscorable items. The mean and standard deviation are computed for the set of items that were scorable on the previous

exam form and for the set of items that will be scorable on the new form, using the item response data of examinees who took the previous form. A score conversion method called *z-score equating* is applied to determine the score on the new form that corresponds to the passing score of the previous form.

To equate the two exam forms, a linear equating method was implemented. In linear equating, two scores are equivalent if they are the same number of standard deviation units above or below the mean for some group of candidates (Angoff, 1984). A linear equation is used to relate the scores from the two forms by setting standard deviation scores, or z-scores, to be equal on the two test forms (Kolen & Brennan, 2004).

The following formula is used for *z-score equating*:

1. Define:

\bar{X} = the mean raw score achieved on the new exam form's scorable items

S_x = the standard deviation of X

\bar{Y} = the mean raw score achieved on the previous exam form's scorable items

S_y = the standard deviation of Y

X_i = a given raw score on the new exam form

Y_i = the raw score equivalent to X_i expressed in the raw score metric of form Y

2. Set $Z_x = Z_y$

$$\frac{X_i - \bar{X}}{S_x} = \frac{Y_i - \bar{Y}}{S_y}$$

3. In order to find the equivalent passing score on the new form, solve for X_i where Y_i = the passing score on the previous form.

$$X_i = \bar{X} + \left(\frac{S_x}{S_y} \right) (Y_i - \bar{Y})$$

V. Technical Properties of the Scores

The Standards require that testing agencies provide relevant technical information about the exams so that users and reviewers have sufficient information to make judgments about the quality of the exams, the resulting scores, and interpretations based on exam scores (AERA, APA, & NCME, 2014). This information can ultimately assist users and reviewers in determining the appropriateness of the exam for its intended purpose (AERA, APA, & NCME, 2014).

Scoring

The Texas Educator Certification Examination Program includes exams consisting of selected-response items only as well as exams consisting of both selected-response and constructed-response items. The scoring procedures for the program are carefully documented for both selected-response and constructed-response items. Additionally, performance monitoring is conducted to check the accuracy of scoring and reporting for the constructed-response items.

Scoring Selected-response Items

Answer keys for selected-response items are prepared during the construction of exam forms. These keys are reviewed and checked at several points during development and production. Selected-response items are dichotomously scored, meaning a single point is awarded for each correct response, and no points are awarded for an incorrect response. For exams composed of selected-response items only, the final raw score is the total number of correct responses on the exam. The raw scores are transformed and reported on a scale ranging from 100 to 300 with a scaled passing score of 240.

Each exam form includes both scorable and nonscorable selected-response items. Scorable items are those that are used to compute candidates' scores. Nonscorable items are those that are included on an exam form to collect additional psychometric information (to support pilot testing) and to support exam form equating but do not contribute to candidates' scores.

Scoring Constructed-Response Items

Some Texas Educator Certification Examination Program exams include constructed-response items in addition to selected-response items. Candidate responses to constructed-response items are scored using a focused holistic scoring methodology. In this method, scorers judge the overall effectiveness of each response using a set of performance characteristics included in a scoring rubric. These performance characteristics are provided in the preparation manuals for the exams. The score is holistic in that each score is based on the overall effectiveness of these characteristics working together, focusing on the response as a whole.

The majority of constructed-response items follow this holistic scoring method; however, some use an analytic scoring method. For these types of constructed-response items, the scores provided are based on the number of errors made. For example, some items on the Braille (Unified English Braille, UEB) exam may require examinees to transcribe a passage, mathematical problem or expression into UEB. Responses to each transcription assignment are scored based on the number of

transcription errors made. Errors are defined in the Preparation Manual for each item type that are found on the exam.

Scoring Components

Candidate responses are scored on a scale. The majority of exams use either a three- or four-point score scale (except for the Texas Assessment of Sign Communication exam, described in the next section). The characteristics of responses at each score point is defined in TEA-approved scoring rubrics. Each constructed response is independently scored by two scorers, and these scores are summed for a total possible score range of 2 to 6 for three-point score scales or 2 to 8 for four-point score scales.

As part of the effort to involve Texas educators in the development and validation of the Texas Educator Certification Examination Program activities, Pearson recruits experienced educators from Texas and trains them to perform holistic scoring. To participate in the holistic scoring process, scorers must meet specific qualifications such as having the following.

- A Texas educator certificate/license;
- Experience as an educator in Texas public schools; and/or
- Experience as a college faculty member responsible for preparing prospective educators.

Texas Assessment of Sign Communication (TASC, TASC-ASL) Scoring

The Texas Assessment of Sign Communication and Texas Assessment of Sign Communication-American Sign Language exams require examinees to be video-recorded performing American Sign Language in response to various prompts by an interviewer. The recordings are provided to trained scorers using a holistic scoring process to evaluate responses on the overall sign communication proficiency of the examinee on a 5-point scale. Scorers are trained on the performance characteristics defined in each analytic category (i.e., range of communication, comprehension, fluency, vocabulary/grammar, and use of space). For each of the 5 categories, performance levels A through E are defined with Level E representing strong limitations in performance and Level A representing high proficiency. The passing score for the TASC is set at Level C.

Scorer Training

Prior to scoring, each scorer receives training and orientation by a Chief Reader who trains each scorer to evaluate responses to a variety of educator licensure exams. The Chief Reader provides each scorer with the background of the Texas Educator Certification Examination Program exams, the context of the scoring task, the tasks they will perform, the procedures they will follow, the scoring scale, and the characteristics that will guide their scoring judgments. The scorers are also oriented to the scoring rubrics that define the performance characteristics and scoring scale to guide evaluation of candidate responses to the constructed-response item(s) used on test forms for the current exam administration. The Chief Reader identifies and develops orientation materials, leads scoring sessions, conducts calibration orientation, and monitors the progress of the scoring session.

Scorers receive practice using training sets of responses to which scores have already been assigned, including marker responses (i.e., exemplar responses of each score point on the score scale). The training emphasizes equity and fair application of the score scale. Once scorers have been trained, they have to prove their ability to score accurately by completing a calibration exercise. Each response is read independently and scored by two scorers. If the two scores are not identical or adjacent, additional scoring is conducted to resolve the discrepancy.

Performance Monitoring of Scorers

Pearson monitors the performance of scorers throughout the scoring process. Specific areas monitored include a scorers' ability to understand and apply the established scoring scale, the consistency of the scores assigned in comparison with those assigned by the second scorer, and the scorers' consistency over time. At points in the holistic scoring process, scorers are recalibrated to the scale, typically through discussions of specific items. Scorers must demonstrate continued scoring accuracy on the responses. If scorers fail to demonstrate accuracy, they receive additional, individual reorientation before proceeding with scoring.

Scaled Scores

With the exception of TASC and TASC-ASL as described above, candidate results for the Texas Educator Certification Examination Program exams are reported on a scale of 100 to 300 with the passing score set at 240.

Scaled score reporting is preferred to raw score reporting to eliminate confusion that may occur as a result of raw cut score differences across exam forms due to equating. Therefore, the use of scaled scores helps to support the communication of exam results in the following ways:

- Candidates, EPPs, and stakeholders are able to interpret scores from different exams in a similar manner, regardless of the exam taken.
- The meaning of the scaled passing scores are consistent over time, making it possible to compare performance from one exam administration to the next.

Calculation of Scaled Scores

For exams containing only selected-response items, a linear transformation is applied to the raw scores to compute the associated scaled score. The scaled score is derived from the candidate's raw score, the raw cut score, and the maximum possible raw score. Candidates who perform at the raw score that is equivalent to the passing score achieve a scaled score of 240, while those who achieve the maximum possible raw score will receive a scaled score of 300.

For exams that contain both selected-response and constructed-response items, the selected-response and constructed-response exam sections are each scaled separately. These selected-response and constructed-response scaled scores are then combined in accordance with the following weightings.

Table 2. Texas Educator Certification Examination Program Section Weighting

Exam Field	Selected-Response Weight	Constructed-Response Weight
072 Texas Assessment of Sign Communication (TASC)	--	100%
073 Texas Assessment of Sign Communication (TASC-ASL)	--	100%
190 Bilingual Target Language Proficiency Test	47%	53%
217 English Language Arts and Reading 4-8	80%	20%
231 English Language Arts and Reading 7-12	64%	36%
252 School Counselor	80%	20%
253 Educational Diagnostician	80%	20%
268 Principal as Instructional Leader (PAIL)	60%	40%
283 Braille (UEB)	50%	50%
292 Early Childhood: PK-3	80%	20%
293 Science of Teaching Reading (STR)	80%	20%
370 Pedagogy and Professional Responsibilities for Trade and Industrial Education 6-12	80%	20%
610 Languages Other than English (LOTE)-FRENCH	68%	32%
611 Languages Other than English (LOTE)-GERMAN	68%	32%
612 Languages Other than English (LOTE)-LATIN	90%	10%
613 Languages Other than English (LOTE)-SPANISH	68%	32%
702 TX PACT: Essential Academic Skills (Subtest II: Writing)	75%	25%
710 TX PACT: LOTE French: Early Childhood–Grade 12	58%	42%
711 TX PACT: LOTE German: Early Childhood–Grade 12	58%	42%
712 TX PACT: LOTE Latin: Early Childhood–Grade 12	80%	20%
713 TX PACT: LOTE Spanish: Early Childhood–Grade 12	58%	42%
714 TX PACT: LOTE Chinese: Early Childhood–Grade 12	58%	42%
729 TX PACT: Speech: Grades 7–12	85%	15%
785 TX PACT: American Sign Language (ASL): Early Childhood–Grade 12 (Subtests II)	40%	60%

Introductory Pass/Fail Periods

During the 2022-2023 Program Year, there were no exams launched with an Introductory Pass/Fail requirement.

Reliability

The Standards refer to reliability as the consistency of test scores for a group of candidates across administrations (AERA, APA, & NCME, 2014). There are many common reasons for individual scores to fluctuate over time. Score fluctuation from one testing occasion to another has an impact on reliability. Some factors that affect reliability include the following.

- **Number of candidates.** The number of candidates whose exam scores contribute to a statistical estimate of reliability affects the stability of the estimate. In general, reliability estimates based on larger numbers of candidates are more stable than estimates based on smaller numbers. For this reason, reliability estimates are calculated for exam forms that are taken by one hundred or more candidates.
- **Self-selection of candidates by exam administration date.** Typically, candidates can decide when to take an exam. Texas Educator Certification Examination Program exams are administered throughout the year, and candidates can select when to take and retake the exams. This self-selection can affect the composition, ability level, and variability of the group taking a specific exam at a given exam administration.
- **Variability of the group tested.** In general, the larger the true variance or true spread of the scores of the candidate group (i.e., the greater the individual differences in the true level of knowledge, skills, and abilities of the candidates in the particular group taking an exam on a particular occasion), the greater will be the reliability coefficient. Reliability estimates tend to be higher if candidates in the group have widely varying levels of knowledge, and lower if they tend to have similar levels of knowledge.
- **Exam length.** Statistical estimates of reliability are typically higher for exams with greater numbers of items. A more reliable estimate of a person's knowledge is obtained by asking more questions.
- **Exam content.** Reliability estimates are typically higher for exams that cover narrow, homogeneous content than for exams (such as many used for educator licensure) that cover a broad range of content. Exams for educator licensure must typically assess a broad base of knowledge, skills, and abilities that pertain to licenses that will apply in a wide range of educational settings, grade levels, and teaching assignments.

Because the exams included in the Texas Educator Certification Examination Program are used to make high-stakes decisions, several indicators of decision consistency (that is the degree to which the same decisions are made from two exams) and measures that indicate score reliability (consistency of scores across administrations) are calculated. Statistics presented not only consider the reliability of the exam scores, but also indicate the reliability of the decisions made using the exam results.

Several measures are employed to assess the reliability of each exam in the Texas Educator Certification Examination Program. These measures are described below.

- **Kuder-Richardson formula 20 (KR20).** The Kuder-Richardson index of item homogeneity (KR20) is an overall test consistency (reliability) estimate based on a single exam administration (Kuder & Richardson, 1937). It is applicable to the selected-response section of exams. KR20 is reported in the range 0 to 1, with a higher number indicating a greater level of consistency (reliability). Homogeneity refers to the degree to which the items on the exam are consistent with one another. For the Texas Educator Certification

Examination Program, KR20 is computed for exams composed of selected-response items only as well as for selected-response sections of exams that also include constructed-response items.

- **Standard error of measurement (SEM).** The Standards define the standard error of measurement as the estimate of the difference between observed scores and estimated true scores by estimating the variability of measurement errors. This statistic speaks to the reliability of test scores, with smaller standard errors of measurement indicating more reliable test scores (AERA, APA, & NCME, 2014).
- **Generalizability coefficient (G).** The Generalizability (G) coefficient is a measure of the percent of total score variance that is attributable to persons (i.e., factors within the candidate, such as subject matter knowledge). It reflects the proportion of variability in individuals' scores that is attributable to true score variability rather than to measurement error (Brennan, 2001). It is reported in the range 0 to 1, with a higher number indicating a greater level of generalizability. The G-coefficient is applicable to exam sections composed of constructed-response items. It gauges the degree to which the results from one exam form of the constructed-response items are generalizable to other forms or other exam administrations. The G coefficient for exam forms with a single constructed-response item is calculated with the item type as a random facet. This permits variability of scores to be associated with the item type rather than with error variance (Brennan, 2001). Some exam forms have more than one type of constructed-response item. Calculating G coefficient for these exam forms as a random facet will result in lower G coefficient for these exam forms. In this report we also provide G coefficient treating the items as fixed facets. The G coefficients on exam forms with more than one constructed-response assignment are typically higher when the item types are treated as fixed facets.
- **Scorer agreement.** Scorer agreement is the degree of agreement between constructed-response scores assigned by independent scorers. Independent scorers are in agreement if the scores they award are either exact or adjacent. The scorers are not in agreement if the scores awarded differ by more than one point. The percent of cases in which the first two independent scorers are in agreement is computed as a measure of scorer agreement (reliability). The following scorer agreement statistics are reported.
 - *Percent agreement.* Overall agreement determined by summing exact and adjacent agreement.
 - *Percent exact.* This is the percentage of scores in which the first two scorers were in exact agreement.
 - *Percentage adjacent.* This is the percentage of scores in which the two scorers assigned adjacent scores.
 - *Inter-rater reliability.* This is the intraclass correlation between the first and second score assigned to each response, corrected using the Spearman-Brown formula.

VI. Exam Administration Statistics

This section describes statistical reports for each exam and reports on candidate performance for Texas Educator Certification Examination Program exams administered during the 2022–2023 academic year. Exam statistics reports consist of exam form and field statistics reports that outline statistical characteristics of selected-response-only exams as well as exams composed of both selected-response and constructed-response items administered during the year. Total scaled score distributions also are provided. Specific details of each report are outlined below.

Exam Form Statistics Reports

The Exam Form Statistics Report in Appendix 1 provides selected statistics for exam forms administered to candidates during the academic year. This report includes the following information:

- *Exam Field.* The Exam Field code number and Exam Name.
- *Form.* Identifier assigned to each exam form.
- *Number of Exams Taken.* Scores are included in the analyses for this report for candidates who attempted at least one selected-response item and provided scorable responses to the constructed-response items, if applicable. In the cases in which the same exam forms were administered at more than one exam administration during the reporting period and candidates took the same exam form at more than one exam administration, both scores for those candidates' several attempts are included in the analyses.
- *Total Exam Scaled Score Indices.*
 - *Mean.* The mean of the total exam scaled scores achieved by the candidates taking the exam form.
 - *Standard Deviation (Std. Dev).* A measure of the amount of variation or dispersion of the total exam scaled scores.
 - *Standard error of measurement (SEM).* The standard error of measurement of the total exam scaled scores is reported.
- *Selected-Response Section.*
 - *Length.* The number of scorable items of the selected-response section of each exam form.
 - *KR20.* The Kuder-Richardson index of reliability applicable to the selected-response sections, reflecting the degree to which items on the exam forms are consistent with one another.
- *Constructed-Response Section.*

- *Length*. The number of scorable items of the constructed-response section of each exam form.
- *G Coefficient*. Gauges the degree to which the results from one exam form of the constructed-response items are generalizable to other forms or administrations.
 - *I Fixed*. The G coefficient calculation treating constructed-response item types as fixed facets.
 - *I Random*. The G coefficient calculation treating constructed-response items types as a random facet.

Statistical indices such as the SEM or reliability coefficients cannot be confidently interpreted when computed using data from small groups of candidates; therefore, such analyses were omitted for exam forms administered to fewer than 100 candidates in the reporting period.

Exam Statistics Report for Exam Fields with Constructed-Response Items

The Exam Statistics Report for Exam Fields with Constructed-Response Items shown in Appendix 2 provides selected statistics for exam fields composed of constructed-response items administered to at least 100 candidates during the academic year. This report includes the following information for each prompt/assignment.

- **Number of Exams Taken**. The number of exams taken during the academic year.
- **Number of Scorable Responses**. The number of valid (scorable) responses that were included in the scorer agreement calculations.
- **Scorer Agreement (%)**. Measures of scorer agreement reported are provided in percentages.
 - *Total*. Overall agreement determined by summing exact and adjacent agreement.
 - *Exact*. This is the percentage of scores in which the first two scorers were in exact agreement.
 - *Adjacent*. This is the percentage of scores in which the two scorers assigned adjacent scores.
- **Inter-rater Reliability**. This is the intraclass correlation between the first and second score assigned to each response, corrected using the Spearman-Brown formula.

The following fields were not included in the report due to sample sizes below 100: 072 TASC, 073 TASC-ASL, 283 Braille, 610 LOTE-French, 611 LOTE-German, 612

LOTE-Latin, 710 TX PACT: LOTE French, 711 TX PACT: LOTE German, 712 TX PACT: LOTE Latin, 714 TX PACT: LOTE Chinese, 729 TX PACT: Speech, and 785 TX PACT: ASL (Subtest II).

Total Scaled Score Distribution by Exam Field

The Total Scaled Score Distribution by Exam Field shown in Appendix 3 provides information about the scaled score distributions associated with all exam fields taken by 10 or more candidates during the 2022–2023 academic year. For the Texas Educator Certification Examination Program, results are reported on a scale ranging from 100 to 300. A scaled score of 240 represents the passing standard for each exam. Fields with fewer than 10 candidates were, 611 LOTE Latin, 711 TX PACT: LOTE German, 714 TX PACT: LOTE Chinese, 737 TX PACT: Physical Science Grades 6-12, 739 TX PACT: Physics, 741 TX PACT: Computer Science 8-12, 756 TX PACT: Journalism 7-12, 784 TX PACT: ASL (Subtest I), and 785 TX PACT: ASL (Subtest II).

The data represent all test attempts within the interval. The scale score distributions include the following information.

Total scaled score. The inclusive list of observed total exam scaled scores, in intervals of five scale-score points.

- ***N***. The number of scores observed within each interval.
- ***N at or above***. The number of scores observed at or above each scaled score interval.
- ***Percent***. The percent of scores observed within each interval.
- ***Percent at or above***. The percent of scores observed at or above each scaled score interval.

Total Scaled Score Summary Statistics by Exam Field

Appendix 4 provides scoring and statistical summaries of test-taker performance on the Texas Educator Certification Examination Program exam forms during the 2022-2023 testing year. If more than one attempt existed for a given test-taker, all attempts were included in the analyses. The following variables are reported, with a brief description of each.

- **Exam Code.** The 3-digit code assigned the exams.
- **Exam Field.** The name of the exam for the given field.
- **Number of Test Takers.** The annual test taker volume for the 2022-2023 academic year.
- **Mean Reported Score.** The average reported scale score of test-takers who tested during the 2022-2023 academic year.

- **Mean Standard Deviation.** The average standard deviation of the reported scale score of test-takers who tested during the 2022-2023 academic year.
- **Mean SEM.** The average Standard Error of Measurement (SEM) is the average estimate of the difference between observed scores and estimated true scores by estimating the variability of measurement errors of the test-takers who tested during the 2022-2023 academic year. Smaller standard errors of measurement indicate more reliable exam scores.
- **Mean KR20.** The average Kuder-Richardson index of item homogeneity (KR20) reliability statistic of test-takers who tested during the 2022-2023 academic year.
- **Pass Rate.** The average passing rate of test-takers who tested during the 2022-2023 academic year.

Caution should be used when interpreting data with a low number of candidates. When too few test-takers were administered an exam form (i.e., less than 10 candidates), mean scores and standard deviations are not reported. Additionally, estimates of reliability and SEM cannot be confidently interpreted when computed using data from small groups of candidates; therefore, such analyses were omitted for exam forms administered to fewer than 100 candidates in the reporting period. Such cases are noted in the endnotes of the appendix.

VII. Score Reporting

After administration of the exams, score reports are provided to candidates to inform them of their passing status and performance on the exam. Score reports are also provided to TEA and to EPPs, to communicate passing status of individual candidates for educator certification.

Candidate Score Reports

Candidates receive a receipt of completion on-site following the exam administration. During the registration process, all candidates provide an e-mail address and may request that a score report be e-mailed on the score report date published on the program website. Score reports are posted to the candidate's online account as PDF documents, which a candidate may view, print, and save for their records. Historical score reports are available to candidates for exams taken from September 1, 2006 to the present.

Score reports include the following information.

- The date the candidate took the exam,
- The candidate's overall scaled score based on the number of items answered correctly converted to a scale ranging from 100 to 300,
- The candidate's passing status based on the state-approved passing standard, and
- Details of candidate performance on each content domain assessed by the exam for both selected-response and constructed-response sections.

A sample candidate score report can be found in Appendix 5. Additional information is provided on the Texas Educator Certification Examination program website to assist candidates in understanding their exam results.

Other Score Recipients

Candidate exam results are sent to the TEA and EPPs. These scores are delivered electronically through Pearson's secure web-based score-reporting system. Through this system, the TEA and EPPs also have access to *ResultsAnalyzer*[®], a web-based, interactive exam results reporting tool that allows users to view, analyze, reorganize, download, and print results based on exam data and generate customized reports of their choice.

Title II Reporting

The federal government requires that states submit annual reports on the quality of their teacher preparation programs for accountability purposes. The data are intended to inform stakeholders on the quality of teacher preparation.

Pearson helps the TEA meet Title II requirements by working with both the TEA and EPPs to produce the reports. The Title II reporting system allows the submission, review, and transmission of data that supports collaboration among EPPs and the TEA. Pearson supports the reporting needs and requirements through the following actions.

- Producing Exam Pass Rates Tables and Summary Pass Rates Tables for Title II Reporting,
- Providing web-based training to EPPs on the purpose and process for data collection, and
- Maintaining a secure, password-accessible website for data collection.

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Appendix 1. Exam Form Statistics Report

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
Test Field	Form									
072 TEXAS ASSESSMENT OF SIGN COMMUNICATION	A	67	3	1.1	--	--	--	1	--	--
073 TEXAS ASSESSMENT OF SIGN COMMUNICATION (TASC-ASL)	A	68	3	1.0	--	--	--	1	--	--
113 ENGLISH LANGUAGE ARTS AND READING/SOCIAL STUDIES 4-8	A	174	248	21.0	6.4	100	0.91	--	--	--
	B	149	251	19.3	6.3	100	0.89	--	--	--
	C	2	--	--	--	100	--	--	--	--
	D	1	--	--	--	100	--	--	--	--
114 MATHEMATICS/SCIENCE 4-8	A	101	234	25.2	7.1	100	0.92	--	--	--
	B	93	236	20.9	--	100	--	--	--	--
	C	91	233	21.5	--	100	--	--	--	--
	D	89	240	22.4	--	100	--	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
115 MATHEMATICS 4-8	A	287	237	30.4	9.1	80	0.91	--	--	--
	B	283	239	30.8	9.1	80	0.91	--	--	--
	C	277	240	29.2	9.3	80	0.90	--	--	--
	D	256	239	27.4	8.9	80	0.89	--	--	--
	E	242	232	31.6	9.4	80	0.91	--	--	--
	F	237	235	27.8	9.2	80	0.89	--	--	--
116 SCIENCE 4-8	A	649	237	21.7	8.1	80	0.86	--	--	--
	B	582	236	20.0	7.5	80	0.86	--	--	--
	C	19	236	19.7	--	80	--	--	--	--
118 SOCIAL STUDIES 4-8	A	357	234	26.8	9.4	80	0.88	--	--	--
	B	228	238	23.4	8.4	80	0.87	--	--	--
	C	216	237	24.7	8.3	80	0.89	--	--	--
	D	199	236	25.6	8.9	80	0.88	--	--	--
	E	180	237	25.3	8.5	80	0.89	--	--	--
129 SPEECH 7-12	A	115	246	22.1	7.3	80	0.89	--	--	--
	B	97	243	20.3	--	80	--	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
150 SCHOOL LIBRARIAN	A	217	246	15.0	7.6	80	0.75	--	--	--
	B	192	246	15.6	8.5	80	0.70	--	--	--
151 READING SPECIALIST	A	52	273	13.5	--	80	--	--	--	--
	B	50	273	11.4	--	80	--	--	--	--
	C	46	274	11.5	--	80	--	--	--	--
	D	44	272	11.2	--	80	--	--	--	--
154 ENGLISH AS A SECOND LANGUAGE SUPPLEMENTAL (ESL)	A	3,655	247	19.7	8.5	60	0.81	--	--	--
	B	3,594	248	18.9	7.8	60	0.83	--	--	--
	C	1,269	248	19.3	8.2	60	0.82	--	--	--
	D	1,266	248	20.5	9.1	60	0.80	--	--	--
	E	1,119	248	19.4	8.4	60	0.81	--	--	--
	F	1,107	250	18.2	8.4	60	0.79	--	--	--
	G	720	252	19.3	8.1	60	0.82	--	--	--
	H	718	254	18.8	8.2	60	0.81	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	I Fixed	I Random
157 HEALTH EC-12	A	216	259	16.1	6.7	80	0.83	--	--	--
	B	197	259	16.1	7.2	80	0.80	--	--	--
	C	54	253	16.8	--	80	--	--	--	--
	D	45	259	17.0	--	80	--	--	--	--
158 PHYSICAL EDUCATION EC-12	A	1,304	250	21.5	9.2	80	0.82	--	--	--
	B	1,259	252	20.7	9.2	80	0.80	--	--	--
	C	7	--	--	--	80	--	--	--	--
	D	5	--	--	--	80	--	--	--	--
160 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES EC-12	A	7,244	255	18.7	6.9	90	0.86	--	--	--
	B	4,034	256	17.8	6.8	90	0.85	--	--	--
	C	3,409	257	17.9	6.6	90	0.86	--	--	--
	D	3,235	256	18.4	6.8	90	0.86	--	--	--
	E	3,127	256	18.1	6.8	90	0.86	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
161 SPECIAL EDUCATION EC-12	A	2,337	248	18.3	6.2	120	0.88	--	--	--
	B	2,278	247	18.2	6.2	120	0.88	--	--	--
	C	968	248	17.7	6.1	120	0.88	--	--	--
	D	948	247	18.3	6.2	120	0.89	--	--	--
	E	178	246	18.5	6.1	120	0.89	--	--	--
	F	169	245	18.0	6.2	120	0.88	--	--	--
162 GIFTED AND TALENTED SUPPLEMENTAL	A	143	258	10.8	6.3	60	0.66	--	--	--
	B	118	258	11.7	6.3	60	0.71	--	--	--
	C	32	255	13.8	--	60	--	--	--	--
	D	25	260	11.4	--	60	--	--	--	--
163 SPECIAL EDUCATION SUPPLEMENTAL	A	660	253	13.5	5.5	80	0.83	--	--	--
	B	650	251	15.6	6.7	80	0.82	--	--	--
164 BILINGUAL EDUCATION SUPPLEMENTAL	A	952	249	15.6	7.1	60	0.79	--	--	--
	B	600	248	16.5	7.9	60	0.77	--	--	--
	C	293	252	16.0	7.6	60	0.77	--	--	--
171 TECHNOLOGY EDUCATION 6-12	A	123	262	16.2	5.1	80	0.90	--	--	--
	B	116	263	14.7	4.9	80	0.89	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
177 MUSIC EC-12	A	608	249	15.6	6.7	80	0.81	--	--	--
	B	564	244	17.9	7.2	80	0.84	--	--	--
178 ART EC-12	A	452	261	18.7	7.5	80	0.84	--	--	--
	B	396	259	13.9	5.5	80	0.85	--	--	--
180 THEATRE EC-12	A	198	251	16.5	7.2	80	0.81	--	--	--
	B	157	249	18.5	6.9	80	0.86	--	--	--
181 DEAF AND HARD OF HEARING	A	61	253	15.8	--	80	--	--	--	--
	B	57	251	16.3	--	80	--	--	--	--
182 VISUALLY IMPAIRED	A	32	245	9.0	--	80	--	--	--	--
	B	20	249	11.8	--	80	--	--	--	--
184 AMERICAN SIGN LANGUAGE (ASL)	A	28	257	26.1	--	60	--	--	--	--
	B	27	247	23.7	--	60	--	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
190 BILINGUAL TARGET LANGUAGE PROFICIENCY TEST	A	422	238	19.4	6.9	72	0.84	8	0.93	0.77
	B	409	234	21.7	8.3	72	0.87	8	0.93	0.68
	C	397	237	21.9	7.1	72	0.85	8	0.95	0.82
	D	381	243	20.7	6.7	72	0.83	8	0.95	0.82
	E	375	242	22.1	7.4	72	0.88	8	0.93	0.76
	F	370	234	17.3	6.4	72	0.82	8	0.94	0.77
195 SUPERINTENDENT	A	274	253	11.3	7.0	80	0.62	--	--	--
	B	270	252	10.9	6.8	80	0.61	--	--	--
200 AAFCS FAMILY AND CONSUMER SCIENCES COMPOSITE	A	512	244	16.8	8.7	80	0.73	--	--	--
201 AAFCS HOSPITALITY, NUTRITION, FOOD SCIENCE	A	39	245	14.5	--	80	--	--	--	--
202 AAFCS HUMAN DEVELOPMENT & FAMILY STUDIES	A	70	258	14.9	--	80	--	--	--	--
217 ENGLISH LANGUAGE ARTS AND READING 4-8	A	1,034	248	17.1	7.3	72	0.75	1	0.88	0.88
	B	9	--	--	--	72	--	1	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
231 ENGLISH LANGUAGE ARTS AND READING 7-12	A	1,286	242	25.8	9.5	80	0.89	2	0.96	0.54
	B	1,248	245	22.1	9.7	80	0.83	2	0.95	0.48
232 SOCIAL STUDIES 7-12	A	424	231	26.5	7.5	120	0.92	--	--	--
	B	401	232	25.8	6.9	120	0.93	--	--	--
	C	378	235	24.1	6.9	120	0.92	--	--	--
	D	377	235	25.5	7.1	120	0.92	--	--	--
	E	362	235	24.3	7.2	120	0.91	--	--	--
	F	347	228	25.7	7.3	120	0.92	--	--	--
	G	72	231	28.1	--	120	--	--	--	--
	H	60	232	25.6	--	120	--	--	--	--
233 HISTORY 7-12	A	505	243	23.6	8.1	80	0.88	--	--	--
	B	505	242	23.4	7.5	80	0.90	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
235 MATHEMATICS 7-12	A	290	235	31.5	8.3	80	0.93	--	--	--
	B	287	240	31.7	8.5	80	0.93	--	--	--
	C	281	236	30.2	8.2	80	0.93	--	--	--
	D	262	239	28.9	7.8	80	0.93	--	--	--
	E	256	235	29.6	8.2	80	0.92	--	--	--
	F	246	237	32.7	8.2	80	0.94	--	--	--
236 SCIENCE 7-12	A	535	234	27.4	7.2	120	0.93	--	--	--
	B	519	233	27.9	7.3	120	0.93	--	--	--
237 PHYSICAL SCIENCE 6-12	A	33	223	35.5	--	80	--	--	--	--
	B	23	220	33.3	--	80	--	--	--	--
238 LIFE SCIENCE 7-12	A	306	238	26.7	9.6	80	0.87	--	--	--
	B	291	239	27.3	9.1	80	0.89	--	--	--
	C	172	242	25.1	9.0	80	0.87	--	--	--
	D	164	239	28.6	9.3	80	0.89	--	--	--
240 CHEMISTRY 7-12	A	83	233	28.5	--	80	--	--	--	--
	B	68	240	28.5	--	80	--	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient	I
								I Fixed	Random	
241 COMPUTER SCIENCE 8-12	A	82	218	32.7	--	80	--	--	--	--
	B	79	225	32.7	--	80	--	--	--	--
242 TECHNOLOGY APPLICATIONS EC-12	A	294	236	21.6	8.4	80	0.85	--	--	--
	B	276	234	21.3	8.4	80	0.84	--	--	--
243 PHYSICS/MATHEMATICS 7-12	A	29	243	26.0	--	100	--	--	--	--
	B	27	235	33.9	--	100	--	--	--	--
252 SCHOOL COUNSELOR	A	510	273	10.4	7.6	72	0.69	1	1.00	1.00
	B	244	264	12.8	8.3	72	0.70	1	1.00	1.00
253 EDUCATIONAL DIAGNOSTICIAN	A	853	265	12.2	9.2	72	0.69	1	0.67	0.67
256 JOURNALISM 7-12	A	52	241	23.8	--	80	--	--	--	--
	B	49	238	20.0	--	80	--	--	--	--
268 PRINCIPAL AS INSTRUCTIONAL LEADER	A	1,066	242	13.0	7.3	58	0.69	4	0.92	0.44
	B	1,004	241	13.0	7.5	58	0.68	4	0.93	0.42
	C	526	240	13.9	7.2	58	0.70	4	0.92	0.53
	D	491	241	14.0	7.3	58	0.68	4	0.92	0.52

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
272 AGRICULTURAL- FOOD AND NATURAL RESOURCES 6-12	A	217	259	14.7	6.2	80	0.83	--	--	--
	B	187	260	15.1	6.2	80	0.83	--	--	--
273 HEALTH SCIENCE 6-12	A	75	255	19.0	--	80	--	--	--	--
	B	65	250	20.5	--	80	--	--	--	--
274 MATHEMATICAL/PHYSICAL SCIENCE/ENG 6-12	A	30	255	21.9	--	110	--	--	--	--
	B	20	243	24.9	--	110	--	--	--	--
275 MARKETING 6-12	A	22	242	16.8	--	80	--	--	--	--
	B	17	238	17.9	--	80	--	--	--	--
276 BUSINESS AND FINANCE 6-12	A	398	232	18.6	8.5	80	0.79	--	--	--
	B	374	233	18.0	8.5	80	0.78	--	--	--
279 DANCE 6-12	A	116	249	16.1	7.7	80	0.77	--	--	--
	B	107	247	17.3	8.3	80	0.77	--	--	--
283 BRAILLE	A	55	243	29.8	--	25	--	4	--	--
292 EARLY CHILDHOOD: PK-3	A	157	249	15.0	8.0	72	0.70	1	0.81	0.81
	B	36	249	16.2	--	72	--	1	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
293 SCIENCE OF TEACHING READING	A	3,731	248	17.5	7.1	72	0.81	1	0.73	0.73
	B	3,698	248	17.7	7.0	72	0.81	1	0.74	0.74
	C	2,536	248	18.0	7.1	72	0.81	1	0.79	0.79
	D	2,478	248	17.4	7.1	72	0.80	1	0.78	0.78
370 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES FOR TRADE & INDUSTRIAL EDUCATION 6-12	A	97	260	15.5	--	72	--	1	--	--
	B	54	246	26.6	--	72	--	1	--	--
610 LANGUAGES OTHER THAN ENGLISH-FRENCH	A	36	227	29.1	--	102	--	8	--	--
	B	26	220	21.9	--	102	--	8	--	--
611 LANGUAGES OTHER THAN ENGLISH-GERMAN	A	13	248	23.1	--	102	--	8	--	--
612 LANGUAGES OTHER THAN ENGLISH-LATIN	A	1	--	--	--	81	--	12	--	--
613 LANGUAGES OTHER THAN ENGLISH-SPANISH	A	1,076	239	19.0	7.2	102	--	8	0.94	0.52
	B	138	234	18.8	--	102	--	8	--	--
	C	120	230	16.6	--	102	--	8	--	--
	D	92	228	21.5	--	102	--	8	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
701 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST I: READING)	A	253	239	32.8	13.8	35	0.82	--	--	--
	B	239	241	29.2	13.7	35	0.78	--	--	--
	C	231	241	31.0	13.6	35	0.81	--	--	--
	D	223	241	30.9	13.7	35	0.80	--	--	--
702 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST II: WRITING)	A	339	227	28.2	12.0	30	0.75	1	0.95	0.95
	B	315	228	27.0	12.1	30	0.73	1	0.92	0.92
	C	242	227	27.8	12.2	30	0.72	1	0.93	0.93
	D	225	228	29.9	12.1	30	0.75	1	0.97	0.97
703 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST III: MATHEMATICS)	A	273	236	40.1	13.6	36	0.88	--	--	--
	B	255	233	38.6	13.9	36	0.87	--	--	--
	C	230	236	36.0	13.6	36	0.86	--	--	--
	D	203	233	37.1	13.6	36	0.86	--	--	--
710 TX PACT: LOTE FRENCH: EARLY CHILDHOOD-GRADE 12	A	13	240	30.6	--	80	--	2	--	--
711 TX PACT: LOTE GERMAN: EARLY CHILDHOOD-GRADE 12	A	1	--	--	--	80	--	2	--	--
713 TX PACT: LOTE SPANISH: EARLY CHILDHOOD-GRADE 12	A	213	237	26.9	11.6	80	0.87	2	0.93	0.59

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
714 TX PACT: LOTE CHINESE: EARLY CHILDHOOD-GRADE 12	A	8	--	--	--	80	--	2	--	--
715 TX PACT: MATHEMATICS: GRADES 4-8	A	129	218	38.2	8.8	100	0.95	--	--	--
	B	129	223	35.2	8.6	100	0.94	--	--	--
716 TX PACT: SCIENCE: GRADES 4-8	A	80	219	33.8	--	100	--	--	--	--
	B	69	223	29.8	--	100	--	--	--	--
717 TX PACT: ENGLISH LANGUAGE ARTS AND READING: GRADES 4-8	A	111	219	26.5	8.5	100	0.90	--	--	--
	B	94	221	31.1	--	100	--	--	--	--
718 TX PACT: SOCIAL STUDIES: GRADES 4-8	A	75	228	25.2	--	100	--	--	--	--
	B	70	231	26.1	--	100	--	--	--	--
721 TX PACT: FAMILY AND CONSUMER SCIENCES	A	40	265	16.1	--	100	--	--	--	--
	B	4	--	--	--	100	--	--	--	--
729 TX PACT: SPEECH: GRADES 7-12	A	16	238	28.3	--	64	--	1	--	--
731 TX PACT: ENGLISH LANGUAGE ARTS AND READING: GRADES 7-12	A	188	246	27.9	7.6	100	0.93	--	--	--
	B	157	248	26.4	7.6	100	0.92	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
732 TX PACT: SOCIAL STUDIES: GRADES 7-12	A	142	222	35.8	8.9	100	0.94	--	--	--
	B	138	224	31.1	8.9	100	0.92	--	--	--
733 TX PACT: HISTORY: GRADES 7-12	A	67	235	29.7	--	100	--	--	--	--
	B	63	239	32.1	--	100	--	--	--	--
735 TX PACT: MATHEMATICS: GRADES 7-12	A	117	222	36.1	8.9	100	0.94	--	--	--
	B	64	231	39.2	--	100	--	--	--	--
	C	31	231	36.1	--	100	--	--	--	--
736 TX PACT: SCIENCE: GRADES 7-12	A	52	232	26.5	--	100	--	--	--	--
	B	49	234	34.4	--	100	--	--	--	--
737 TX PACT: PHYSICAL SCIENCE: GRADES 6-12	A	7	--	--	--	100	--	--	--	--
738 TX PACT: LIFE SCIENCE: GRADES 7-12	A	97	221	27.5	--	100	--	--	--	--
739 TX PACT: PHYSICS: GRADES 7-12	A	2	--	--	--	100	--	--	--	--
740 TX PACT: CHEMISTRY: GRADES 7-12	A	13	244	30.8	--	100	--	--	--	--
741 TX PACT: COMPUTER SCIENCE: GRADES 8-12	A	7	--	--	--	80	--	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	I Fixed	I Random
742 TX PACT: TECHNOLOGY APPLICATIONS: EARLY CHILDHOOD-GRADE 12	A	55	223	32.5	--	80	--	--	--	--
756 TX PACT: JOURNALISM: GRADES 7-12	A	6	--	--	--	72	--	--	--	--
757 TX PACT: HEALTH: EARLY CHILDHOOD-GRADE 12	A	40	223	26.3	--	80	--	--	--	--
	B	23	234	23.5	--	80	--	--	--	--
	C	15	235	16.9	--	80	--	--	--	--
758 TX PACT: PHYSICAL EDUCATION: EARLY CHILDHOOD-GRADE 12	A	388	234	21.5	9.7	80	0.80	--	--	--
771 TX PACT: TECHNOLOGY EDUCATION: GRADES 6-12	A	21	239	18.4	--	80	--	--	--	--
	B	5	--	--	--	80	--	--	--	--
772 TX PACT: AGRICULTURE, FOOD, AND NATURAL RESOURCES: GRADES 6-12	A	45	244	15.7	--	100	--	--	--	--
776 TX PACT: BUSINESS AND FINANCE: GRADES 6-12	A	149	238	28.7	8.1	100	0.92	--	--	--
777 TX PACT: MUSIC: EARLY CHILDHOOD-GRADE 12	A	70	247	26.5	--	100	--	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
778 TX PACT: ART: EARLY CHILDHOOD-GRADE 12	A	47	247	28.9	--	100	--	--	--	--
	B	41	241	27.0	--	100	--	--	--	--
779 TX PACT: DANCE: GRADES 6-12	A	14	233	26.4	--	80	--	--	--	--
780 TX PACT: THEATRE: EARLY CHILDHOOD-GRADE 12	A	36	253	14.7	--	80	--	--	--	--
784 TX PACT: AMERICAN SIGN LANGUAGE (ASL): EARLY CHILDHOOD-GRADE 12 (SUBTEST I)	A	4	--	--	--	40	--	--	--	--
785 TX PACT: AMERICAN SIGN LANGUAGE (ASL): EARLY CHILDHOOD-GRADE 12 (SUBTEST II)	A	5	--	--	--	40	--	4	--	--
790 TX PACT: CORE SUBJECTS: GRADES 4-8	A	72	199	31.3	--	160	--	--	--	--
	B	58	197	30.8	--	160	--	--	--	--
806 CORE SUBJECTS 4-8 ELAR	A	556	241	25.8	10.1	65	0.85	--	--	--
	B	534	244	25.6	10.1	65	0.84	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
807 CORE SUBJECTS 4-8 MATHEMATICS	A	199	243	28.8	11.1	35	0.85	--	--	--
	B	176	247	29.4	11.6	35	0.84	--	--	--
	C	171	247	29.6	10.7	35	0.87	--	--	--
	D	168	245	29.7	12.1	35	0.83	--	--	--
	E	157	246	30.8	11.6	35	0.86	--	--	--
	F	150	246	26.1	10.8	35	0.83	--	--	--
808 CORE SUBJECTS 4-8 SOCIAL STUDIES	A	276	245	26.4	13.6	35	0.74	--	--	--
	B	263	244	27.4	13.5	35	0.76	--	--	--
	C	257	247	23.9	12.6	35	0.72	--	--	--
	D	243	241	29.2	12.2	35	0.82	--	--	--
809 CORE SUBJECTS 4-8 SCIENCE	A	300	248	26.2	12.6	35	0.77	--	--	--
	B	295	246	24.9	11.0	35	0.80	--	--	--
	C	237	247	23.9	11.0	35	0.79	--	--	--
	D	201	247	26.9	12.6	35	0.78	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
901 CORE SUBJECTS EC-6 ELAR	A	3,095	255	25.4	11.2	38	0.81	--	--	--
	B	3,051	254	26.8	11.5	38	0.82	--	--	--
	C	3,020	257	25.2	11.1	38	0.81	--	--	--
	D	2,955	257	25.2	10.9	38	0.81	--	--	--
902 CORE SUBJECTS EC-6 MATH	A	3,357	251	27.5	12.5	34	0.79	--	--	--
	B	3,174	251	27.4	12.4	34	0.80	--	--	--
	C	3,164	248	28.1	13.0	34	0.78	--	--	--
	D	3,050	247	29.1	13.0	34	0.80	--	--	--
	E	259	236	44.1	14.1	34	0.90	--	--	--
	F	235	248	27.6	12.9	34	0.78	--	--	--

Texas Educator Certification Examination Program (TECE)

September 1, 2022 - August 31, 2023

Technical Report Statistics by Test Form

September 1, 2022 - August 31, 2023		Number of Tests Taken	Total Test Scaled Score Indices			Multiple-Choice Section		Open Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient I Fixed	I Random
903 CORE SUBJECTS EC-6 SOCIAL STUDIES	A	2,607	246	30.9	13.1	34	0.82	--	--	--
	B	2,582	247	31.0	12.9	34	0.83	--	--	--
	C	2,501	245	30.3	13.3	34	0.81	--	--	--
	D	2,416	246	29.2	13.3	34	0.79	--	--	--
	E	1,560	247	30.8	13.0	34	0.82	--	--	--
	F	1,479	246	32.2	13.1	34	0.83	--	--	--
	G	256	245	30.4	13.2	34	0.81	--	--	--
	H	249	236	46.0	14.7	34	0.90	--	--	--
904 CORE SUBJECTS EC-6 SCIENCE	A	6,314	254	27.1	11.6	38	0.82	--	--	--
	B	6,194	254	27.3	11.7	38	0.82	--	--	--
905 CORE SUBJECTS EC-6 FINE ARTS, HEALTH, PE	A	3,349	249	26.4	12.9	34	0.76	--	--	--
	B	3,213	249	26.7	13.0	34	0.76	--	--	--
	C	3,173	252	26.3	12.6	34	0.77	--	--	--
	D	3,152	253	25.1	12.4	34	0.76	--	--	--

Appendix 2. Exam Statistics Report for Exam Fields with Constructed Response Items

Texas Educator Certification Examination Program (TECE)
September 1, 2022 - August 31, 2023
Technical Report Statistics by Test Field (All Forms)

Test and Item(s)		Number of Tests Taken	Number of Scorable Responses	Open Response Prompts			Inter-rater Reliability
				Scorer Agreement (%)			
				Total	Exact	Adjacent	
190 BILINGUAL TARGET LANGUAGE PROFICIENCY TEST	1	2,354	2,258	99.7	79.3	20.4	0.78
	2	2,354	2,250	99.7	79.9	19.9	0.77
	3	2,354	2,237	99.6	78.5	21.1	0.75
	4	2,354	2,285	99.9	82.4	17.5	0.78
	5	2,354	2,320	100.0	83.7	16.3	0.75
	6	2,354	2,314	99.9	86.0	13.9	0.86
	7	2,354	2,005	99.9	83.6	16.2	0.78
	8	2,354	2,305	100.0	86.6	13.4	0.83
217 ENGLISH LANGUAGE ARTS AND READING 4-8	1	1,043	1,037	99.4	79.8	19.6	0.86
231 ENGLISH LANGUAGE ARTS AND READING 7-12	1	2,534	2,516	99.6	84.3	15.3	0.90
	2	2,534	2,235	95.4	77.1	18.3	0.89
252 SCHOOL COUNSELOR	1	754	753	100.0	100.0	0.0	1.00
253 EDUCATIONAL DIAGNOSTICIAN	1	853	853	97.3	60.3	37.0	0.57
268 PRINCIPAL AS INSTRUCTIONAL LEADER	1	3,087	3,079	100.0	89.4	10.6	0.88
	2	3,087	3,066	100.0	91.3	8.7	0.88
	3	3,087	3,074	100.0	91.4	8.6	0.89
	4	3,087	3,038	100.0	91.9	8.1	0.90
292 EARLY CHILDHOOD: PK-3	1	193	192	99.0	72.4	26.6	0.77
293 SCIENCE OF TEACHING READING	1	12,443	12,388	99.9	76.0	24.0	0.75
370 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES FOR TRADE & INDUSTRIAL EDUCATION 6-12	1	151	146	100.0	100.0	0.0	1.00

Texas Educator Certification Examination Program (TECE)
September 1, 2022 - August 31, 2023
Technical Report Statistics by Test Field (All Forms)

Test and Item(s)		Number of Tests Taken	Number of Scorable Responses	Open Response Prompts			Inter-rater Reliability
				Scorer Agreement (%)			
				Total	Exact	Adjacent	
613 LANGUAGES OTHER THAN ENGLISH-SPANISH	1	713	706	99.9	85.1	14.7	0.88
	2	713	695	100.0	83.9	16.1	0.85
	3	713	679	100.0	86.7	13.3	0.90
	4	713	681	99.7	83.4	16.3	0.79
	5	713	704	100.0	78.4	21.6	0.78
	6	713	696	100.0	77.9	22.1	0.76
	7	713	404	99.0	82.9	16.1	0.93
	8	713	556	99.8	82.7	17.1	0.91
702 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST II: WRITING)	1	1,121	1,081	99.9	92.2	7.7	0.94
713 TX PACT: LOTE SPANISH: EARLY CHILDHOOD- GRADE 12	1	213	210	100.0	86.7	13.3	0.93
	2	213	189	98.9	76.7	22.2	0.88

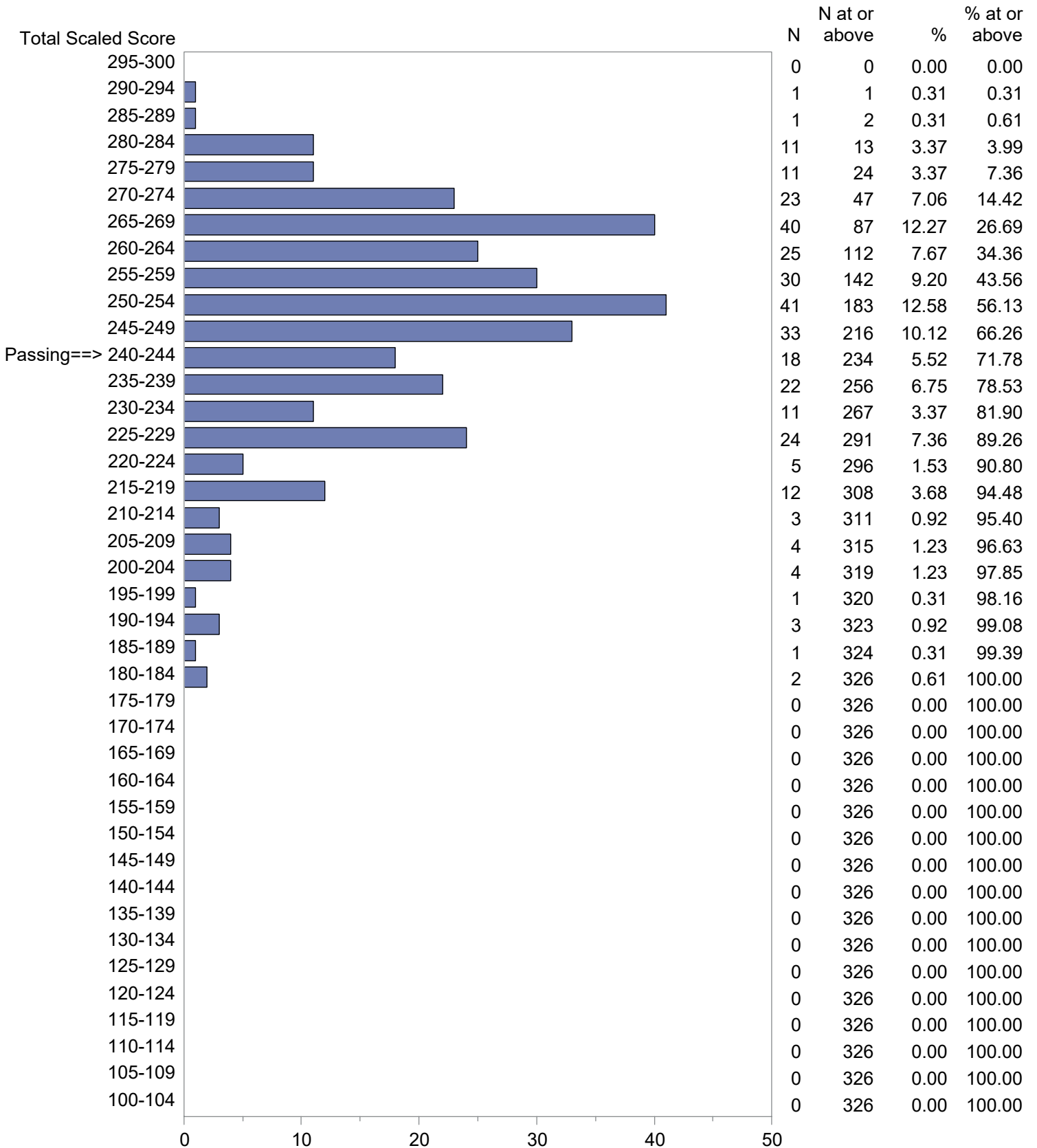
Appendix 3. Total Scaled Score Distribution by Exam Field

NOTES:

- The following data represents all test attempts within the 2022-2023 academic year.

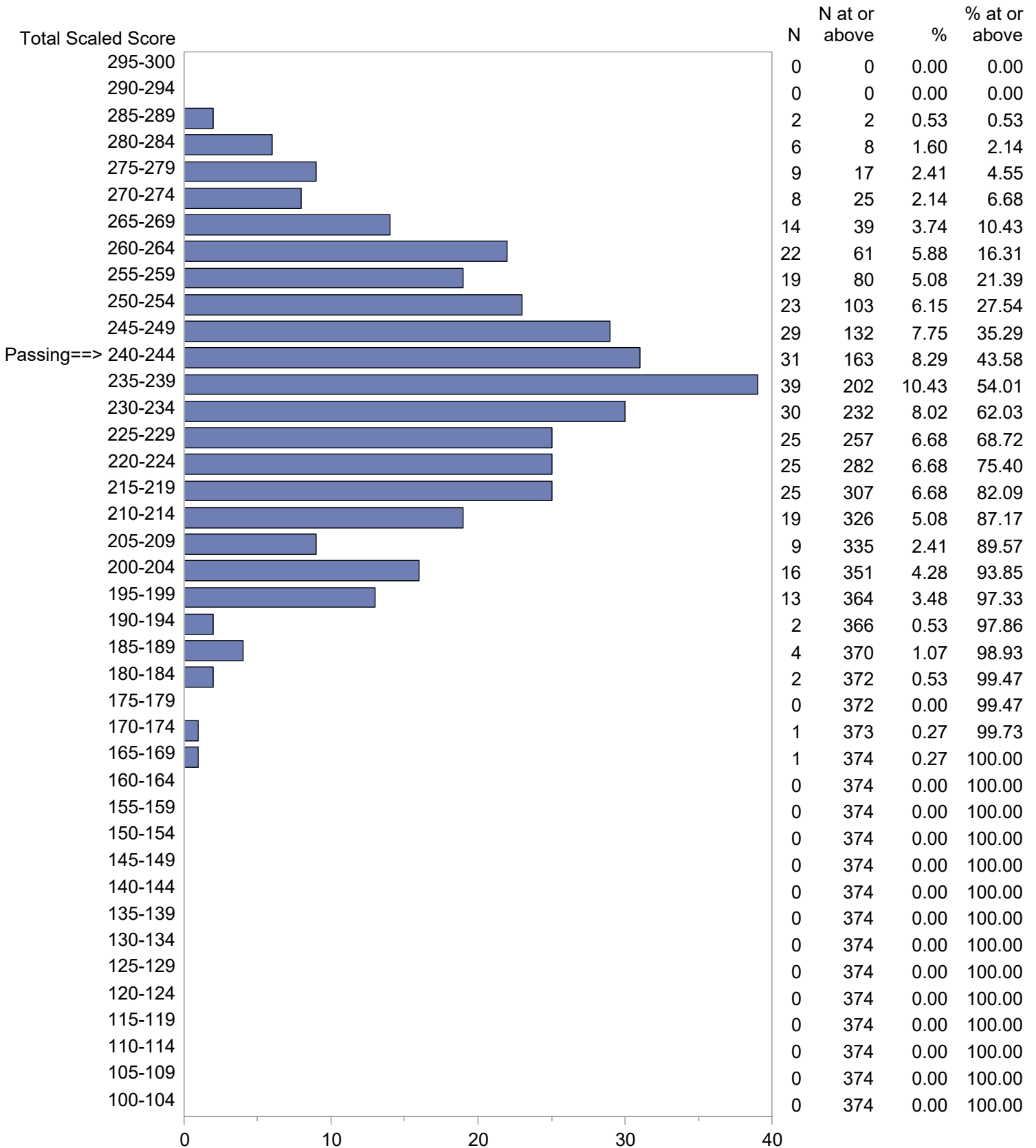
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=113 ENGLISH LANGUAGE ARTS AND READING/SOCIAL STUDIES 4-8



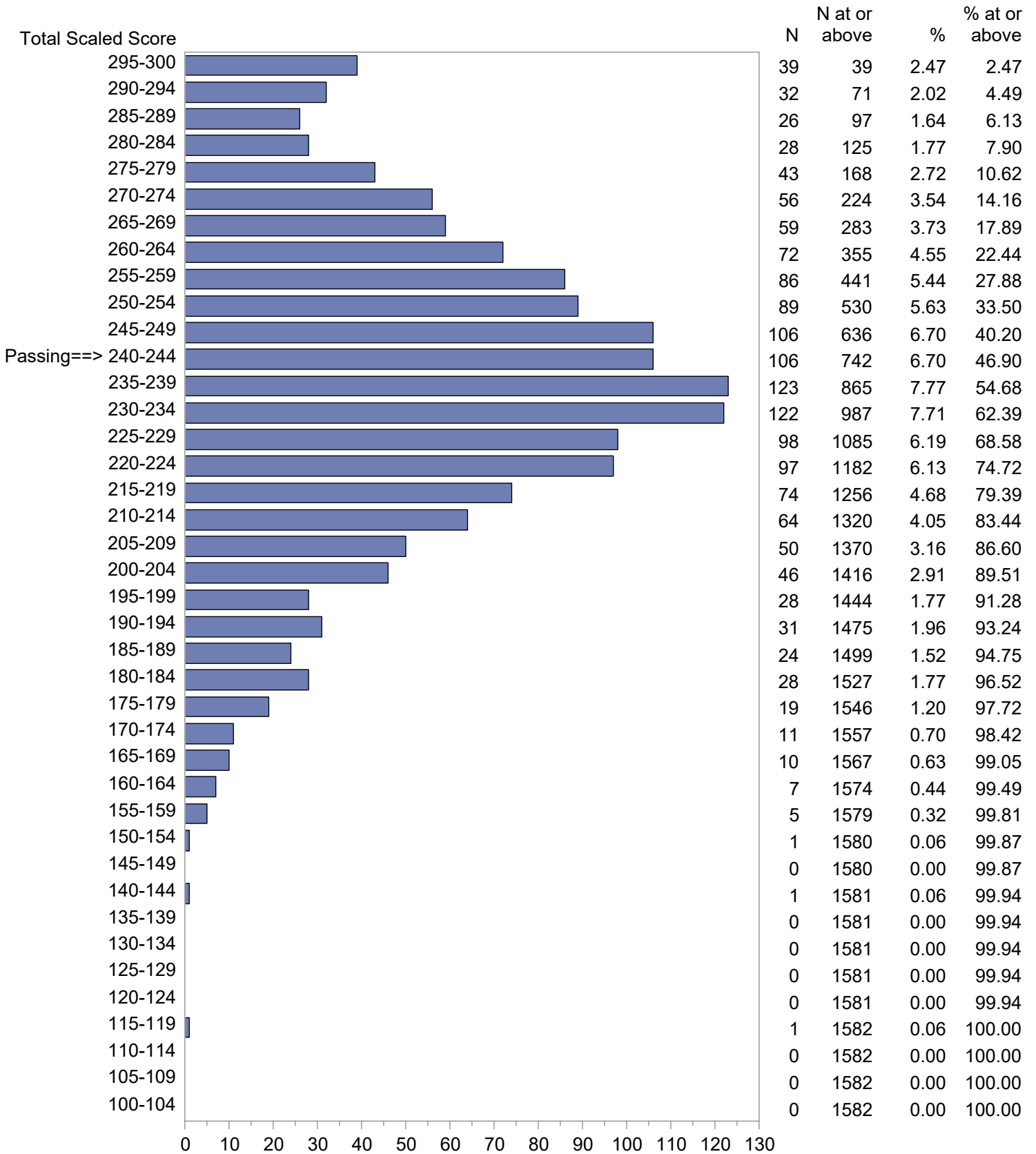
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=114 MATHEMATICS/SCIENCE 4-8



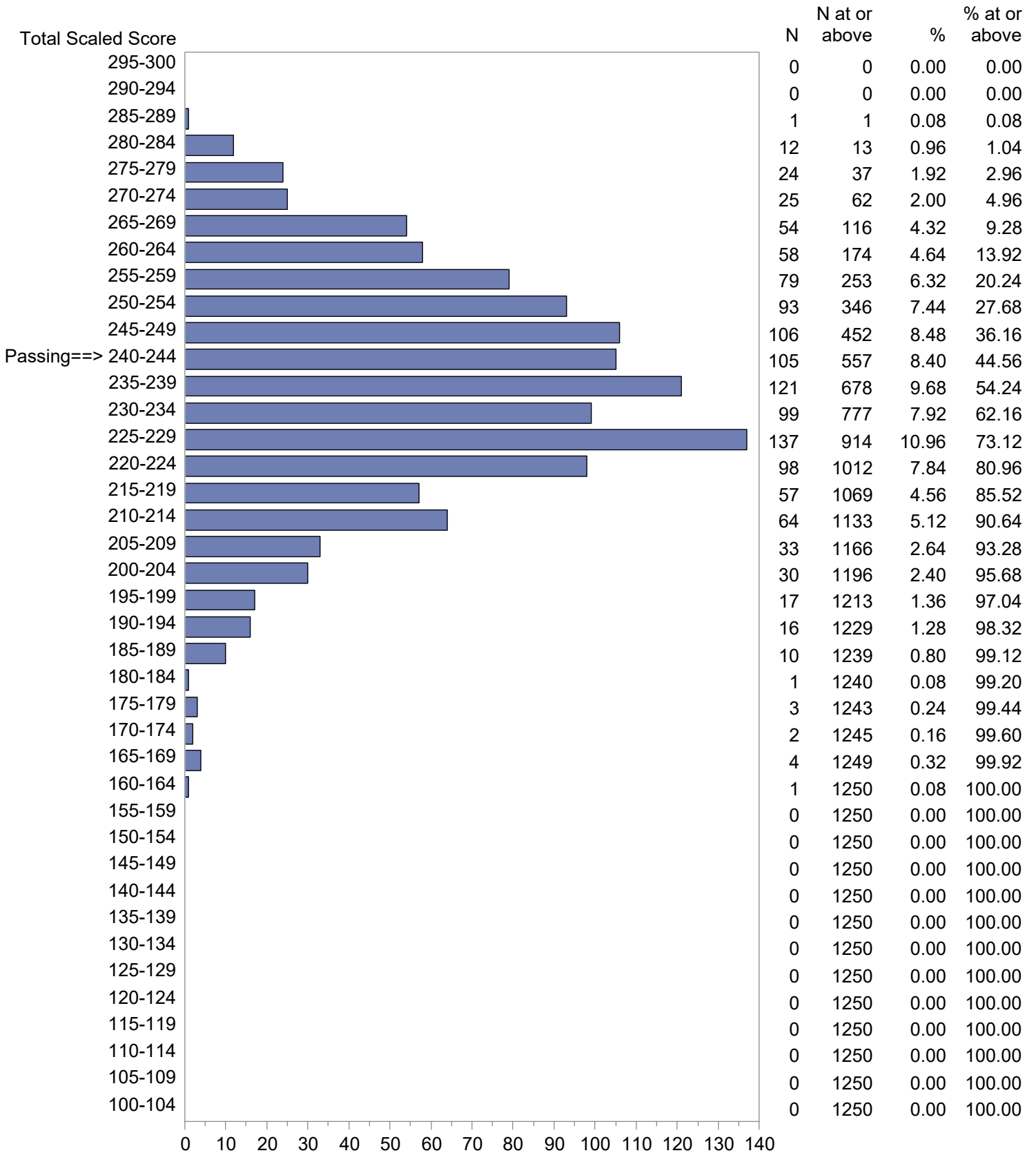
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=115 MATHEMATICS 4-8



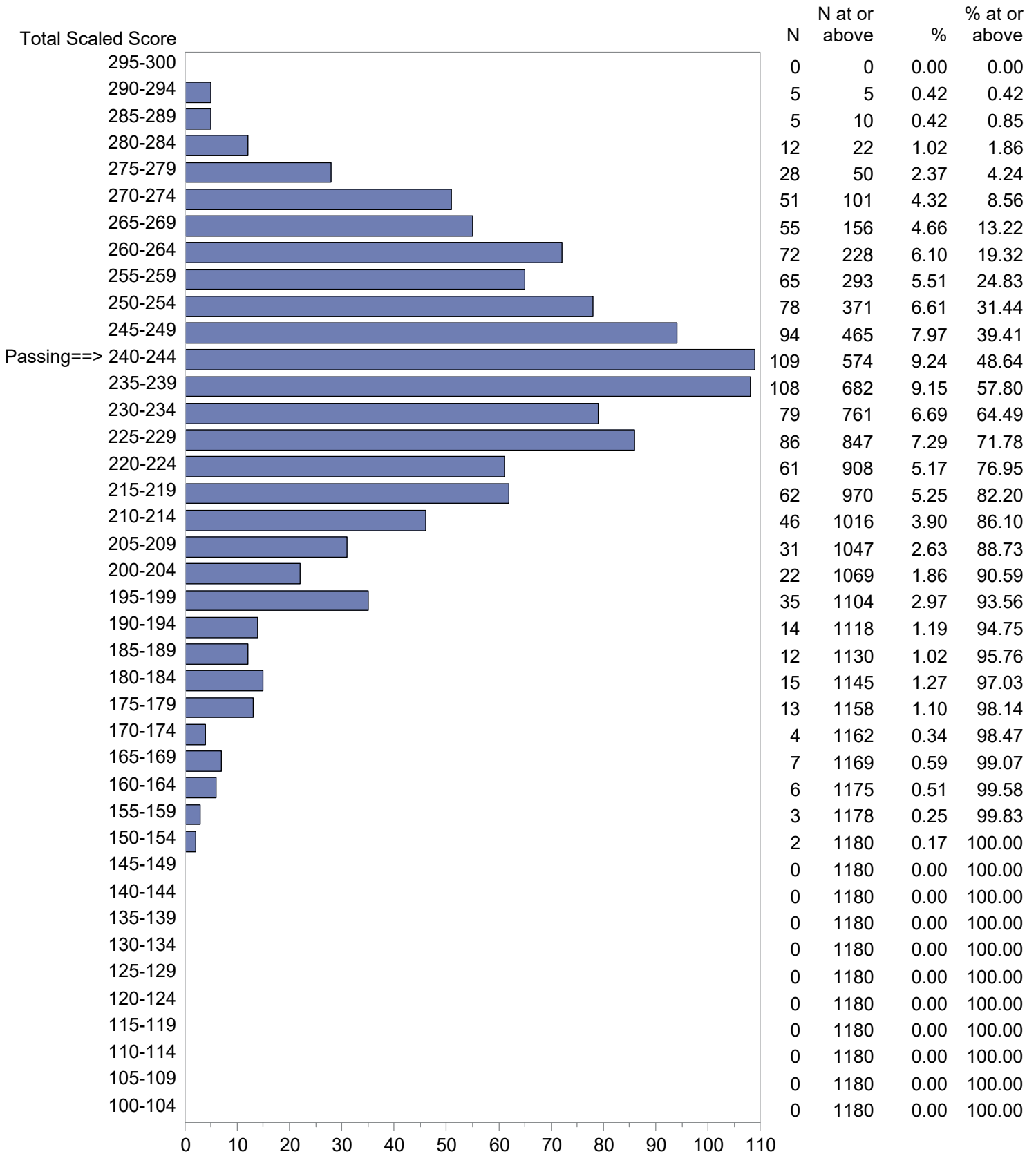
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=116 SCIENCE 4-8



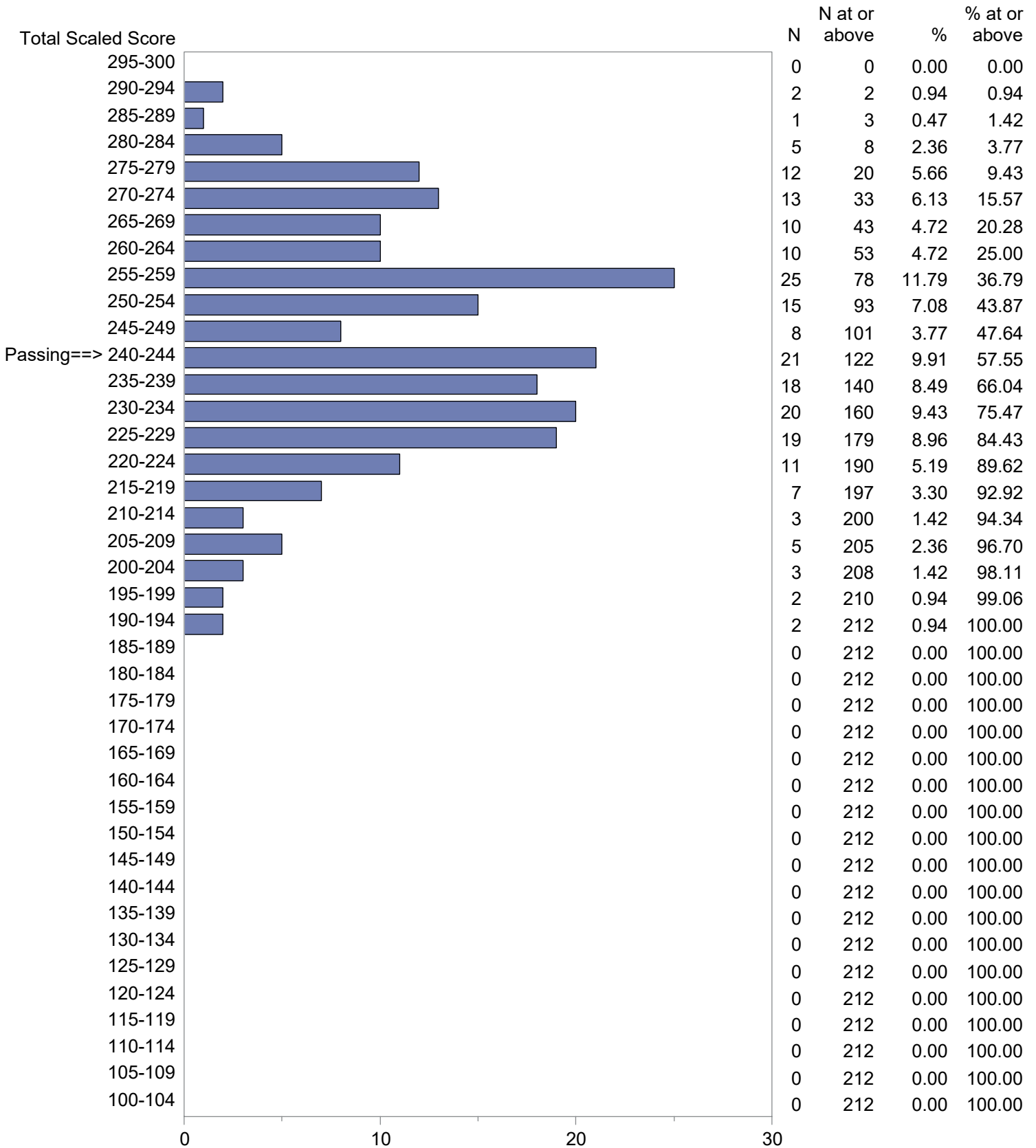
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=118 SOCIAL STUDIES 4-8



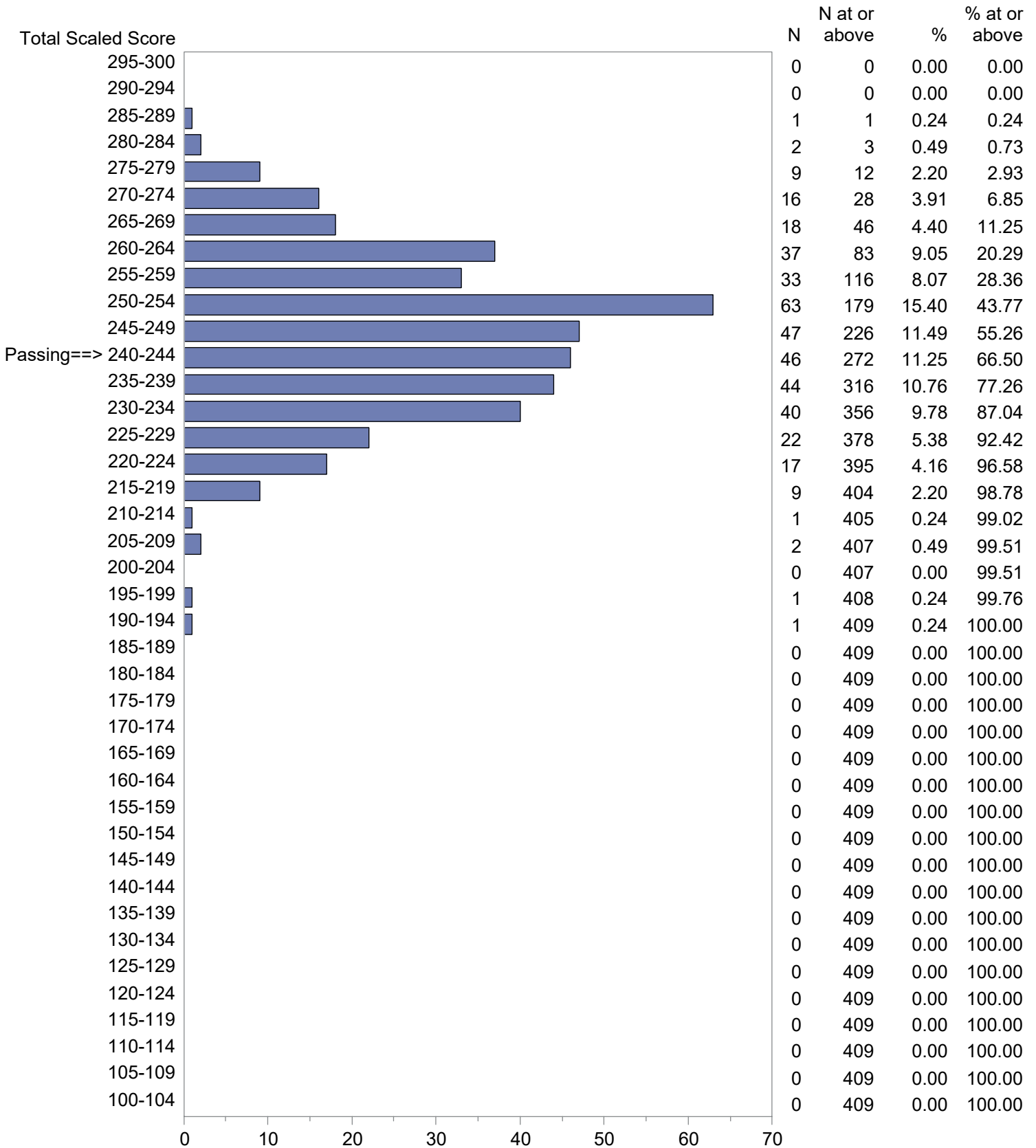
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=129 SPEECH 7-12



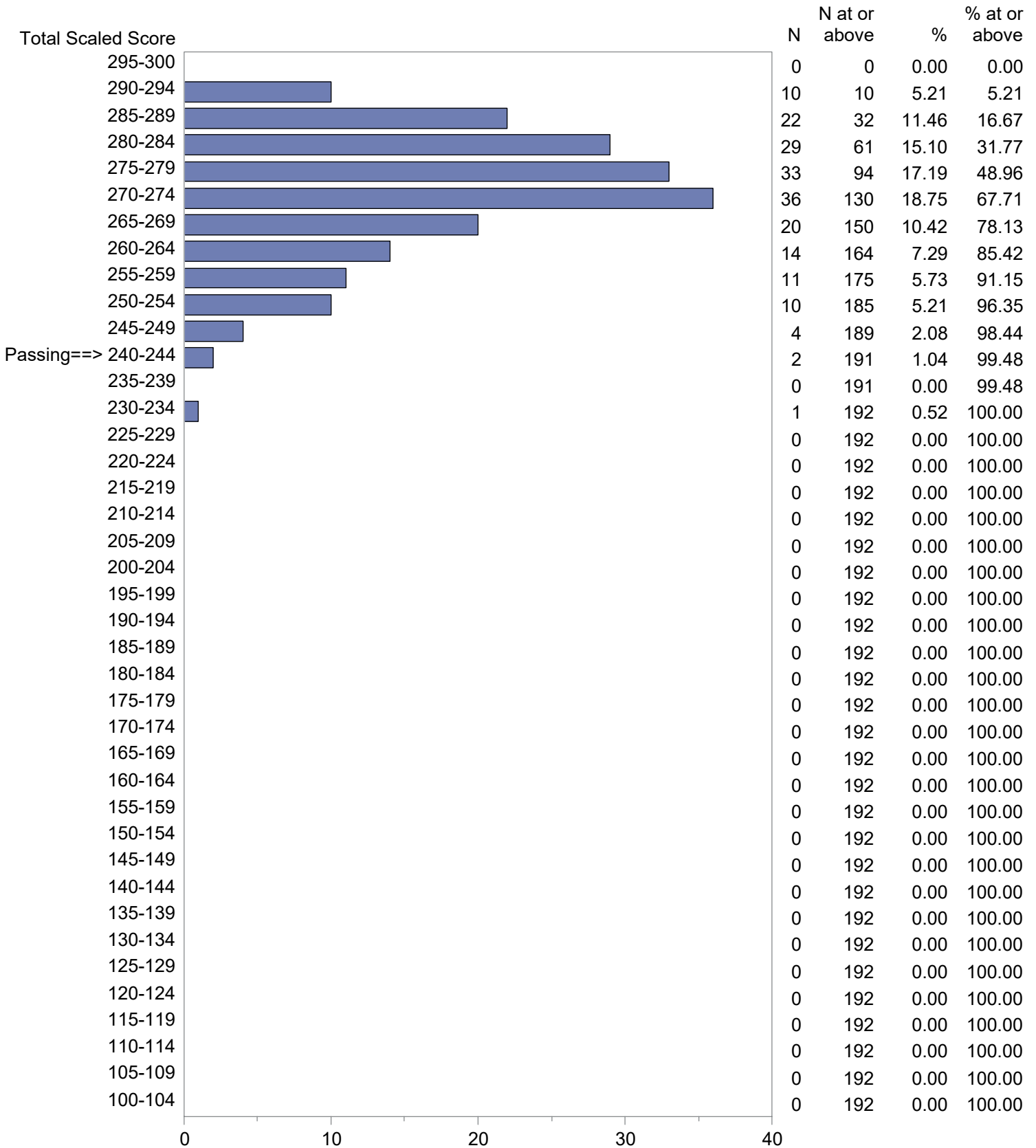
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=150 SCHOOL LIBRARIAN



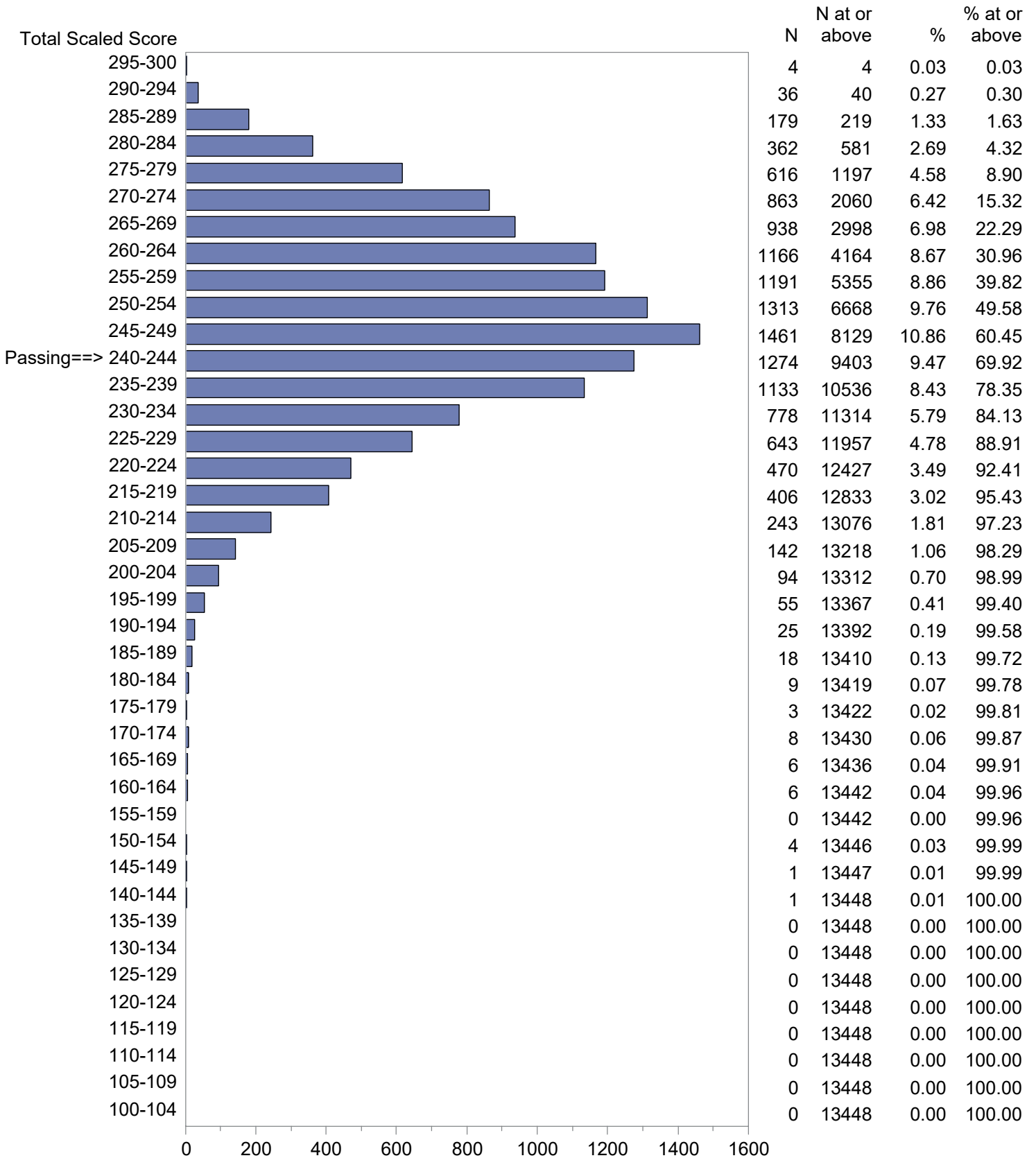
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=151 READING SPECIALIST



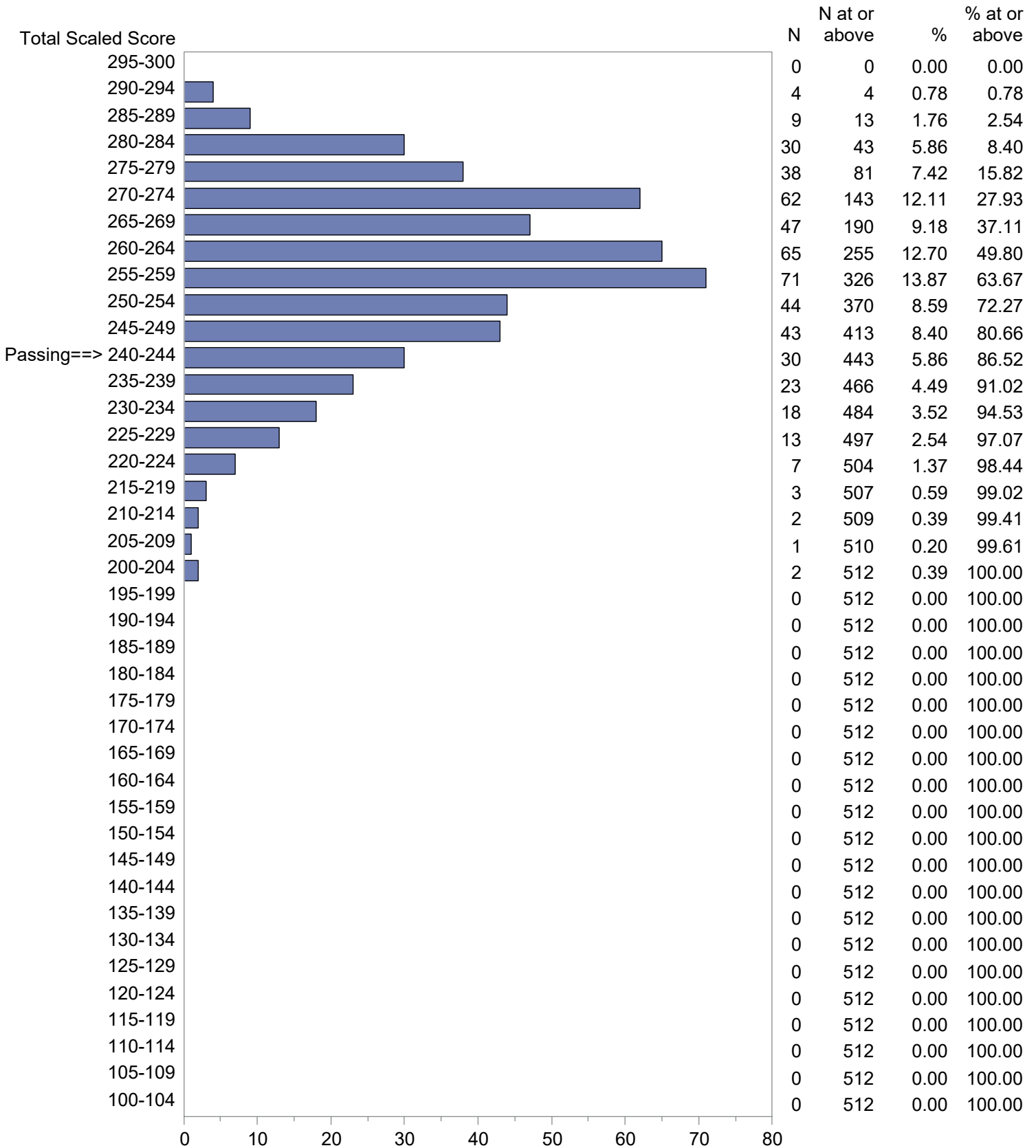
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=154 ENGLISH AS A SECOND LANGUAGE SUPPLEMENTAL (ESL)



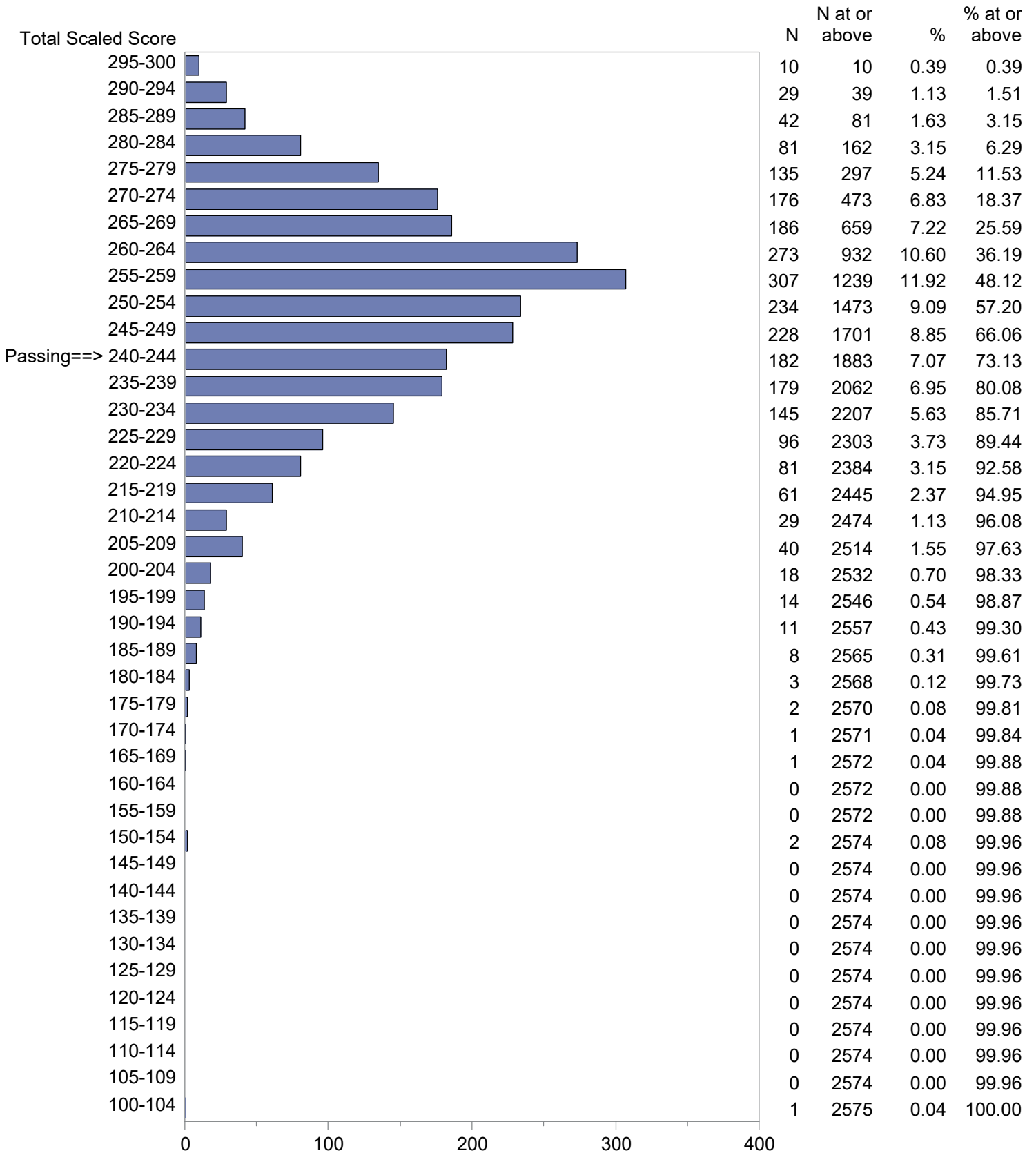
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=157 HEALTH EC-12



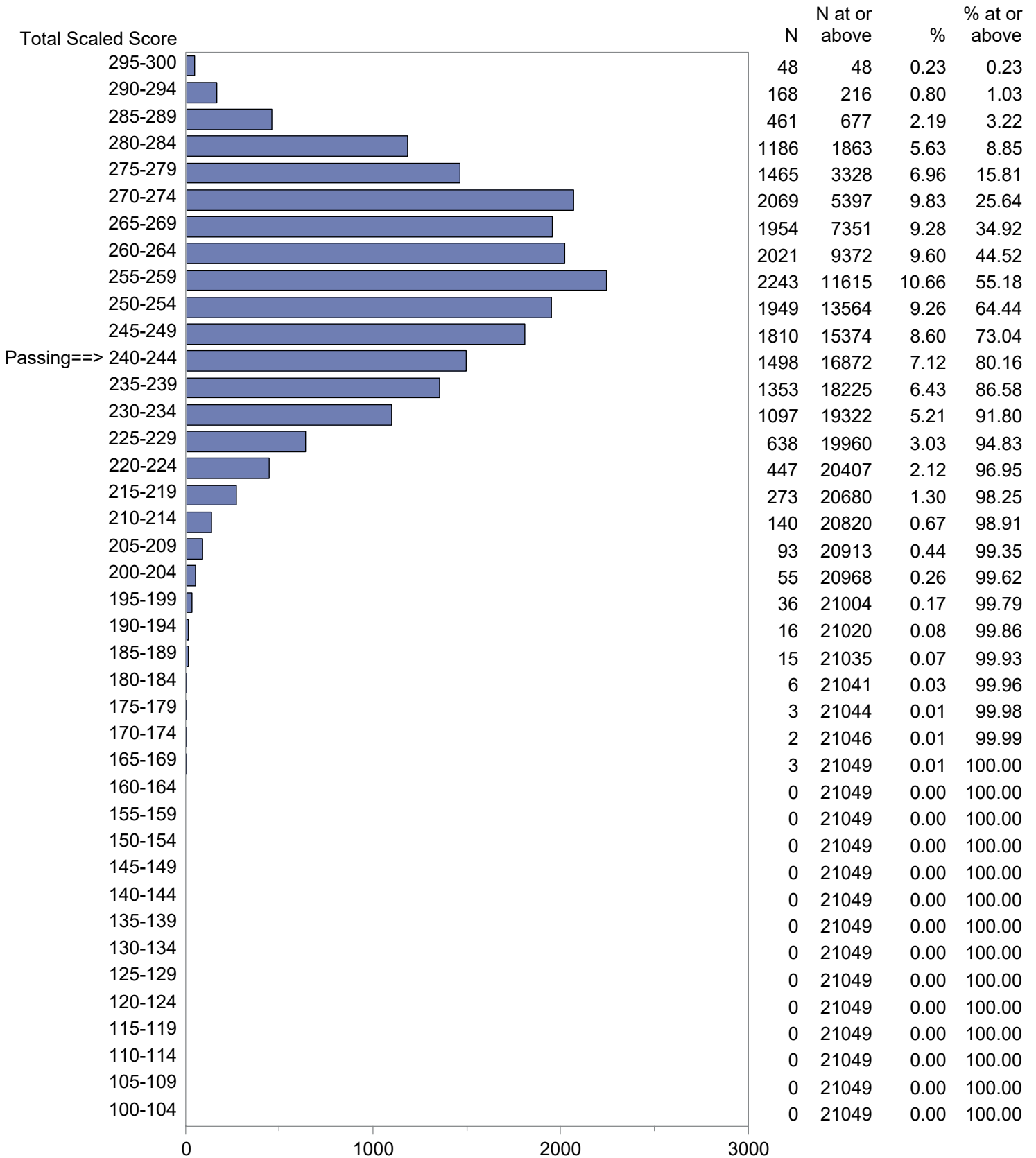
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=158 PHYSICAL EDUCATION EC-12



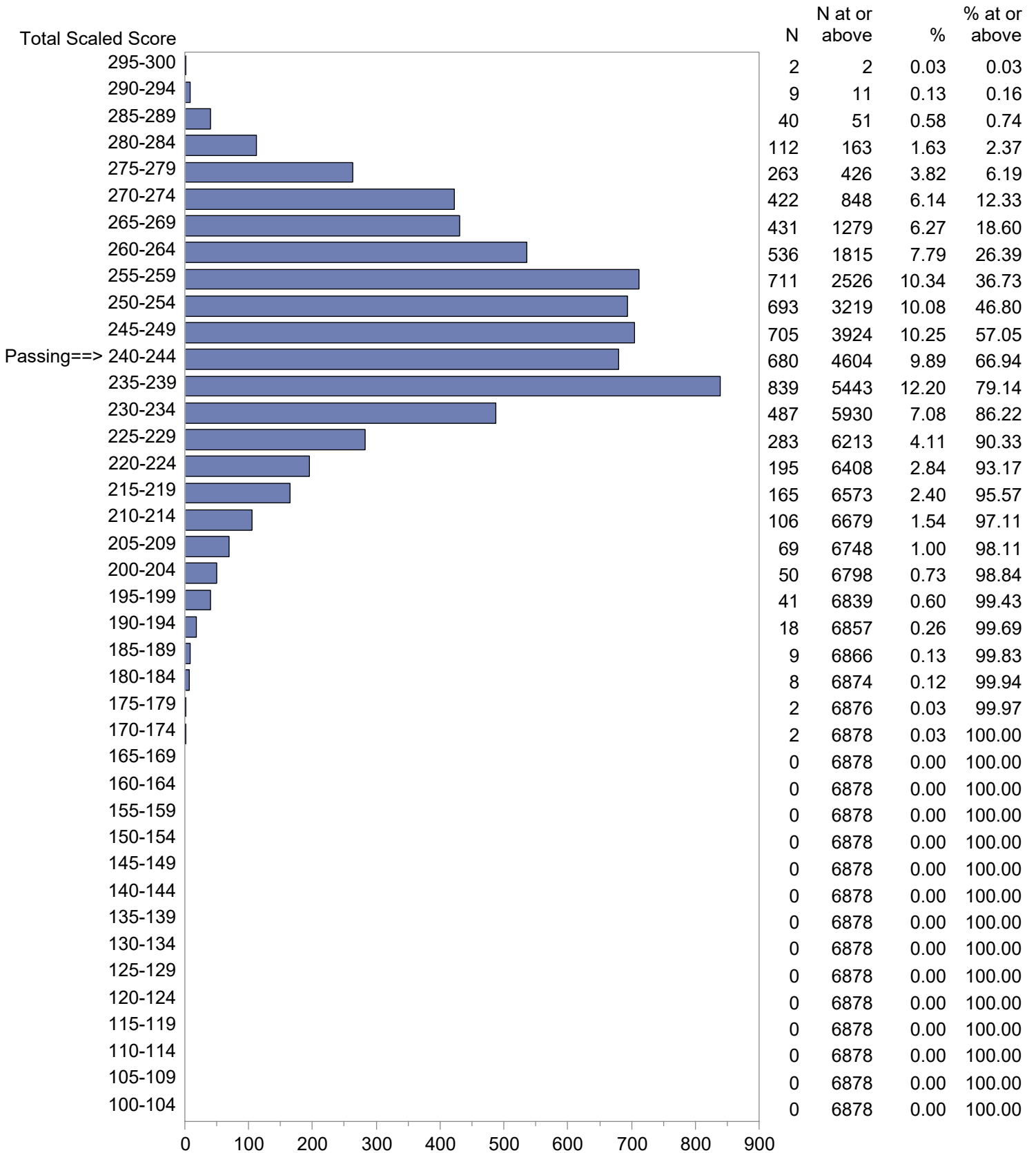
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=160 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES EC-12



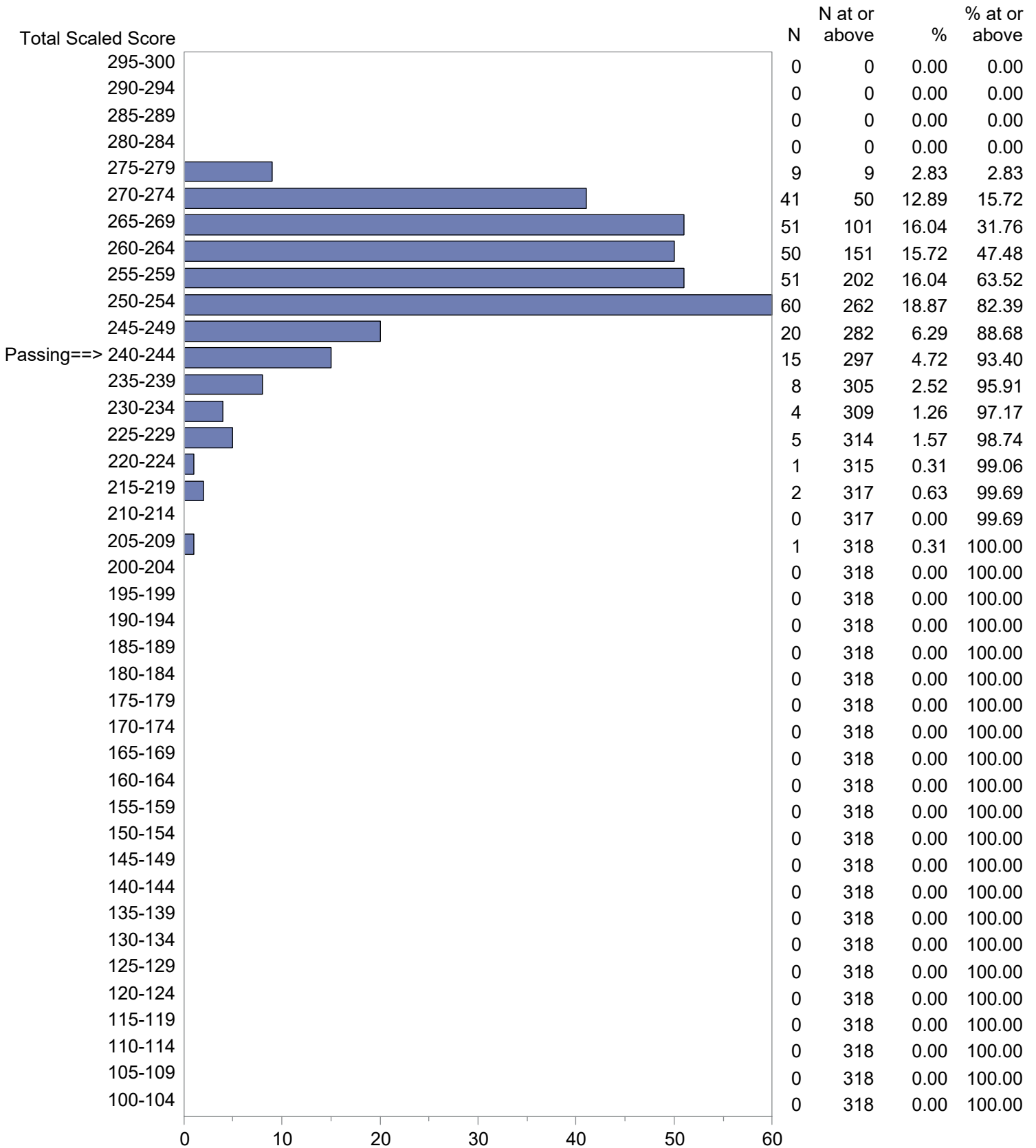
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=161 SPECIAL EDUCATION EC-12



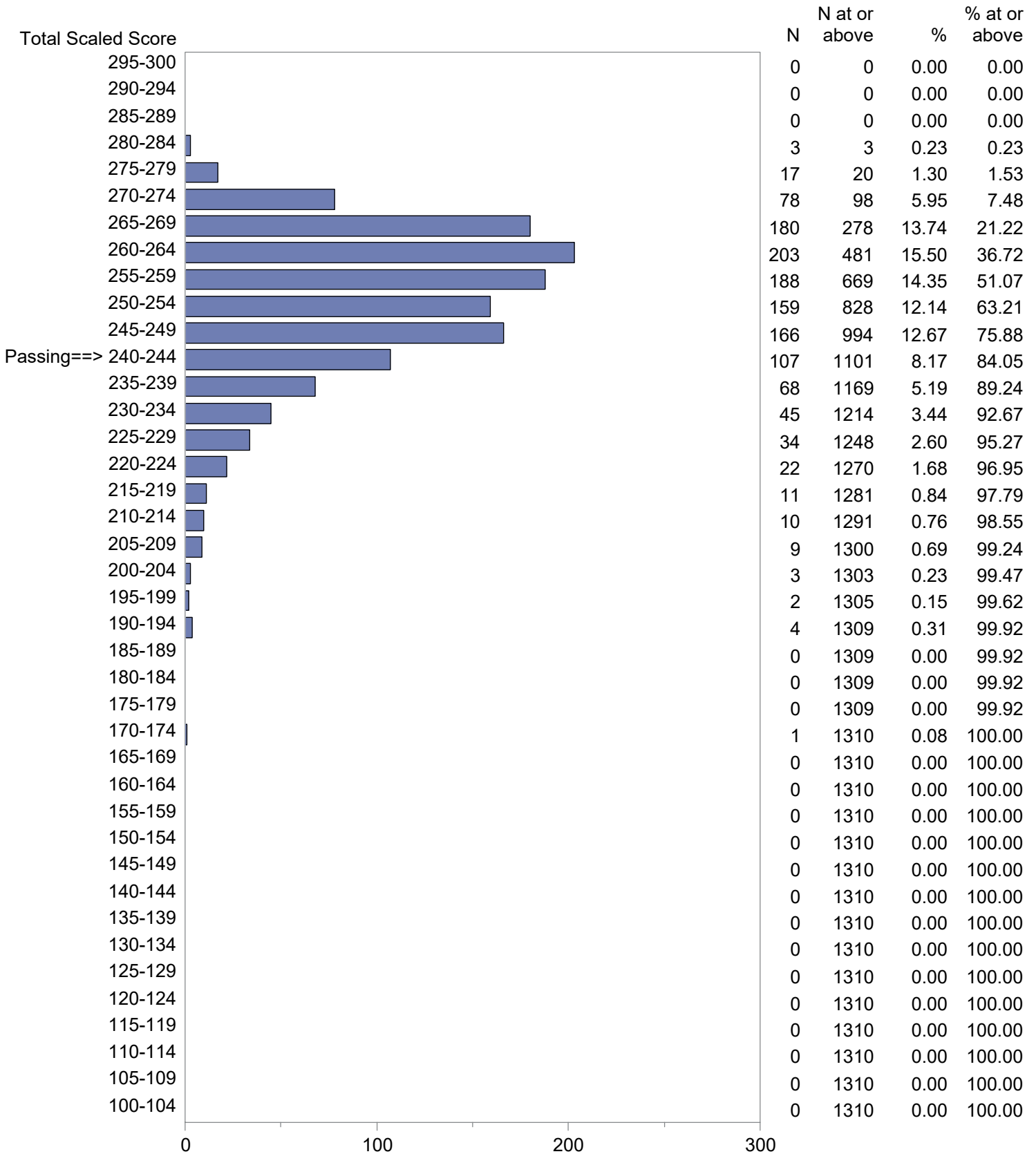
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=162 GIFTED AND TALENTED SUPPLEMENTAL



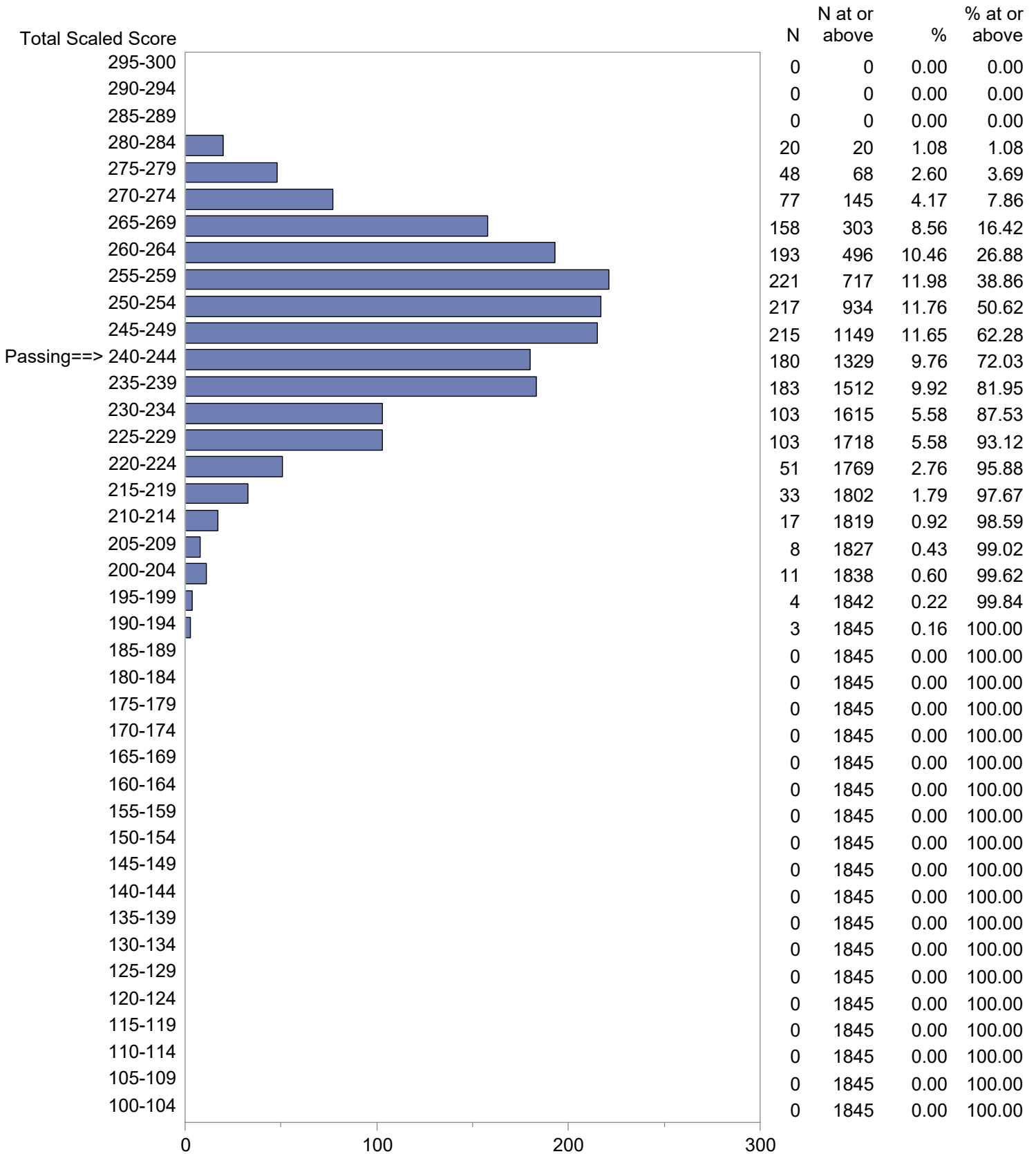
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=163 SPECIAL EDUCATION SUPPLEMENTAL



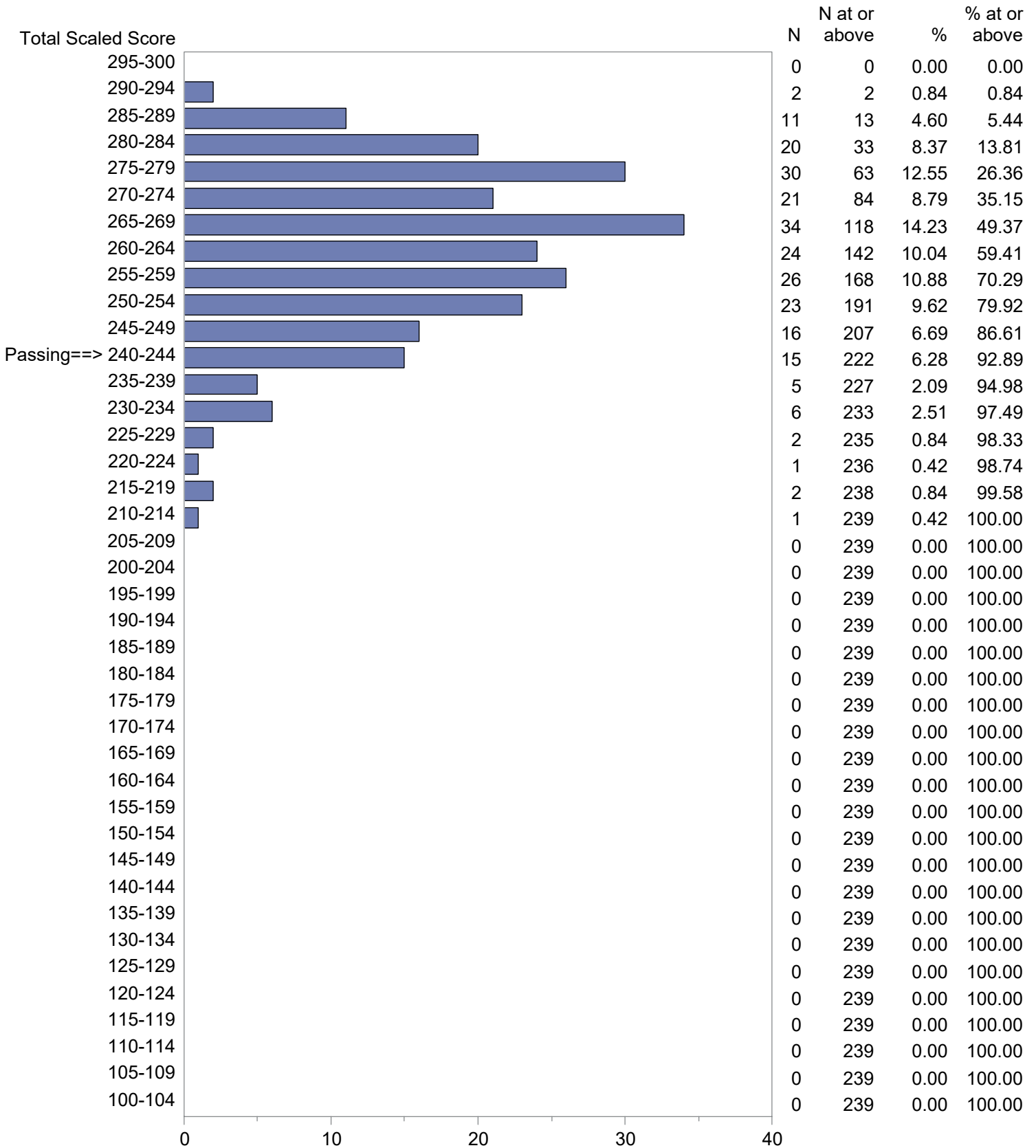
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=164 BILINGUAL EDUCATION SUPPLEMENTAL



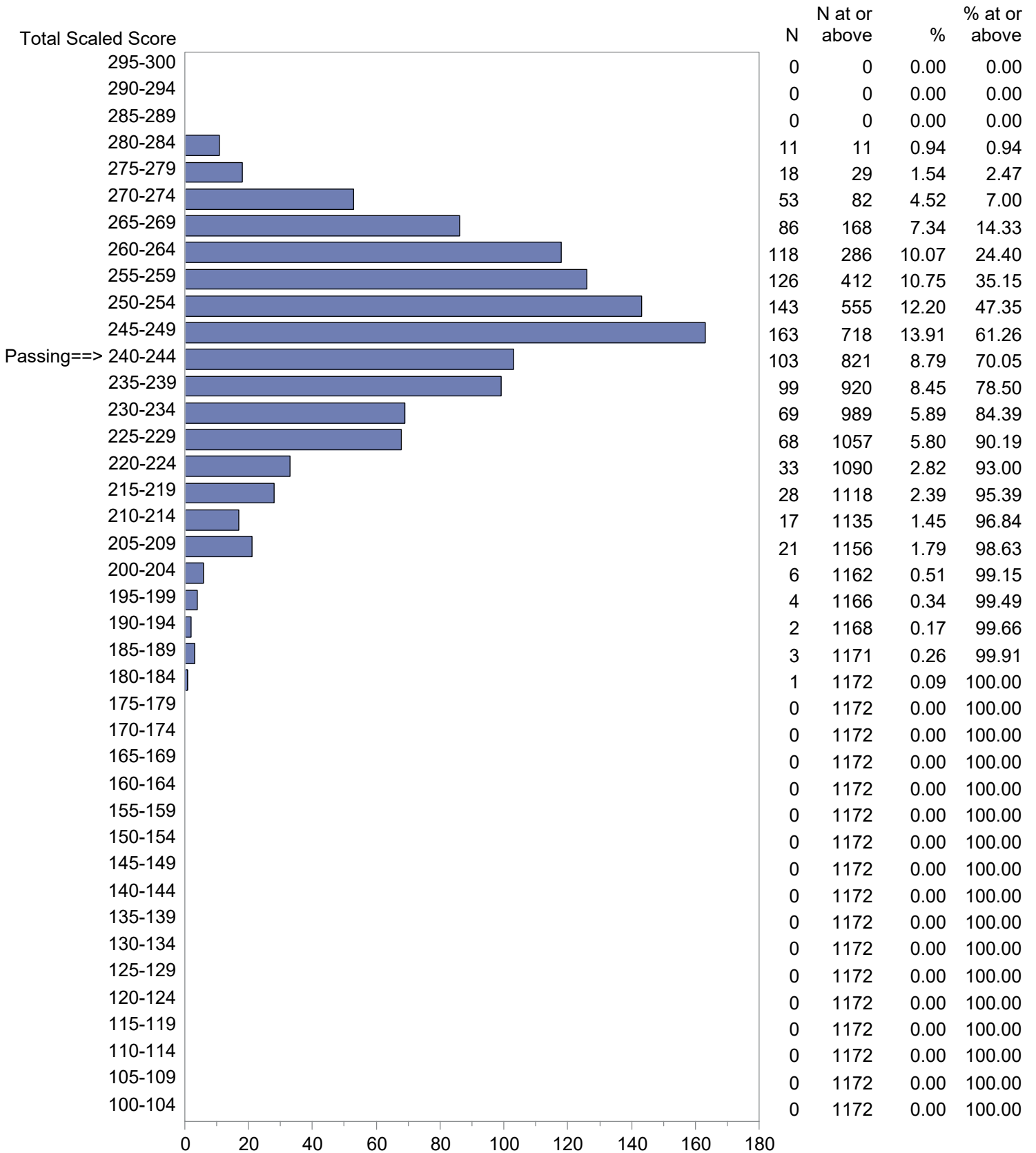
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=171 TECHNOLOGY EDUCATION 6-12



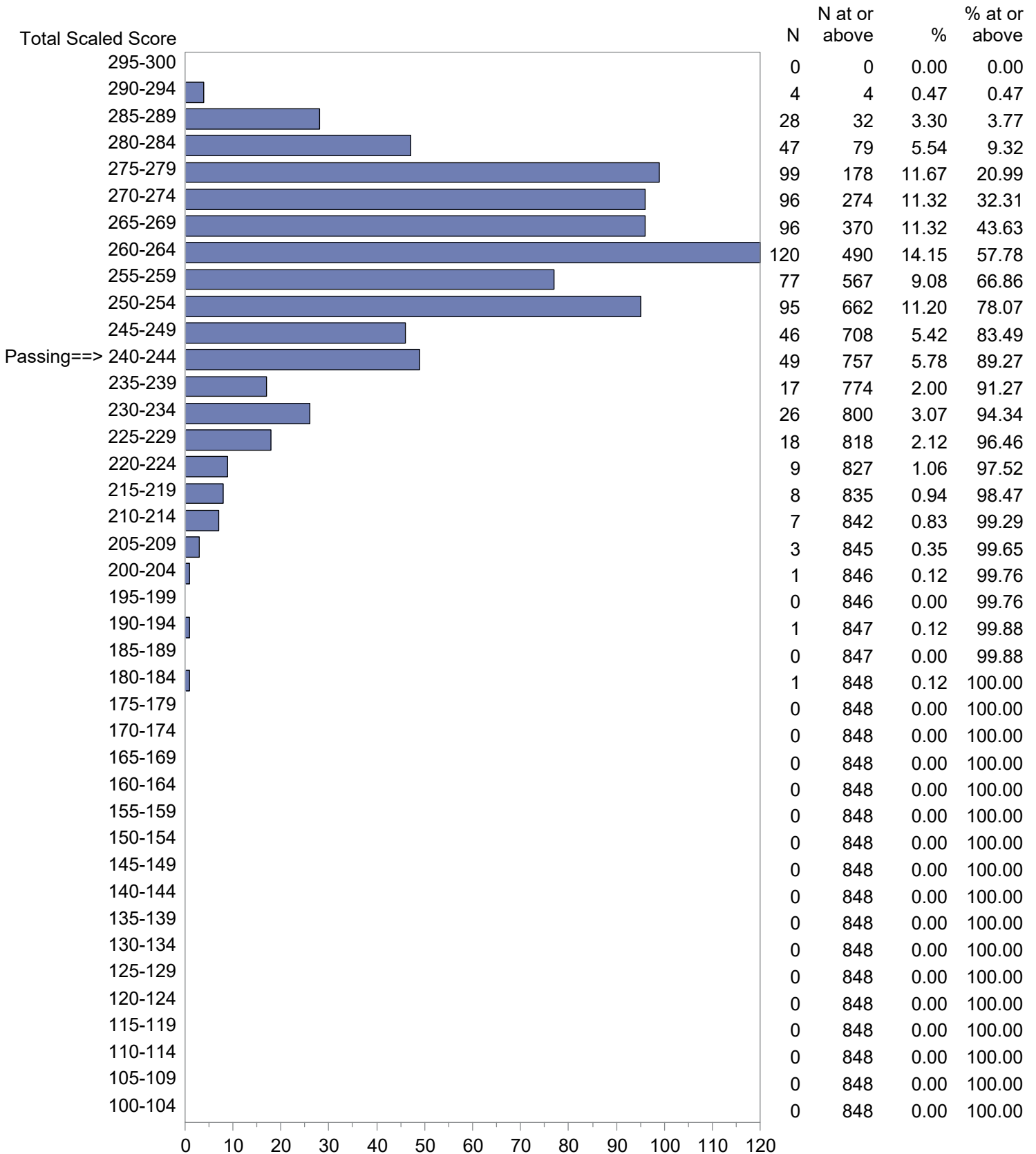
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=177 MUSIC EC-12



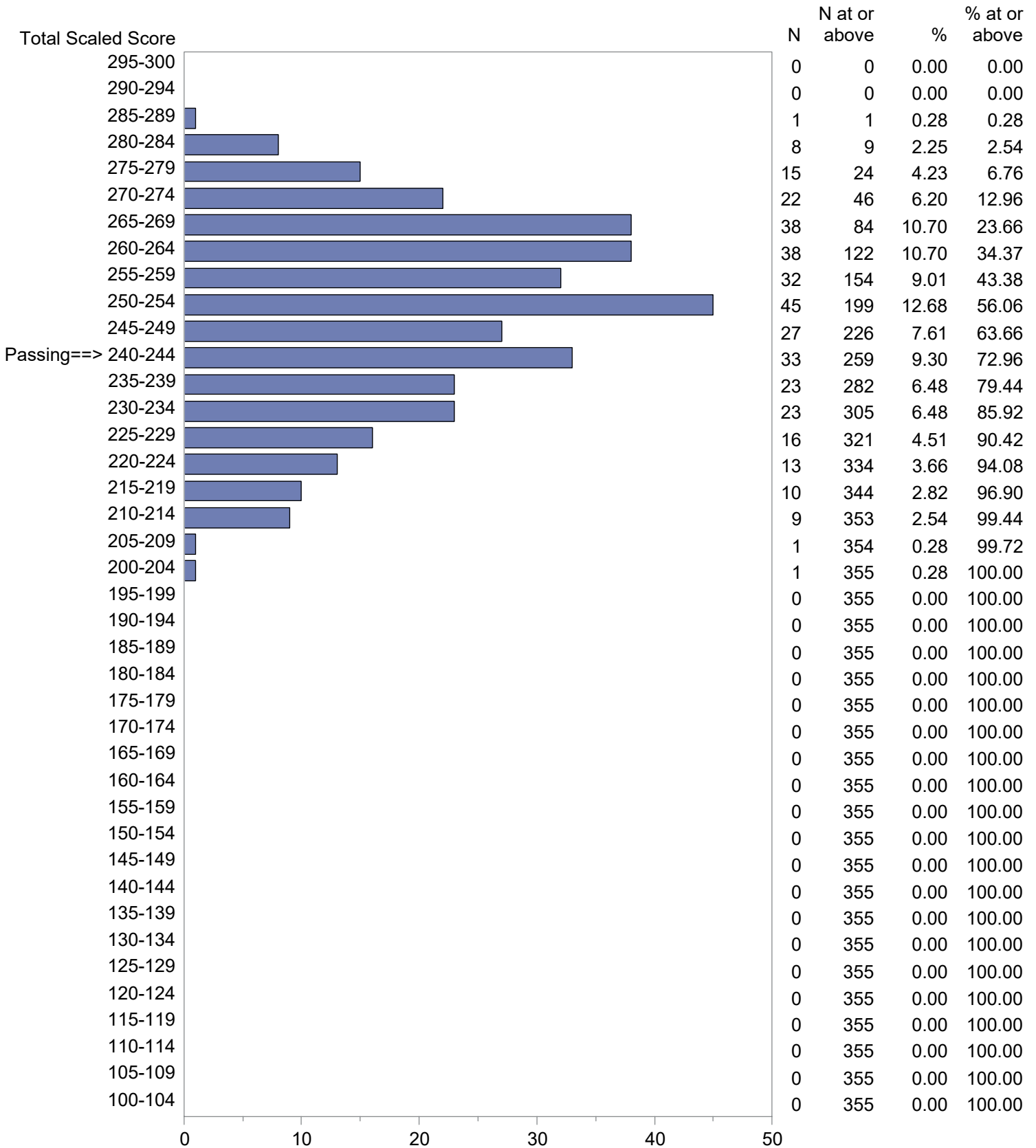
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=178 ART EC-12



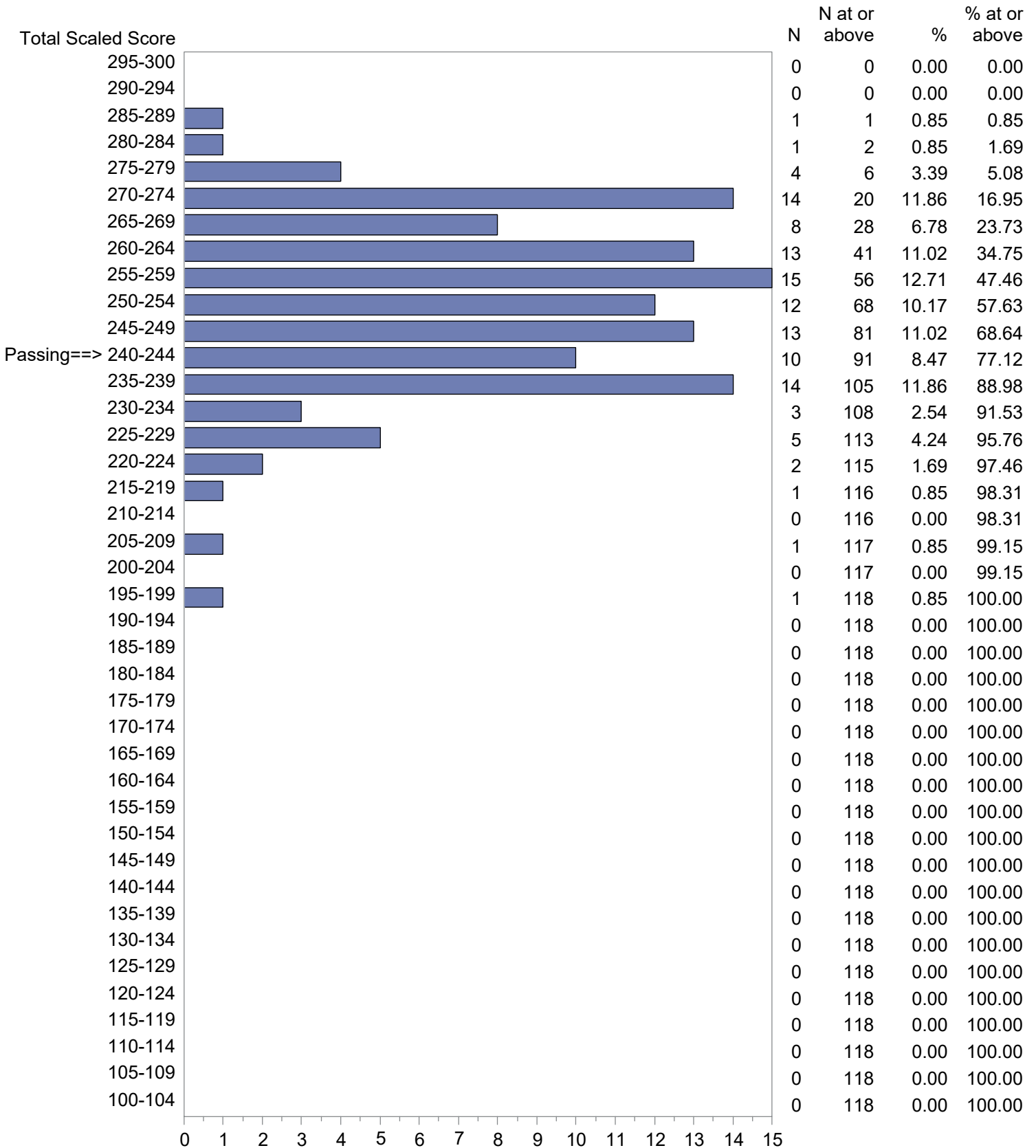
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=180 THEATRE EC-12



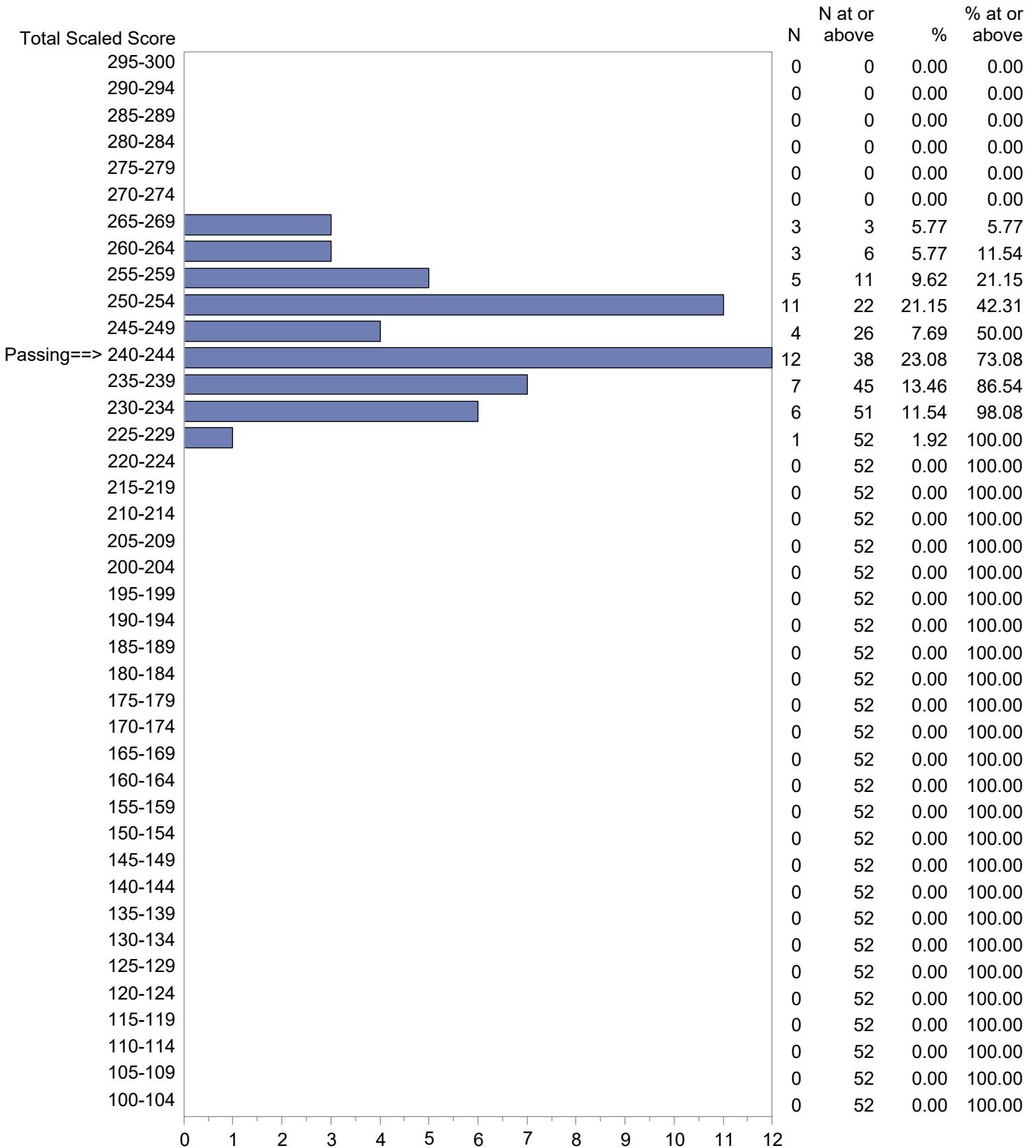
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=181 DEAF AND HARD OF HEARING



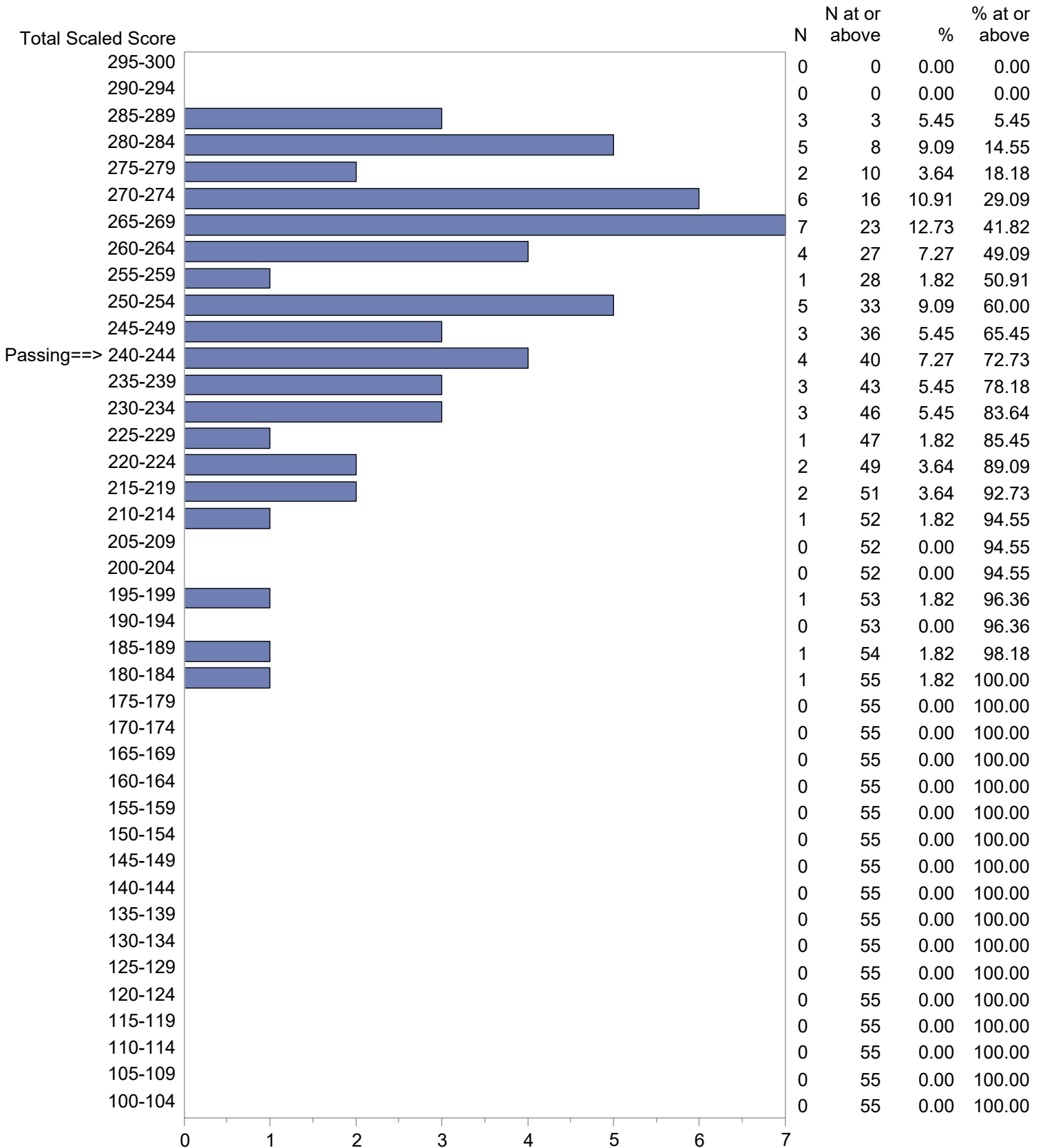
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=182 VISUALLY IMPAIRED



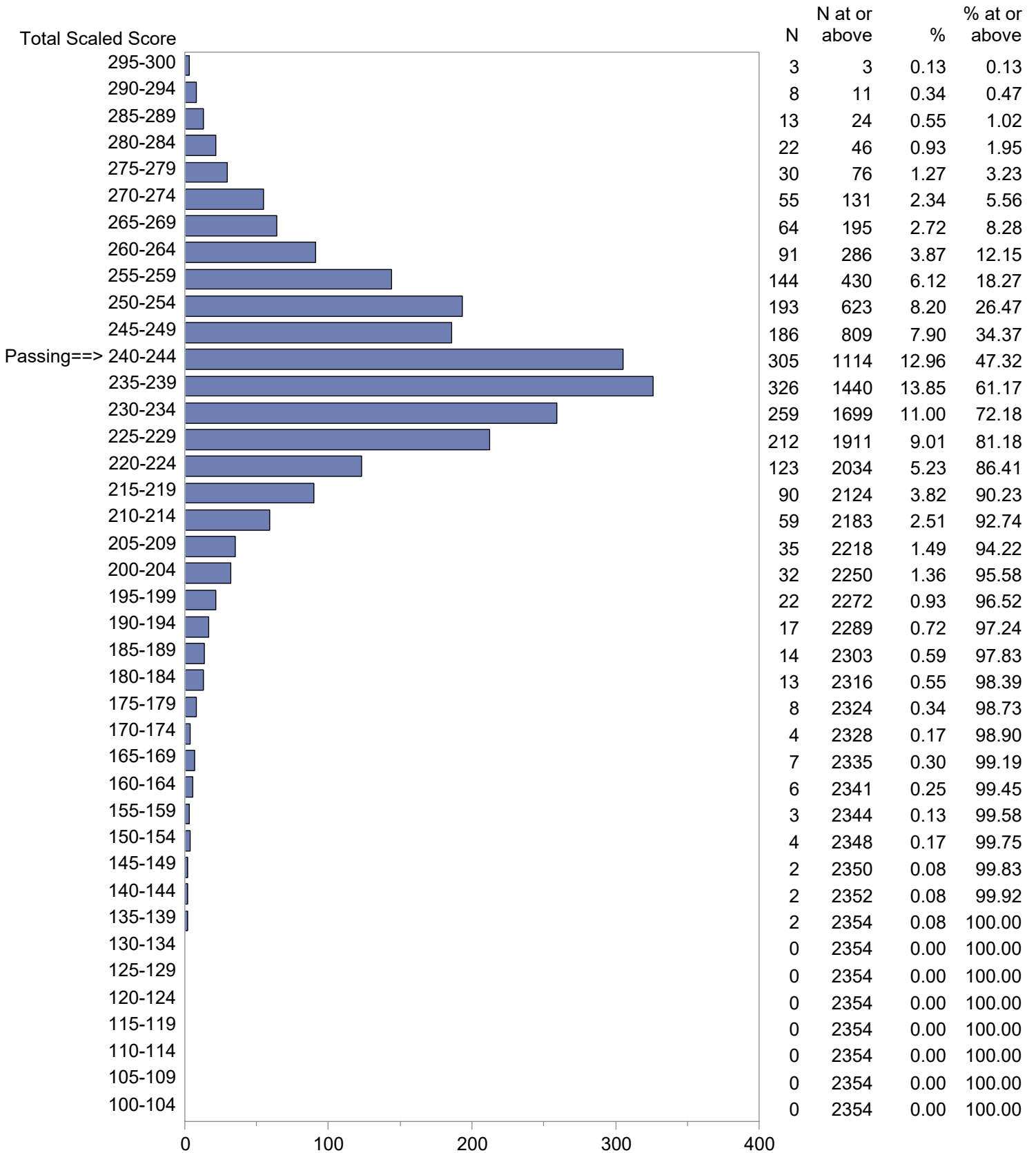
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=184 AMERICAN SIGN LANGUAGE (ASL)



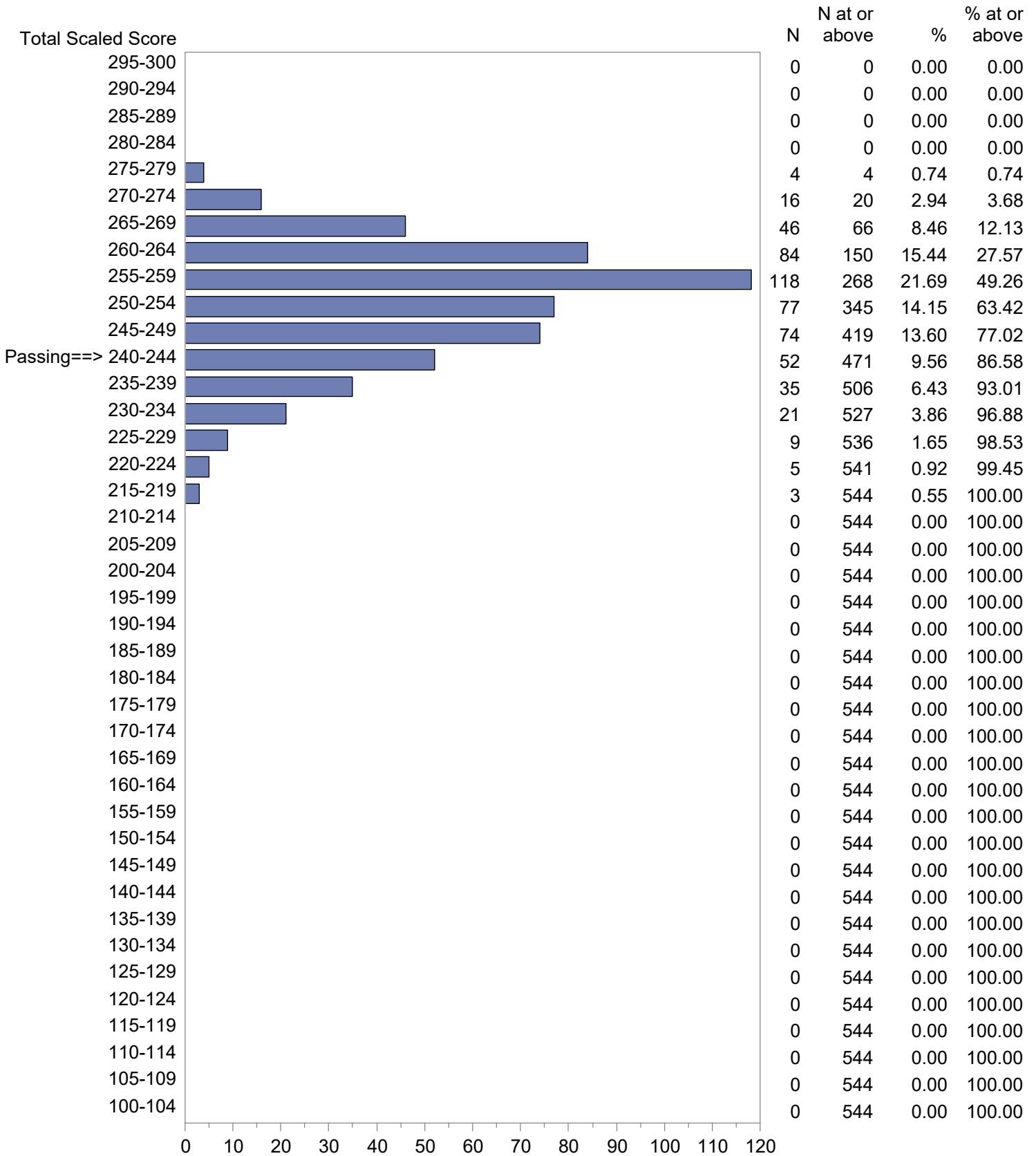
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=190 BILINGUAL TARGET LANGUAGE PROFICIENCY TEST



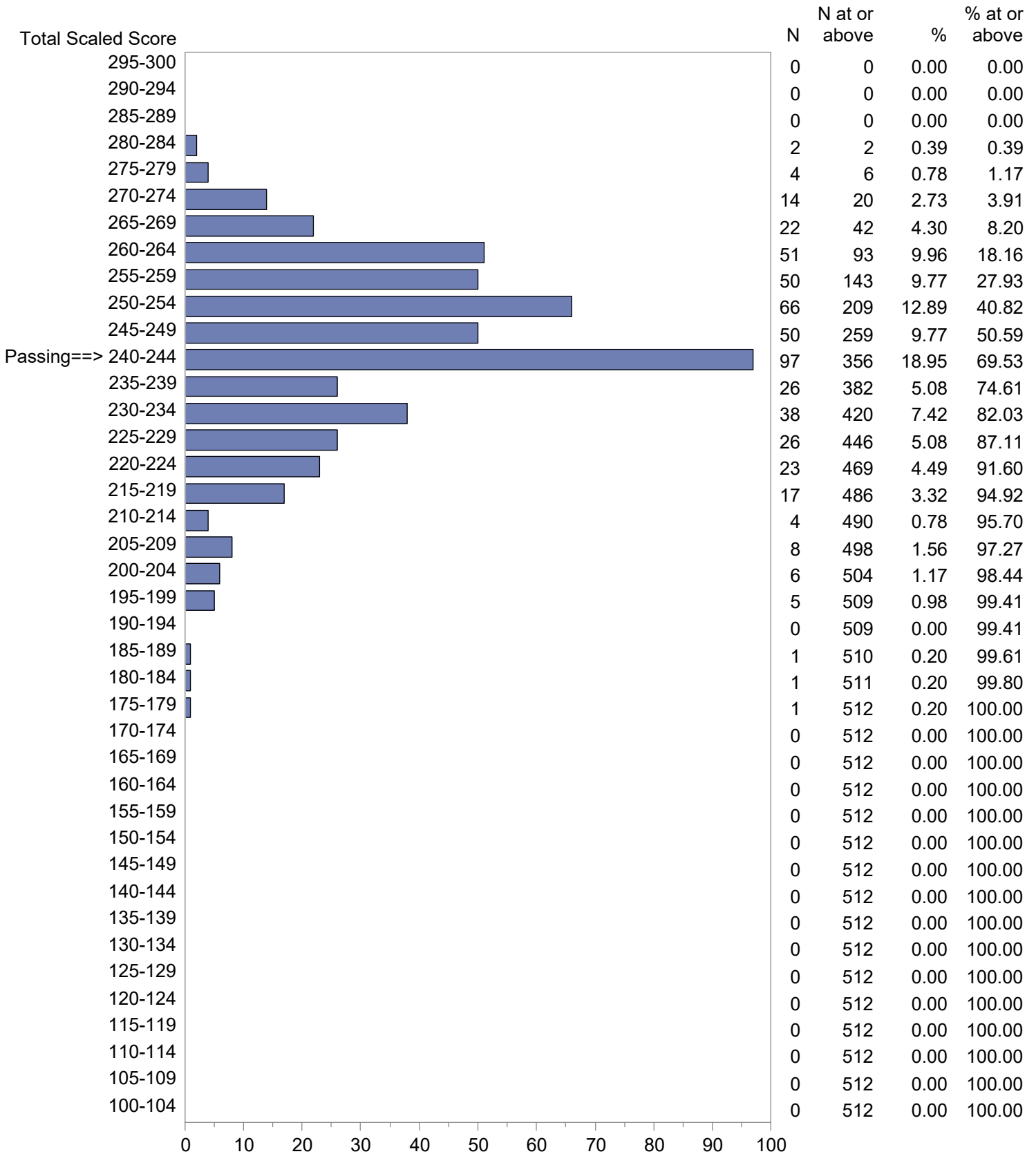
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=195 SUPERINTENDENT



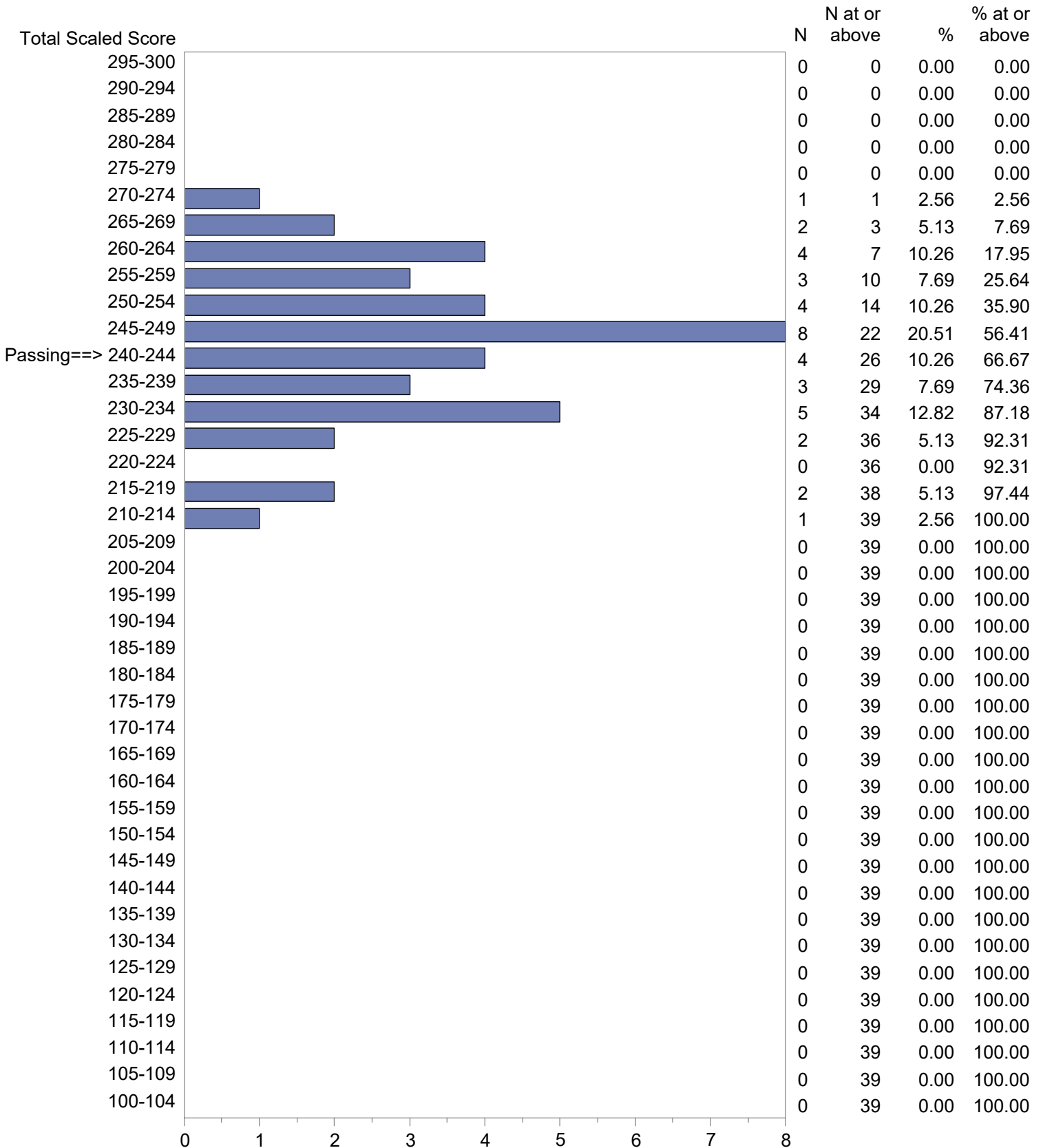
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=200 AAFCS FAMILY AND CONSUMER SCIENCES COMPOSITE



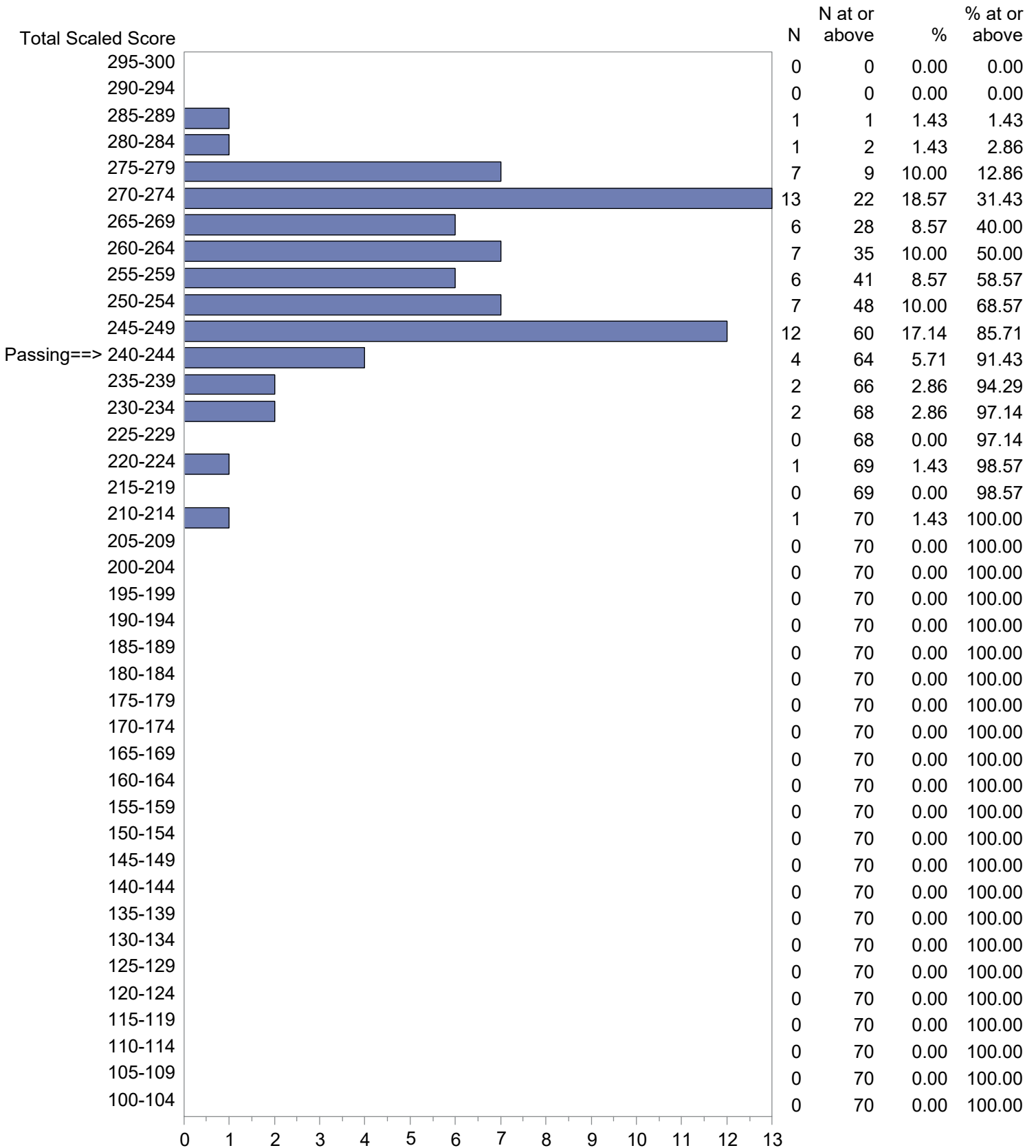
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=201 AAFCS HOSPITALITY, NUTRITION, FOOD SCIENCE



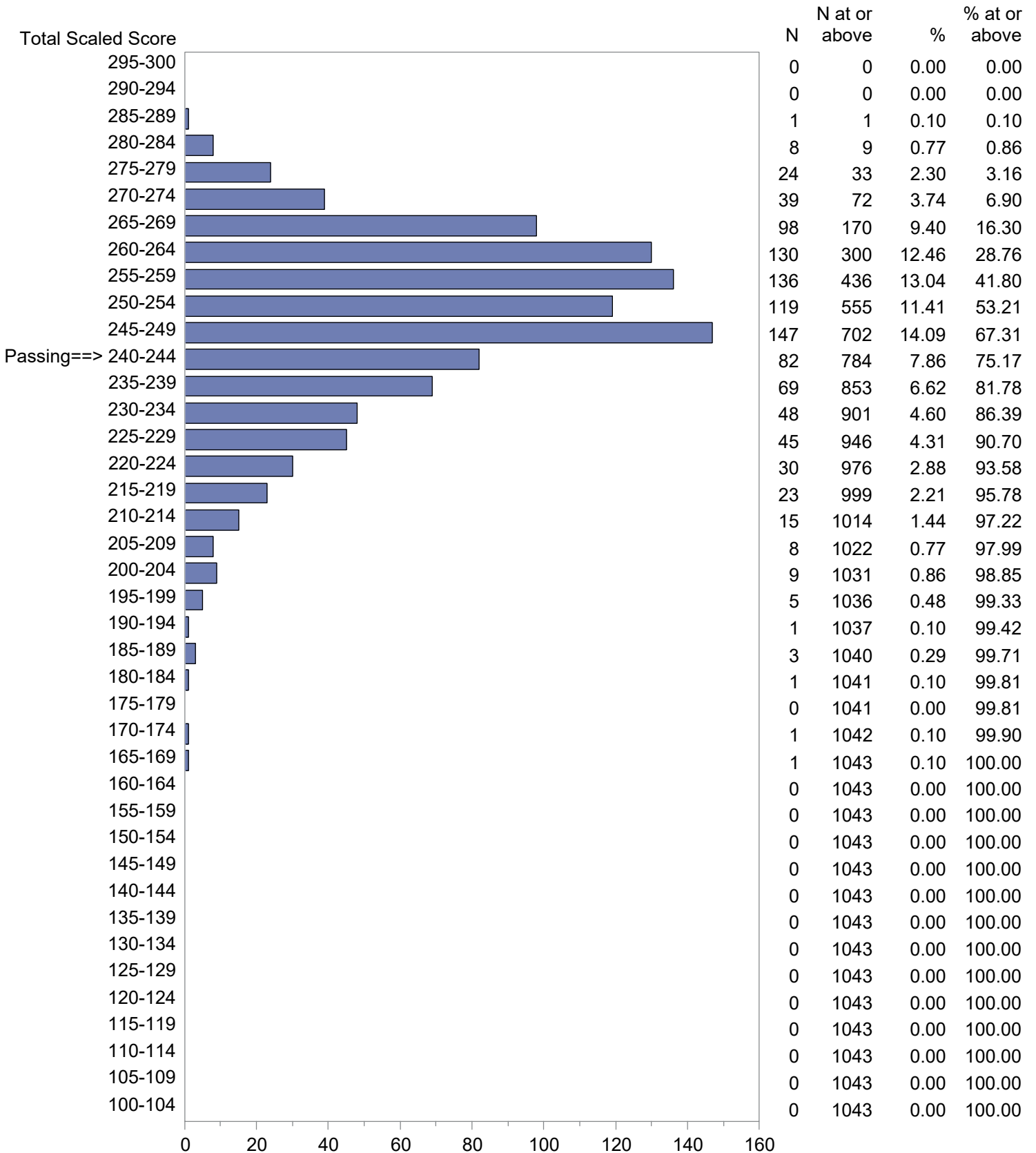
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=202 AAFCS HUMAN DEVELOPMENT & FAMILY STUDIES



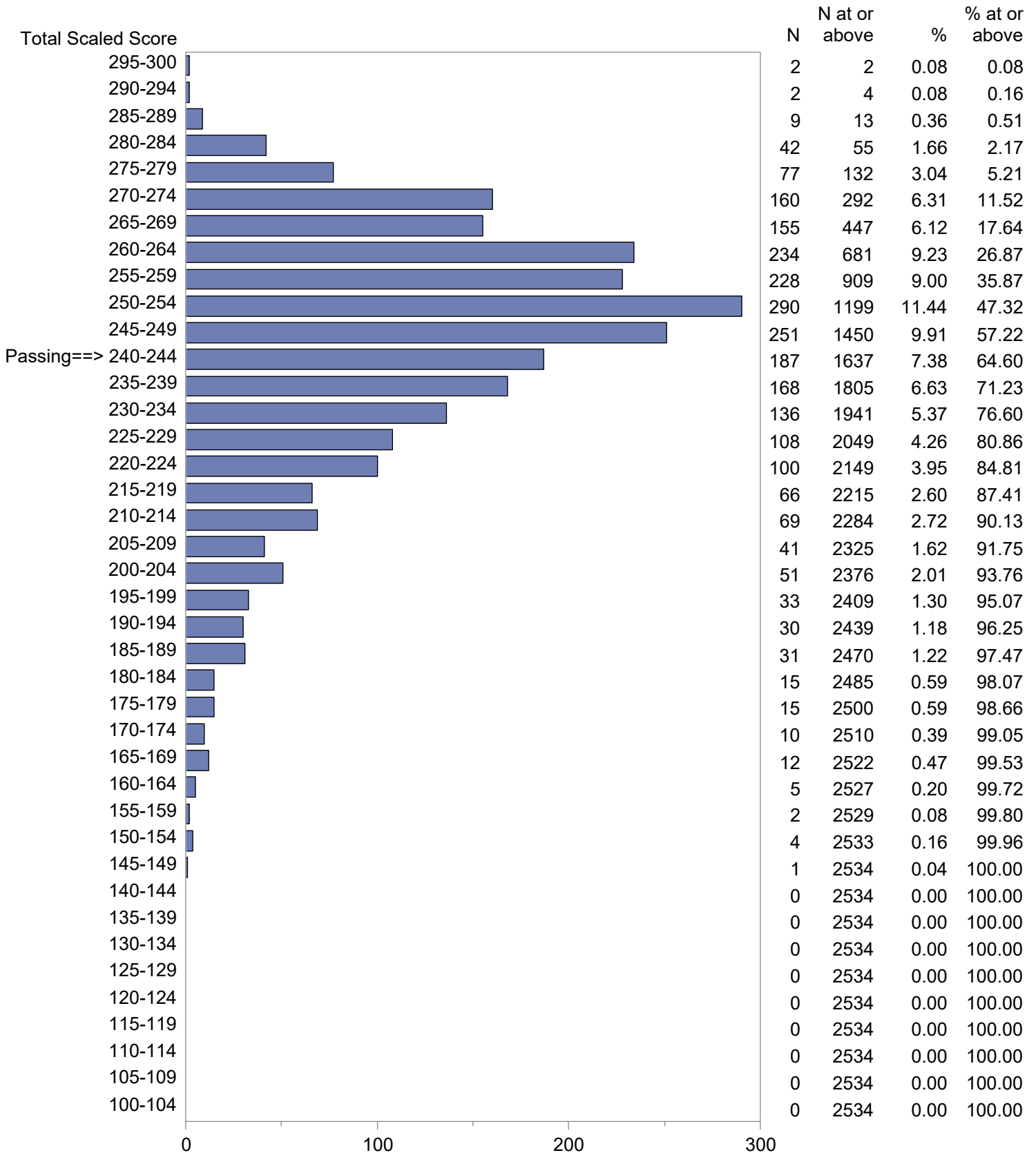
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=217 ENGLISH LANGUAGE ARTS AND READING 4-8



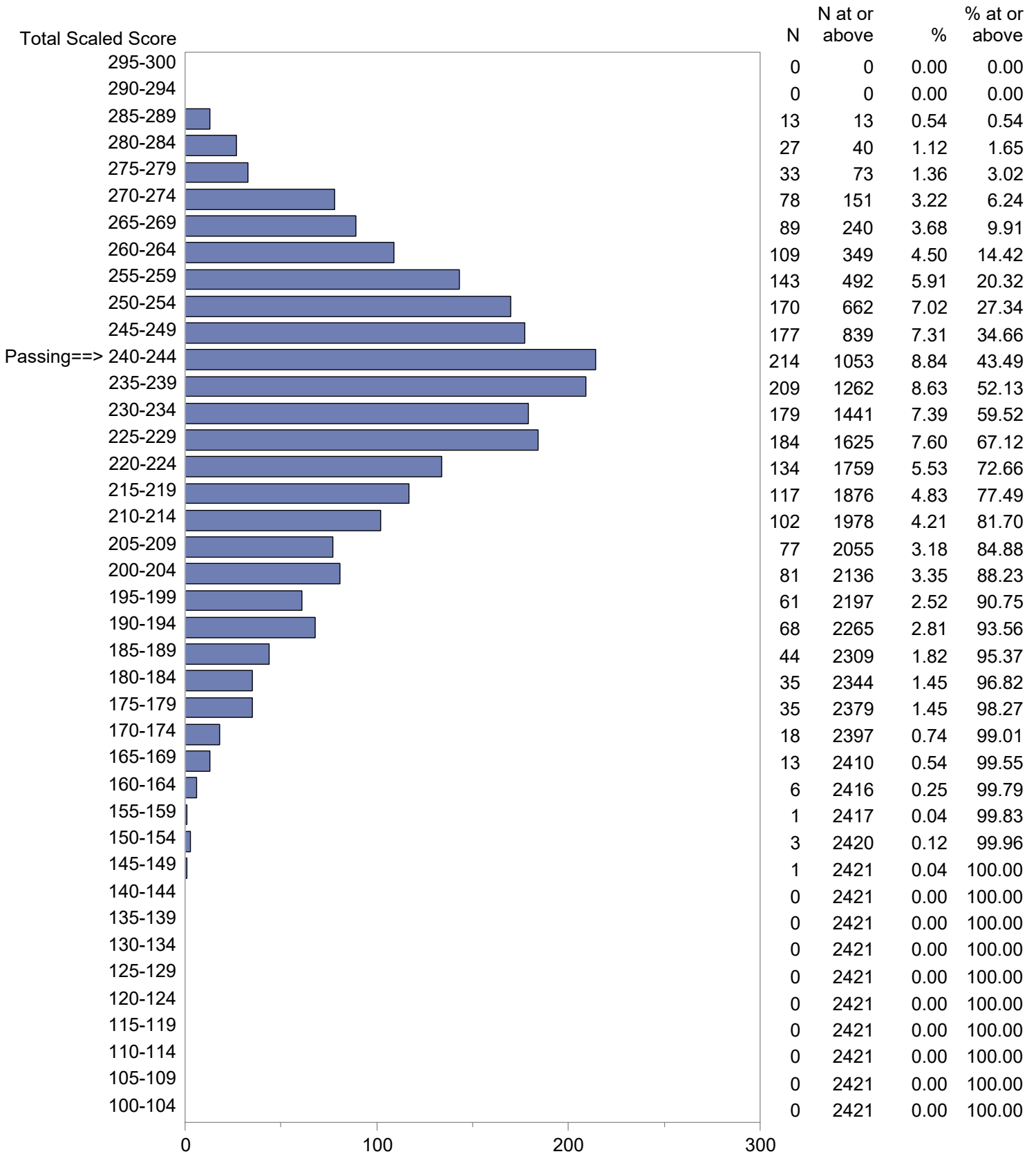
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=231 ENGLISH LANGUAGE ARTS AND READING 7-12



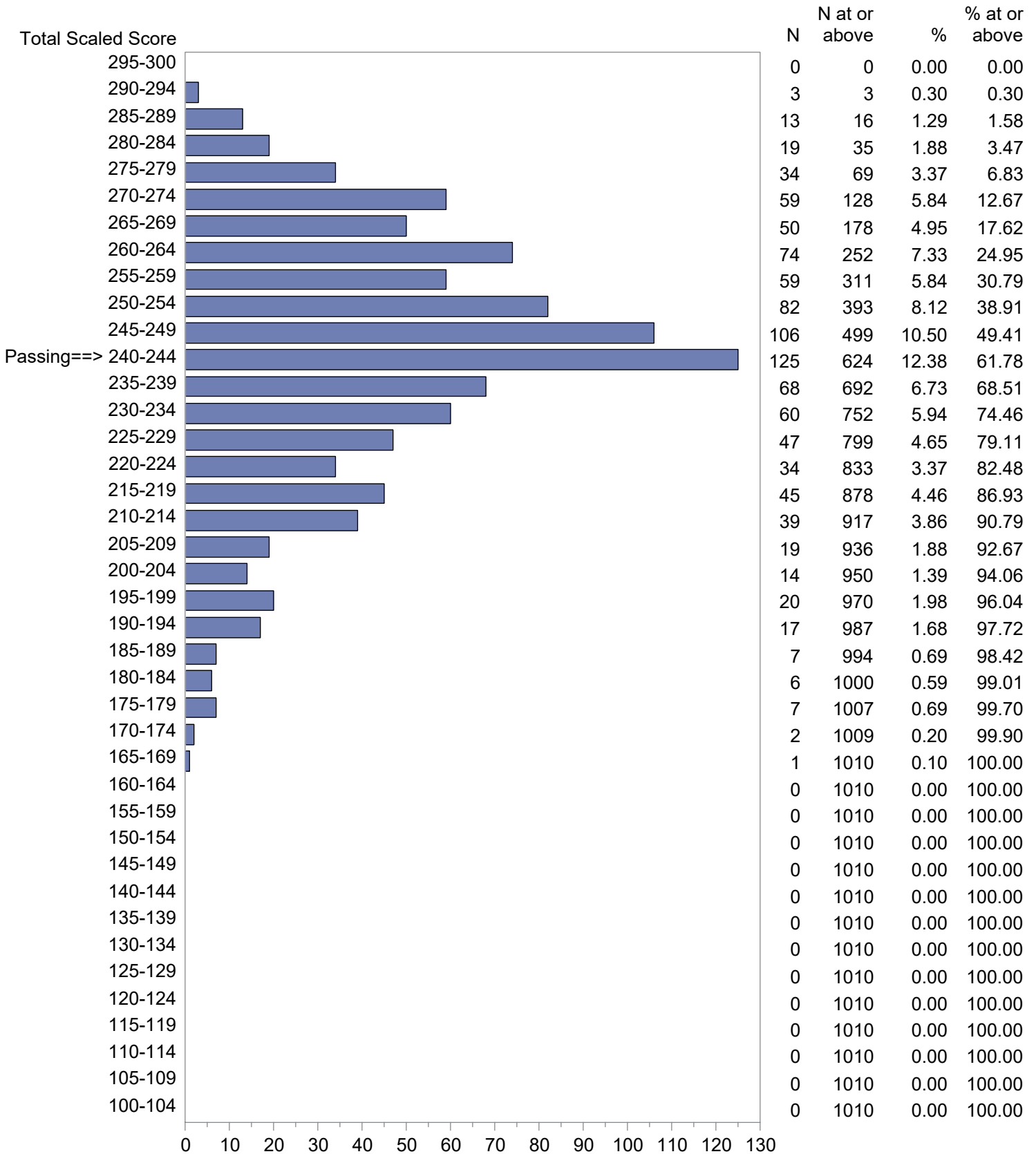
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=232 SOCIAL STUDIES 7-12



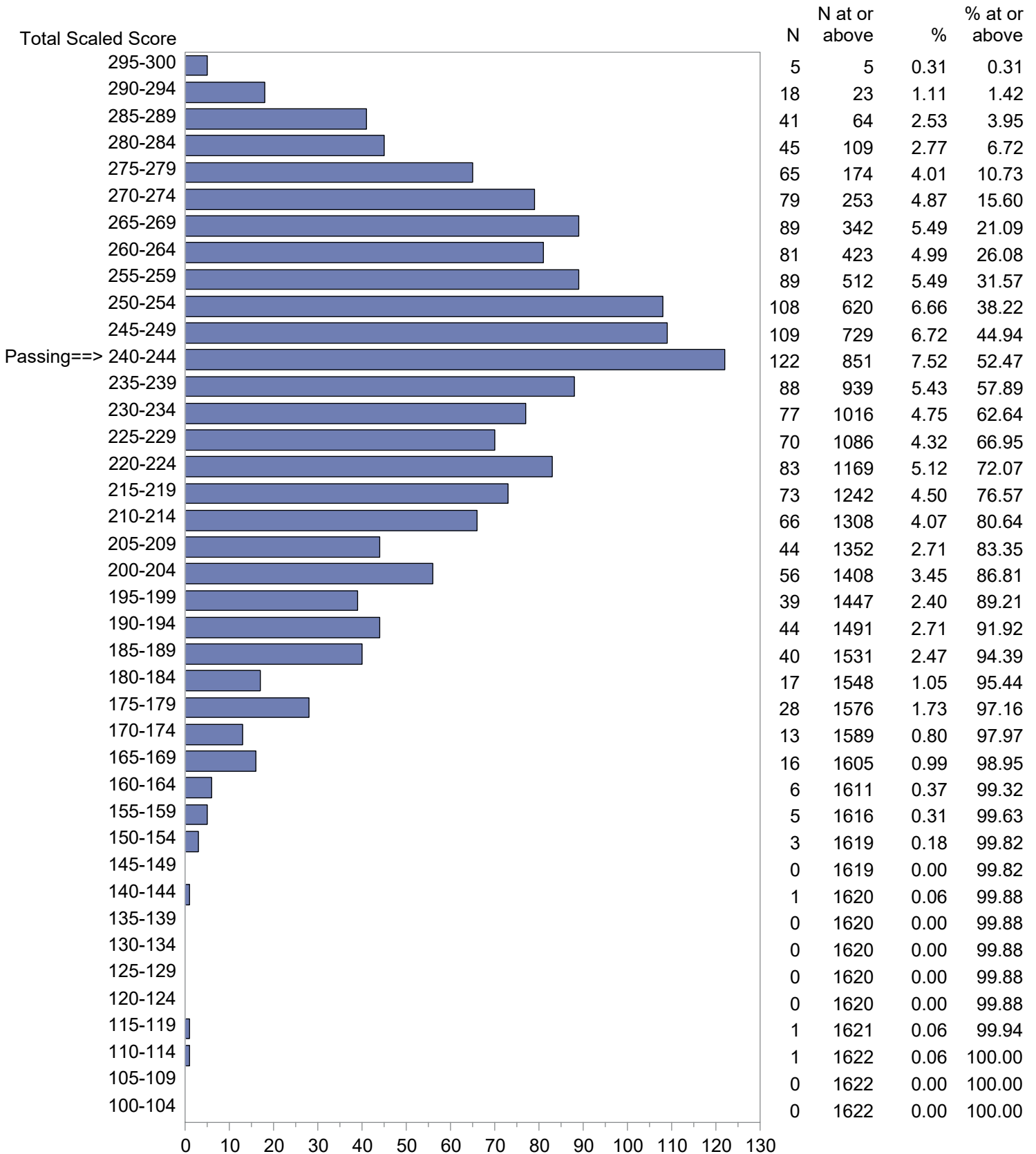
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=233 HISTORY 7-12



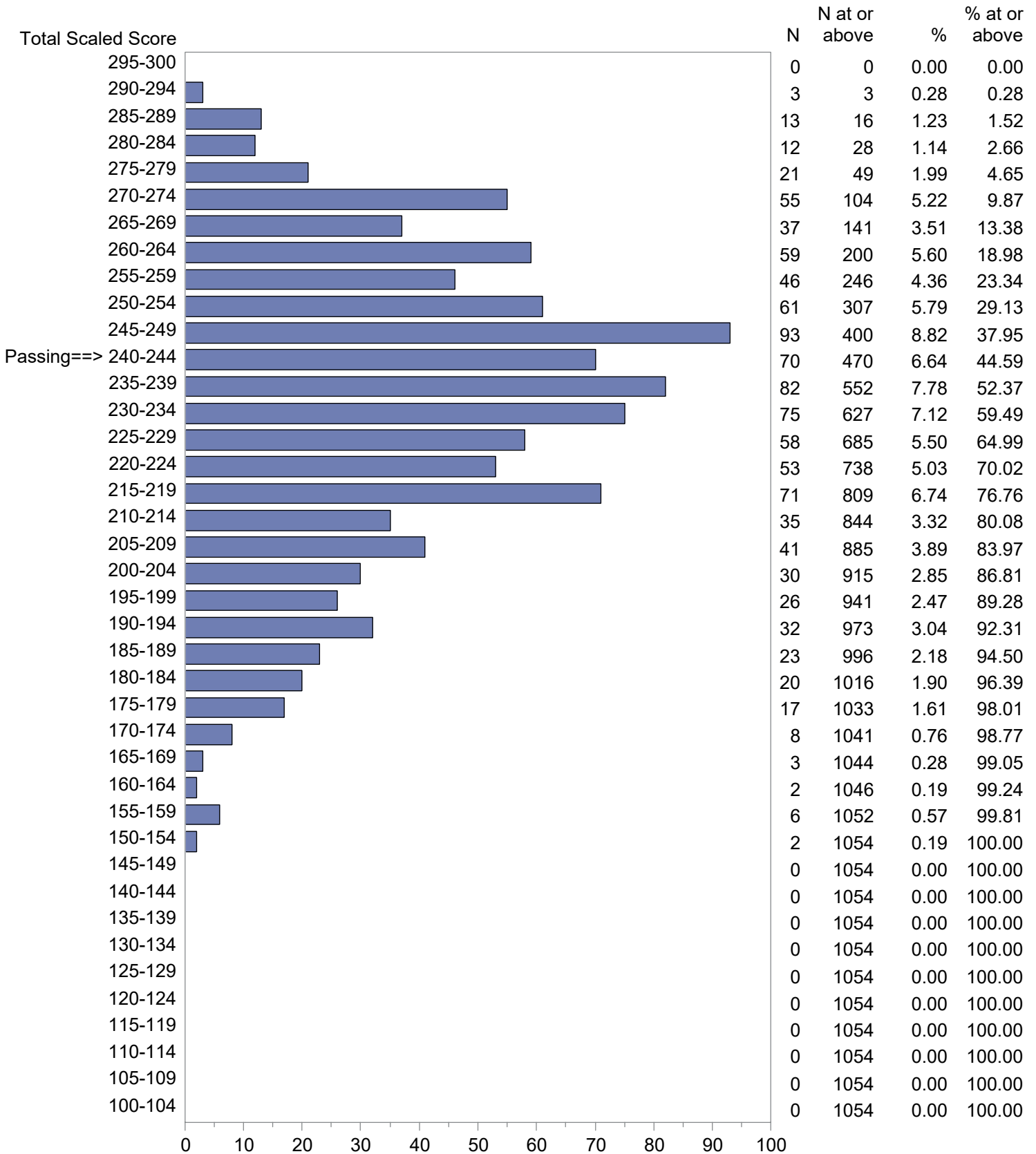
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=235 MATHEMATICS 7-12



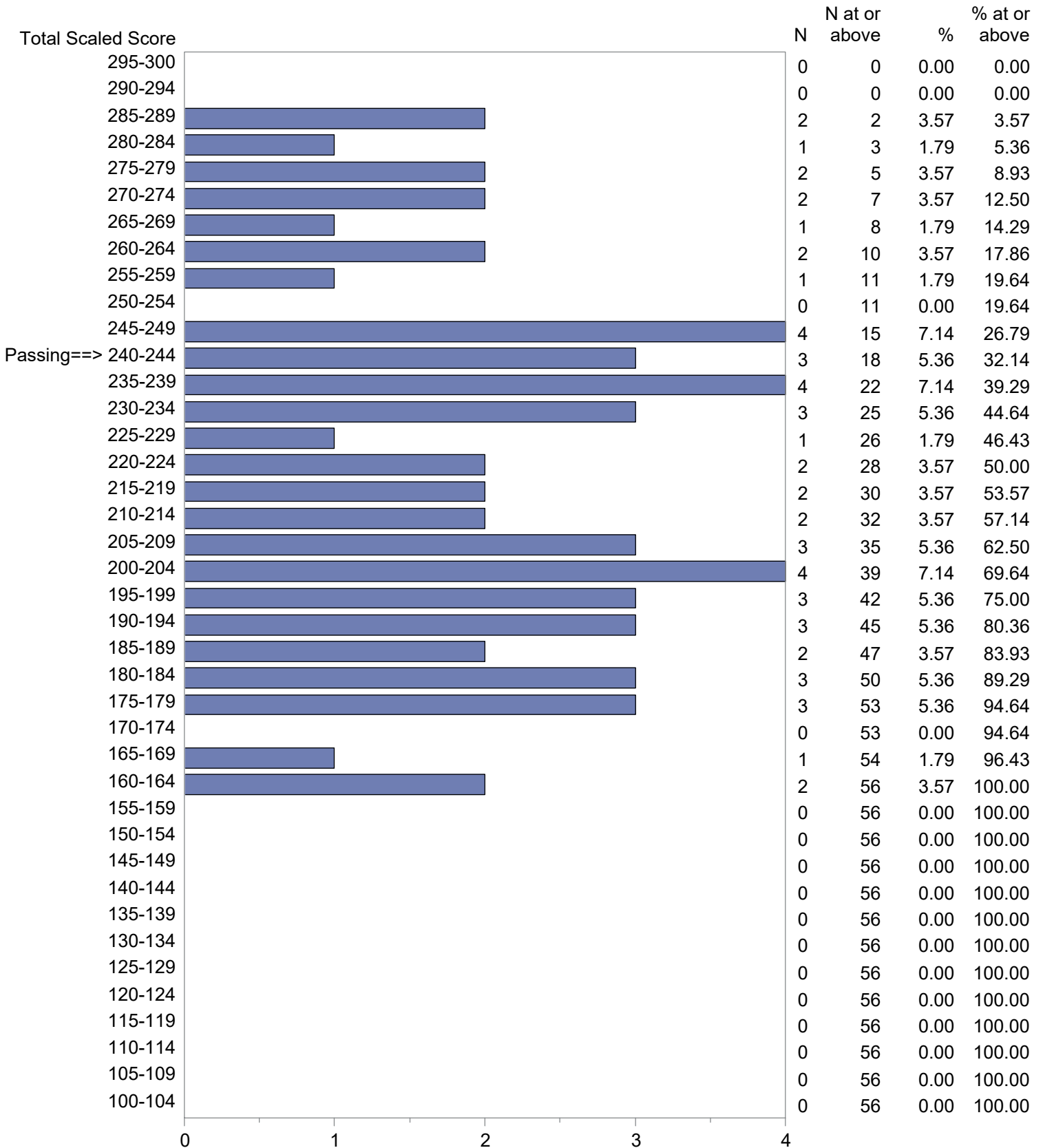
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=236 SCIENCE 7-12



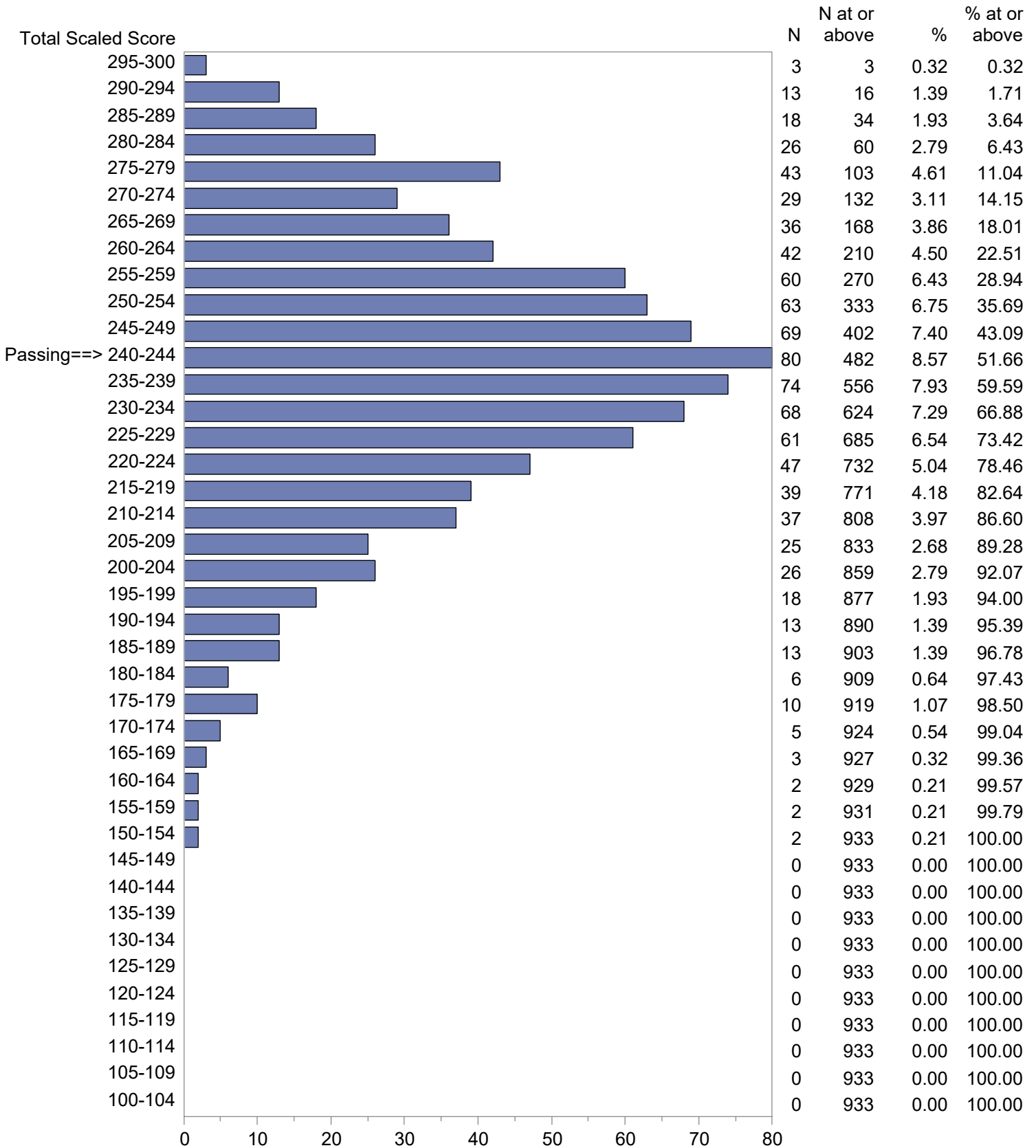
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=237 PHYSICAL SCIENCE 6-12



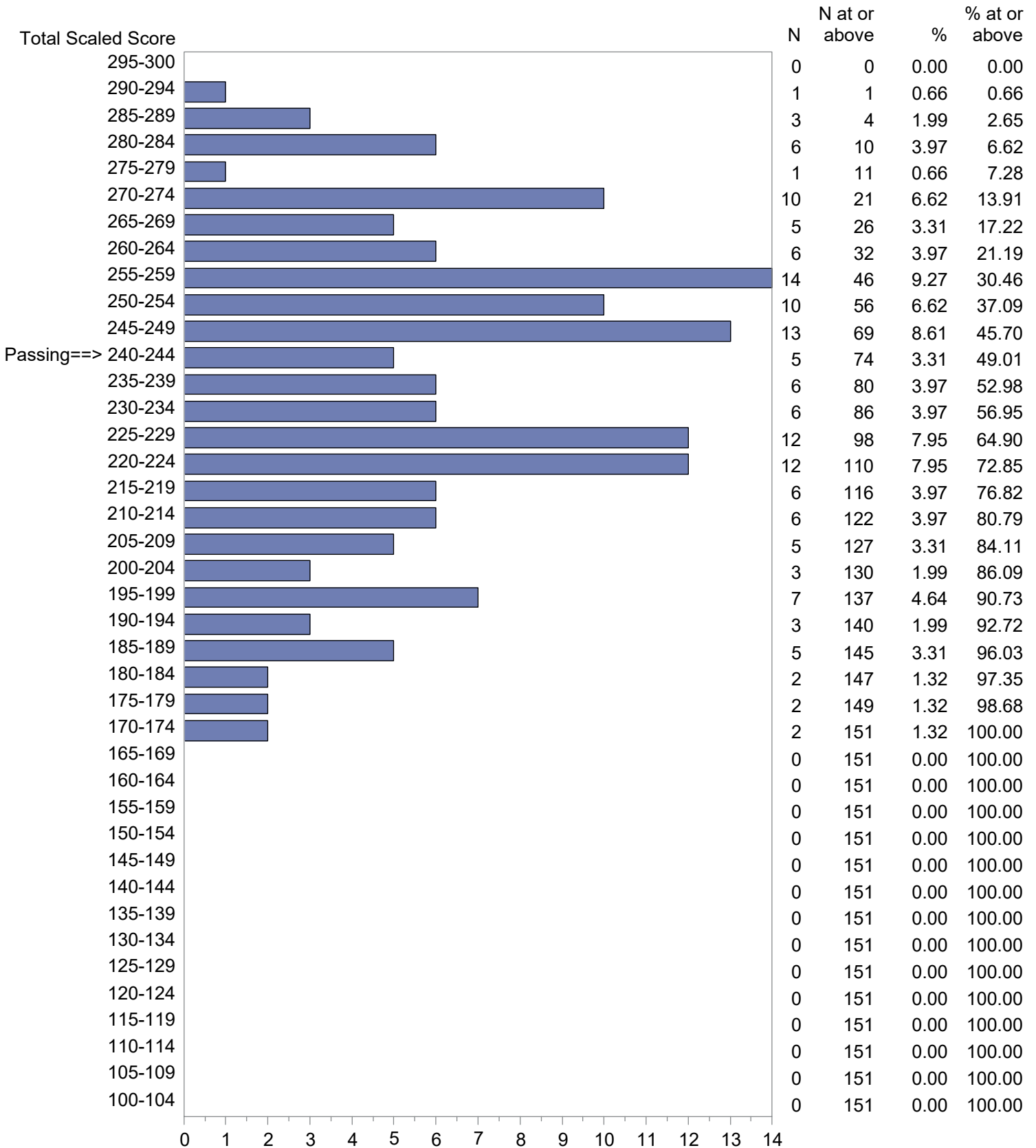
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=238 LIFE SCIENCE 7-12



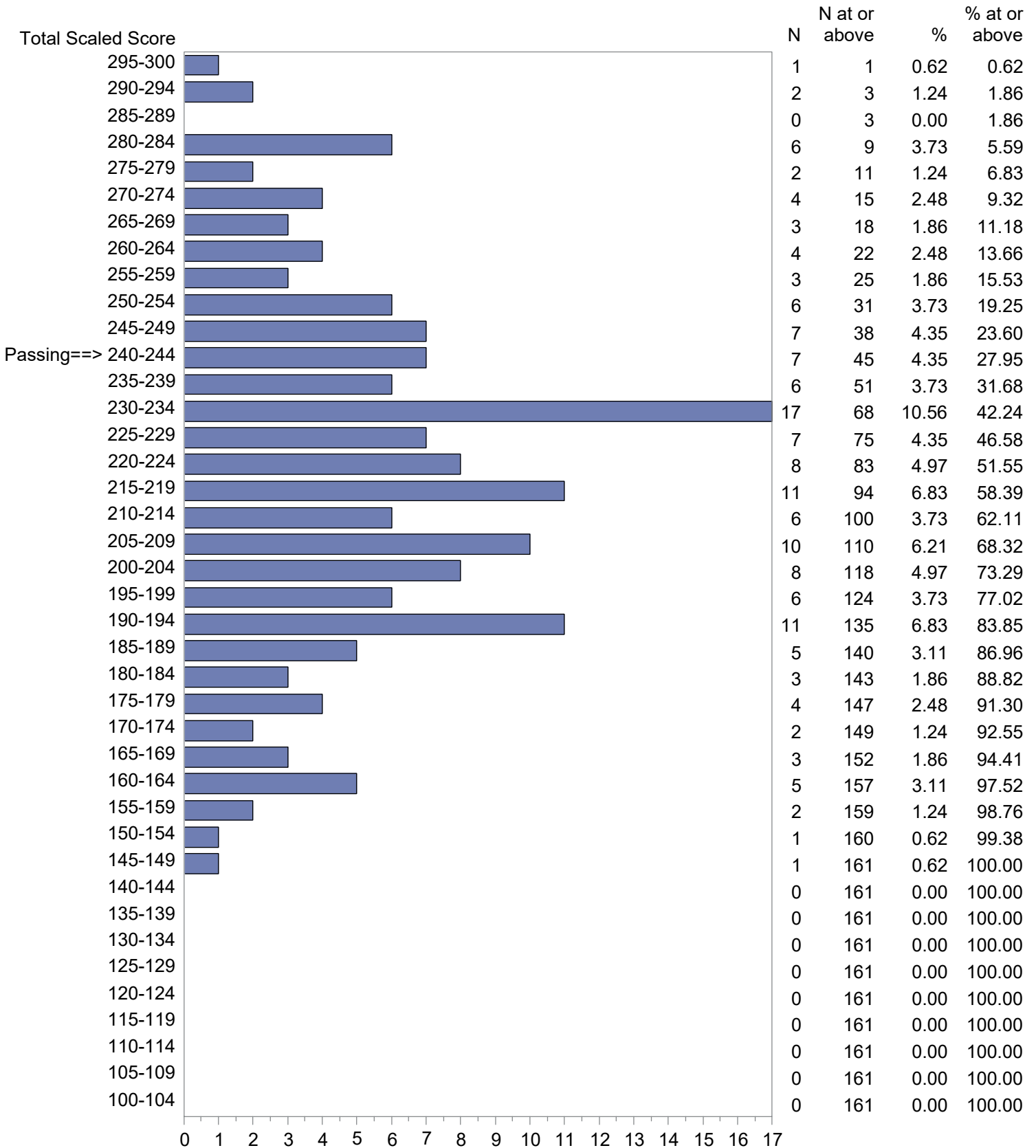
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=240 CHEMISTRY 7-12



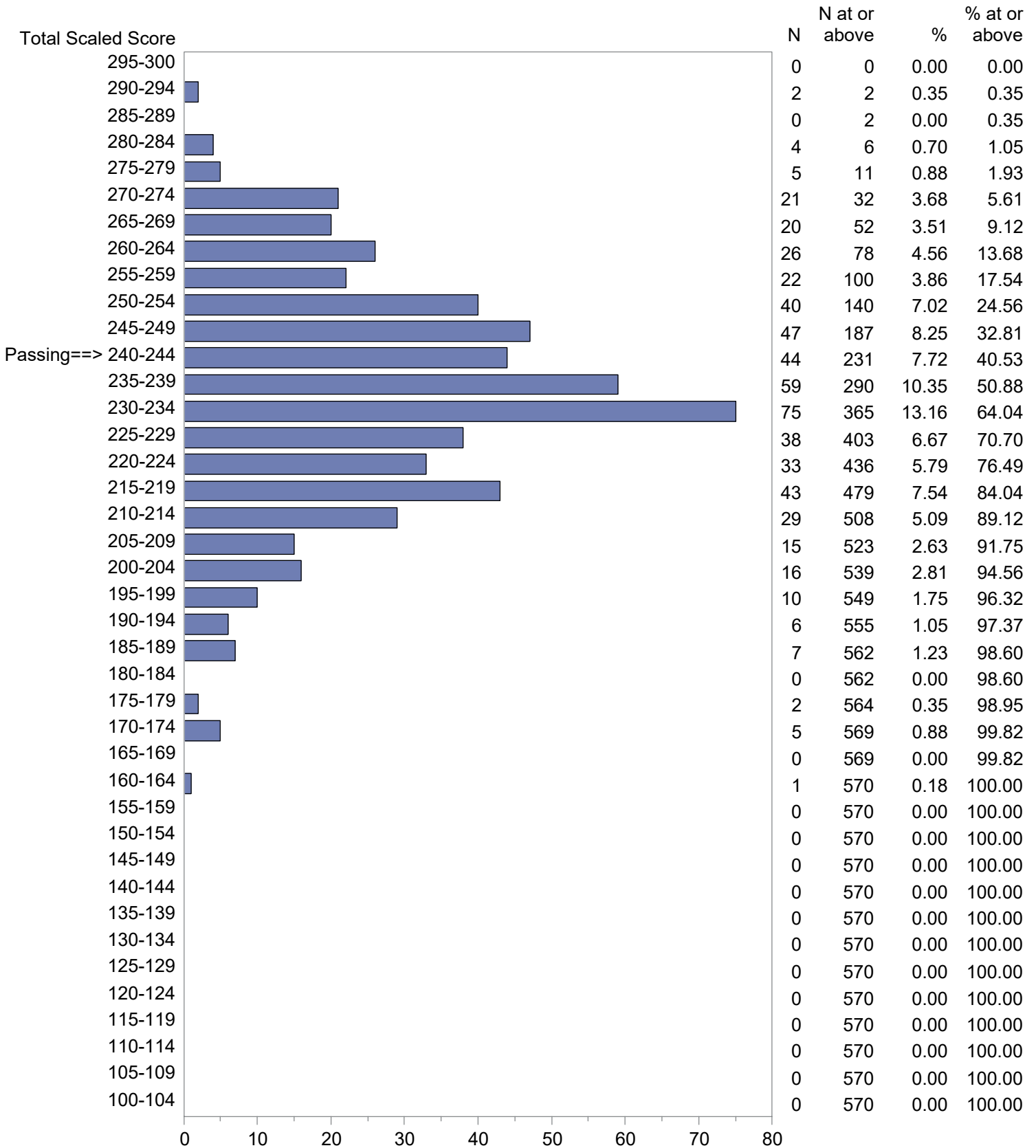
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=241 COMPUTER SCIENCE 8-12



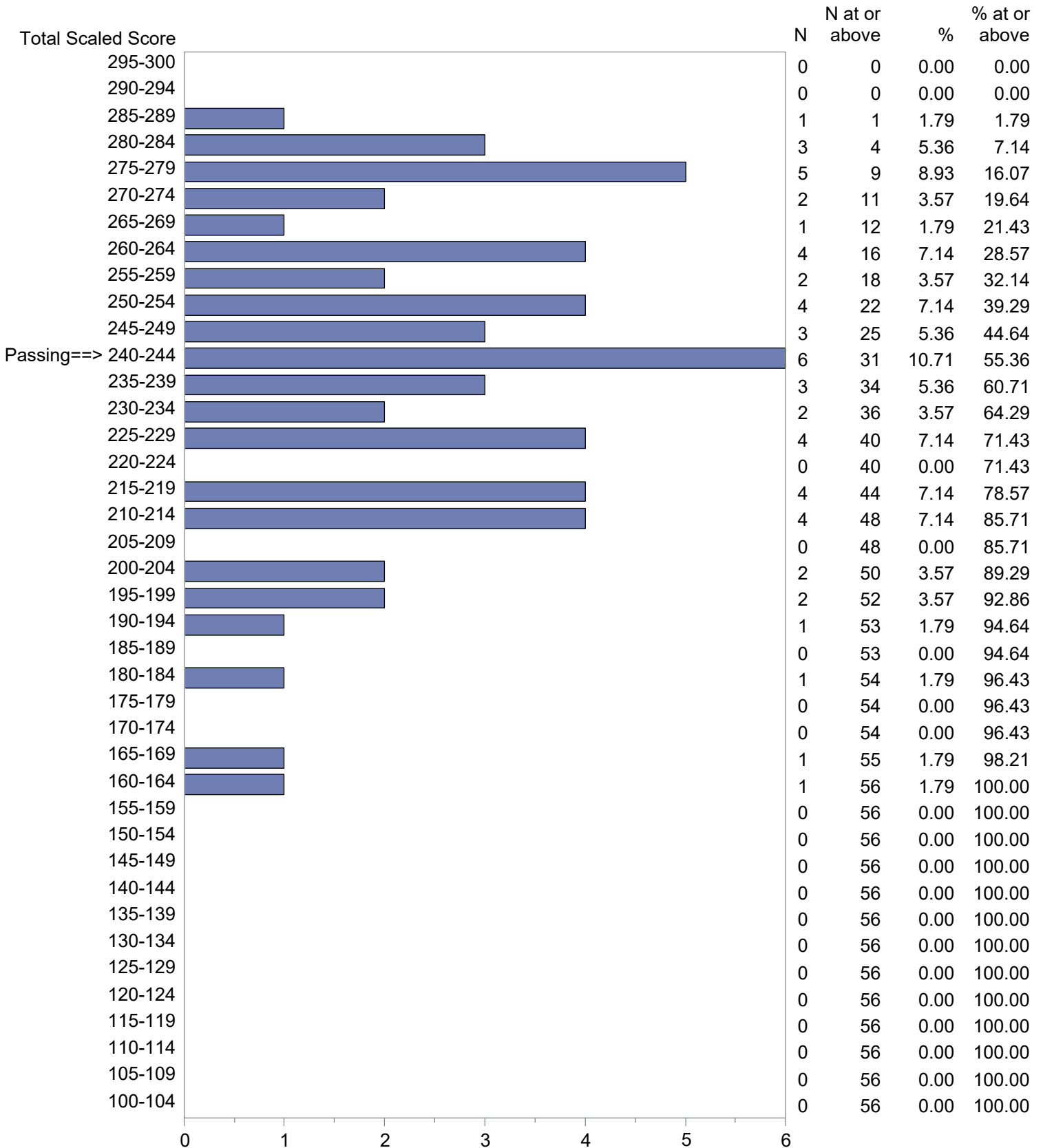
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=242 TECHNOLOGY APPLICATIONS EC-12



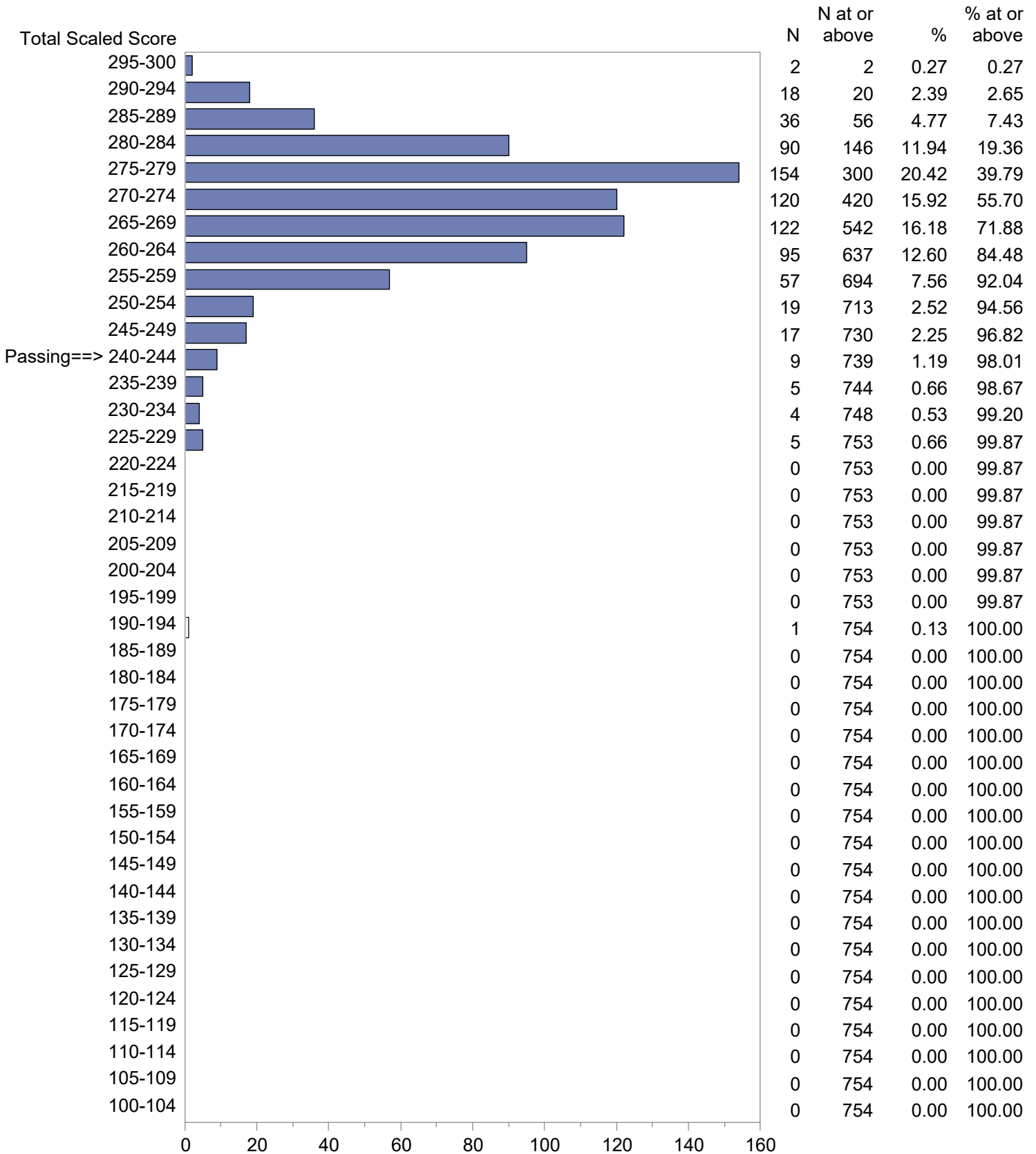
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=243 PHYSICS/MATHEMATICS 7-12



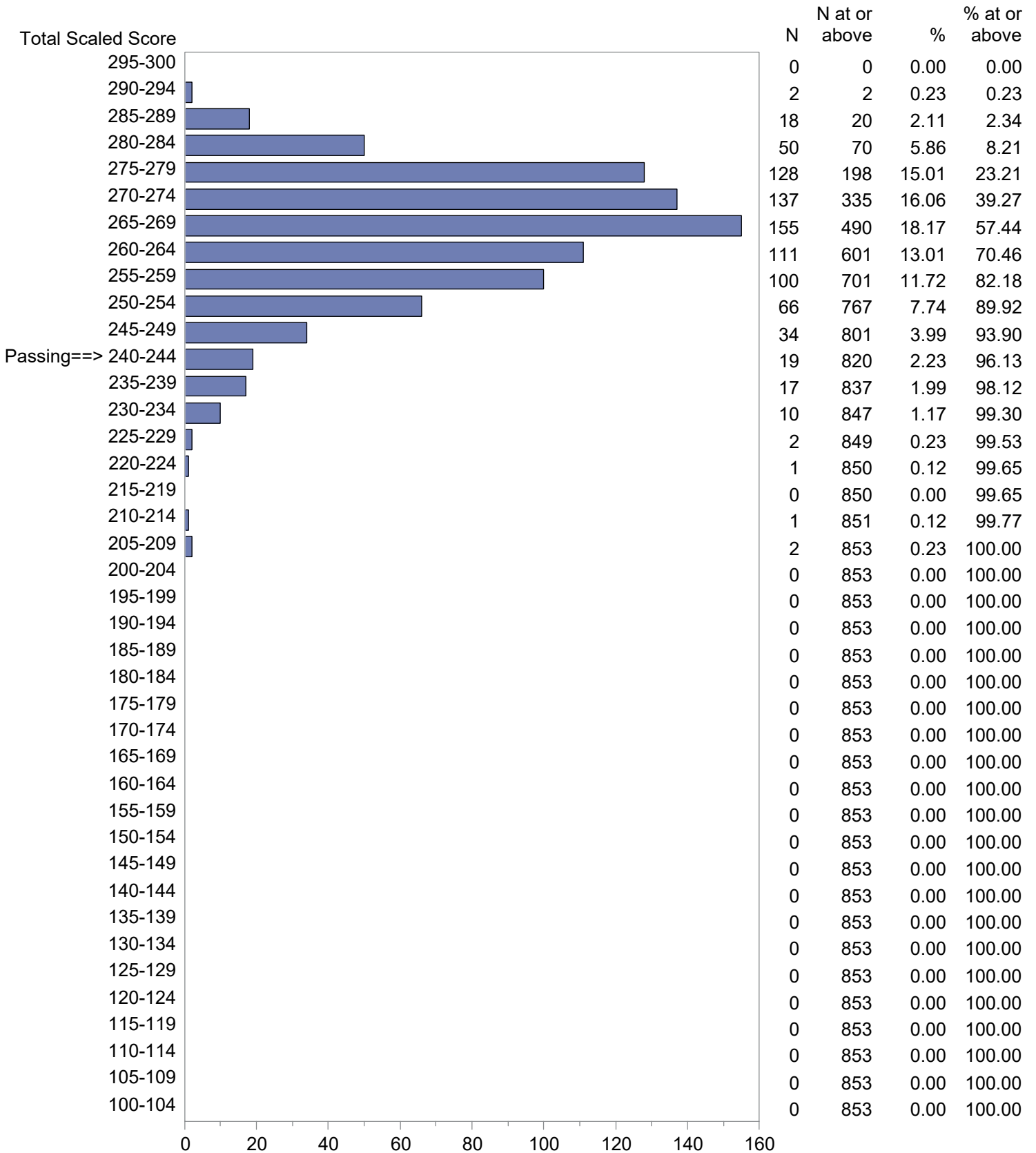
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=252 SCHOOL COUNSELOR



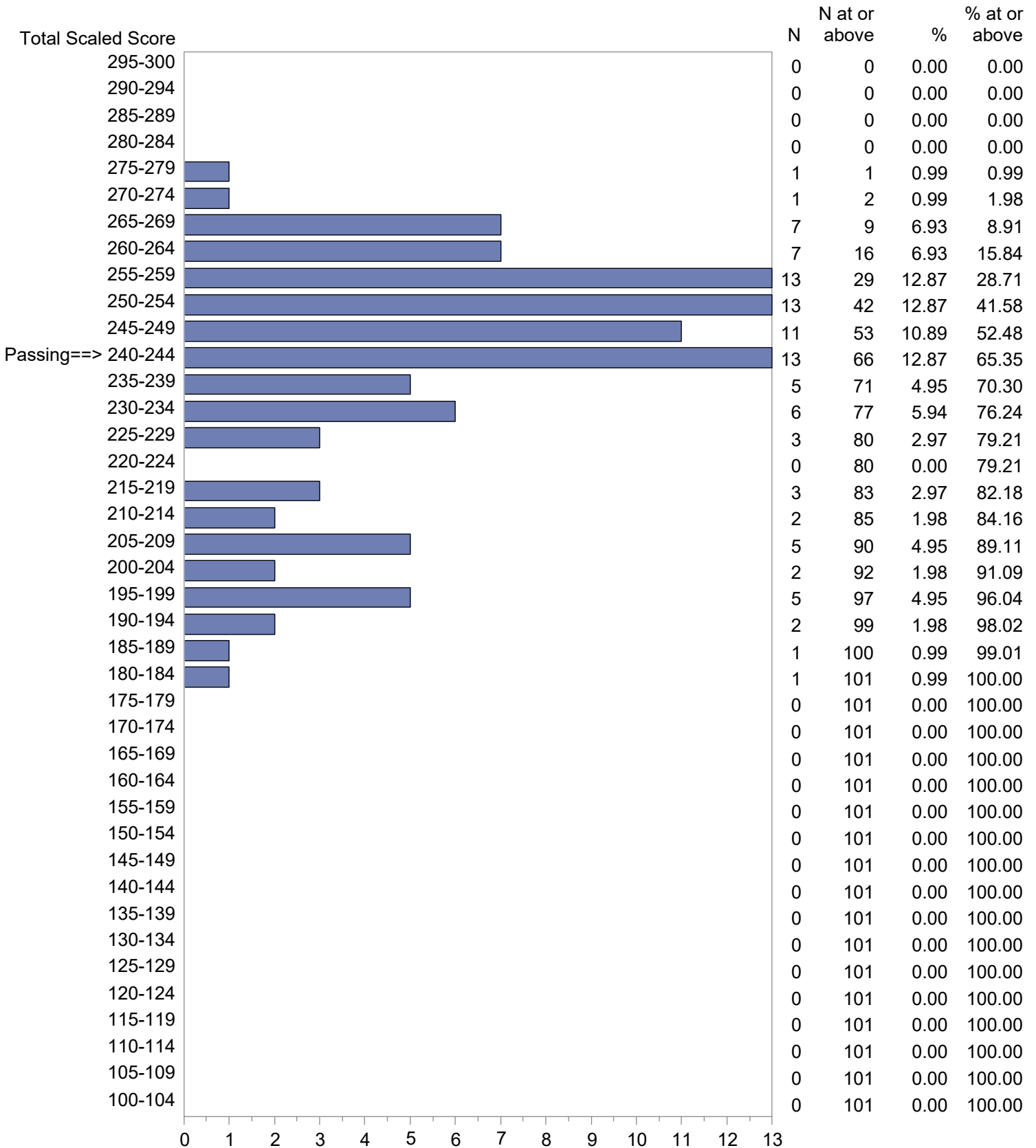
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=253 EDUCATIONAL DIAGNOSTICIAN



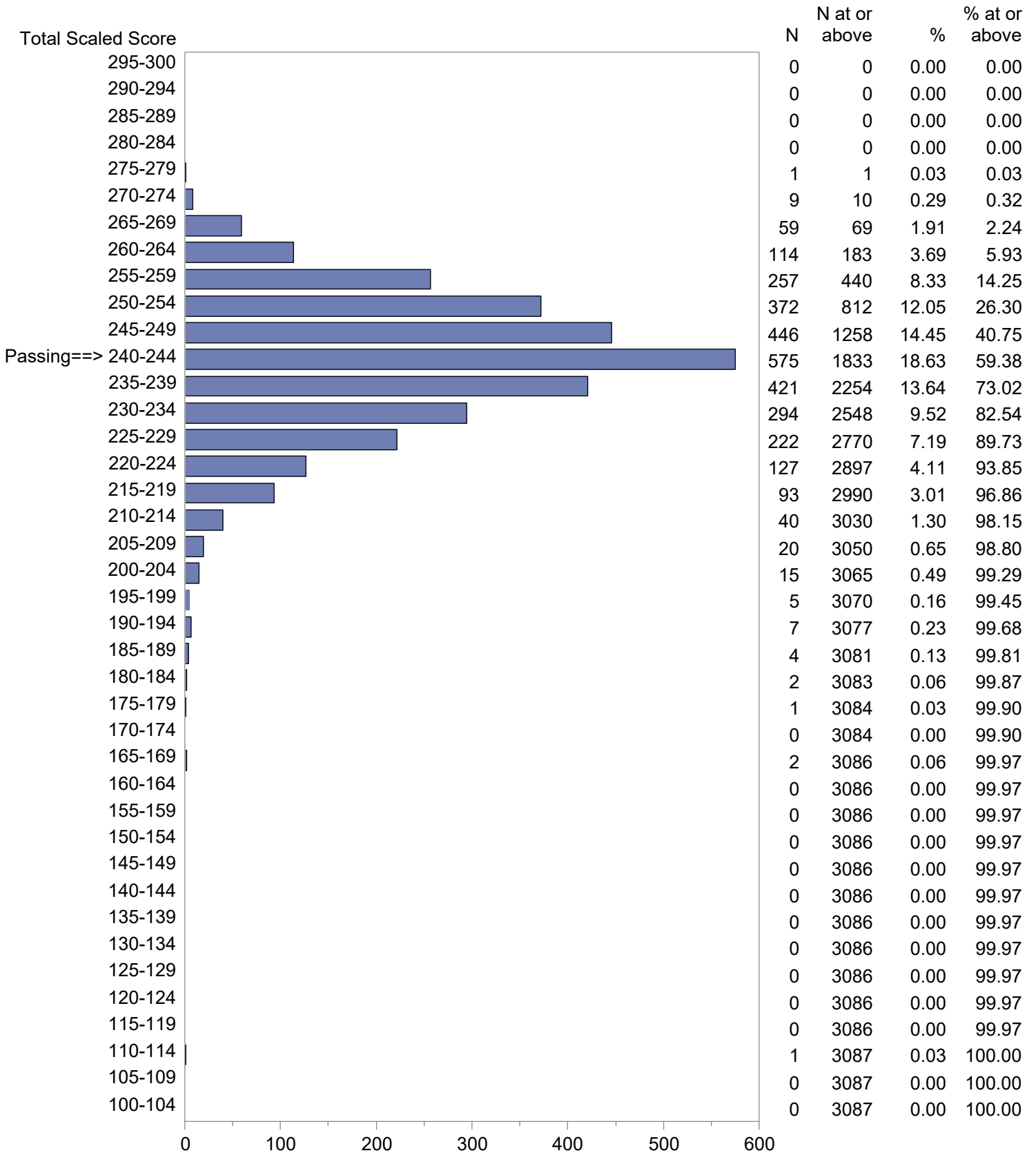
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=256 JOURNALISM 7-12



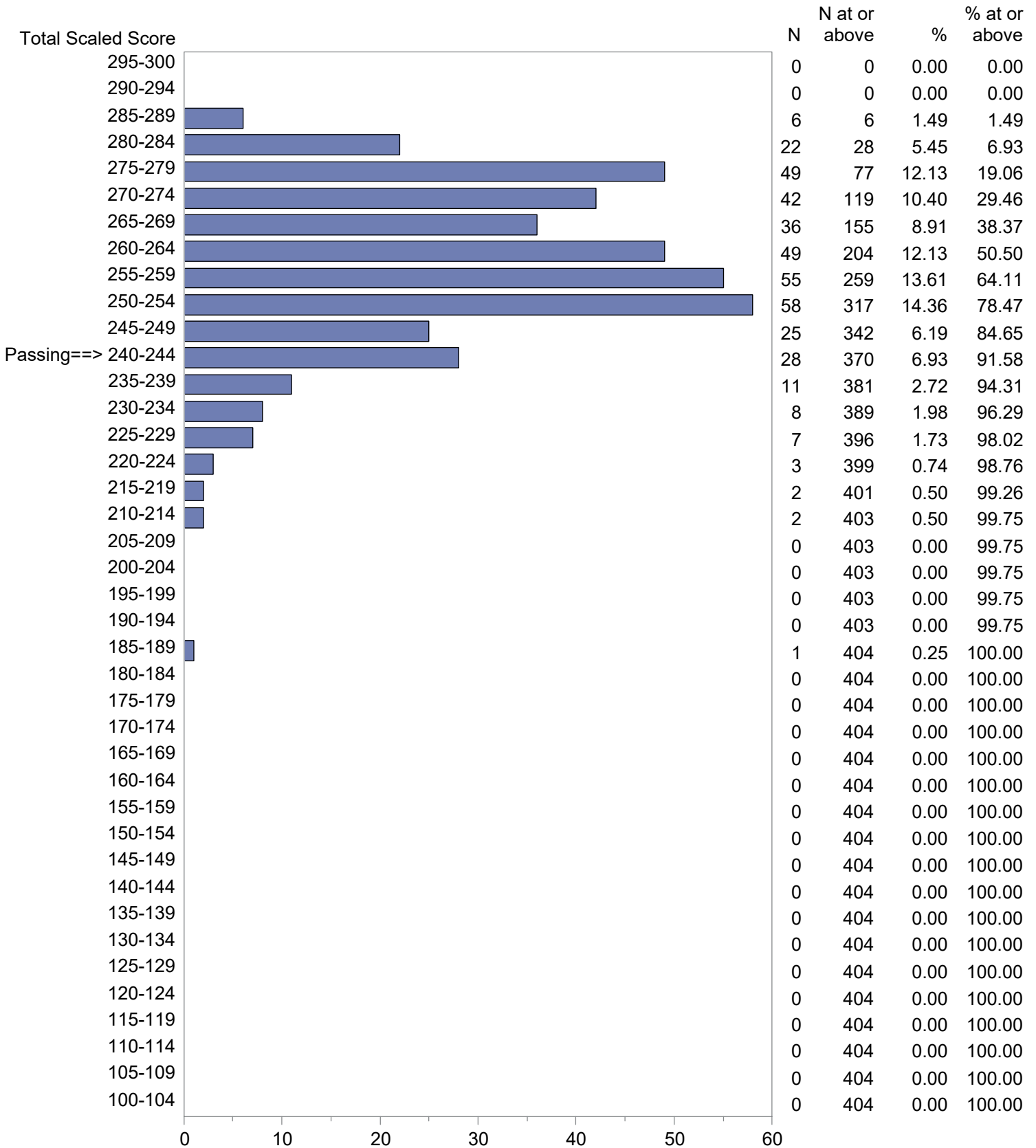
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=268 PRINCIPAL AS INSTRUCTIONAL LEADER



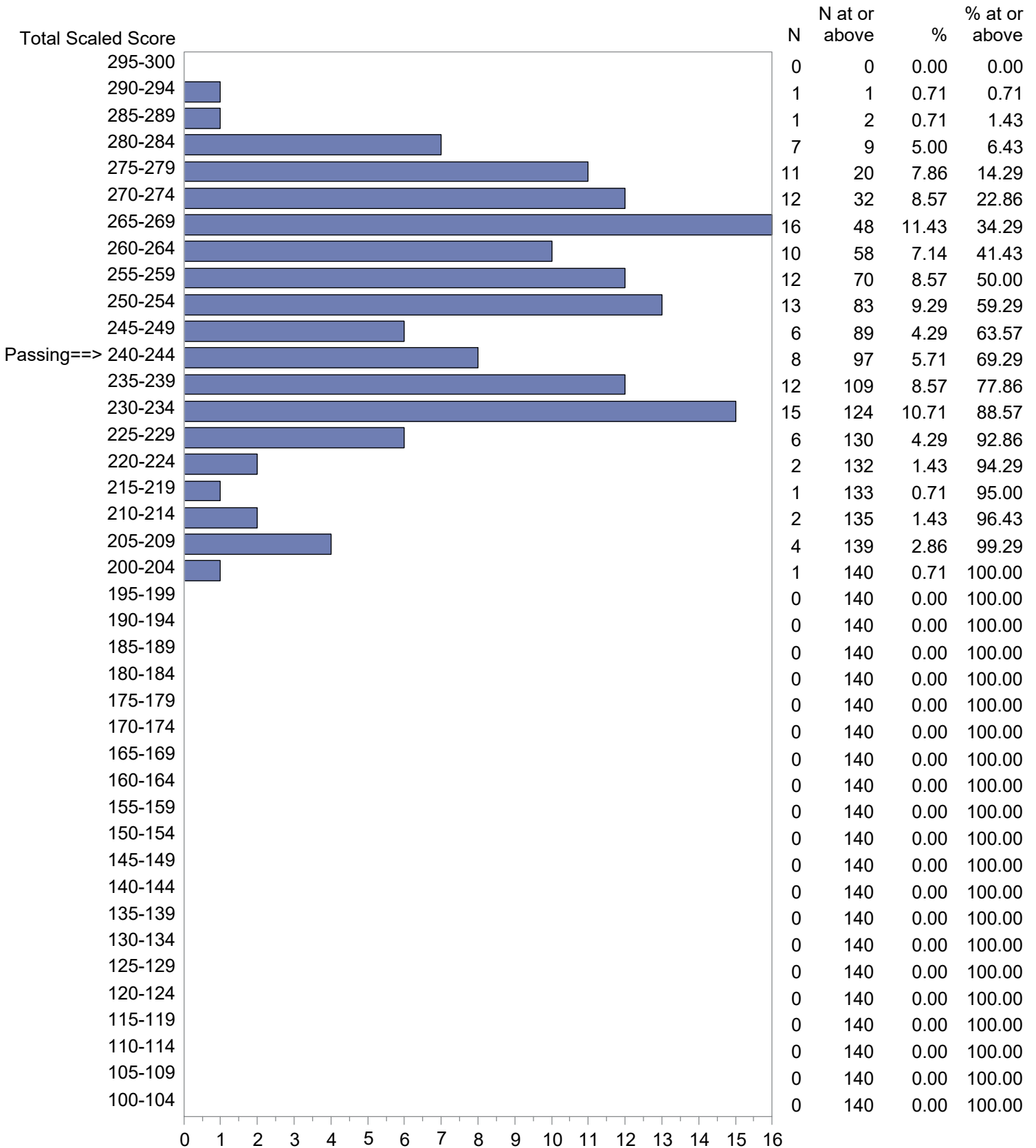
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=272 AGRICULTURAL- FOOD AND NATURAL RESOURCES 6-12



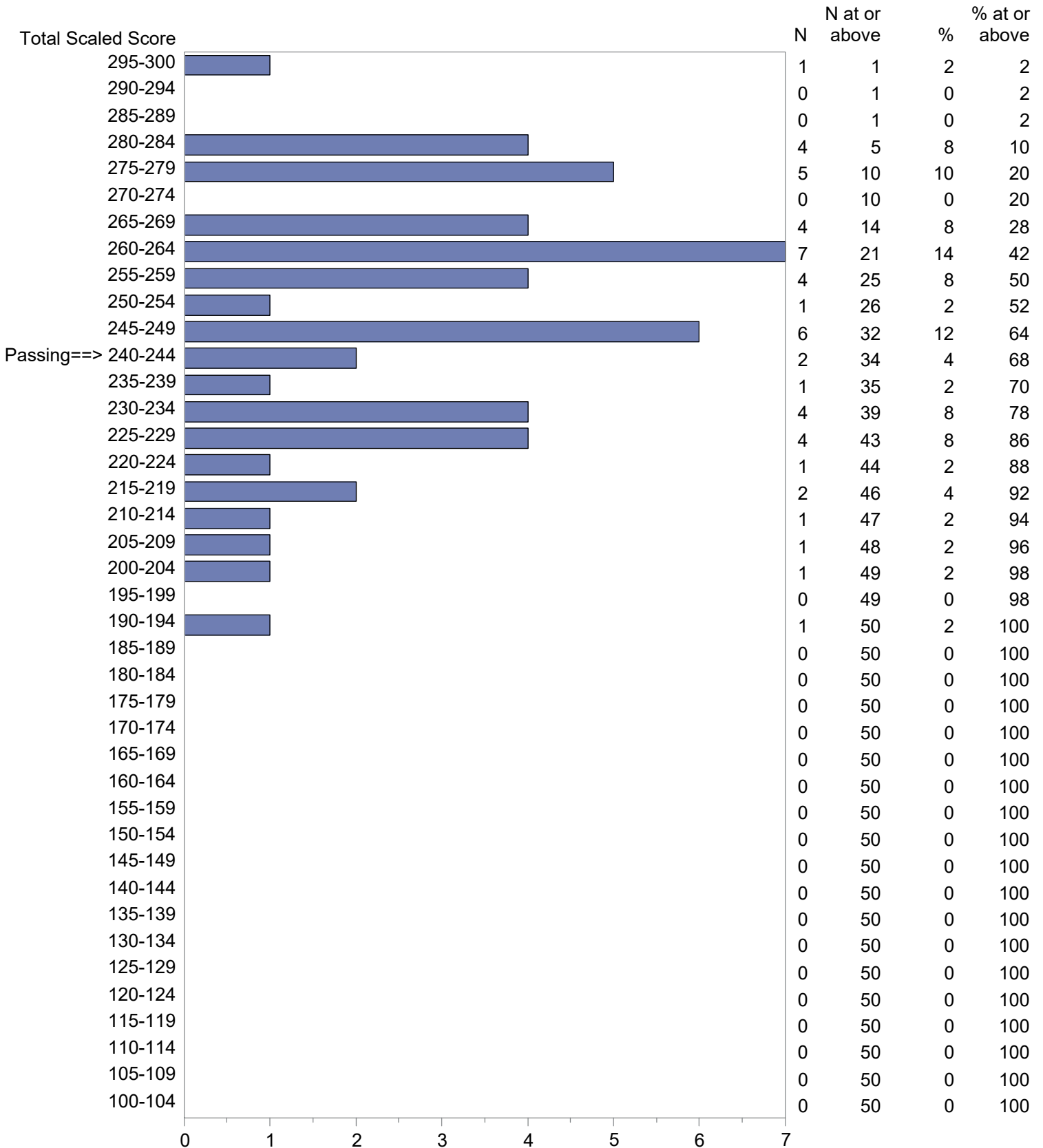
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=273 HEALTH SCIENCE 6-12



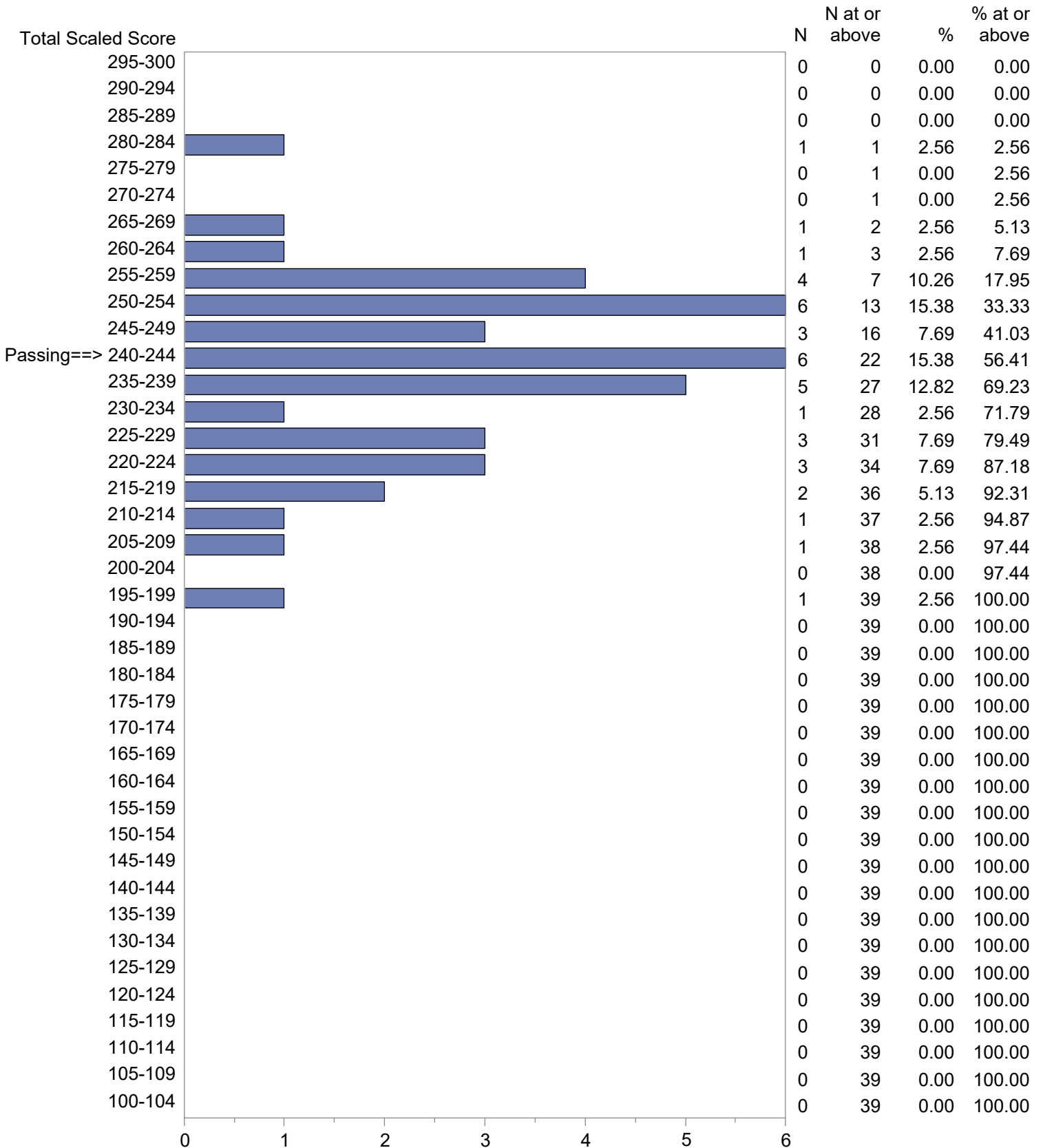
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=274 MATHEMATICAL/PHYSICAL SCIENCE/ENG 6-12



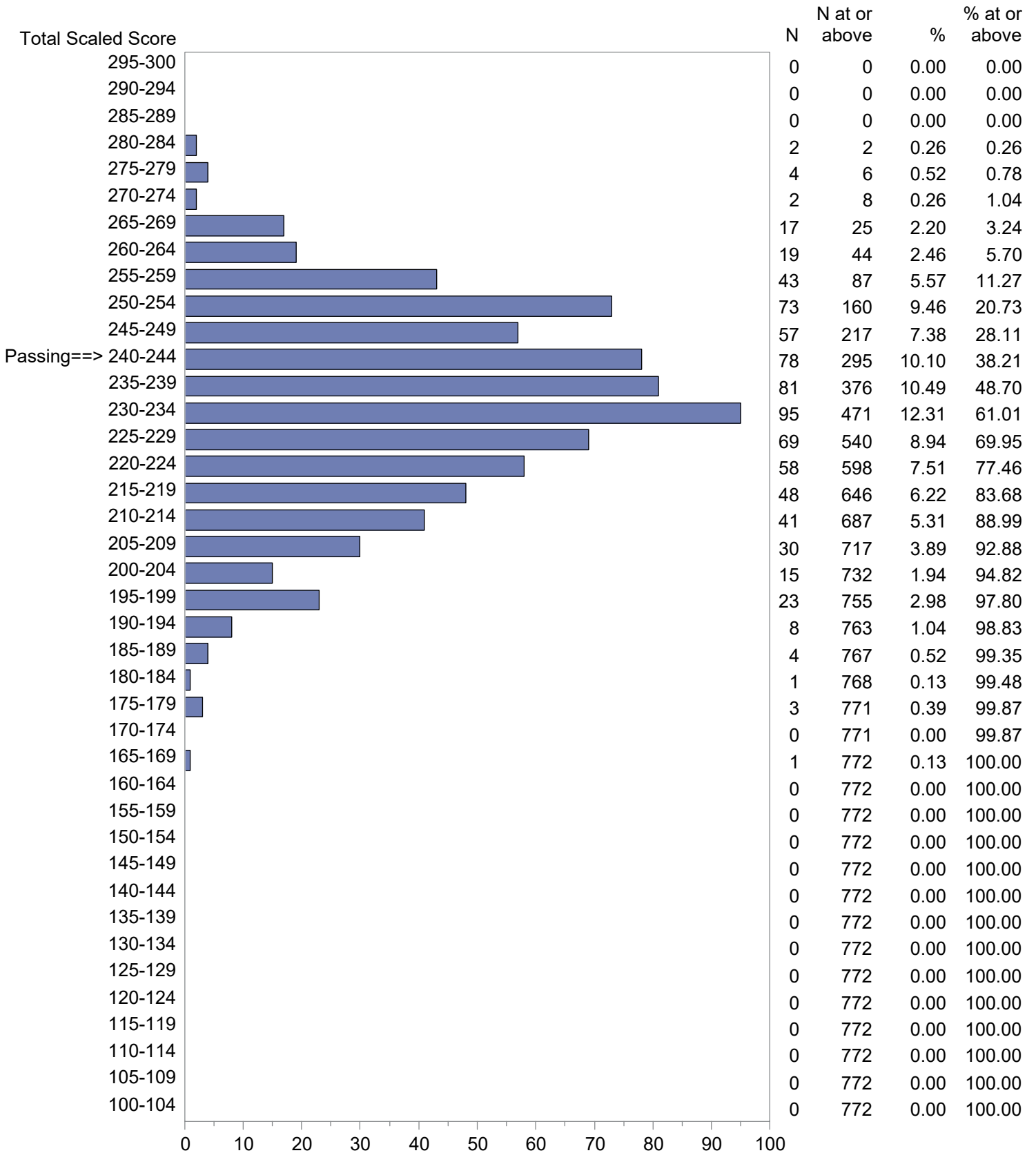
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=275 MARKETING 6-12



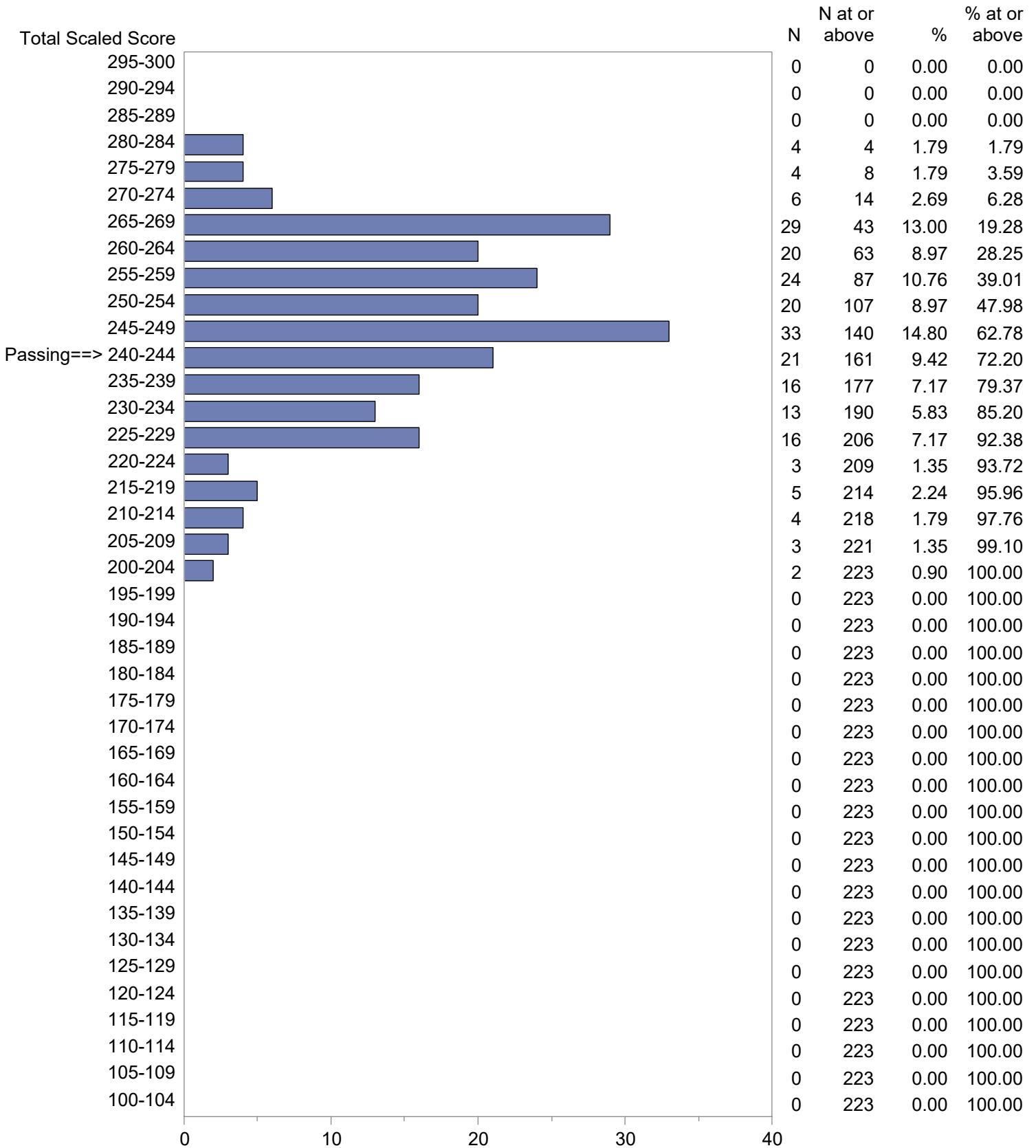
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=276 BUSINESS AND FINANCE 6-12



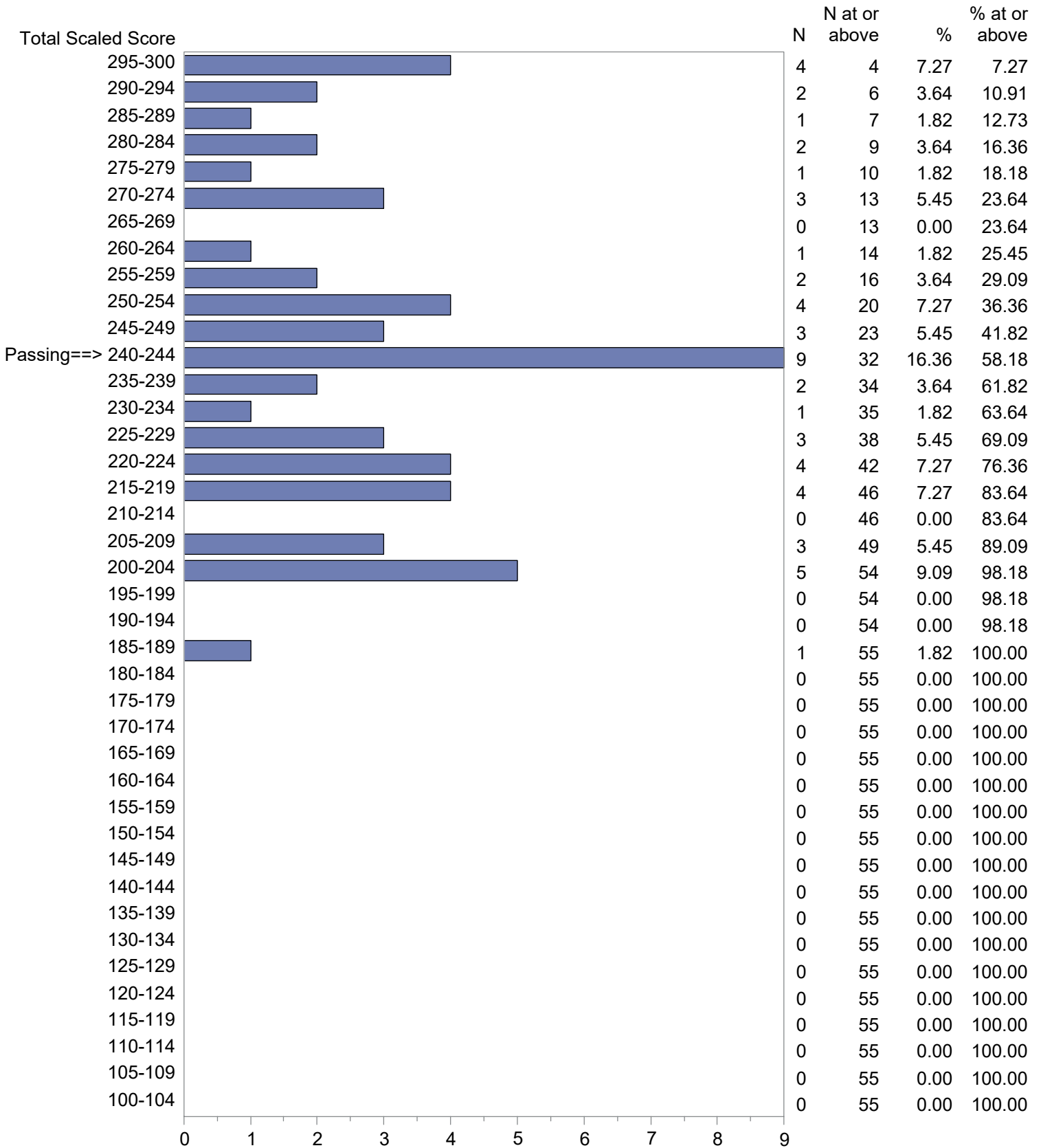
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=279 DANCE 6-12



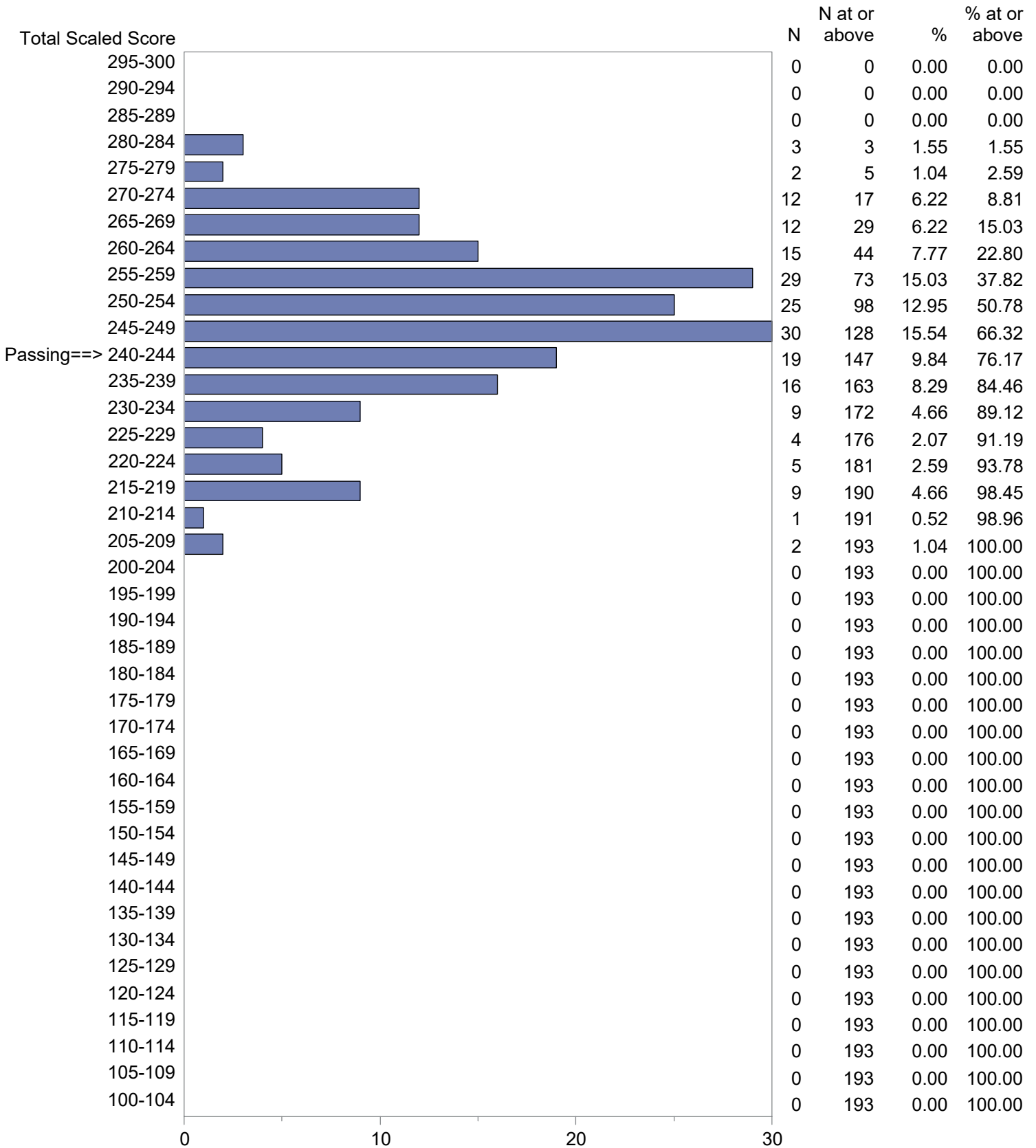
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=283 BRAILLE



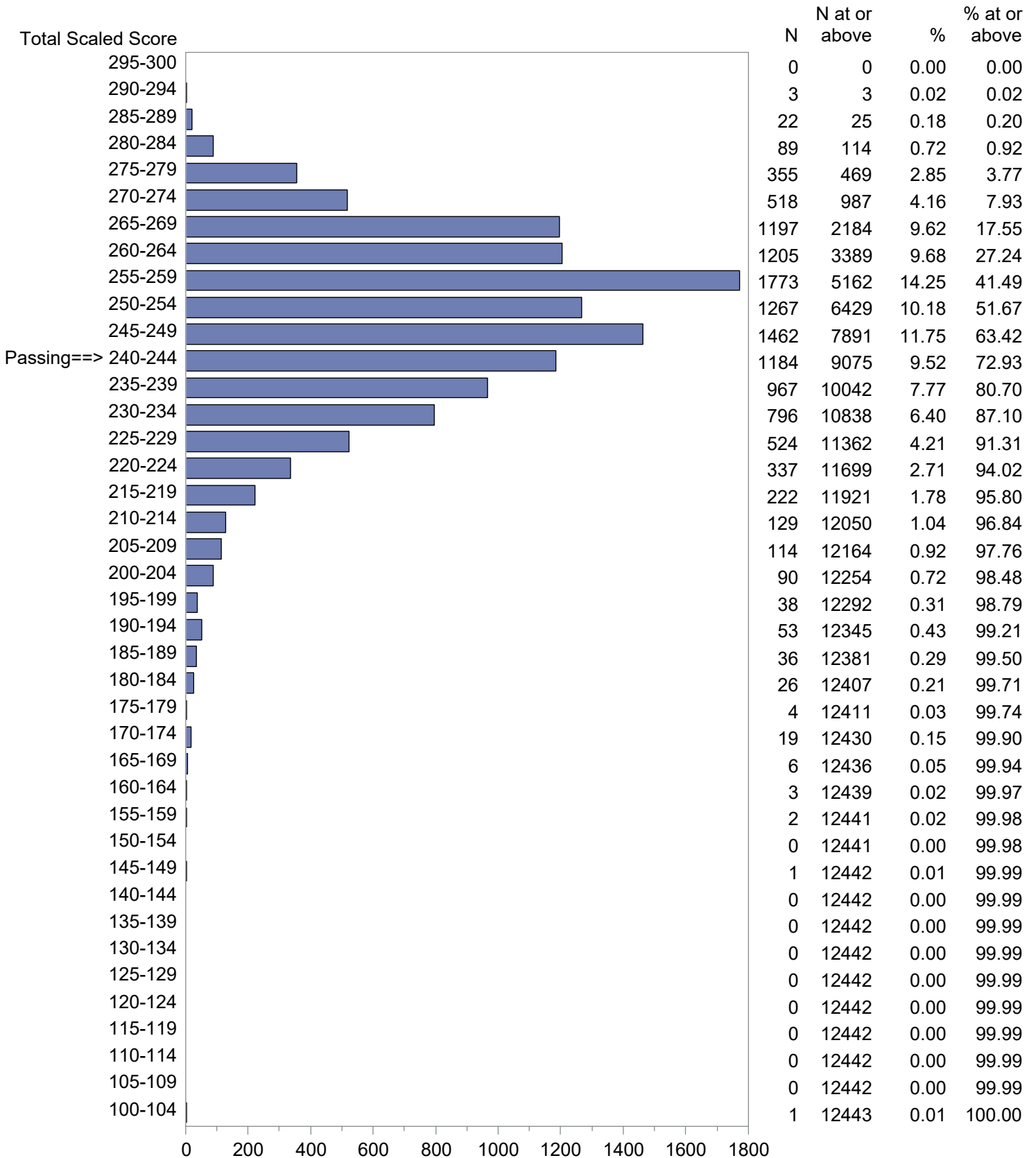
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=292 EARLY CHILDHOOD: PK-3



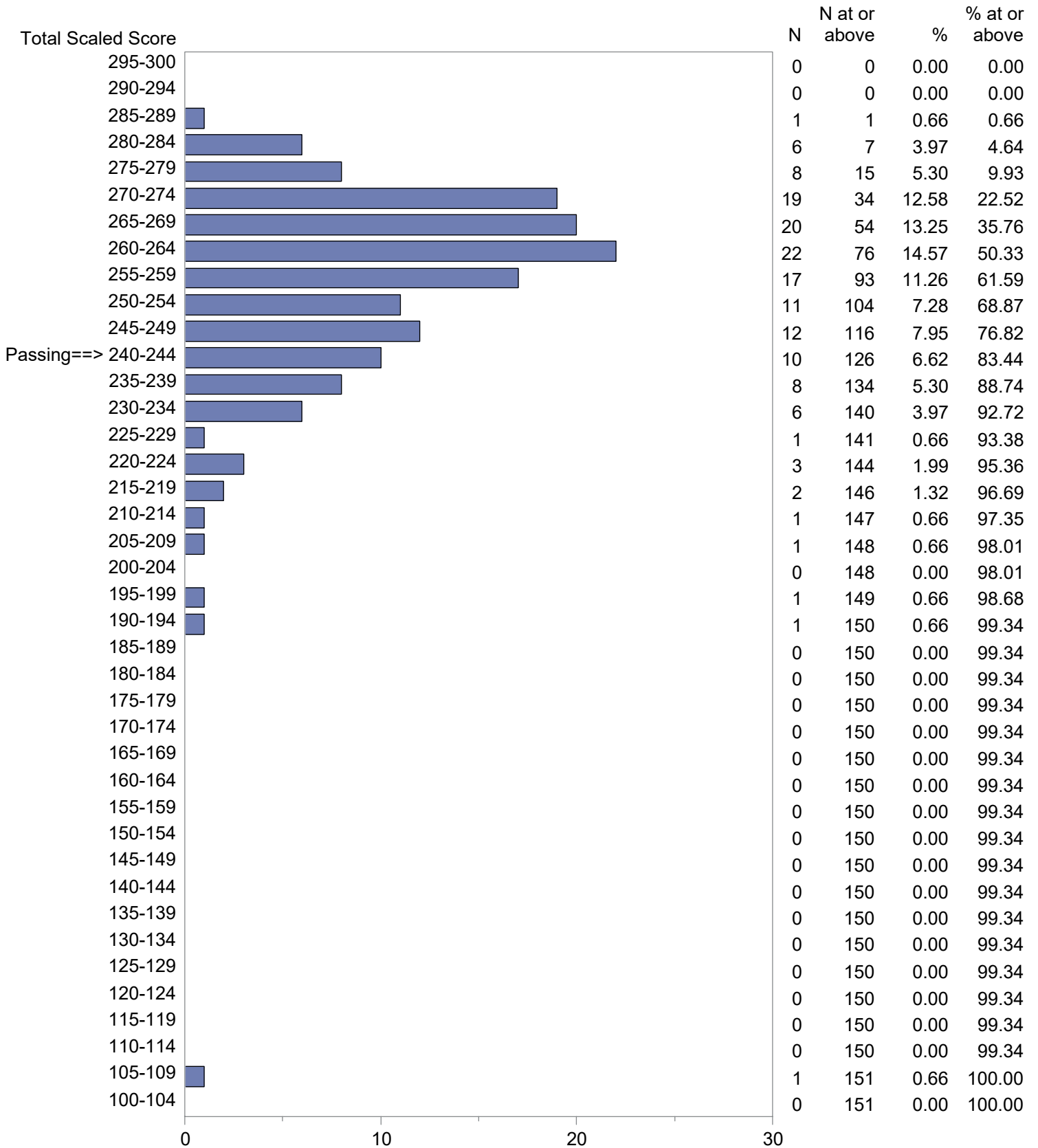
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=293 SCIENCE OF TEACHING READING



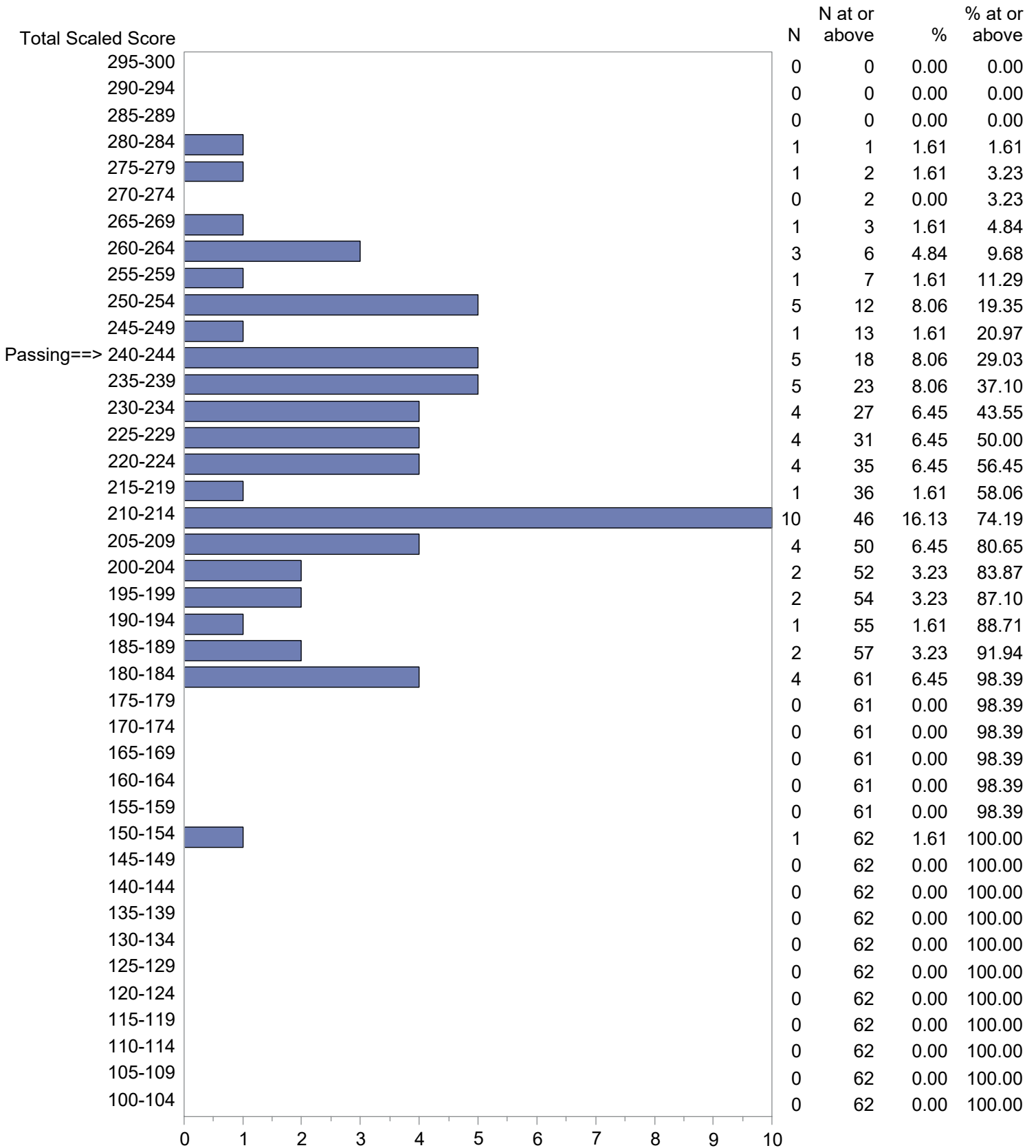
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=370 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES FOR TRADE & INDUSTRIAL EDUCATION 6-12



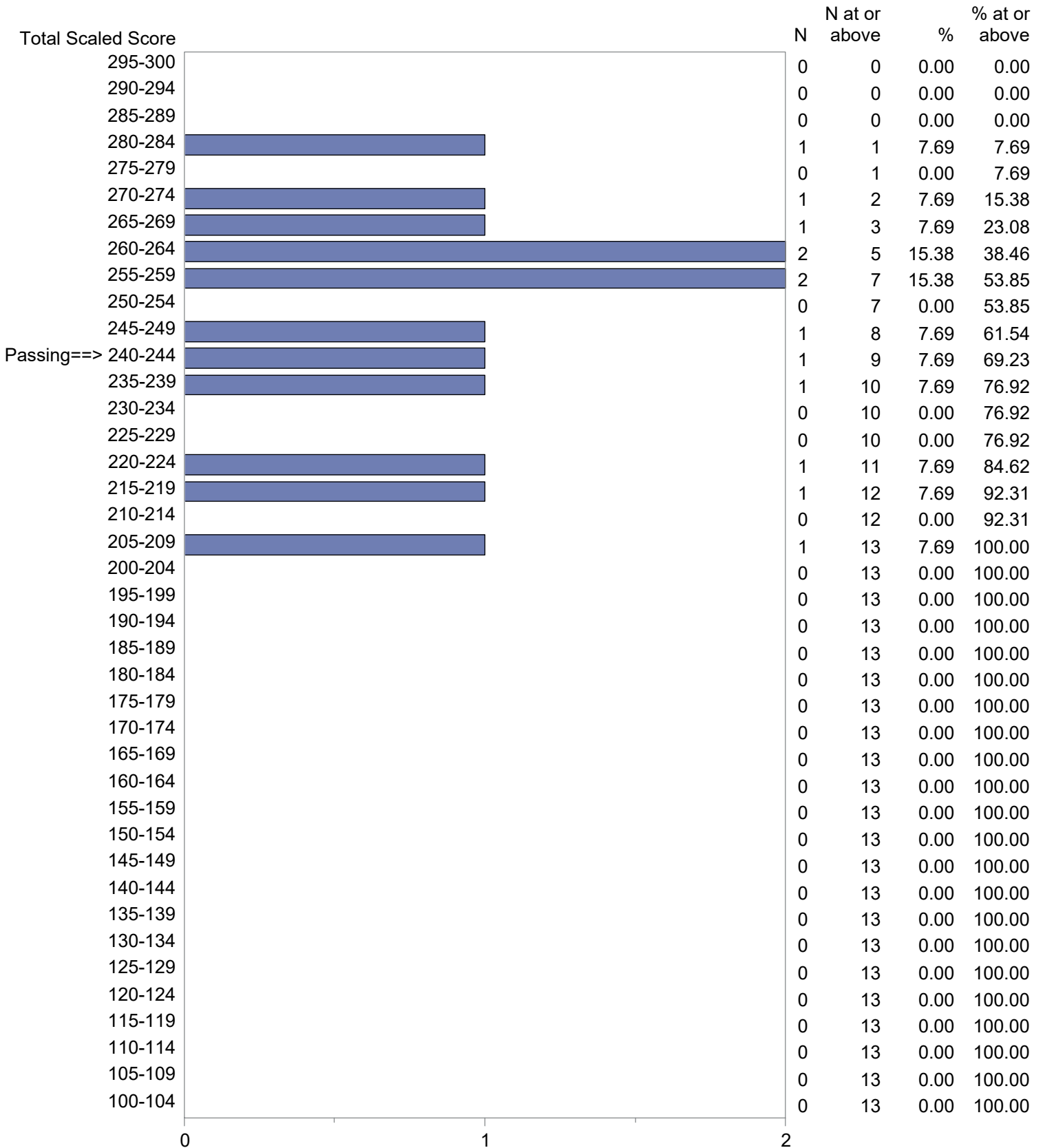
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=610 LANGUAGES OTHER THAN ENGLISH-FRENCH



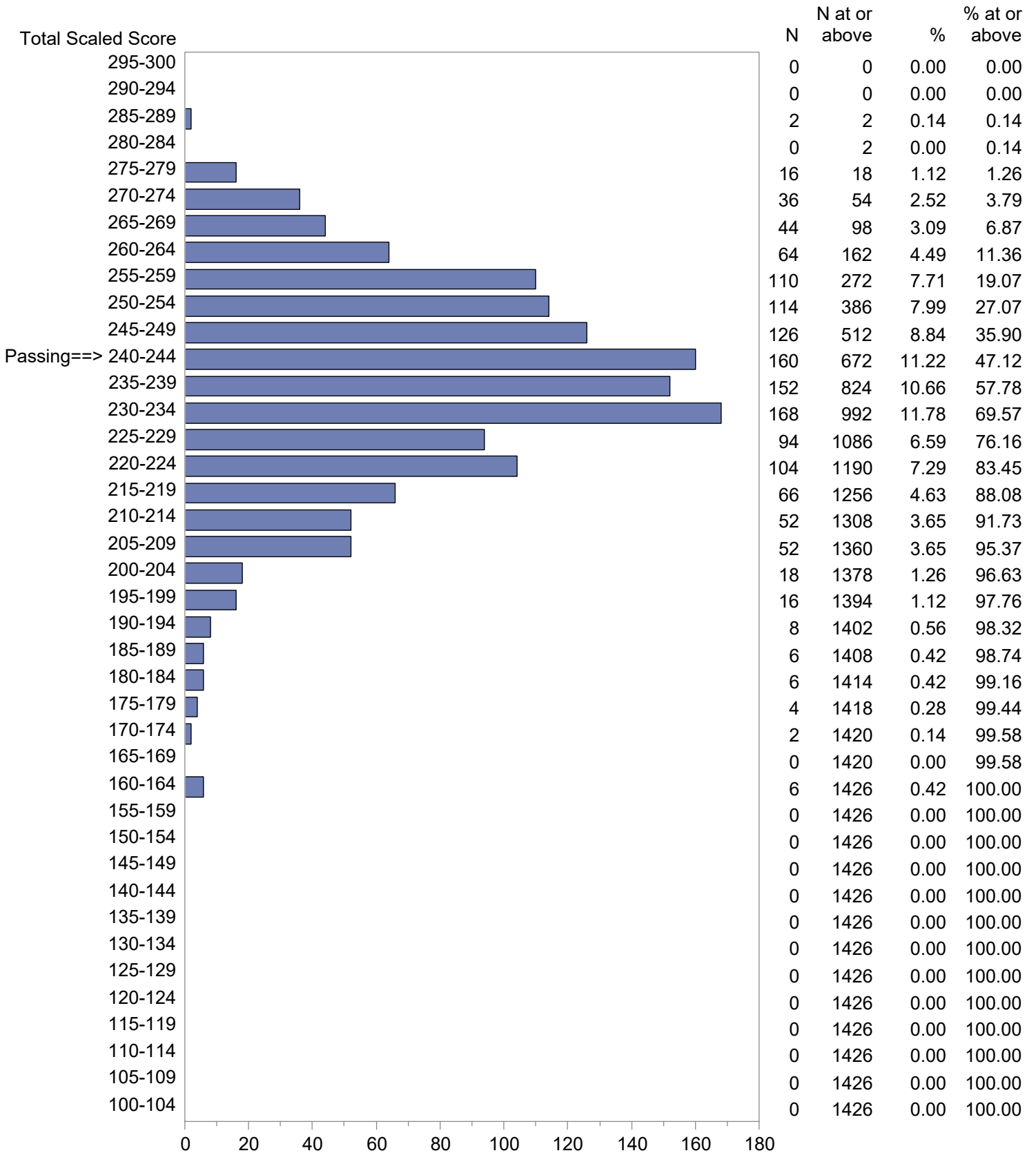
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=611 LANGUAGES OTHER THAN ENGLISH-GERMAN



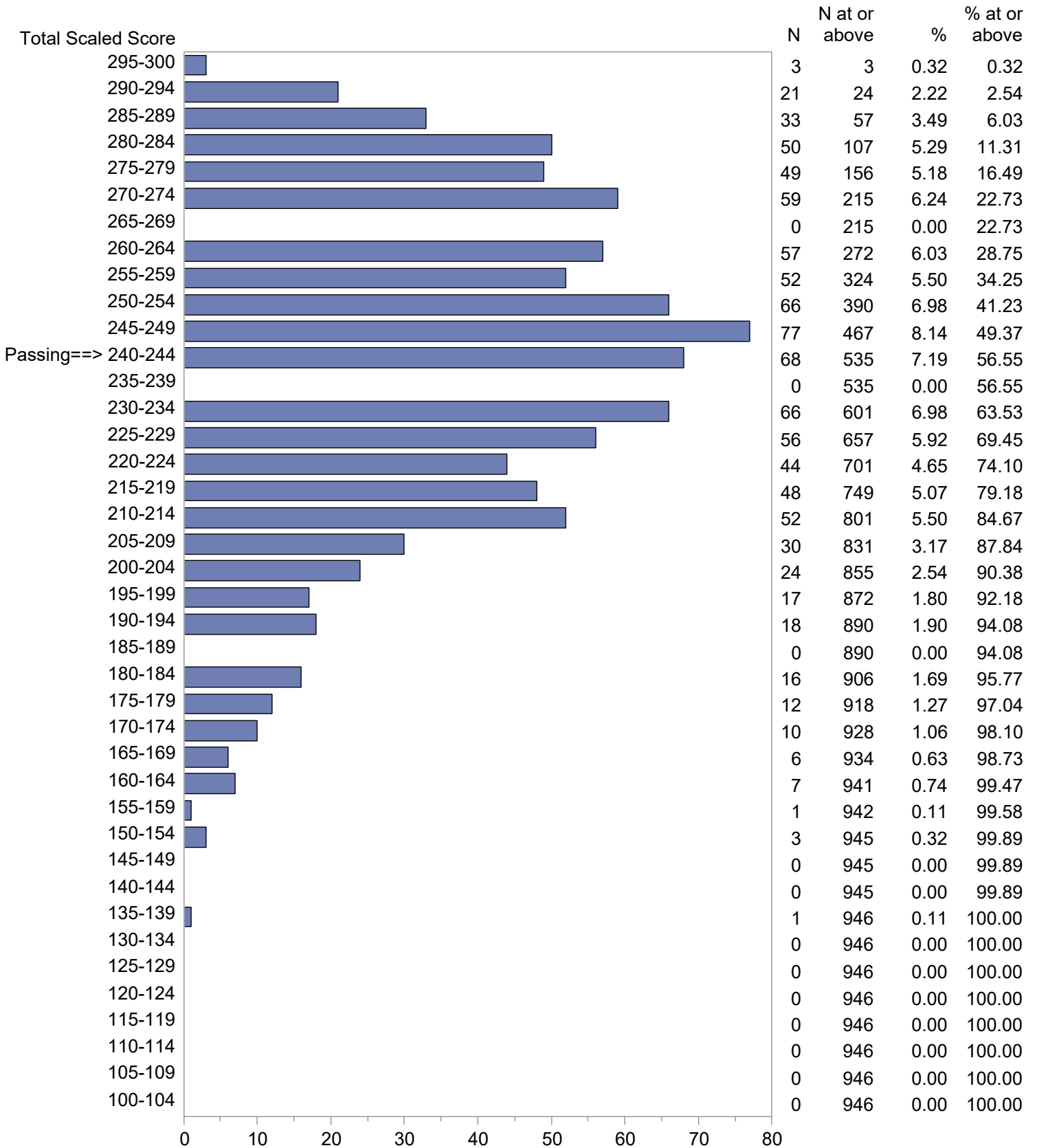
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=613 LANGUAGES OTHER THAN ENGLISH-SPANISH



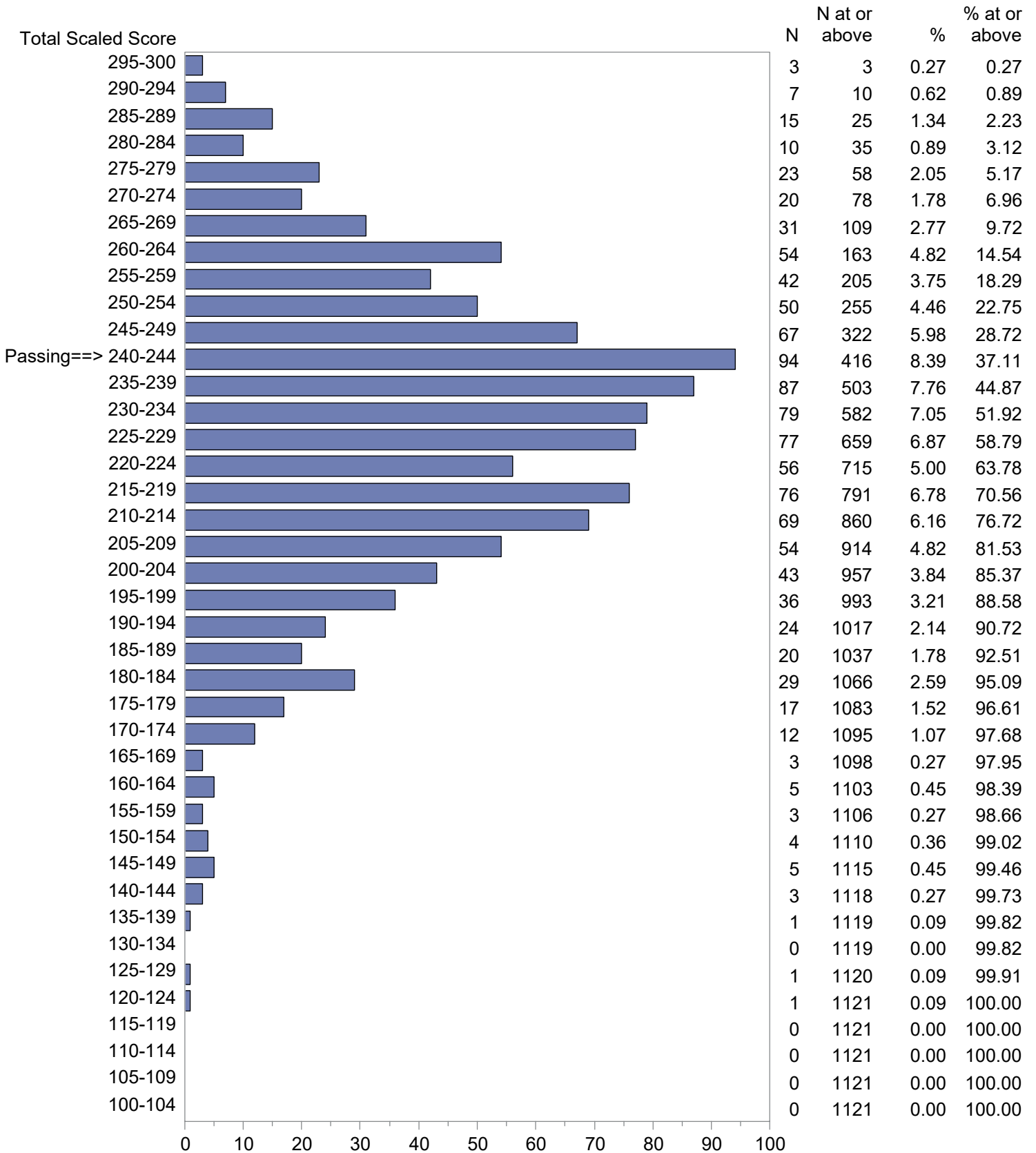
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=701 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST I: READING)



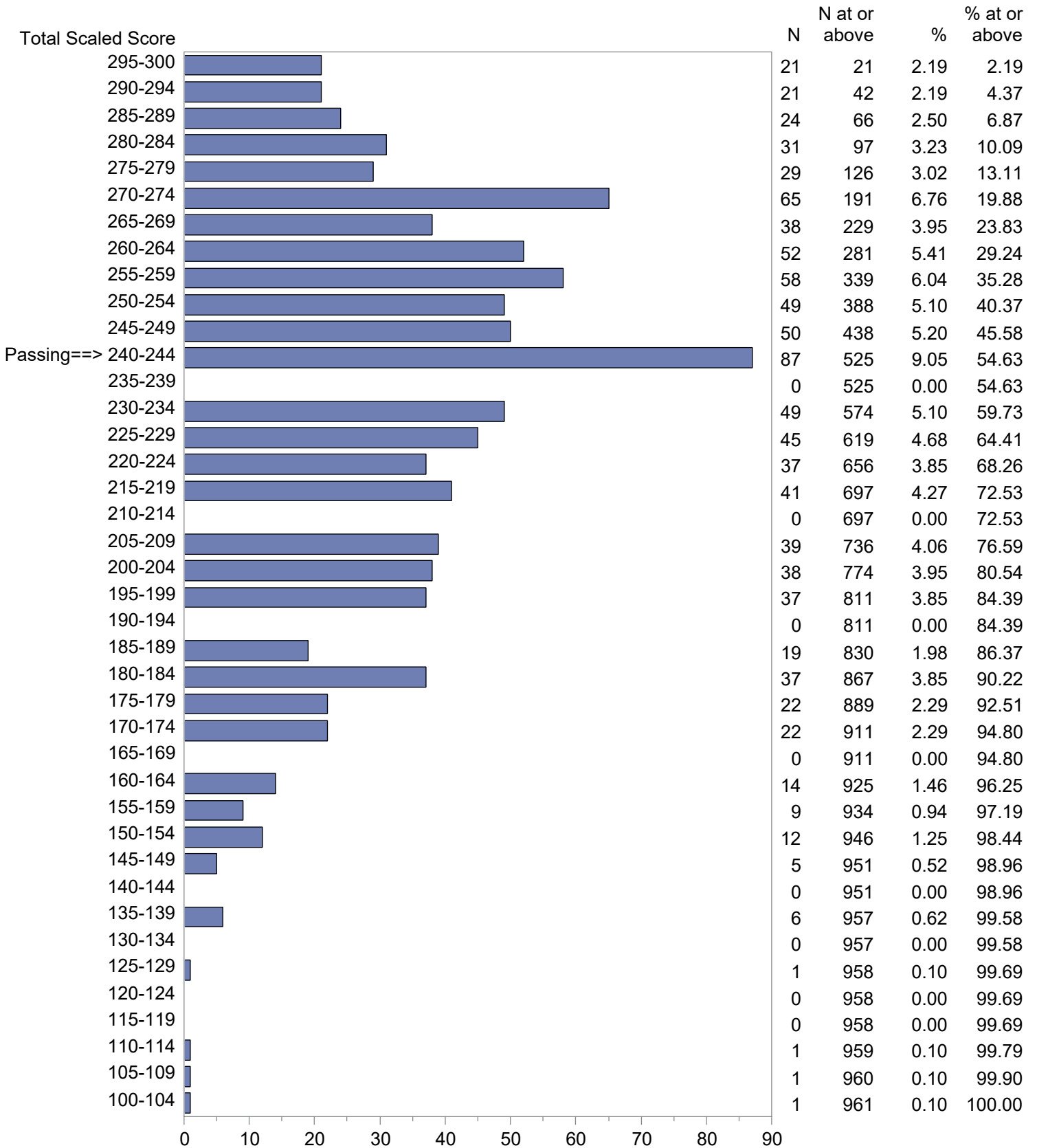
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=702 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST II: WRITING)



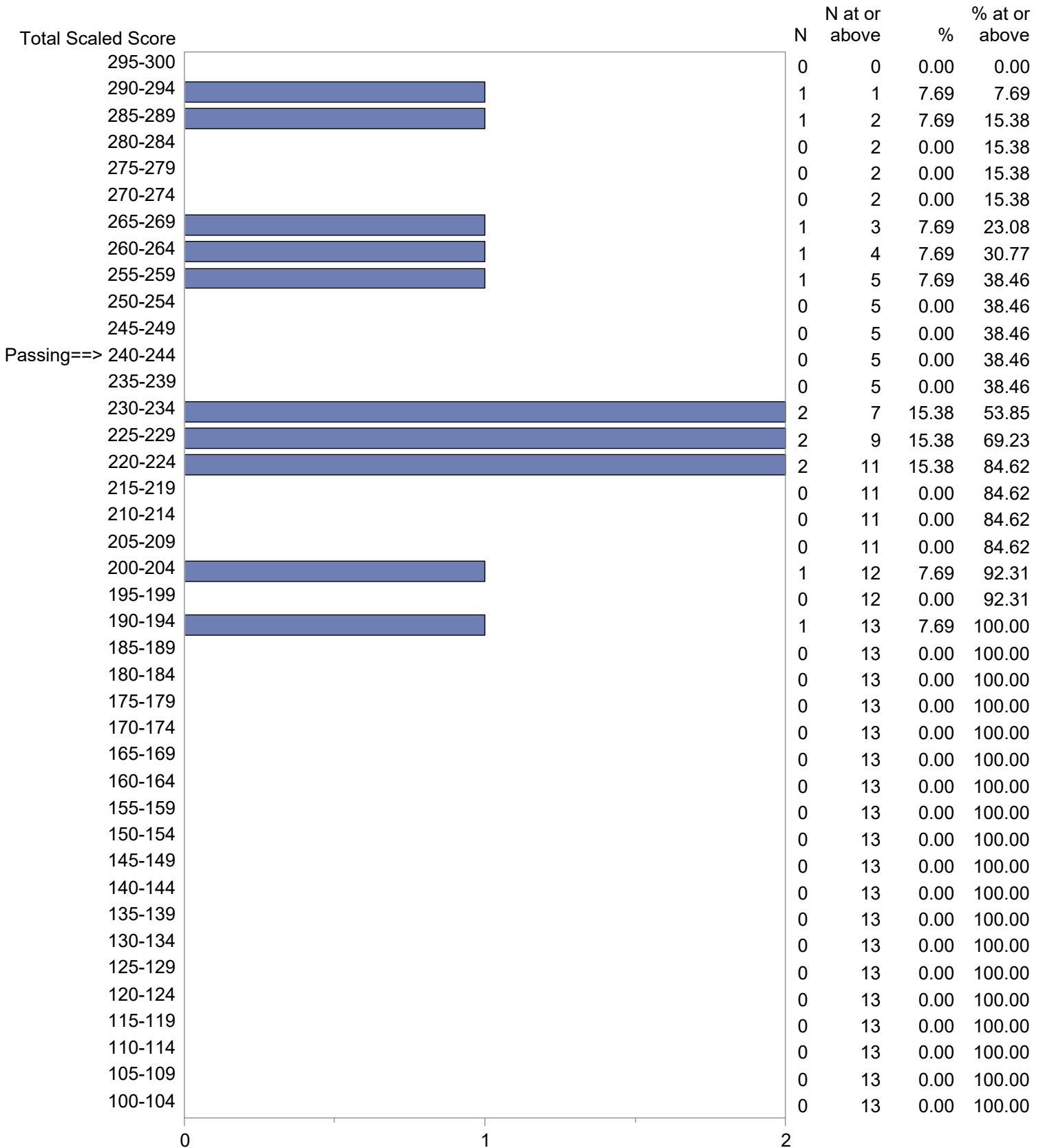
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=703 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST III: MATHEMATICS)



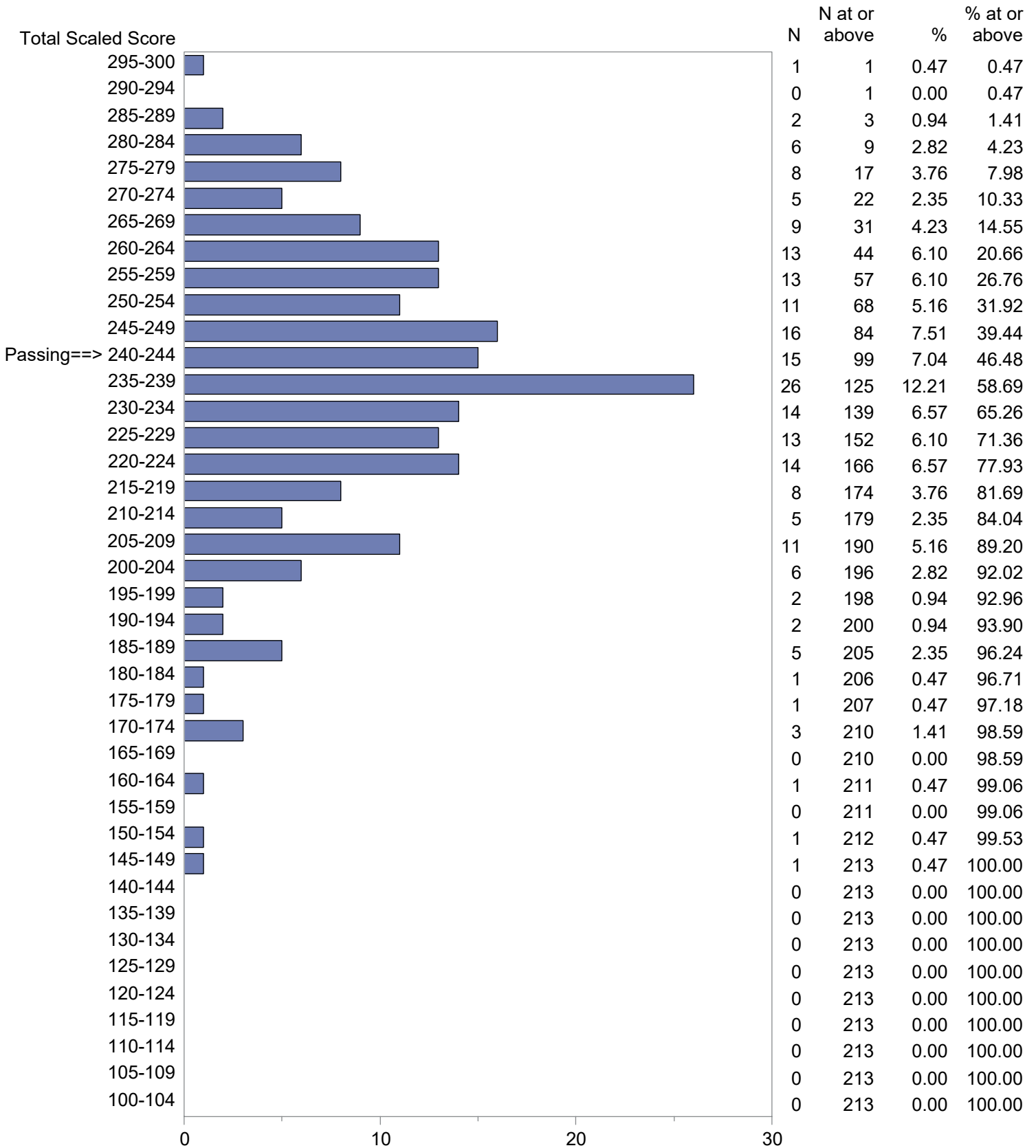
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=710 TX PACT: LOTE FRENCH: EARLY CHILDHOOD-GRADE 12



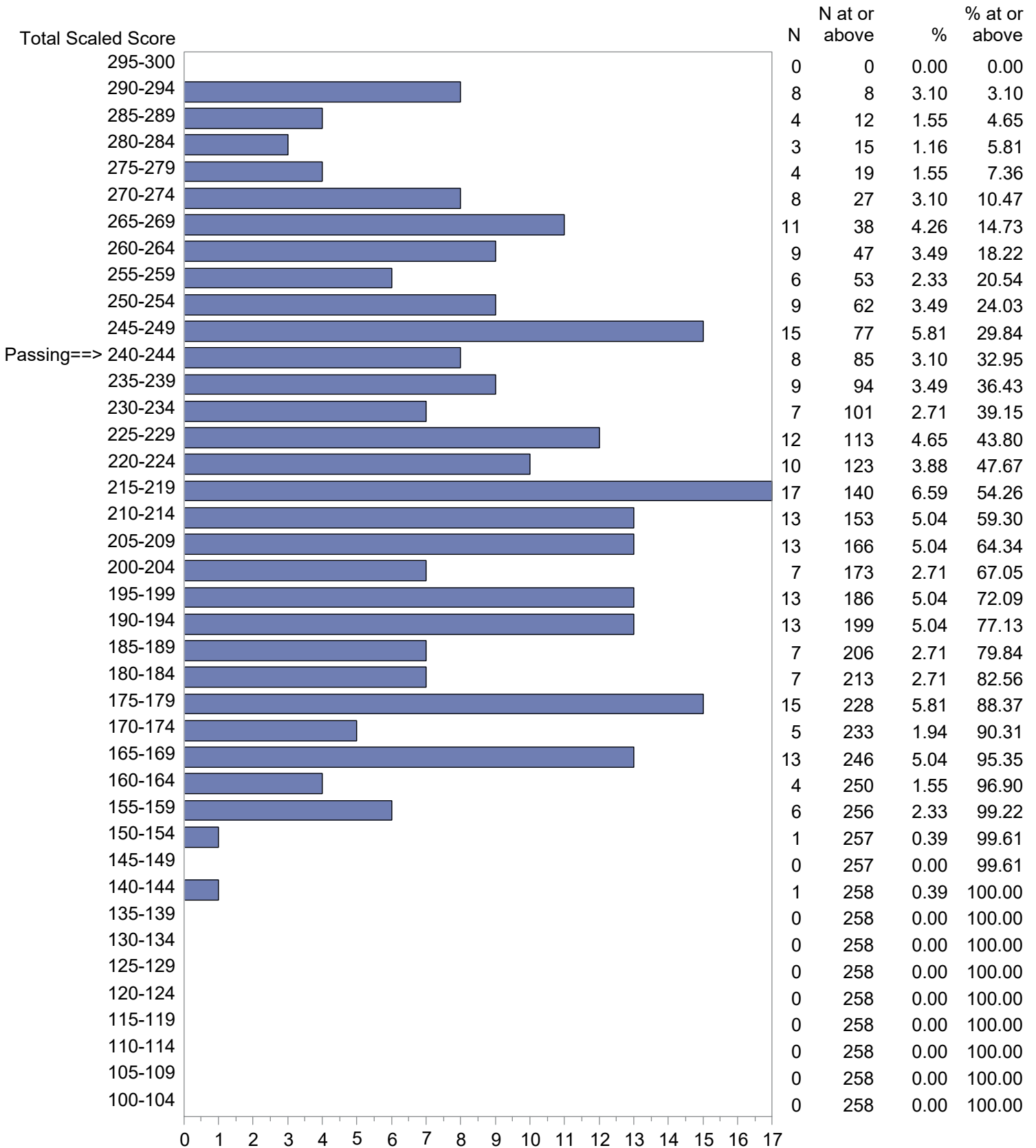
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=713 TX PACT: LOTE SPANISH: EARLY CHILDHOOD-GRADE 12



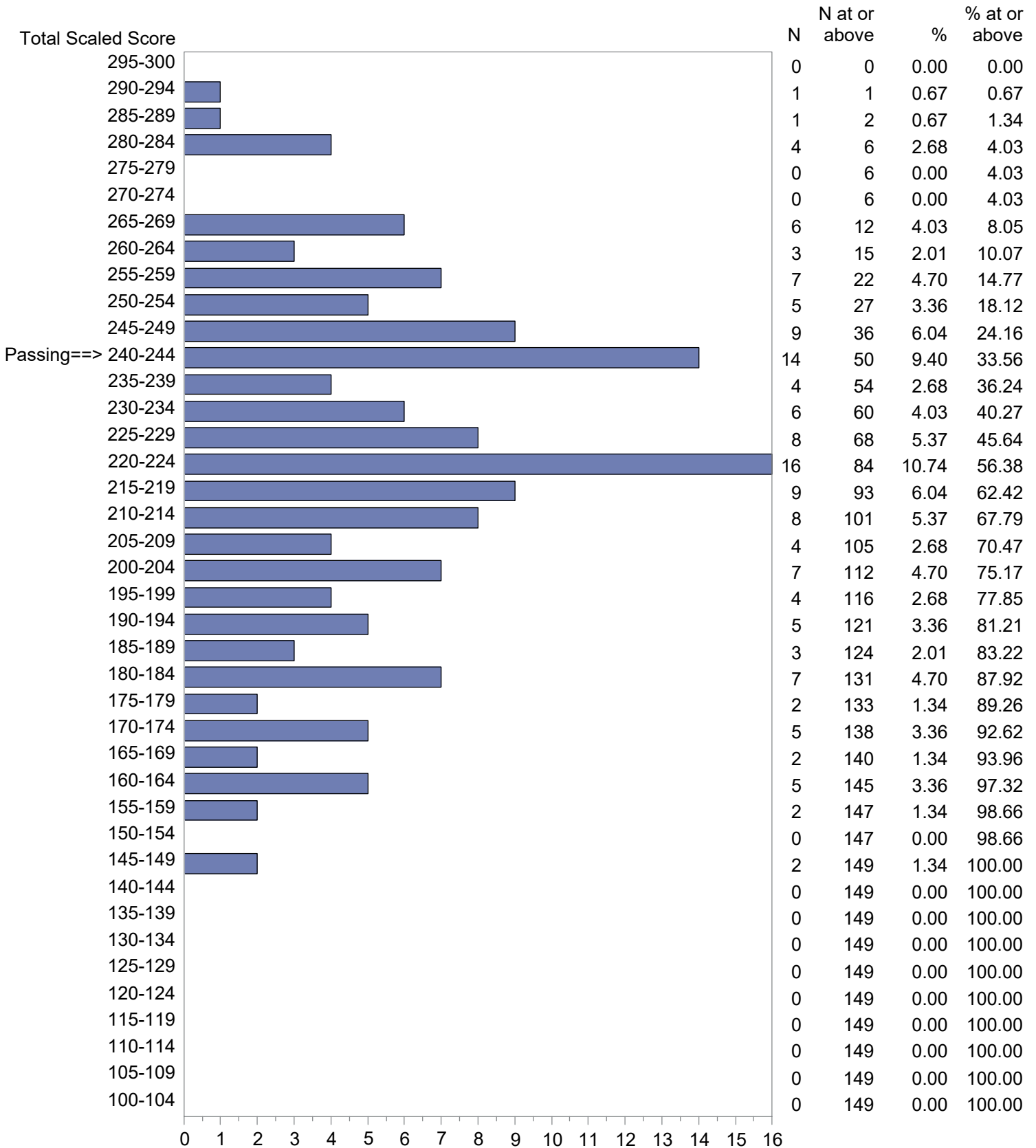
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=715 TX PACT: MATHEMATICS: GRADES 4-8



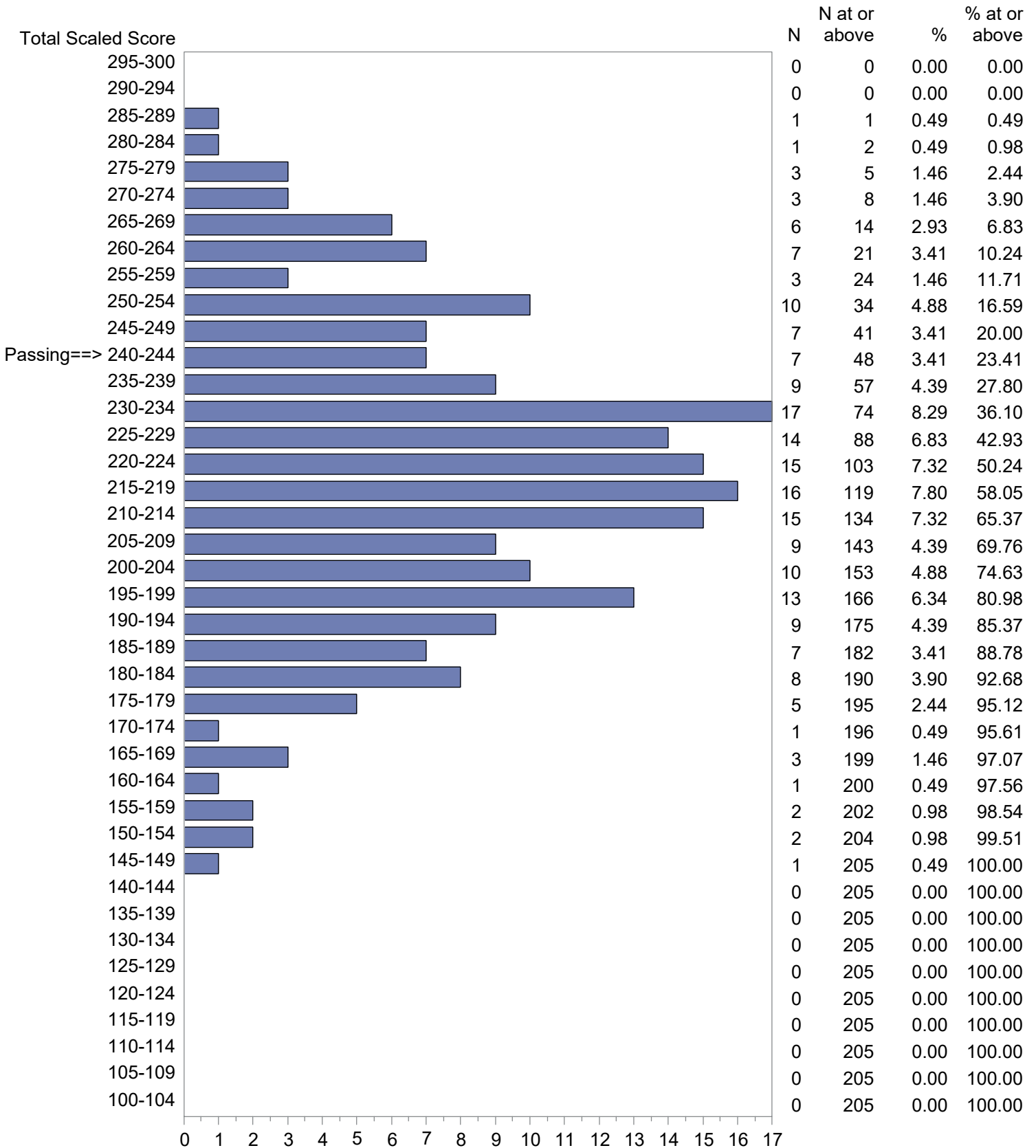
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=716 TX PACT: SCIENCE: GRADES 4-8



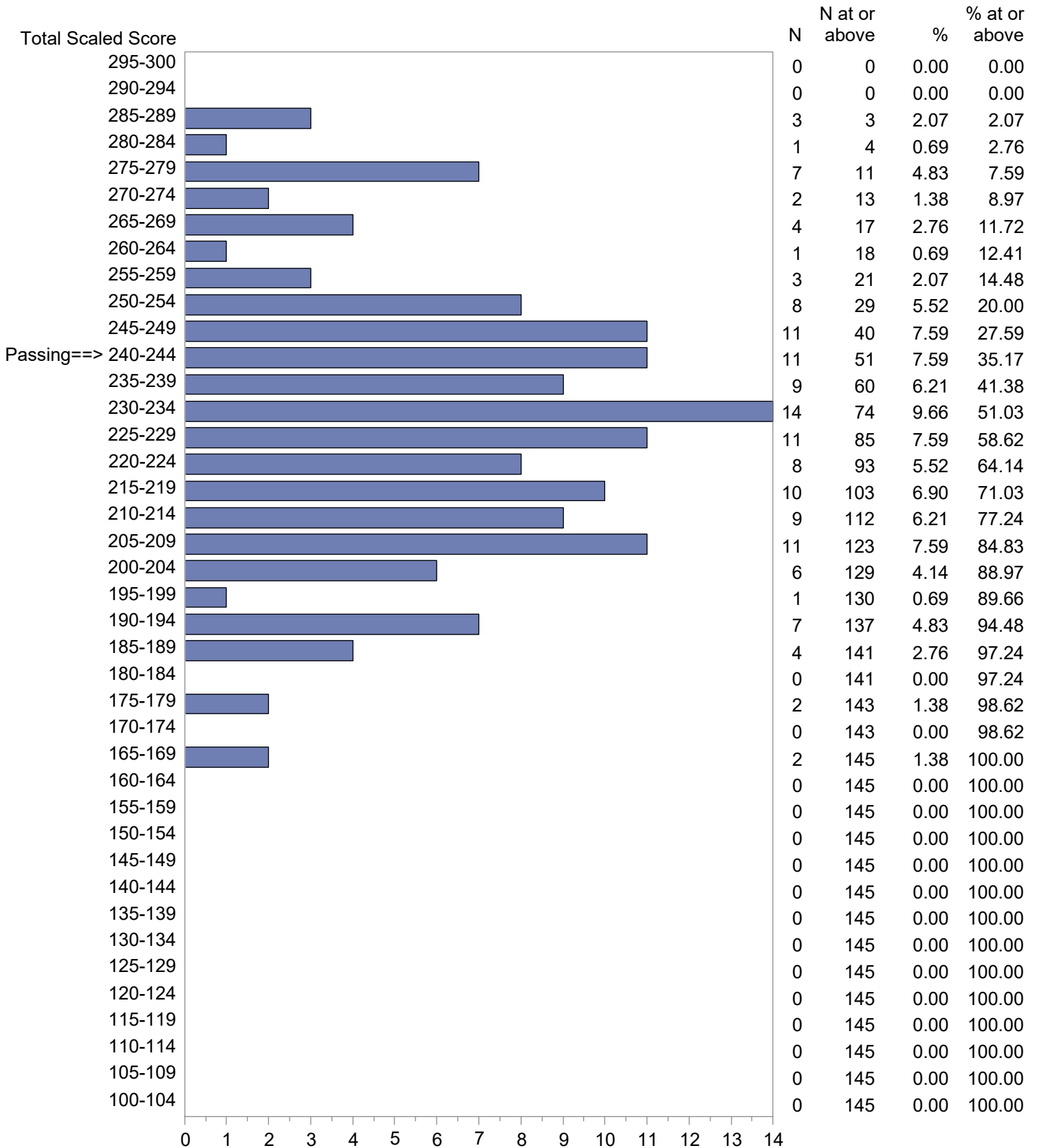
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=717 TX PACT: ENGLISH LANGUAGE ARTS AND READING: GRADES 4-8



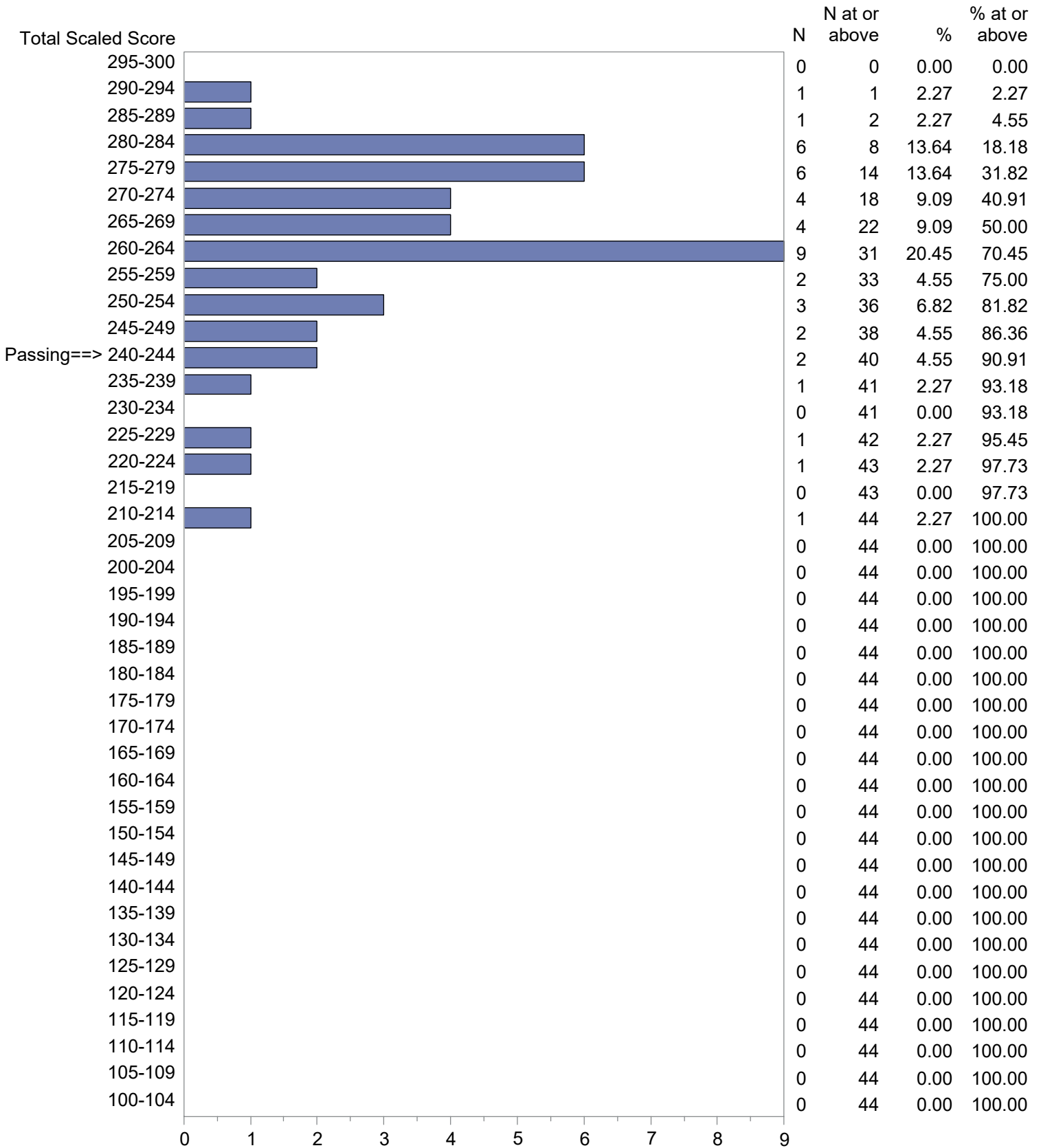
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=718 TX PACT: SOCIAL STUDIES: GRADES 4-8



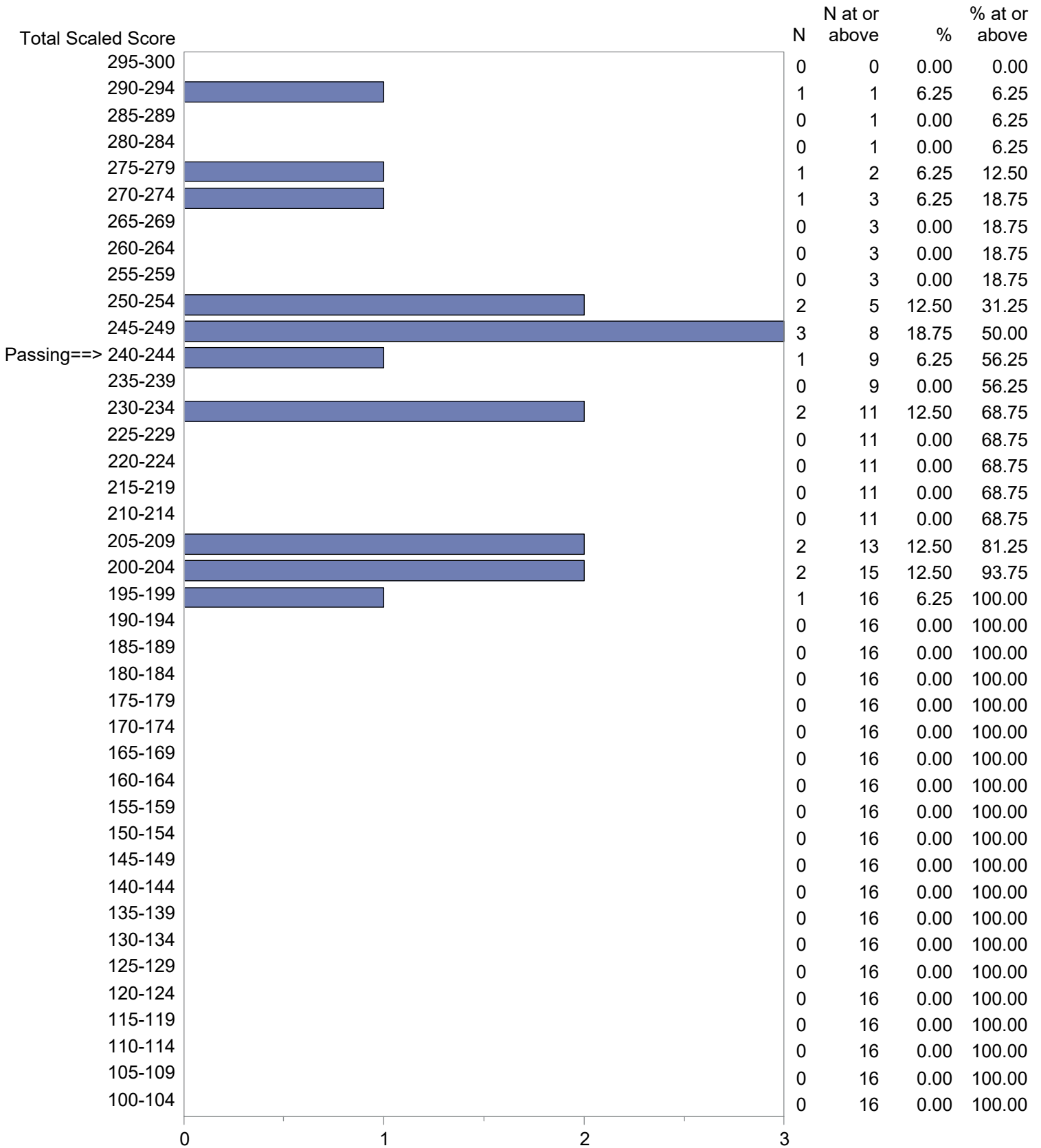
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=721 TX PACT: FAMILY AND CONSUMER SCIENCES



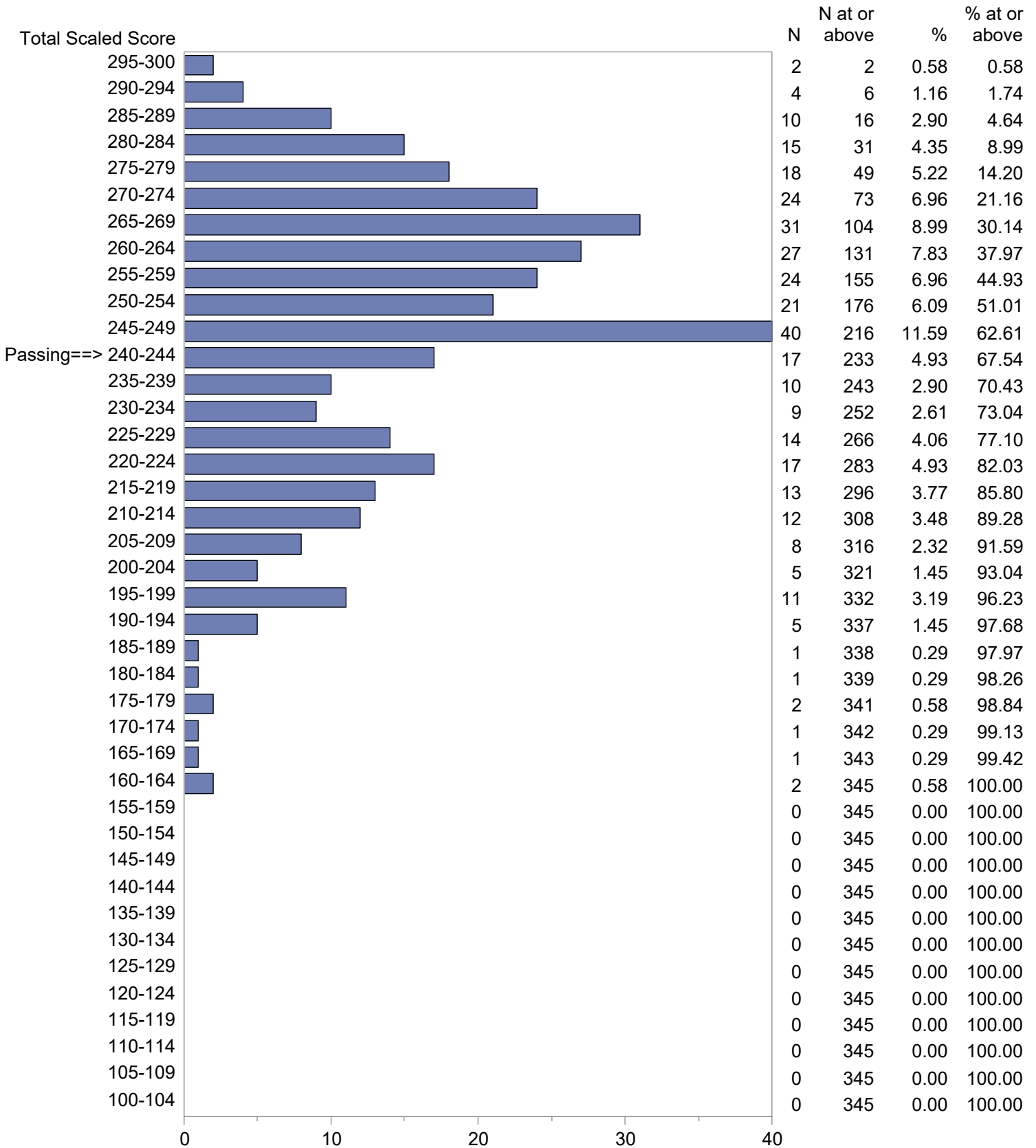
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=729 TX PACT: SPEECH: GRADES 7-12



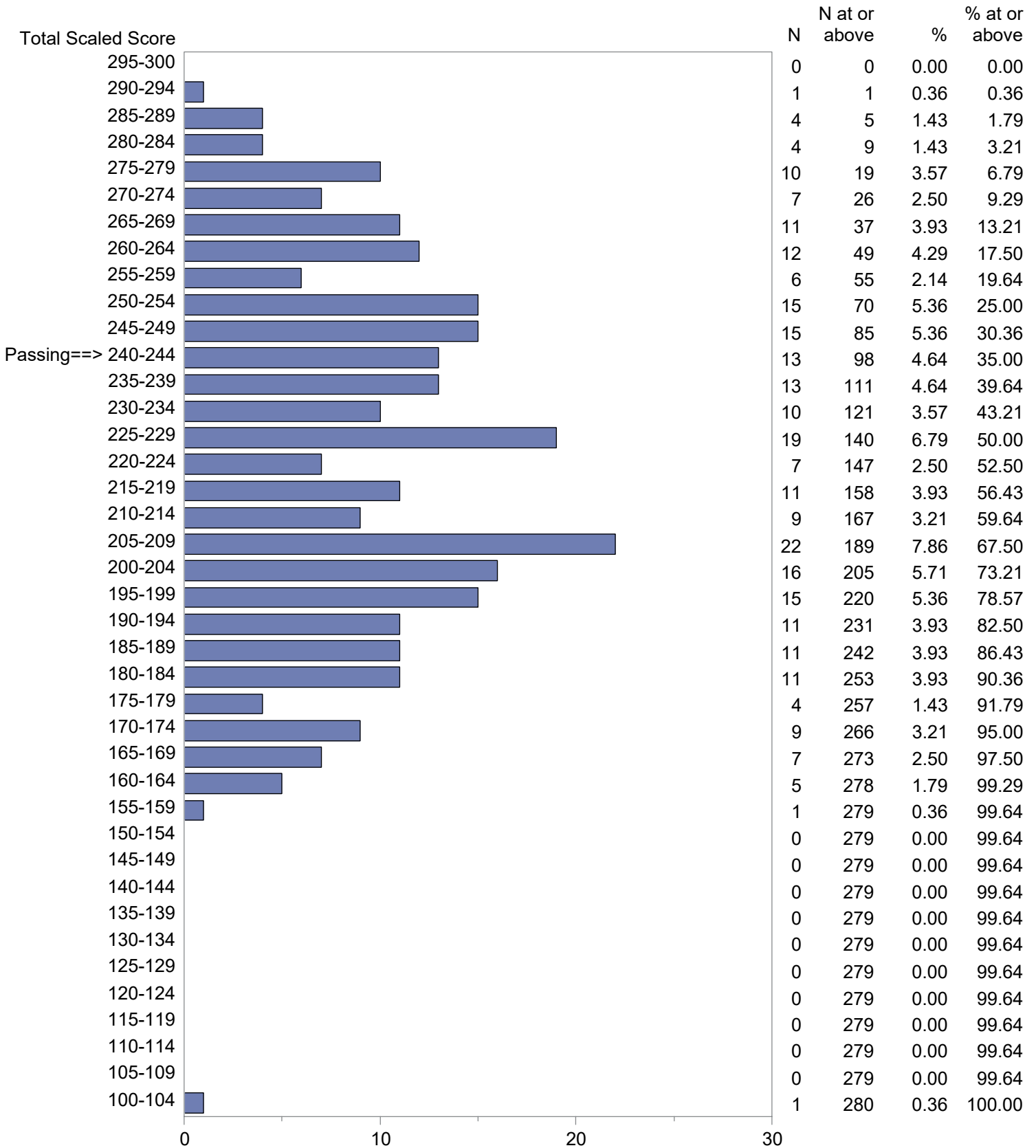
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=731 TX PACT: ENGLISH LANGUAGE ARTS AND READING: GRADES 7-12



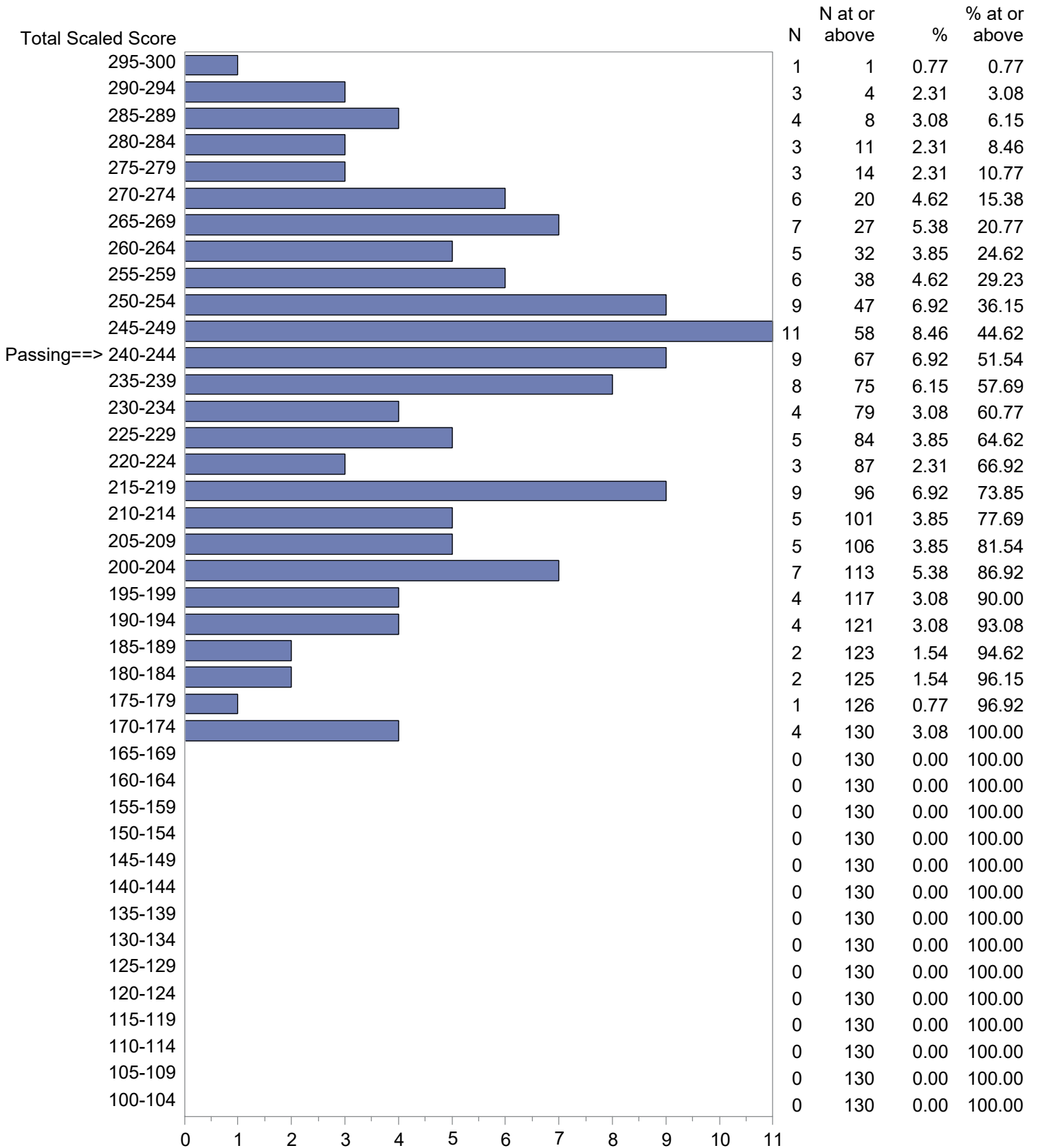
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=732 TX PACT: SOCIAL STUDIES: GRADES 7-12



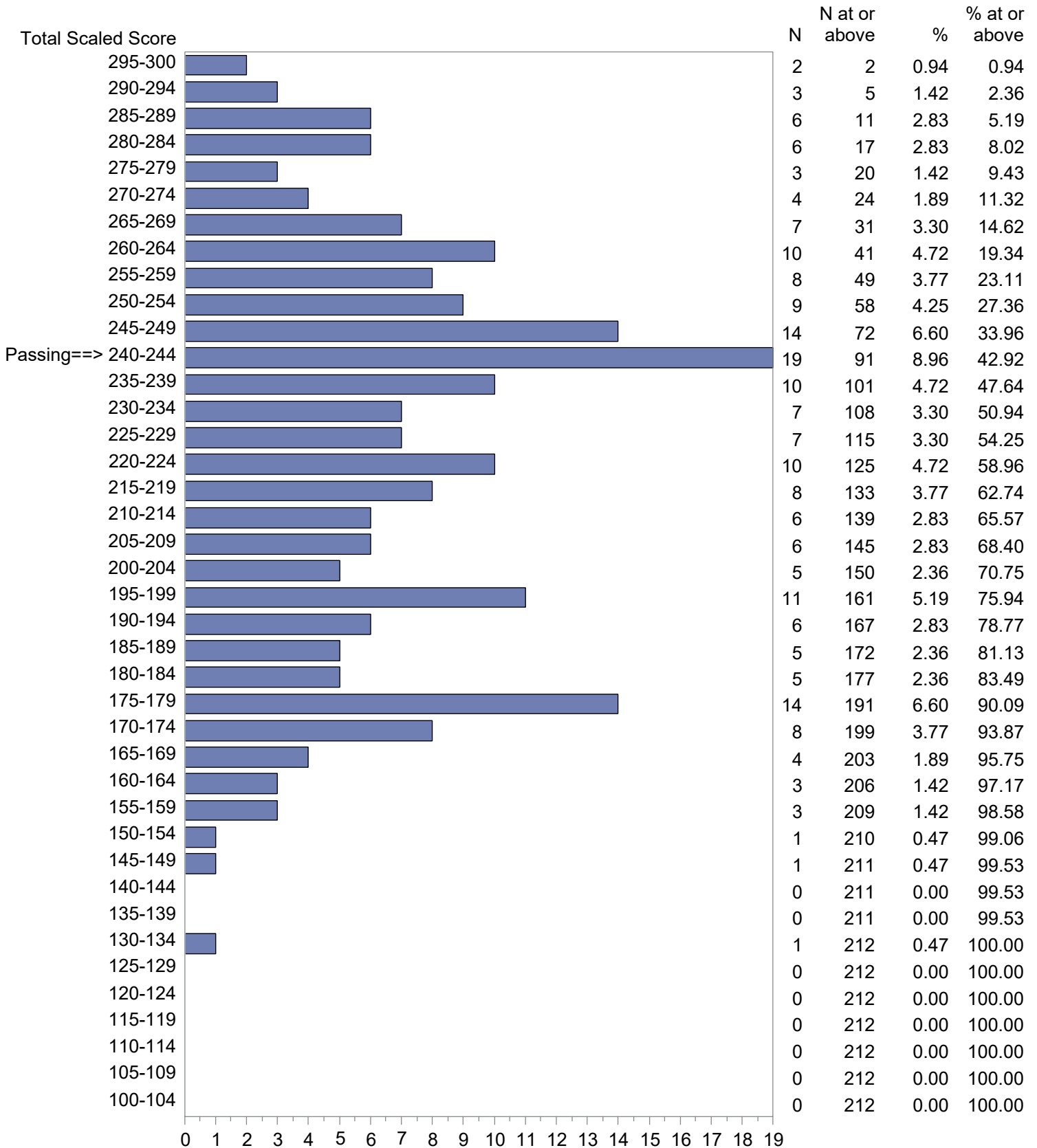
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=733 TX PACT: HISTORY: GRADES 7-12



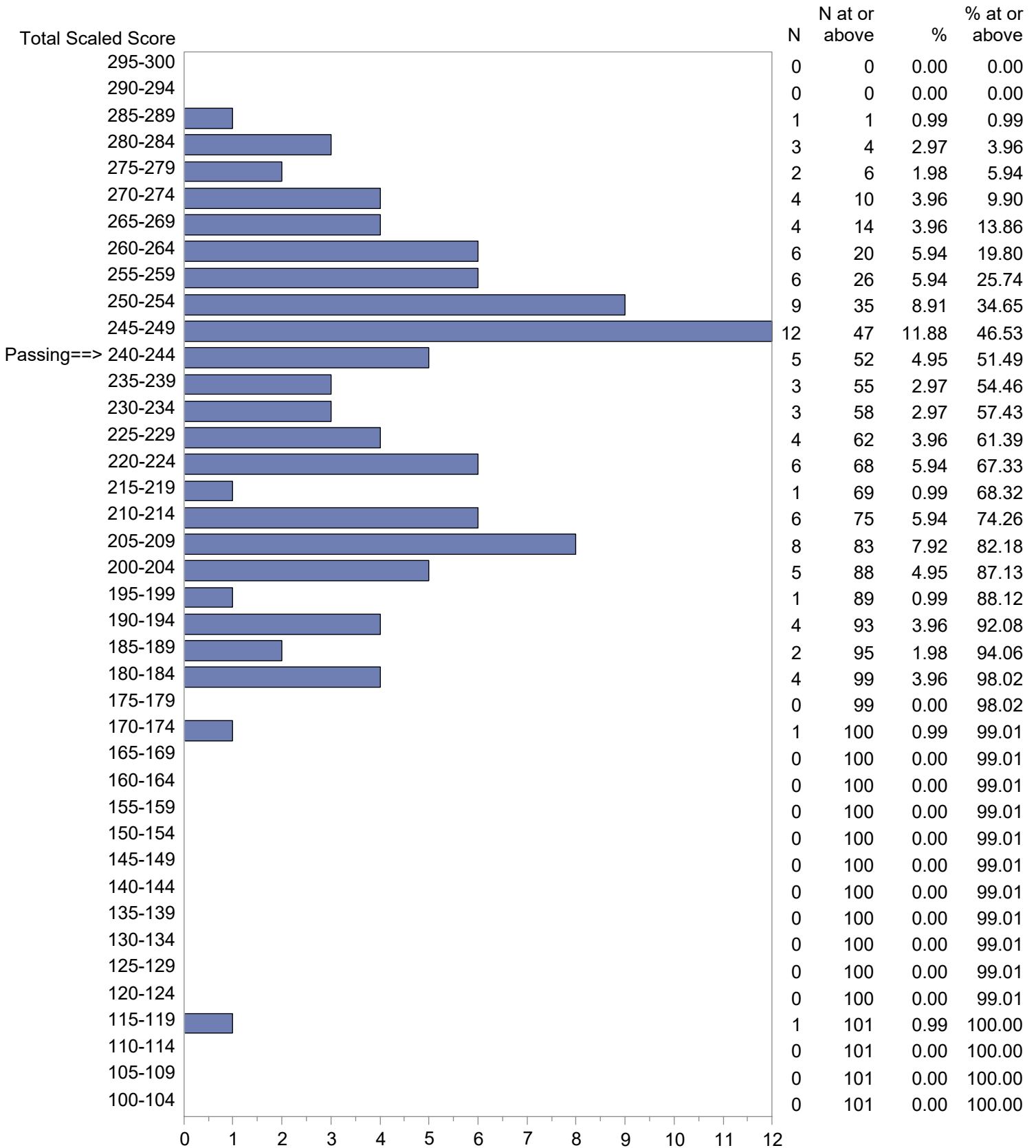
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=735 TX PACT: MATHEMATICS: GRADES 7-12



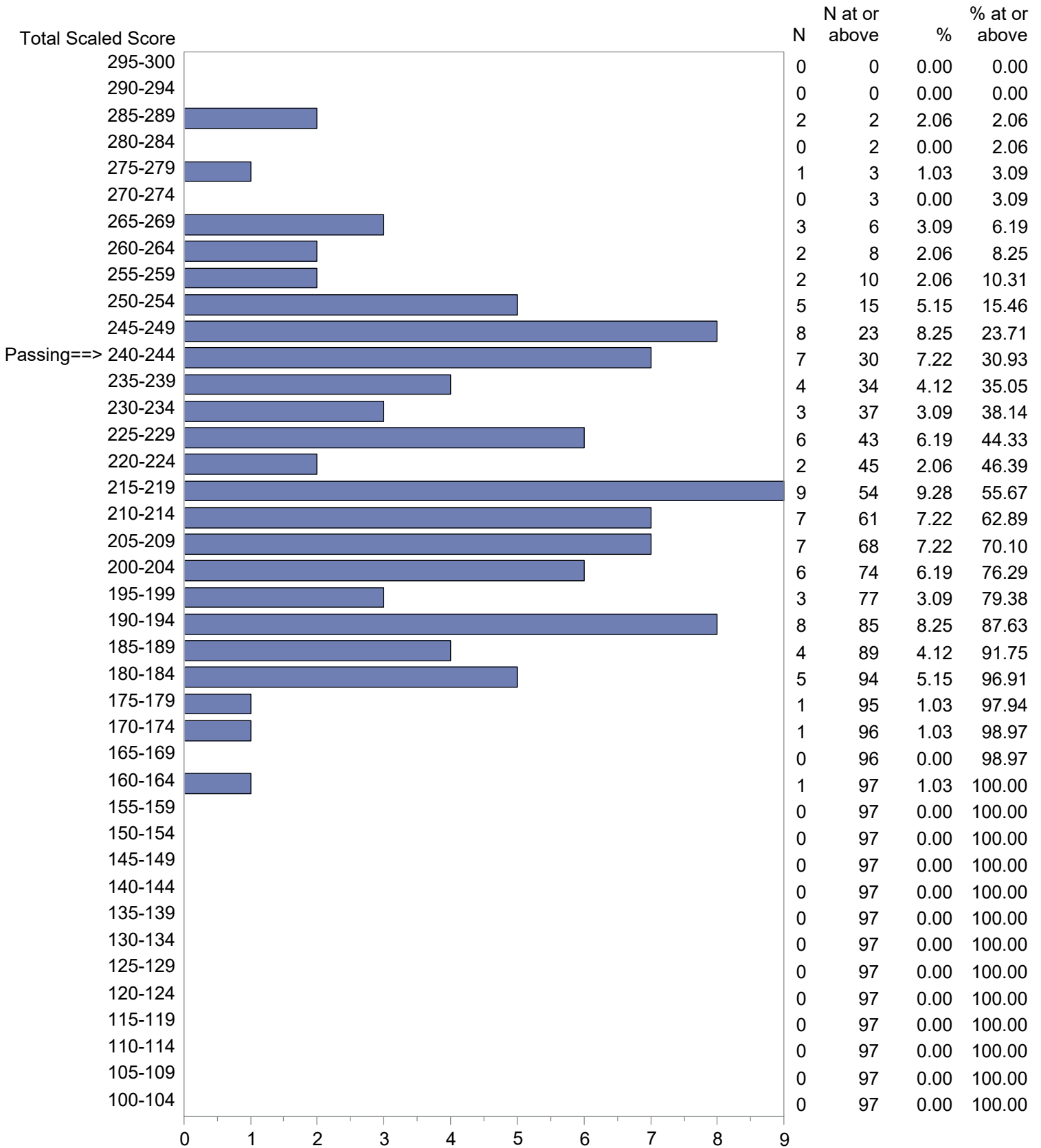
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=736 TX PACT: SCIENCE: GRADES 7-12



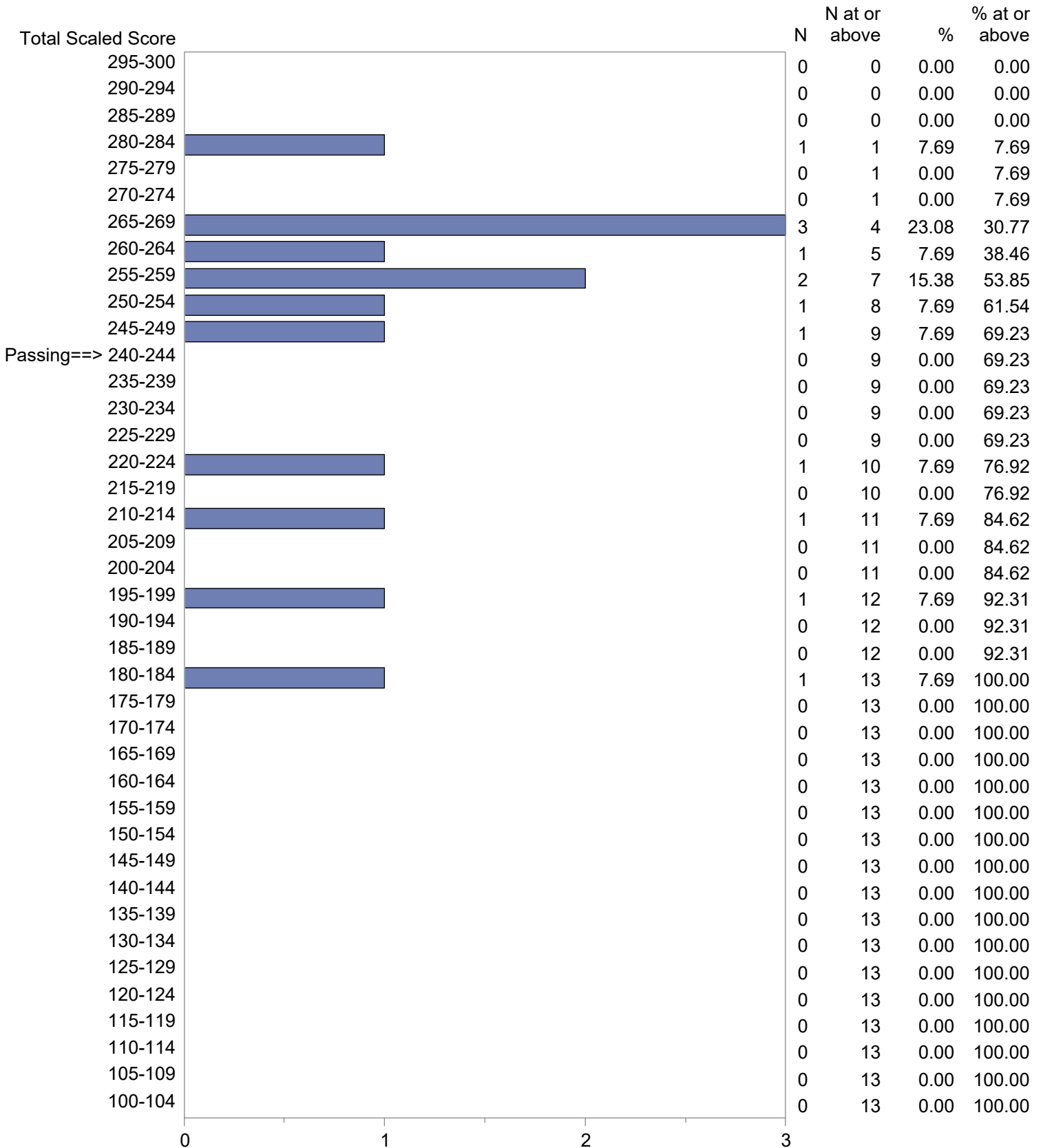
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=738 TX PACT: LIFE SCIENCE: GRADES 7-12



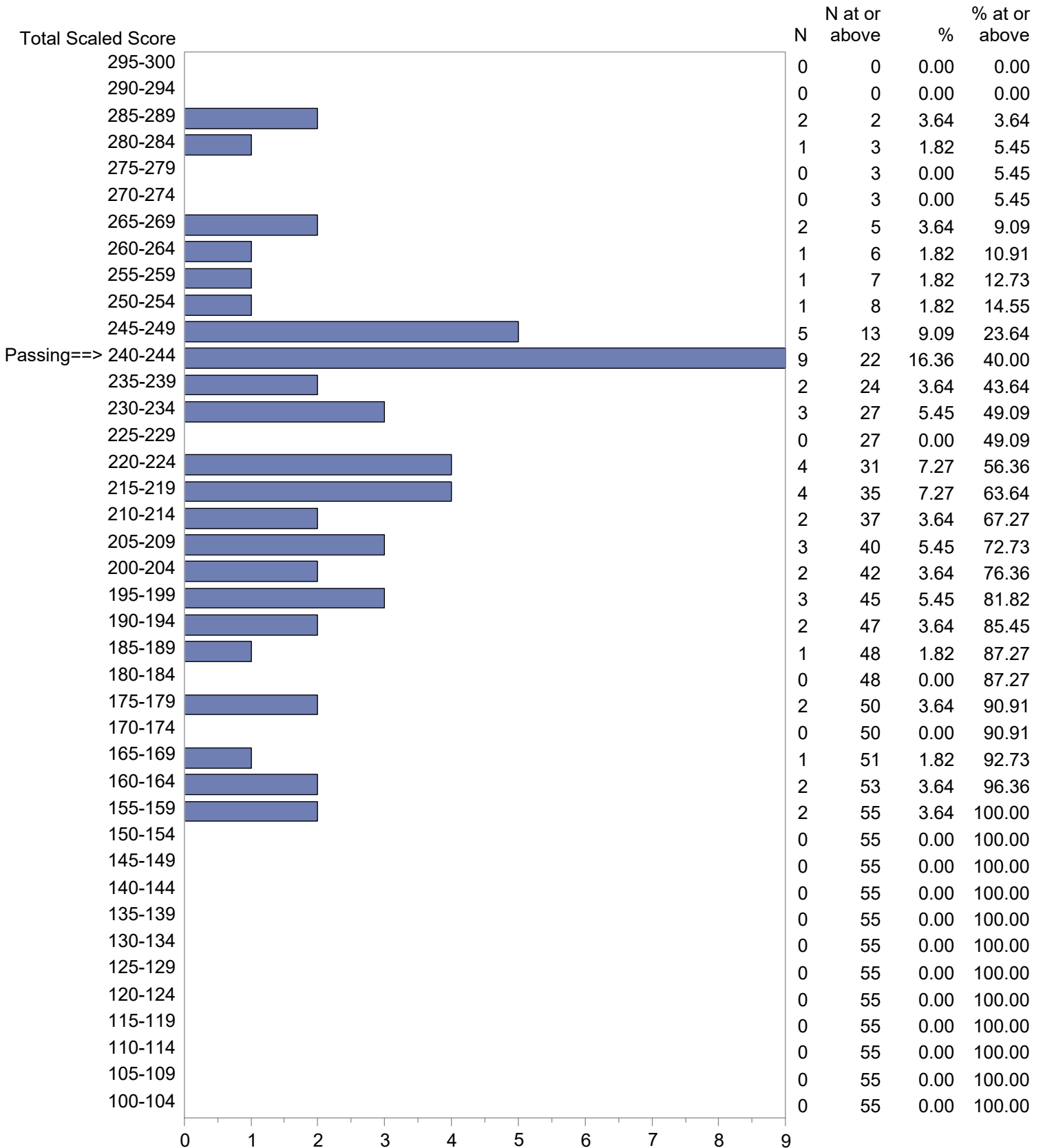
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=740 TX PACT: CHEMISTRY: GRADES 7-12



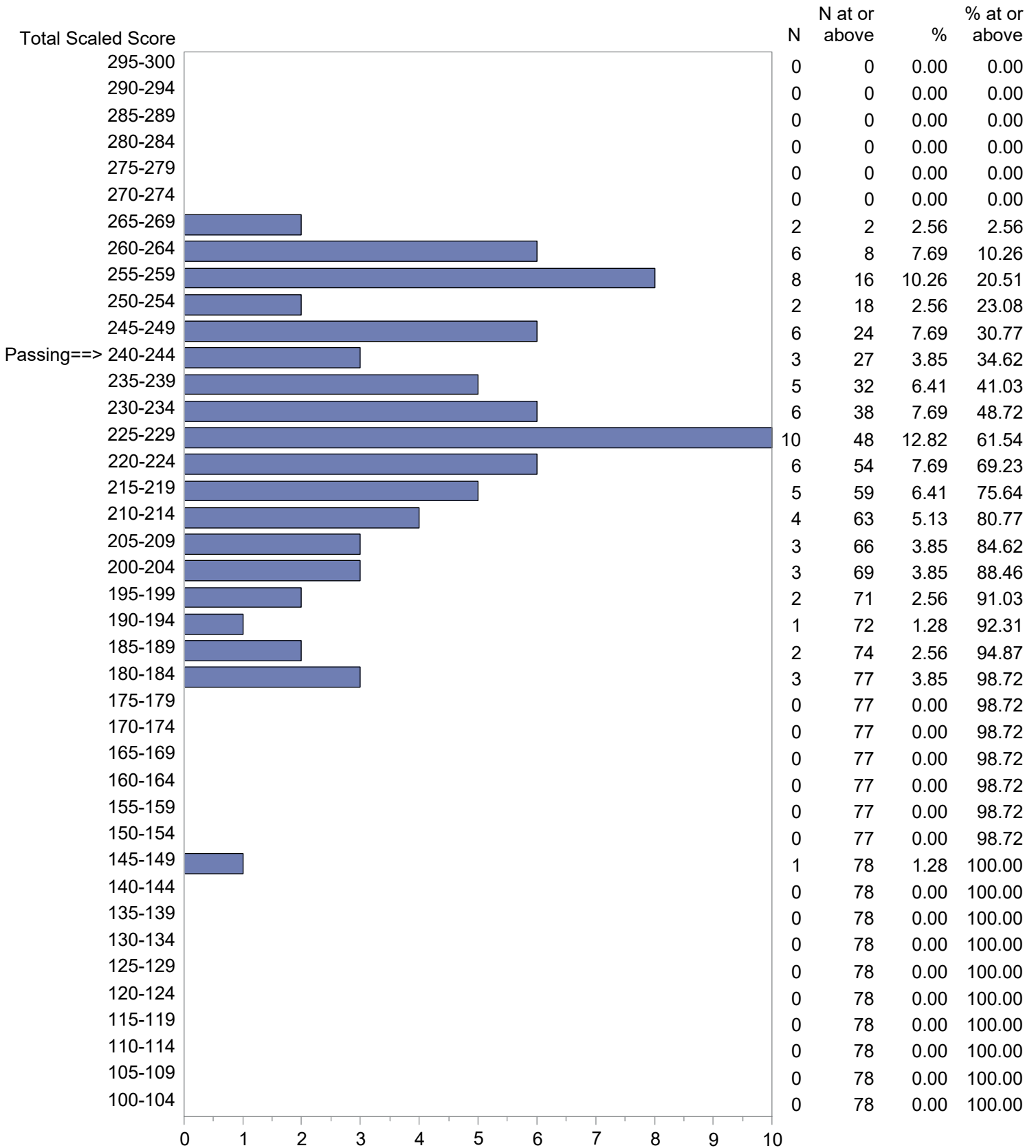
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=742 TX PACT: TECHNOLOGY APPLICATIONS: EARLY CHILDHOOD-GRADE 12



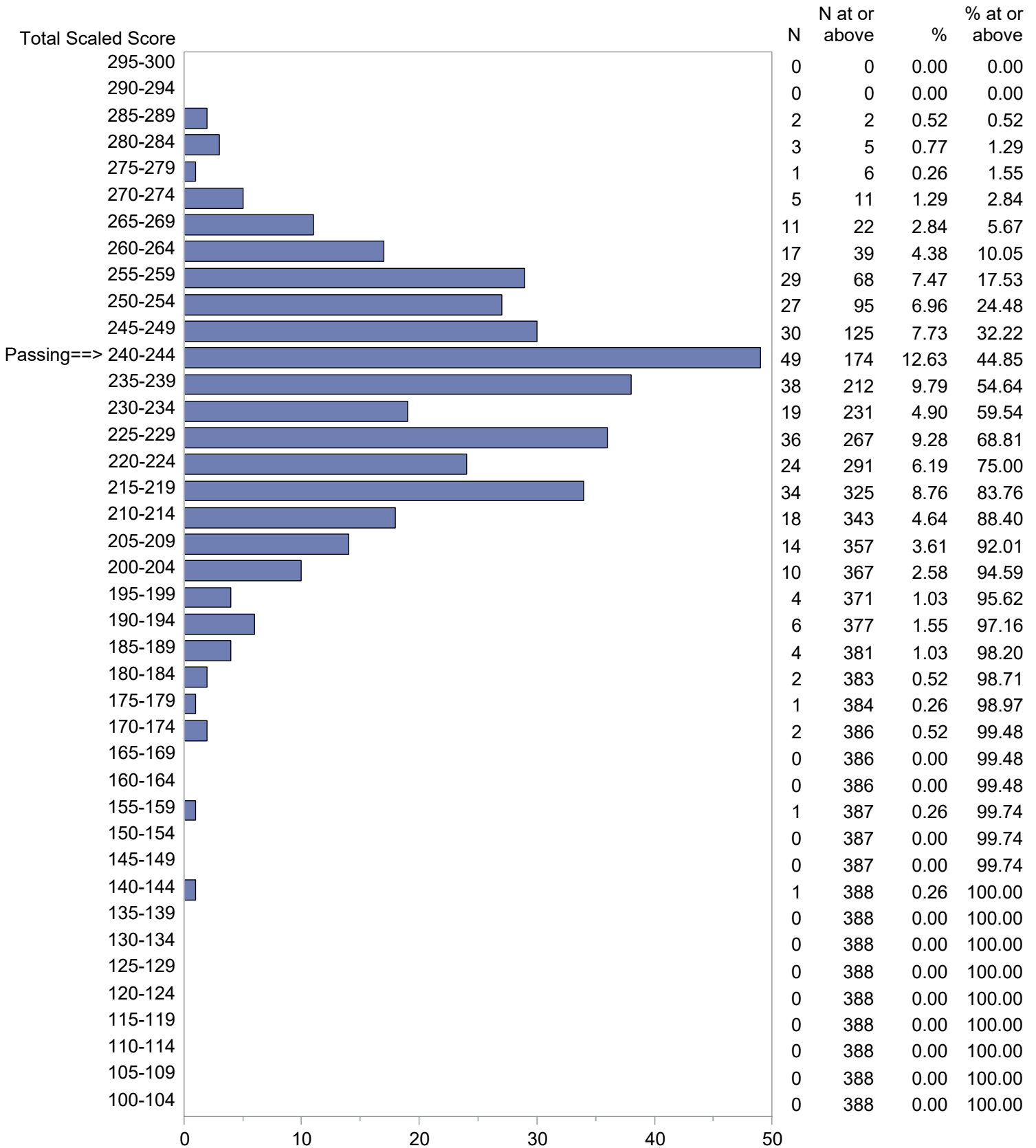
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=757 TX PACT: HEALTH: EARLY CHILDHOOD-GRADE 12



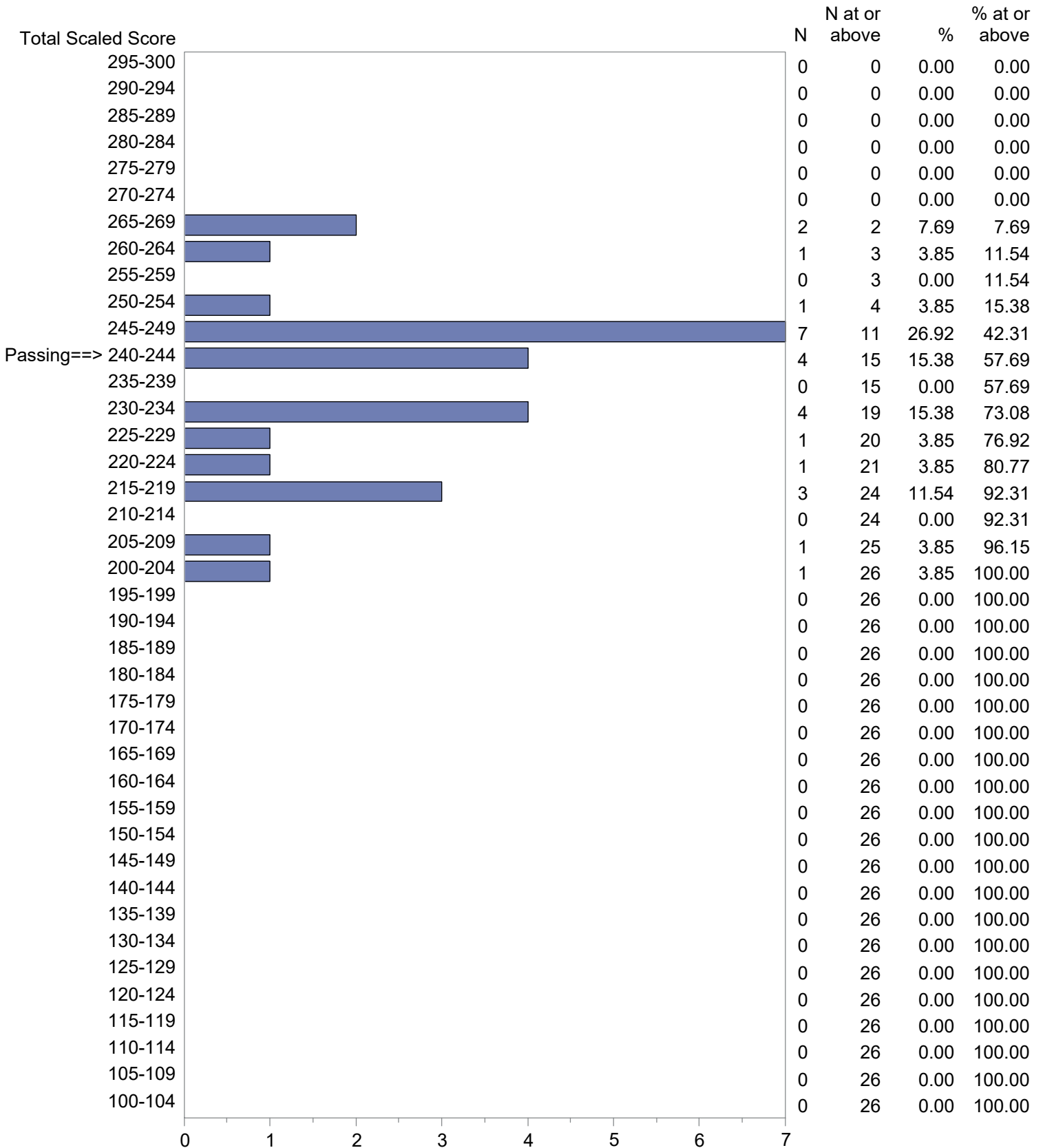
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=758 TX PACT: PHYSICAL EDUCATION: EARLY CHILDHOOD-GRADE 12



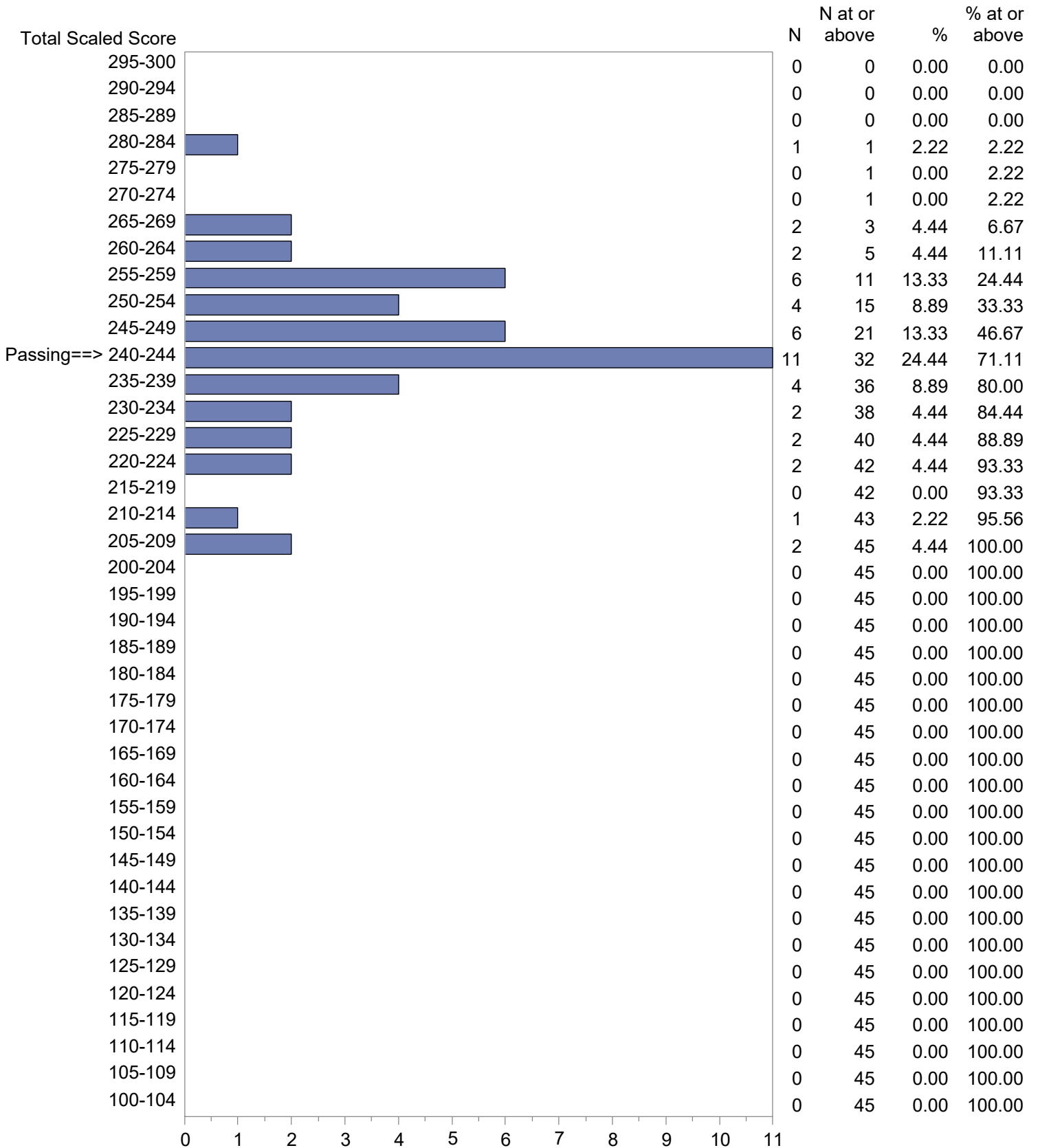
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=771 TX PACT: TECHNOLOGY EDUCATION: GRADES 6-12



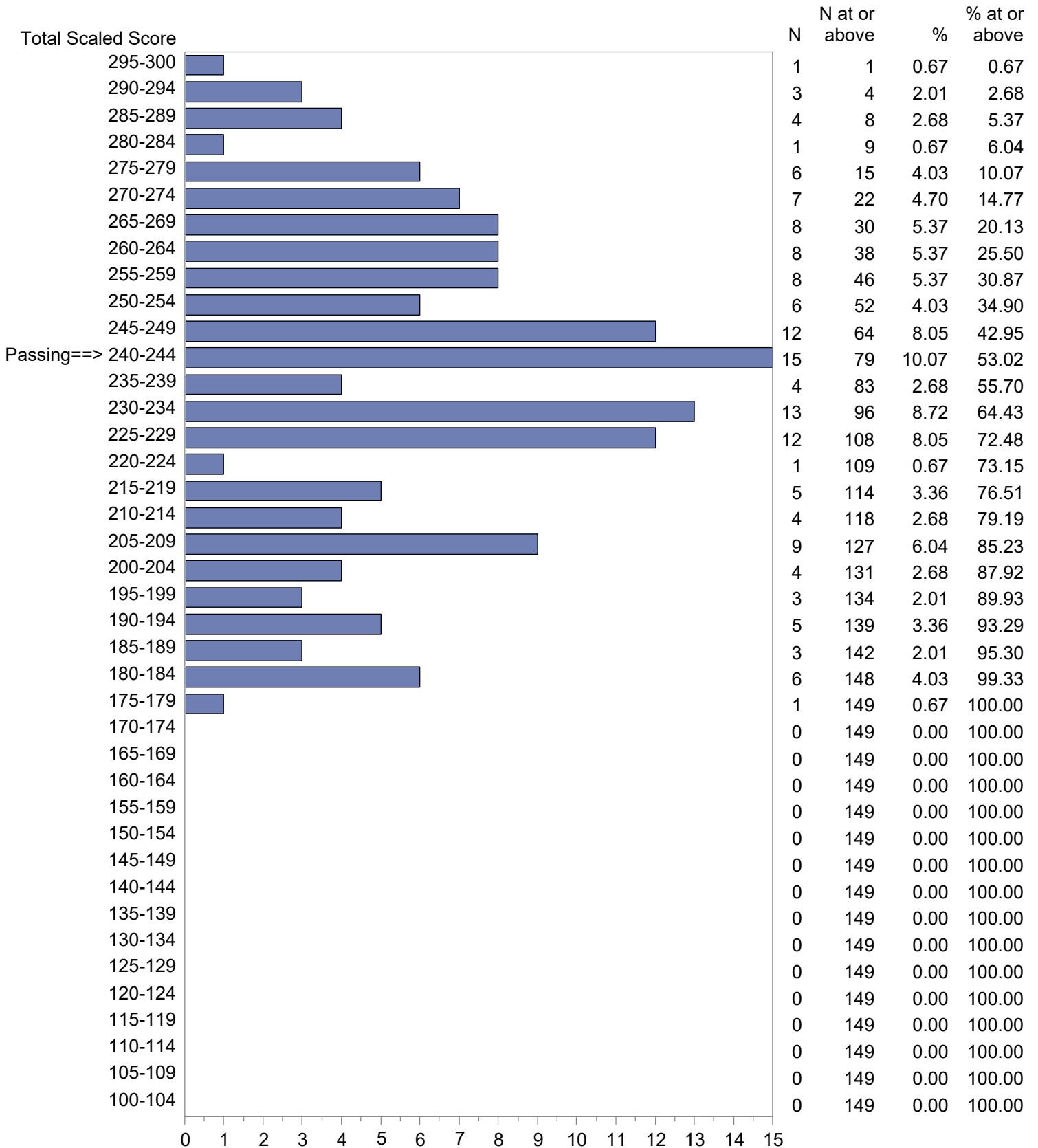
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=772 TX PACT: AGRICULTURE, FOOD, AND NATURAL RESOURCES: GRADES 6-12



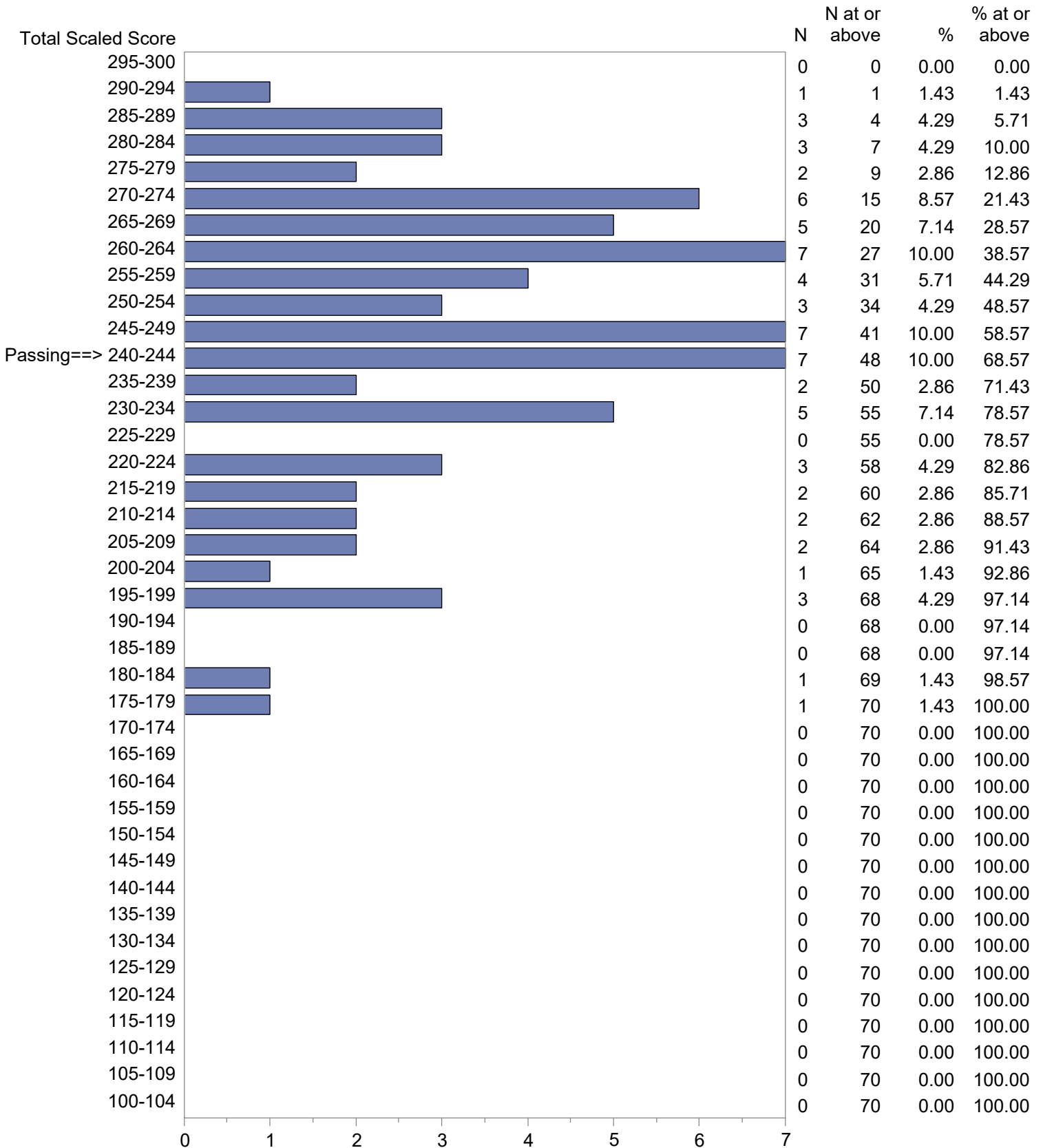
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=776 TX PACT: BUSINESS AND FINANCE: GRADES 6-12



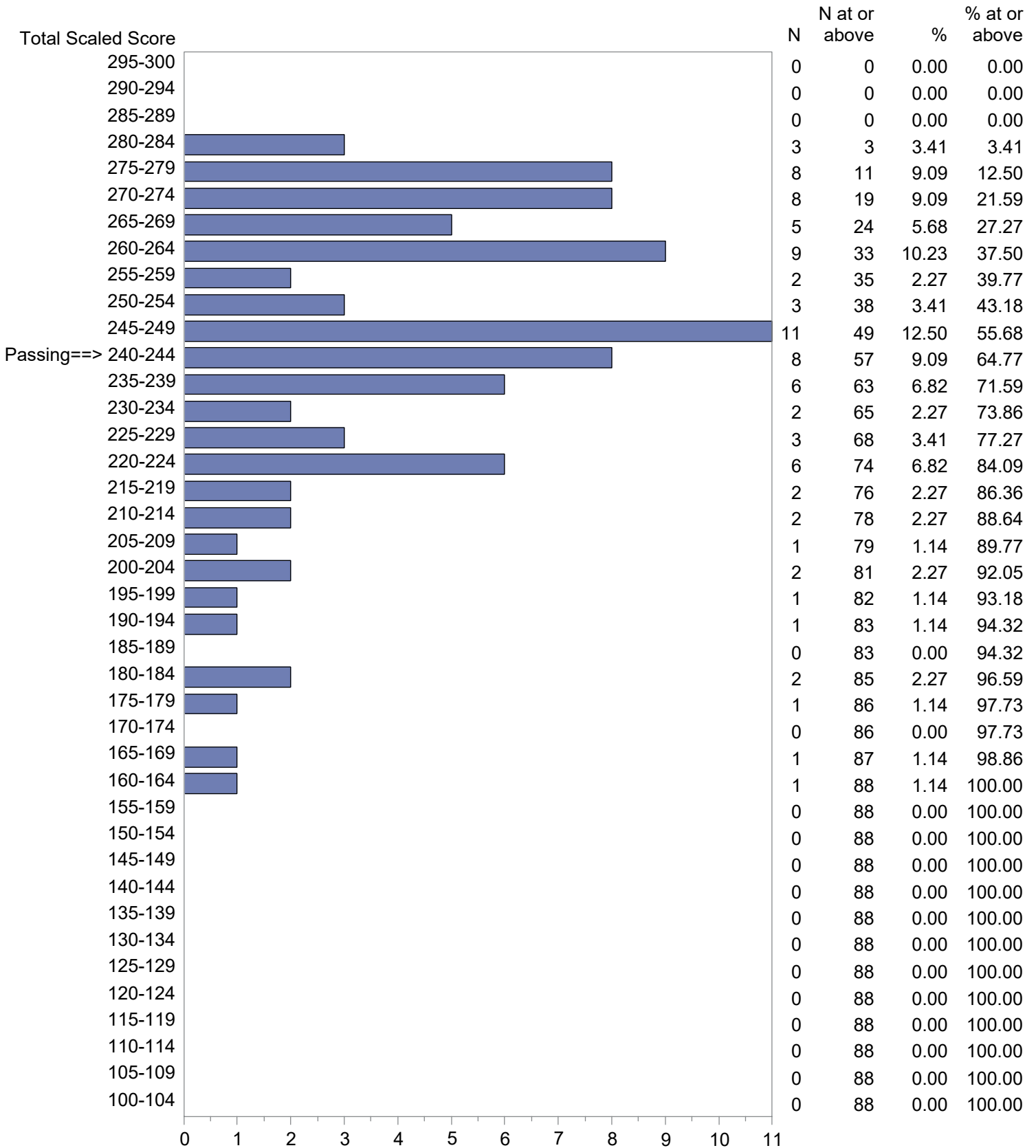
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=777 TX PACT: MUSIC: EARLY CHILDHOOD-GRADE 12



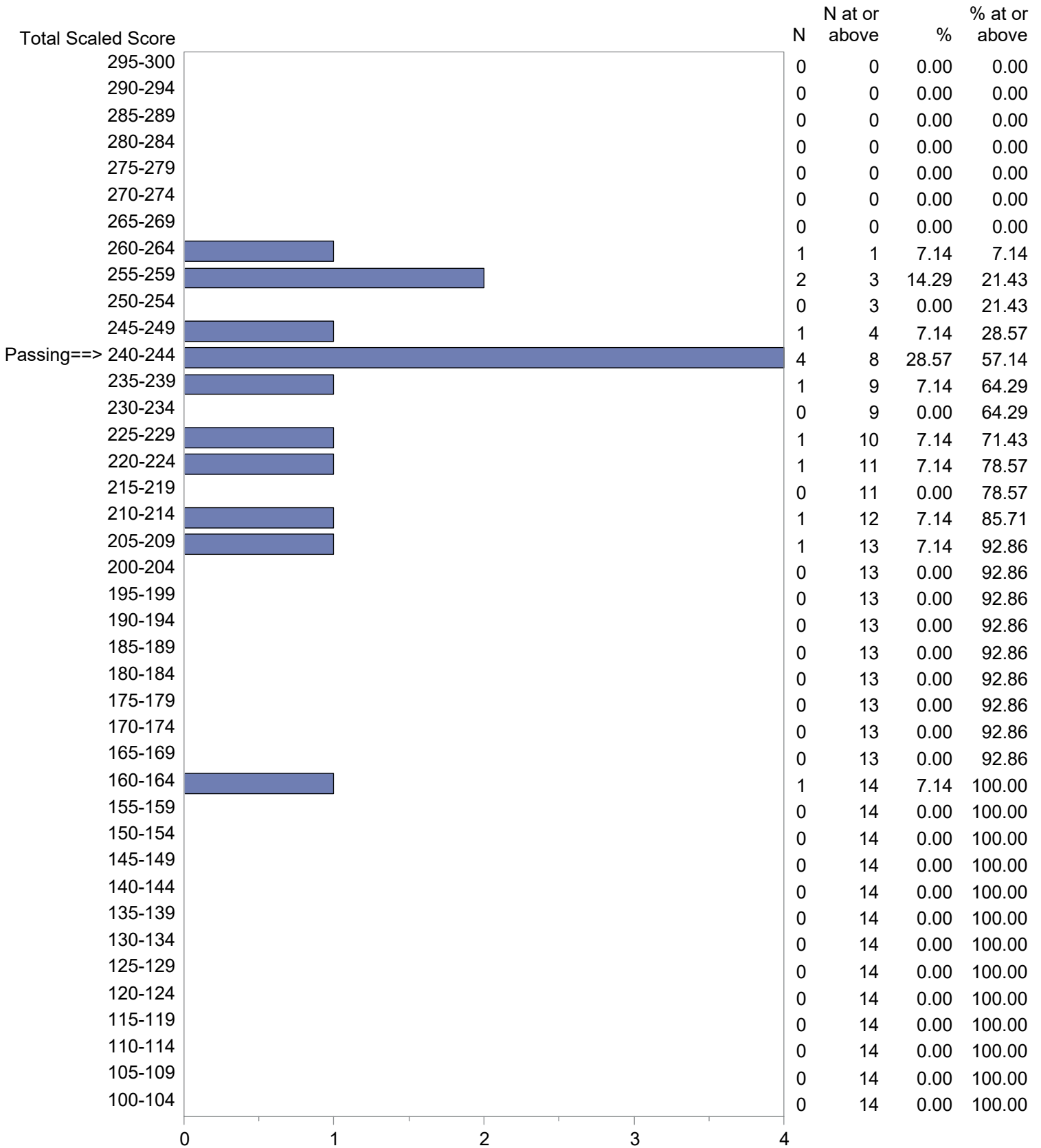
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=778 TX PACT: ART: EARLY CHILDHOOD-GRADE 12



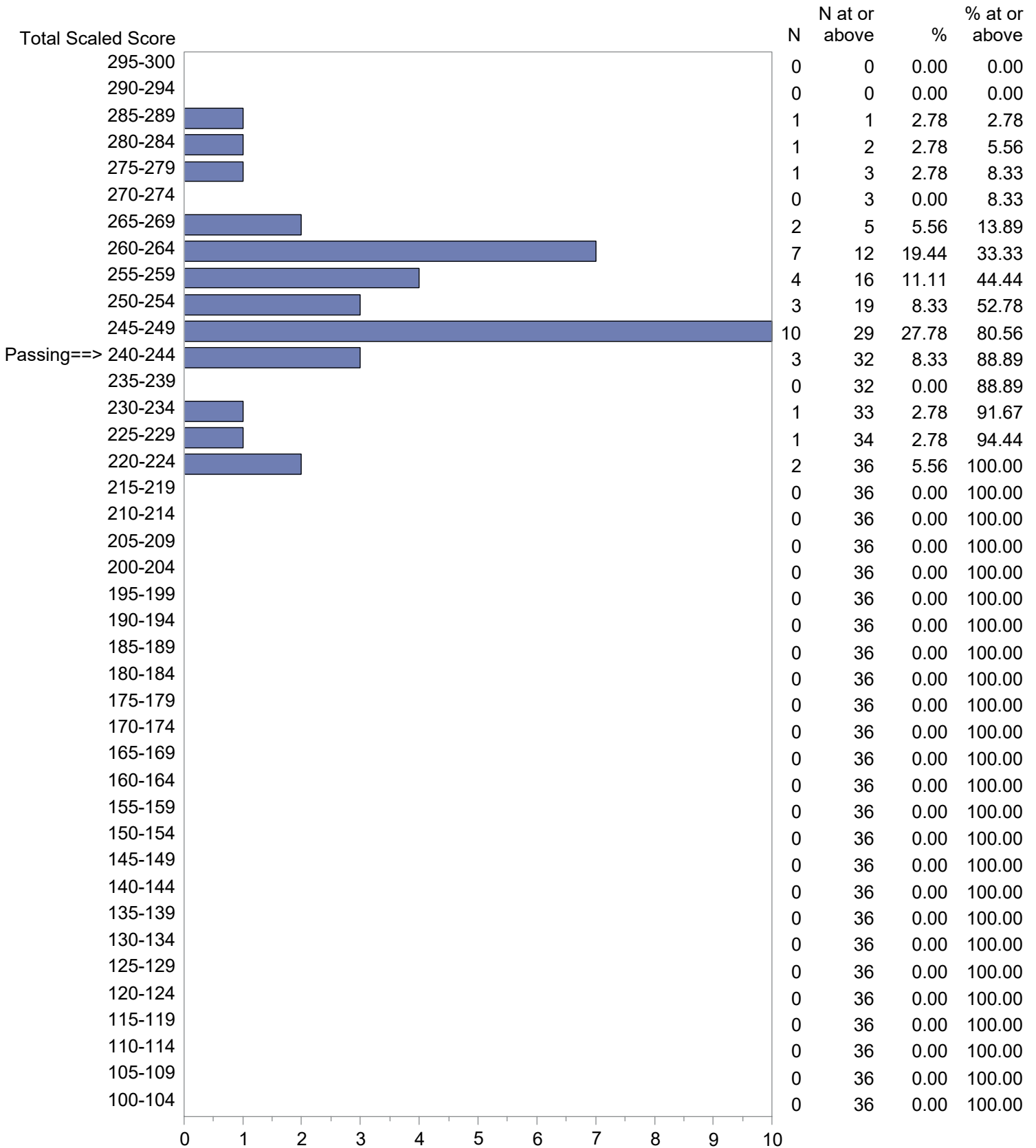
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=779 TX PACT: DANCE: GRADES 6-12



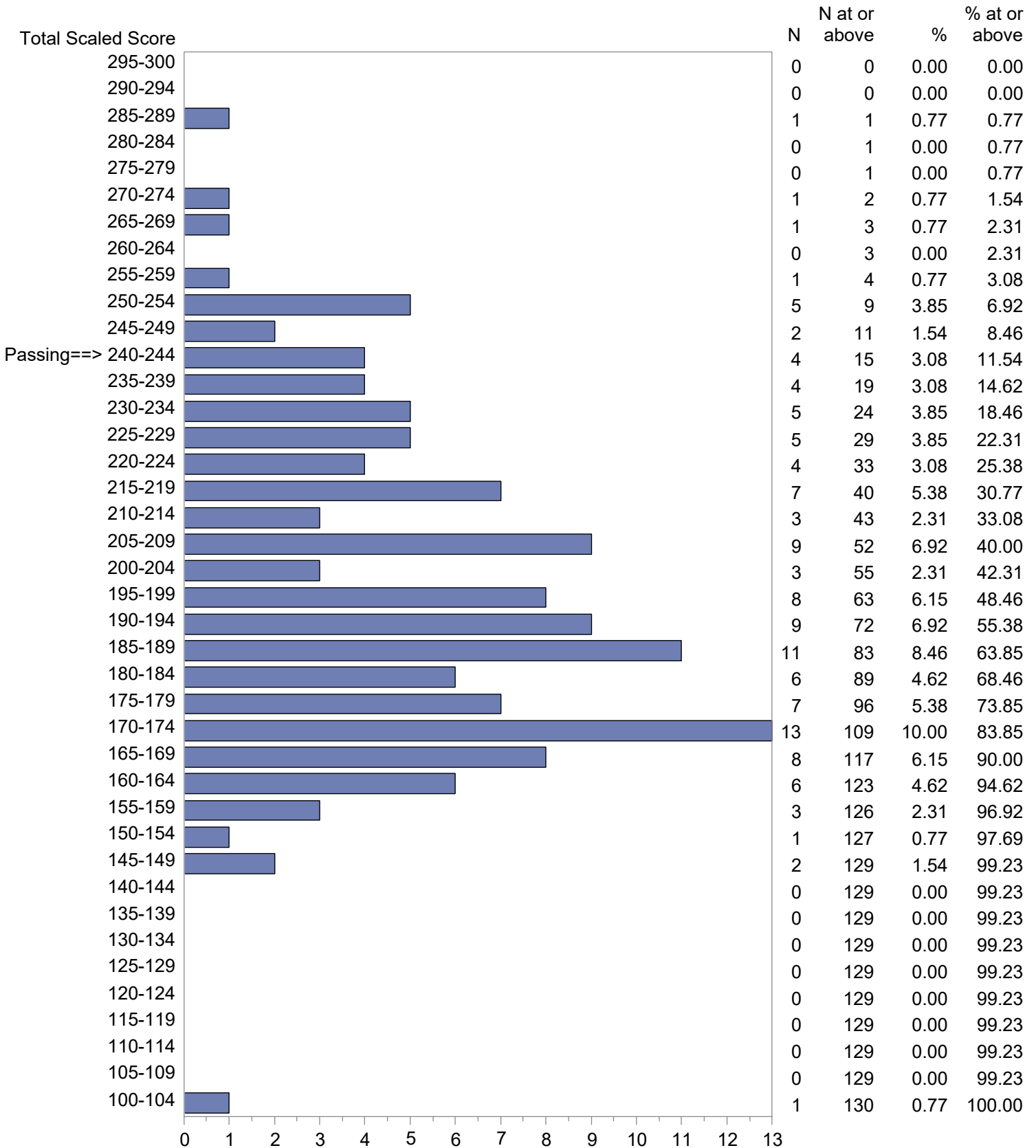
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=780 TX PACT: THEATRE: EARLY CHILDHOOD-GRADE 12



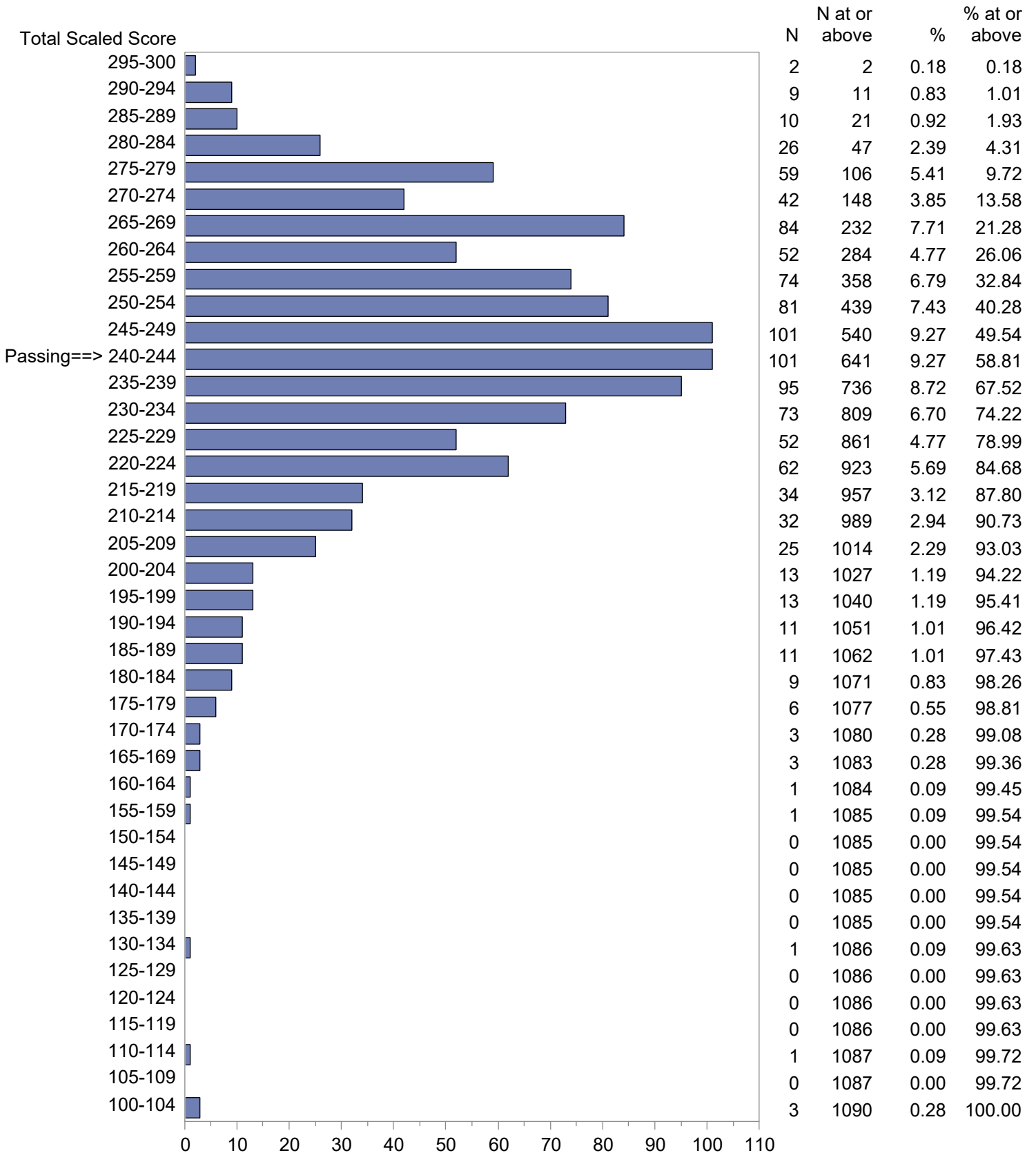
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=790 TX PACT: CORE SUBJECTS: GRADES 4-8



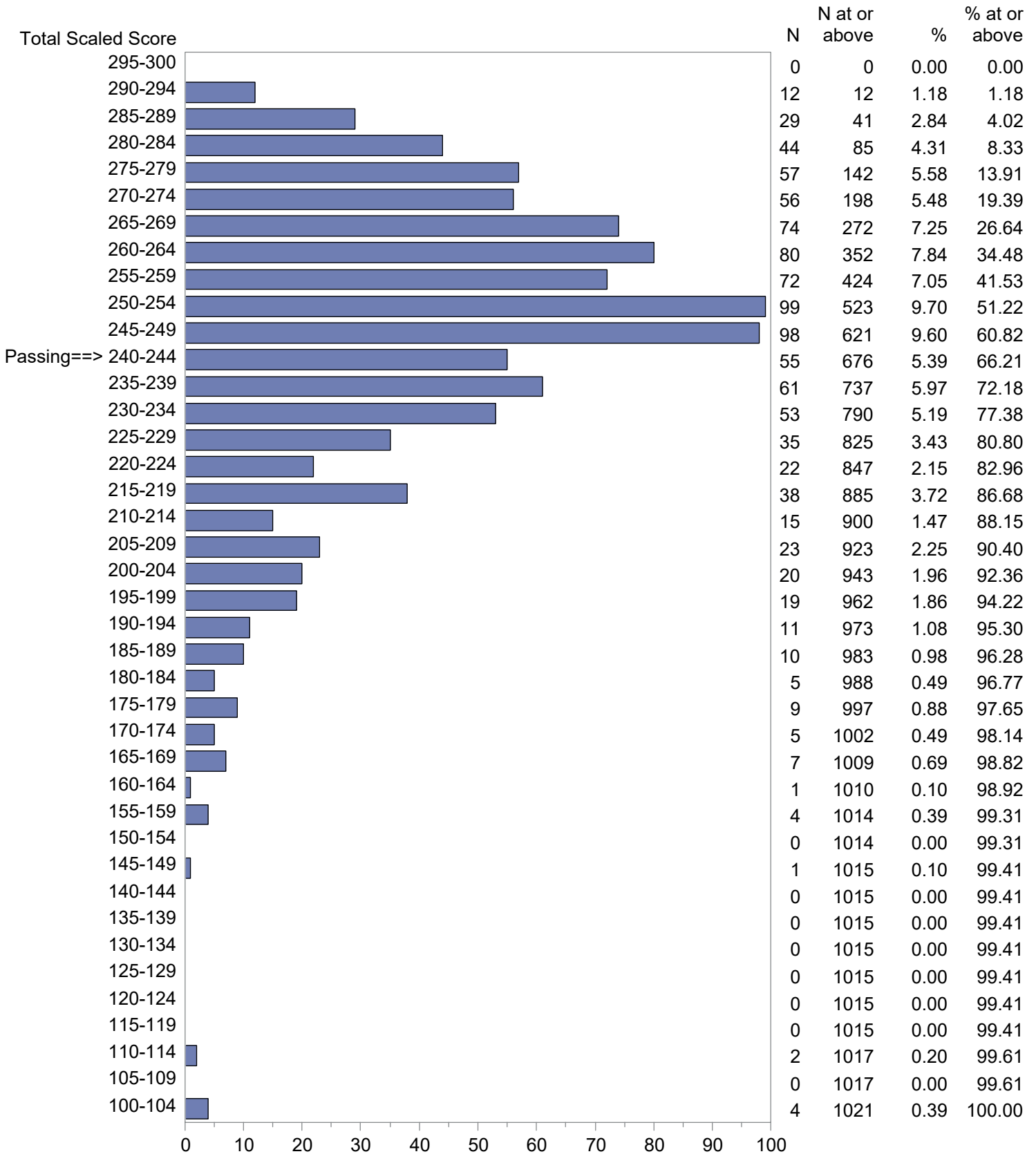
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=806 CORE SUBJECTS 4-8 ELAR



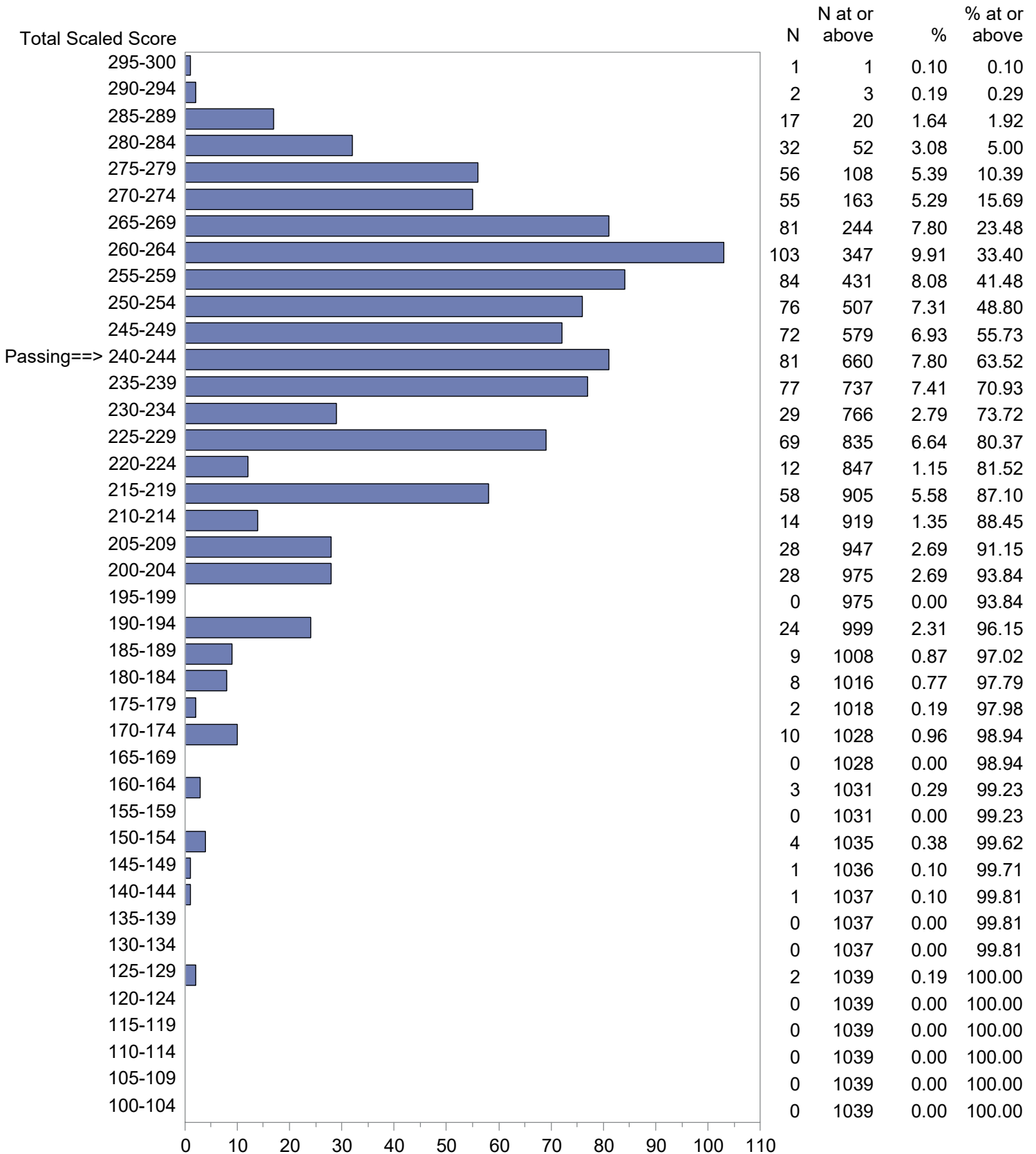
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=807 CORE SUBJECTS 4-8 MATHEMATICS



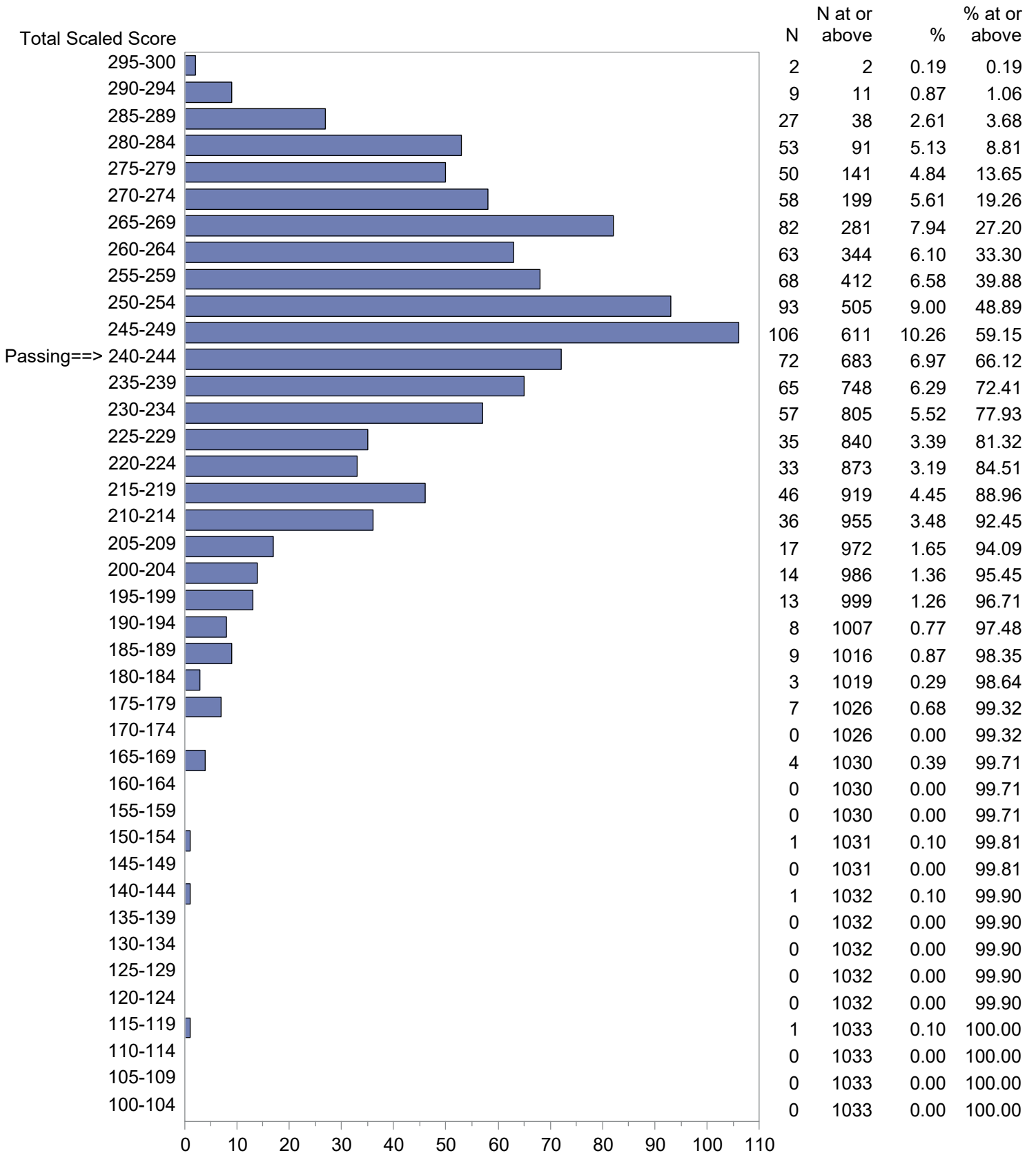
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=808 CORE SUBJECTS 4-8 SOCIAL STUDIES



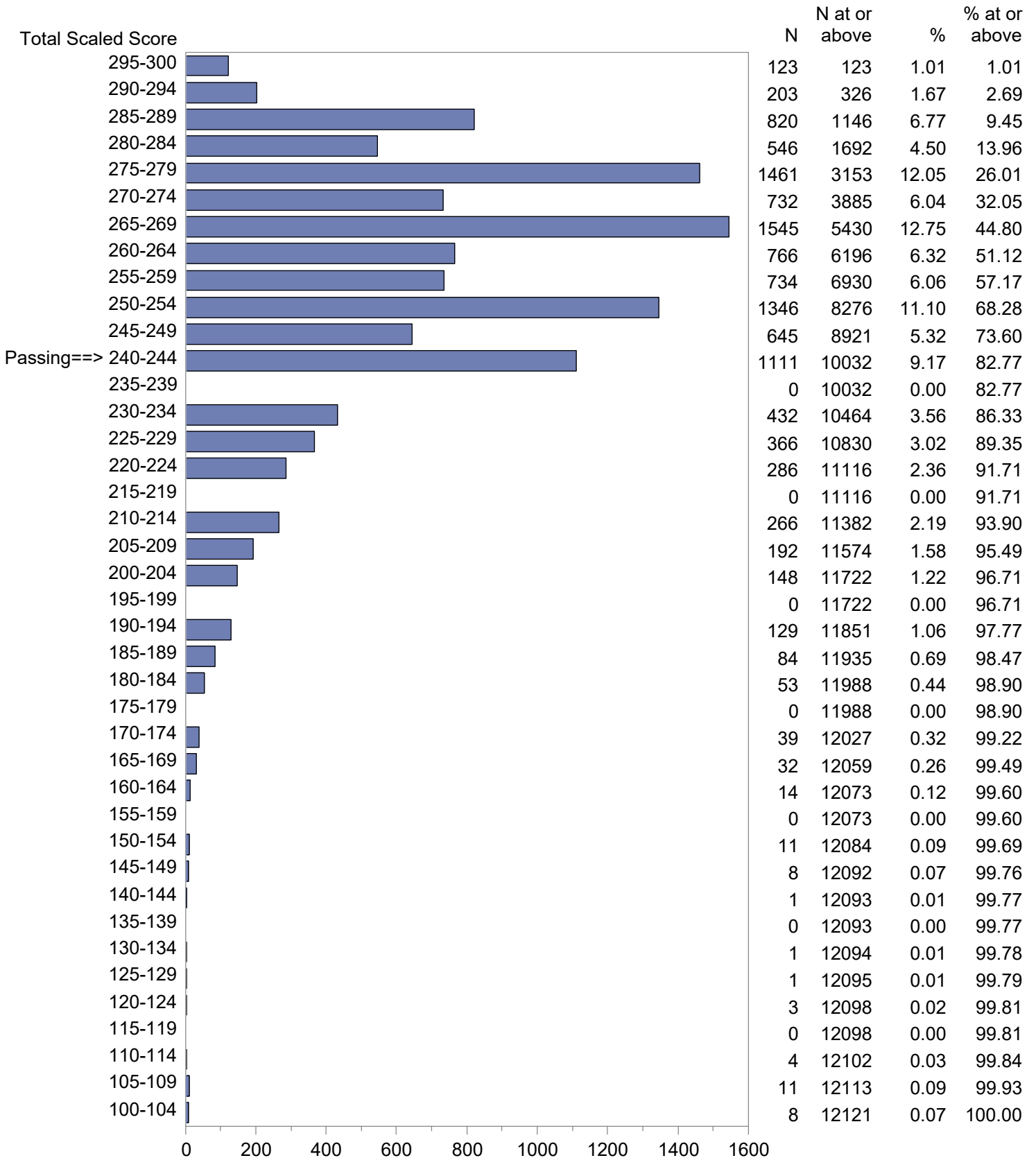
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=809 CORE SUBJECTS 4-8 SCIENCE



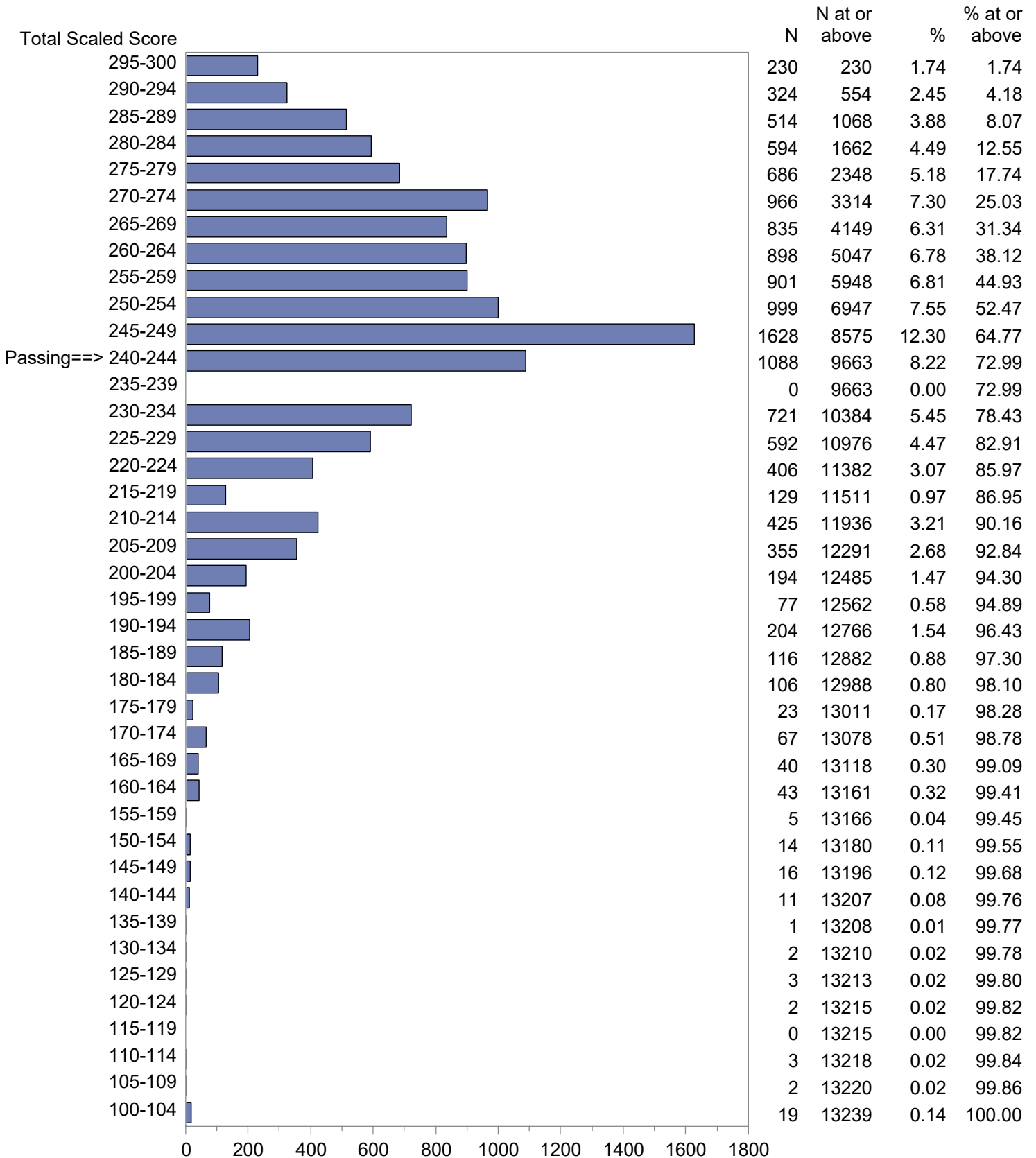
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=901 CORE SUBJECTS EC-6 ELAR



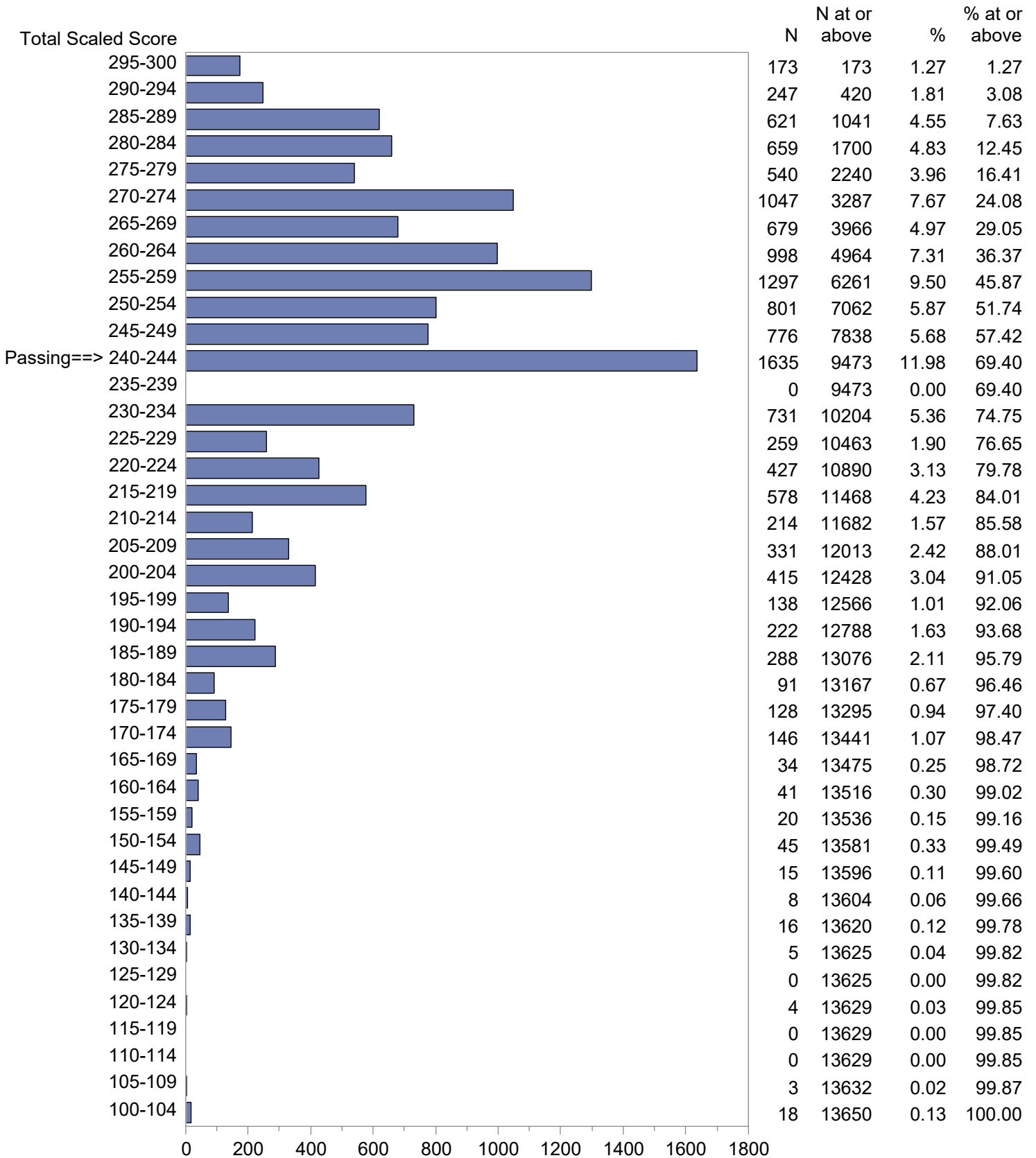
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=902 CORE SUBJECTS EC-6 MATH



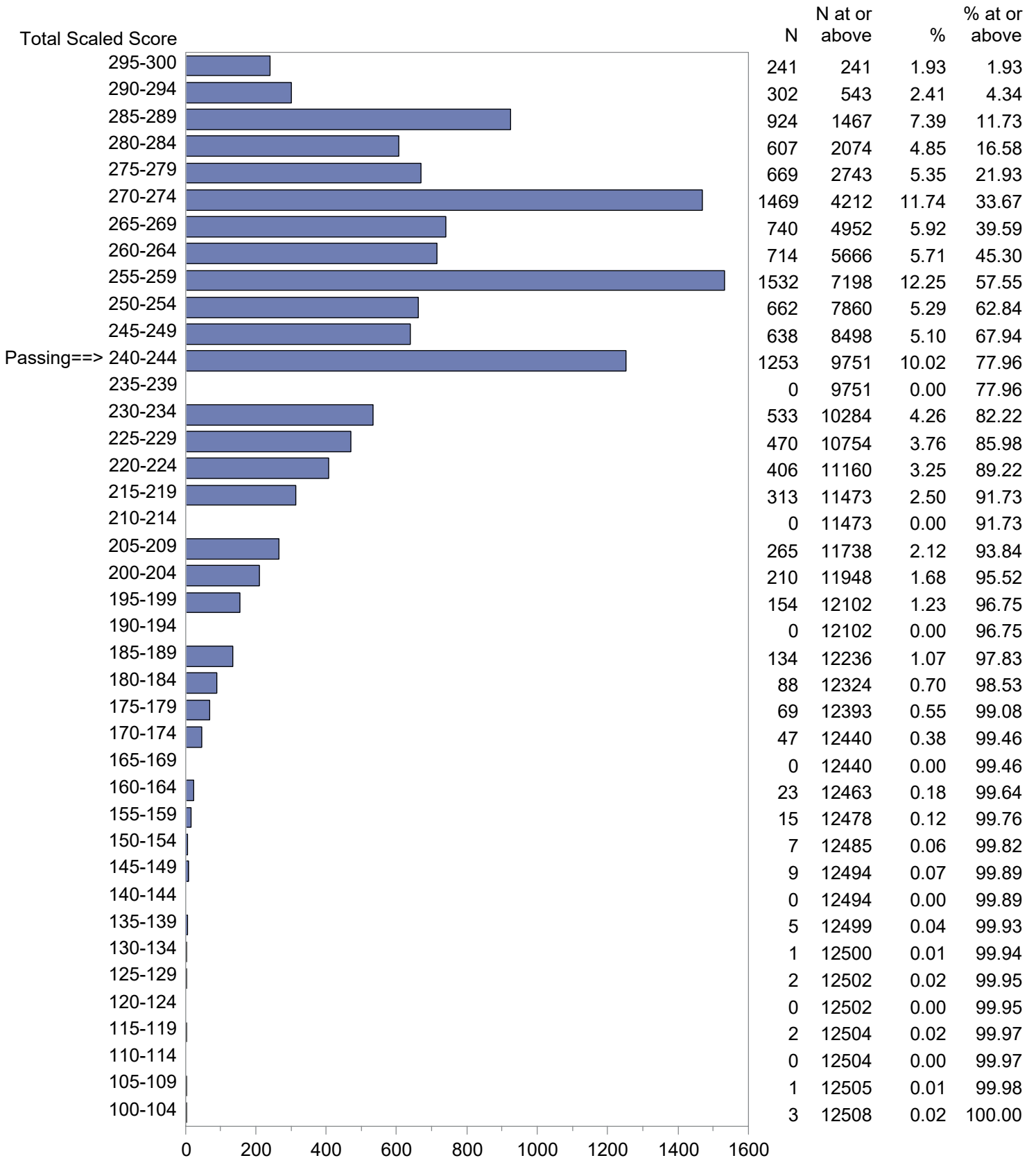
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=903 CORE SUBJECTS EC-6 SOCIAL STUDIES



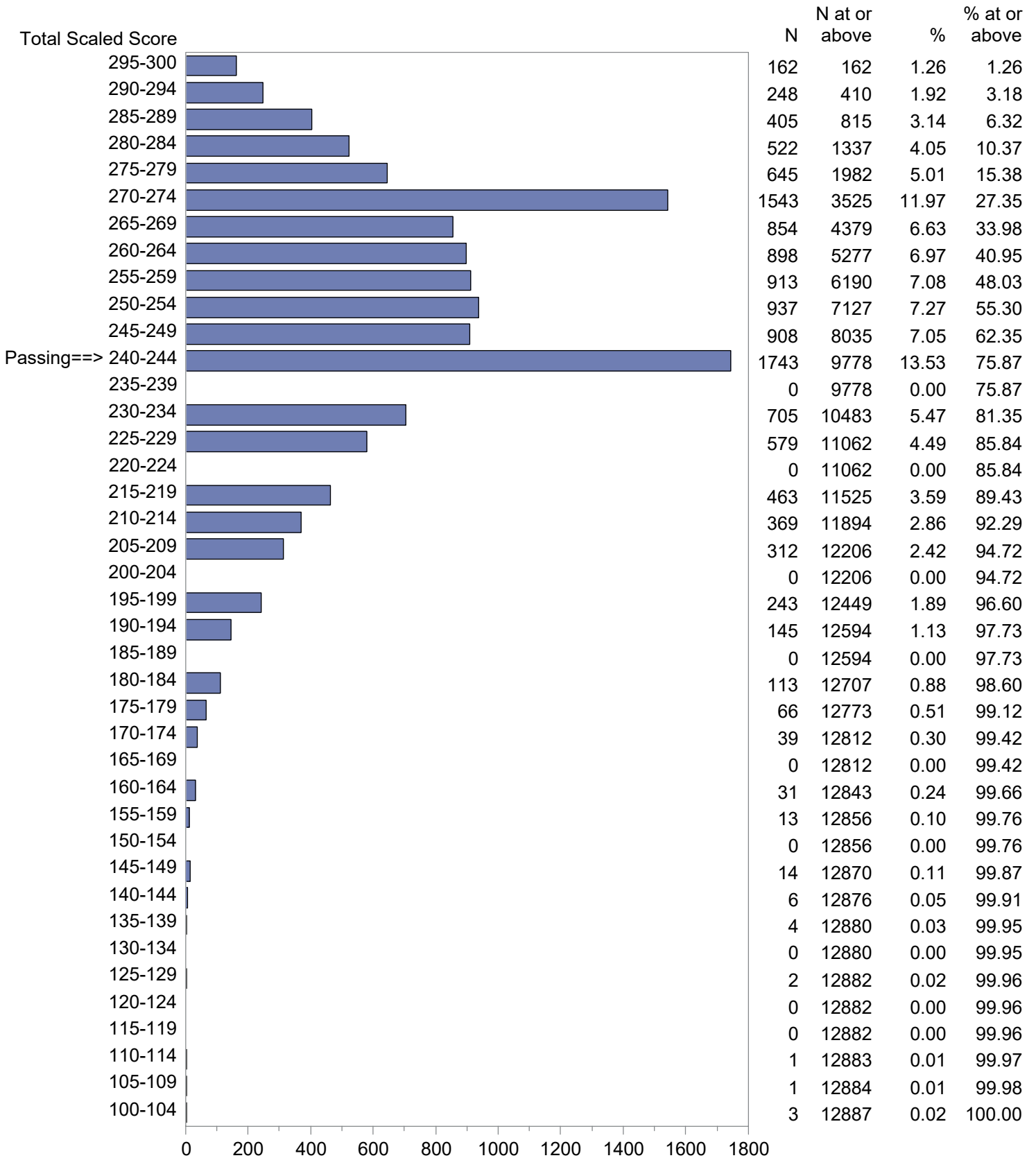
Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=904 CORE SUBJECTS EC-6 SCIENCE



Texas Educator Certification Examination Program
 September 1, 2022 - August 31, 2023
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=905 CORE SUBJECTS EC-6 FINE ARTS, HEALTH, PE



Appendix 4. Total Scaled Score Summary Statistics by Exam Field

Texas Educator Certification Examination Program (TECE)
September 1, 2022 - August 31, 2023
Technical Report Statistics by Test Field

Test Field	Number of Test Takers	Mean Reported Score	Mean Standard Deviation	Mean SEM	Mean KR20	Pass Rate
072 ^{ab} TEXAS ASSESSMENT OF SIGN COMMUNICATION	67	3.45	1.09	-	-	78%
073 ^{ab} TEXAS ASSESSMENT OF SIGN COMMUNICATION (TASC-ASL)	68	2.71	1.02	-	-	50%
113 ENGLISH LANGUAGE ARTS AND READING/SOCIAL STUDIES 4-8	326	249.30	20.45	6.37	0.90	72%
114 MATHEMATICS/SCIENCE 4-8	374	235.83	22.66	7.11	0.92	44%
115 MATHEMATICS 4-8	1582	237.18	29.69	9.17	0.90	47%
116 SCIENCE 4-8	1250	236.40	20.89	7.82	0.86	45%
118 SOCIAL STUDIES 4-8	1180	236.26	25.36	8.77	0.88	49%
129 SPEECH 7-12	212	244.90	21.27	7.35	0.89	58%
150 SCHOOL LIBRARIAN	409	246.36	15.28	8.02	0.73	67%
151 ^b READING SPECIALIST	192	272.99	11.90	-	-	99%
154 ENGLISH AS A SECOND LANGUAGE SUPPLEMENTAL (ESL)	13448	248.60	19.39	8.30	0.82	70%
157 HEALTH EC-12	512	258.27	16.28	6.96	0.81	87%
158 PHYSICAL EDUCATION EC-12	2575	250.82	21.14	9.21	0.81	73%
160 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES EC-12	21049	255.69	18.28	6.82	0.86	80%
161 SPECIAL EDUCATION EC-12	6878	247.60	18.18	6.18	0.88	67%
162 GIFTED AND TALENTED SUPPLEMENTAL	318	257.82	11.49	6.32	0.68	93%
163 SPECIAL EDUCATION SUPPLEMENTAL	1310	252.39	14.59	6.11	0.82	84%
164 BILINGUAL EDUCATION SUPPLEMENTAL	1845	249.07	16.00	7.45	0.78	72%
171 TECHNOLOGY EDUCATION 6-12	239	262.44	15.47	4.97	0.90	93%
177 MUSIC EC-12	1172	246.76	16.98	6.94	0.83	70%
178 ART EC-12	848	259.99	16.65	6.52	0.84	89%
180 THEATRE EC-12	355	250.34	17.39	7.08	0.83	73%
181 ^b DEAF AND HARD OF HEARING	118	252.03	16.03	-	-	77%
182 ^b VISUALLY IMPAIRED	52	246.50	10.19	-	-	73%
184 ^b AMERICAN SIGN LANGUAGE (ASL)	55	252.16	25.27	-	-	73%
190 BILINGUAL TARGET LANGUAGE PROFICIENCY TEST	2354	237.93	20.85	7.17	0.85	47%

Texas Educator Certification Examination Program (TECE)
September 1, 2022 - August 31, 2023
Technical Report Statistics by Test Field

Test Field	Number of Test Takers	Mean Reported Score	Mean Standard Deviation	Mean SEM	Mean KR20	Pass Rate
195 SUPERINTENDENT	544	252.49	11.09	6.90	0.61	87%
200 AAFCS FAMILY AND CONSUMER SCIENCES COMPOSITE	512	244.09	16.81	8.72	0.73	70%
201 ^b AAFCS HOSPITALITY, NUTRITION, FOOD SCIENCE	39	244.85	14.48	-	-	67%
202 ^b AAFCS HUMAN DEVELOPMENT & FAMILY STUDIES	70	258.29	14.94	-	-	91%
217 ENGLISH LANGUAGE ARTS AND READING 4-8	1043	248.57	17.12	7.25	0.75	75%
231 ENGLISH LANGUAGE ARTS AND READING 7-12	2534	243.44	24.07	9.60	0.86	65%
232 SOCIAL STUDIES 7-12	2421	232.83	25.54	7.14	0.92	43%
233 HISTORY 7-12	1010	242.39	23.48	7.79	0.89	62%
235 MATHEMATICS 7-12	1622	237.08	30.80	8.20	0.93	52%
236 SCIENCE 7-12	1054	233.50	27.60	7.22	0.93	45%
237 ^b PHYSICAL SCIENCE 6-12	56	221.63	34.33	-	-	32%
238 LIFE SCIENCE 7-12	933	239.38	26.96	9.26	0.88	52%
240 ^b CHEMISTRY 7-12	151	236.01	28.61	-	-	49%
241 ^b COMPUTER SCIENCE 8-12	161	221.37	32.77	-	-	28%
242 TECHNOLOGY APPLICATIONS EC-12	570	234.92	21.46	8.39	0.85	41%
243 ^b PHYSICS/MATHEMATICS 7-12	56	239.09	30.08	-	-	55%
252 SCHOOL COUNSELOR	754	270.00	11.83	7.84	0.69	98%
253 EDUCATIONAL DIAGNOSTICIAN	853	265.07	12.19	9.24	0.69	96%
256 ^b JOURNALISM 7-12	101	239.88	22.01	-	-	65%
268 PRINCIPAL AS INSTRUCTIONAL LEADER	3087	240.99	13.34	7.33	0.69	59%
272 AGRICULTURAL- FOOD AND NATURAL RESOURCES 6-12	404	259.33	14.90	6.18	0.83	92%
273 ^b HEALTH SCIENCE 6-12	140	252.34	19.77	-	-	69%
274 ^b MATHEMATICAL/PHYSICAL SCIENCE/ENG 6-12	50	250.02	23.69	-	-	68%
275 ^b MARKETING 6-12	39	239.85	17.20	-	-	56%
276 BUSINESS AND FINANCE 6-12	772	232.82	18.30	8.49	0.78	38%
279 DANCE 6-12	223	248.15	16.67	8.03	0.77	72%
283 ^b BRAILLE	55	243.45	29.81	-	-	58%

Texas Educator Certification Examination Program (TECE)
September 1, 2022 - August 31, 2023
Technical Report Statistics by Test Field

Test Field	Number of Test Takers	Mean Reported Score	Mean Standard Deviation	Mean SEM	Mean KR20	Pass Rate
292 EARLY CHILDHOOD: PK-3	193	248.94	15.16	7.98	0.70	76%
293 SCIENCE OF TEACHING READING	12443	248.20	17.65	7.05	0.81	73%
370 ^b PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES FOR TRADE & INDUSTRIAL EDUCATION 6-12	151	254.95	21.17	-	-	83%
610 ^b LANGUAGES OTHER THAN ENGLISH-FRENCH	62	224.13	26.38	-	-	29%
611 ^b LANGUAGES OTHER THAN ENGLISH-GERMAN	13	247.77	23.09	-	-	69%
612 ^c LANGUAGES OTHER THAN ENGLISH-LATIN	1	-	-	-	-	-
613 LANGUAGES OTHER THAN ENGLISH-SPANISH	1426	237.17	19.36	7.21	-	47%
701 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST I: READING)	946	240.47	31.00	13.69	0.80	57%
702 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST II: WRITING)	1121	227.70	28.08	12.10	0.74	37%
703 TX PACT: ESSENTIAL ACADEMIC SKILLS (SUBTEST III: MATHEMATICS)	961	234.57	38.09	13.68	0.87	55%
710 ^b TX PACT: LOTE FRENCH: EARLY CHILDHOOD-GRADE 12	13	239.54	30.58	-	-	38%
711 ^c TX PACT: LOTE GERMAN: EARLY CHILDHOOD-GRADE 12	1	-	-	-	-	-
713 TX PACT: LOTE SPANISH: EARLY CHILDHOOD-GRADE 12	213	236.81	26.86	11.65	0.87	46%
714 ^c TX PACT: LOTE CHINESE: EARLY CHILDHOOD-GRADE 12	8	-	-	-	-	-
715 TX PACT: MATHEMATICS: GRADES 4-8	258	220.29	36.76	8.70	0.94	33%
716 ^b TX PACT: SCIENCE: GRADES 4-8	149	220.69	31.99	-	-	34%
717 TX PACT: ENGLISH LANGUAGE ARTS AND READING: GRADES 4-8	205	219.68	28.63	8.55	0.90	23%
718 ^b TX PACT: SOCIAL STUDIES: GRADES 4-8	145	229.78	25.63	-	-	35%
721 ^b TX PACT: FAMILY AND CONSUMER SCIENCES	44	263.25	17.27	-	-	91%
729 ^b TX PACT: SPEECH: GRADES 7-12	16	238.25	28.28	-	-	56%
731 TX PACT: ENGLISH LANGUAGE ARTS AND READING: GRADES 7-12	345	246.78	27.22	7.61	0.92	68%
732 TX PACT: SOCIAL STUDIES: GRADES 7-12	280	222.95	33.52	8.89	0.93	35%
733 ^b TX PACT: HISTORY: GRADES 7-12	130	236.75	30.88	-	-	52%
735 TX PACT: MATHEMATICS: GRADES 7-12	212	225.56	37.13	8.90	0.94	43%
736 ^b TX PACT: SCIENCE: GRADES 7-12	101	233.32	30.46	-	-	51%

Texas Educator Certification Examination Program (TECE)
September 1, 2022 - August 31, 2023
Technical Report Statistics by Test Field

Test Field	Number of Test Takers	Mean Reported Score	Mean Standard Deviation	Mean SEM	Mean KR20	Pass Rate
737 ^c TX PACT: PHYSICAL SCIENCE: GRADES 6-12	7	-	-	-	-	-
738 ^b TX PACT: LIFE SCIENCE: GRADES 7-12	97	221.21	27.49	-	-	31%
739 ^c TX PACT: PHYSICS: GRADES 7-12	2	-	-	-	-	-
740 ^b TX PACT: CHEMISTRY: GRADES 7-12	13	243.54	30.75	-	-	69%
741 ^c TX PACT: COMPUTER SCIENCE: GRADES 8-12	7	-	-	-	-	-
742 ^b TX PACT: TECHNOLOGY APPLICATIONS: EARLY CHILDHOOD- GRADE 12	55	222.96	32.52	-	-	40%
756 ^c TX PACT: JOURNALISM: GRADES 7-12	6	-	-	-	-	-
757 ^b TX PACT: HEALTH: EARLY CHILDHOOD-GRADE 12	78	228.83	24.33	-	-	35%
758 TX PACT: PHYSICAL EDUCATION: EARLY CHILDHOOD-GRADE 12	388	234.28	21.52	9.66	0.80	45%
771 ^b TX PACT: TECHNOLOGY EDUCATION: GRADES 6-12	26	237.50	17.17	-	-	58%
77 ^b TX PACT: AGRICULTURE, FOOD, AND NATURAL RESOURCES: GRADES 6-12	45	243.64	15.67	-	-	71%
776 TX PACT: BUSINESS AND FINANCE: GRADES 6-12	149	237.68	28.74	8.14	0.92	53%
777 ^b TX PACT: MUSIC: EARLY CHILDHOOD-GRADE 12	70	247.13	26.55	-	-	69%
778 ^b TX PACT: ART: EARLY CHILDHOOD-GRADE 12	88	244.19	28.10	-	-	65%
779 ^b TX PACT: DANCE: GRADES 6-12	14	233.21	26.40	-	-	57%
780 ^b TX PACT: THEATRE: EARLY CHILDHOOD-GRADE 12	36	252.97	14.73	-	-	89%
784 ^c TX PACT: AMERICAN SIGN LANGUAGE (ASL): EARLY CHILDHOOD-GRADE 12 (SUBTEST I)	4	-	-	-	-	-
785 ^c TX PACT: AMERICAN SIGN LANGUAGE (ASL): EARLY CHILDHOOD-GRADE 12 (SUBTEST II)	5	-	-	-	-	-
790 ^b TX PACT: CORE SUBJECTS: GRADES 4-8	130	198.54	30.96	-	-	12%
806 CORE SUBJECTS 4-8 ELAR	1090	242.61	25.72	10.13	0.84	59%
807 CORE SUBJECTS 4-8 MATHEMATICS	1021	245.55	29.12	11.33	0.85	66%
808 CORE SUBJECTS 4-8 SOCIAL STUDIES	1039	244.36	26.80	12.99	0.76	64%
809 CORE SUBJECTS 4-8 SCIENCE	1033	246.76	25.44	11.80	0.78	66%
901 CORE SUBJECTS EC-6 ELAR	12121	255.87	25.69	11.17	0.81	83%

Texas Educator Certification Examination Program (TECE)
September 1, 2022 - August 31, 2023
Technical Report Statistics by Test Field

Test Field	Number of Test Takers	Mean Reported Score	Mean Standard Deviation	Mean SEM	Mean KR20	Pass Rate
902 CORE SUBJECTS EC-6 MATH	13239	249.07	28.51	12.78	0.79	73%
903 CORE SUBJECTS EC-6 SOCIAL STUDIES	13650	245.73	31.01	13.12	0.82	69%
904 CORE SUBJECTS EC-6 SCIENCE	12508	253.84	27.21	11.66	0.82	78%
905 CORE SUBJECTS EC-6 FINE ARTS, HEALTH, PE	12887	250.64	26.18	12.71	0.76	76%

Notes:

- a For exam codes 072 and 073, the summary statistics were calculated by converting alphabetic scores reported to candidates to numeric scores (A = 5, B = 4, C = 3, D = 2, E = 1).
- b These exam forms were taken by too few test-takers to estimate reliability and the standard error of measurement.
- c These exam forms were taken by too few test-takers to report means.

Appendix 5. Sample Candidate Score Report



Examinee Score Report

Test: 231 ENG LANGUAGE ARTS AND READING 7-12
Total Scaled Score: 256
Status*: Passed
Scaled Score Range: 100-300
Passing Score: 240

Test Date: MM/DD/YYYY
FIRSTNAME M LASTNAME
123 EXAMPLE LANE
EXAMPLE, TX, 12345

TEA ID: 1234567

Performance by Domain	Points Possible	Points Earned
I. Integrated Language Arts	12	9
Competency 001	3	2
Competency 002	4	3
Competency 003	5	4
II. Literature and Reading Processes	32	21
Competency 004	8	5
Competency 005	7	4
Competency 006	11	9
Competency 007	6	3
III. Written Communication	24	14
Competency 008	10	4
Competency 009	14	10
IV. Oral Communication and Media Literacy	12	9
Competency 010	4	3
Competency 011	8	6
Constructed Responses	20	12
Literary Analysis	8	8

Responses to the Literary Analysis constructed-response question that receive a score of 8, as yours did, typically demonstrate a thorough understanding of the content knowledge addressed in the assignment.

Writing Assessment and Pedagogy

12

4

A score of 4 on the Writing Assessment and Pedagogy constructed–response question indicates that your responses to the three tasks demonstrate a seriously limited overall understanding of the content knowledge addressed in the assignment. Because this combined score is determined by adding the scores for each of the question’s three tasks together, it does not indicate your level of proficiency on any individual task response. A combined score of 4 does indicate that at least two of your three responses are weak or deficient in addressing the components of the assigned task and /or meeting the **Performance Characteristics** on which the scoring rubrics are based.

A score of 4 may indicate WEAKNESSES in ONE OR MORE of your task responses. Typical weaknesses for each Performance Characteristic are described below.

Purpose: Typical weaknesses include vague, limited, or somewhat inaccurate

- identification/description of
 - o a significant strength of the student’s response (Task 1),
 - o a significant weakness of the student’s response (Task 2), or
 - o a specific, appropriate instructional activity to address the weakness you identified in Task 2 (Task 3);
- explanation of
 - o how the strength contributes to the response’s overall effectiveness (Task 1),
 - o how the weakness interferes with the response’s overall effectiveness (Task 2), or
 - o how the instructional activity addresses the weakness you identified in Task 2 and/or why you think the activity would be effective (Task 3).

Demonstration of Knowledge : Typical weaknesses include vague, limited, or partially inaccurate

- assessment and identification of the strengths and/or weaknesses of student writing,
- explanation of how particular features contribute to the overall effectiveness of student writing,
- application of appropriate instructional and pedagogical activities to address weaknesses in student writing, and
- explanation of how specific instructional activities support student learning.

Support : Typical weaknesses include limited, somewhat ineffective, and/or somewhat inaccurate

- supporting details or examples and
- citations of examples from the student response.

Rationale : Typical weaknesses include

- limited reasoning and
- only a partial understanding of the assigned task.

Written Expression: Typical weaknesses include distracting errors in the conventions of standard English for paragraphing, sentence structure, usage, and mechanical conventions that result in a lack of clarity and/or impede effectiveness.

A score of 4 also indicates DEFICIENCIES in ONE OR MORE of your task responses. Typical deficiencies for each Performance Characteristic are described below.

Purpose: Typical deficiencies include missing, incorrect, or largely incomprehensible

- identification/description of
 - o a significant strength of the student’s response (Task 1),
 - o a significant weakness of the student’s response (Task 2), or
 - o a specific, appropriate instructional activity to address the weakness you identified in Task 2 (Task 3);
- explanation of
 - o how the strength contributes to the response’s overall effectiveness (Task 1),
 - o how the weakness interferes with the response’s overall effectiveness (Task 2), or
 - o how the instructional activity addresses the weakness you identified in Task 2 and/or why you think the activity would be effective (Task 3).

Demonstration of Knowledge : Typical deficiencies include missing, insufficient, or inaccurate

- assessment and identification of the strengths and/or weaknesses of student writing,
- explanation of how particular features contribute to the overall effectiveness of student writing,
- explanation of how to apply appropriate instructional and pedagogical activities to address weaknesses in student writing, and
- explanation of how specific instructional activities support student learning.

Support : Typical deficiencies include

- little or no relevant support and
- no citation of relevant examples from the student response.

Rationale : Typical deficiencies reflect

- weak reasoning and
- little or no understanding of the assigned task.

Written Expression: Typical deficiencies include severe errors in the conventions of standard English for paragraphing, sentence structure, usage, and mechanical conventions that interfere with meaning.

You are strongly encouraged to thoroughly review the pertinent sections of the Test Preparation Manual to better understand all aspects of this test's Writing Assessment and Pedagogy constructed–response question.

You are limited to five attempts to take a certification exam under Texas Education Code §21.048 (<https://statutes.capitol.texas.gov/Docs/ED/htm/ED.21.htm#21.048>). The five attempts include any of the exam approval methods (PACT, EPP, out of state, charter, and CBE). If you choose to register again for the same exam after completion of the fifth testing attempt or an approved waiver attempt, your scores will not be counted towards certification and you will assume responsibility for exam fees paid.

For information about the scoring of the exam, select Scores in the top navigation of the Texas Educator Certification Examination Program website, <http://www.tx.nesinc.com>, and review the additional information provided about how to read your score report.

Print a copy of this score report for your records.

Note: Please allow 7 to 10 business days after the score reporting date for your exam scores to be posted in your Educator Certification Online System (ECOS) account accessed through TEA Login (TEAL) (<https://tealprod.tea.state.tx.us/TSP/TEASecurePortal/Access/LogonServlet>) before submitting your online application for certification. Application for certification does not proceed automatically based upon receipt of your scores by TEA. To apply for certification, you must access your ECOS account, click on "Applications," and complete the appropriate application.

* Passed/Not Passed status is based on the total scaled score for each exam. Refer to the Scores section and the Preparation Manual on the testing program website, at <http://www.tx.nesinc.com>, to learn more about the performance information included on your score report.

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