



Texas

Educator Certification
Examination Program

TEXAS EDUCATOR CERTIFICATION EXAMINATION PROGRAM

Annual Technical Administration Manual 2018–2019

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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 2018-2019 academic year. The academic year is defined as September 1, 2018 to August 31, 2019.

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 2018-2019 academic year, i.e., September 1, 2018 to August 31, 2019, the Texas Educator Certification Examination Program, administered by Pearson, included four 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), and the Texas Examinations for Master Teachers (TExMaT). In accordance with the outcomes of House Bill 3 (HB3), effective September 1, 2019, the State Board for Educator Certification (SBEC) will no longer issue new or renew Master Teacher certificates. Correspondingly, the TExMaT exams were phased out in August 2019.

Exams in the Texas Educator Certification Examination Program were previously validated for use in Texas (as described in the [2017-2018 Technical Manual](#) produced by the previous vendor) 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\(e\)](#). The exams are aligned to standards for beginning educators. These standards are created and approved by the [State Board for Educator Certification](#) (SBEC)¹. 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](#). Approved educator standards are available on the [TEA website](#).

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. Texas Educator Certification Examination Program Composition

TEExES™	272 Agriculture, Food and Natural Resources 6–12
068 Principal	273 Health Science 6–12
113 English Language Arts and Reading/Social Studies 4–8	274 Mathematics/Physical Science/Engineering 6–12
114 Mathematics/Science 4–8	275 Marketing 6–12
115 Mathematics 4–8	276 Business and Finance 6–12
116 Science 4–8	279 Dance 6–12
117 English Language Arts and Reading 4–8	283 Braille (UEB)
118 Social Studies 4–8	610 Languages Other Than English (LOTE) French
129 Speech 7–12	611 Languages Other Than English (LOTE) German
150 School Librarian	612 Languages Other Than English (LOTE) Latin
151 Reading Specialist	613 Languages Other Than English (LOTE) Spanish
152 School Counselor	801 Core Subjects EC–6 English Language Arts and Reading
153 Educational Diagnostician	802 Core Subjects EC–6 Mathematics
154 English as a Second Language Supplemental	803 Core Subjects EC–6 Social Studies
157 Health EC–12	804 Core Subjects EC–6 Science
158 Physical Education EC–12	805 Core Subjects EC–6 Fine Arts, Health and Physical Education
160 Pedagogy and Professional Responsibilities EC–12	806 Core Subjects 4–8 English Language Arts & Reading
161 Special Education EC–12	807 Core Subjects 4–8 Mathematics
162 Gifted and Talented Supplemental	808 Core Subjects 4–8 Social Studies
163 Special Education Supplemental	809 Core Subjects 4–8 Science
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	
183 Braille (Contracted Braille)	
184 American Sign Language (ASL)	
190 Bilingual Target Language Proficiency Test (BTLPT) Spanish	
195 Superintendent	
231 English Language Arts and Reading 7–12	
232 Social Studies 7–12	
233 History 7–12	
235 Mathematics 7–12	
236 Science 7–12	
237 Physical Science 6–12	
238 Life Science 7–12	
240 Chemistry 7–12	
241 Computer Science 8–12	
242 Technology Applications EC–12	
243 Physics/Mathematics 7–12	
256 Journalism 7–12	
268 Principal as Instructional Leader (PAIL)	
270 Pedagogy and Professional Responsibilities for Trade and Industrial Education 6–12	
	TExMaT™
	085 Master Reading Teacher
	086 Master Technology Teacher EC–12
	087 Master Mathematics Teacher EC–4
	088 Master Mathematics Teacher 4–8
	089 Master Mathematics Teacher 8–12
	090 Master Science Teacher EC–4
	091 Master Science Teacher 4–8
	092 Master Science Teacher 8–12

Composition of the Texas Educator Certification Examination Program

As of August 31, 2019, Texas Educator Certification Examination Program comprises 74 exams. The TExMaT Master Teacher exams were phased out in August 2019. The available exams for the 2018-2019 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. These development activities for the existing Texas Educator Certification Examination Program exams are described in the [2017-2018 Technical Manual](#) produced by the previous vendor. Additional details of the exam development activities performed by Pearson can be found in the *Texas Educator Certification Examination Program Annual Technical Development Manual, 2018–2019*. The Texas Educator Certification Examination Program Technical Manuals are available under Educator Preparation Programs (EPPs) on the program [website](#).

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](#).

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

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%
085 Master Reading Teacher	82%	18%
086 Master Technology Teacher EC-12	67%	33%
087 Master Mathematics Teacher EC-4	65%	35%
088 Master Mathematics Teacher 4-8	67%	33%
089 Master Mathematics Teacher 8-12	75%	25%
090 Master Science Teacher EC-4	63%	37%
091 Master Science Teacher 4-8	60%	40%
092 Master Science Teacher 8-12	70%	30%
183 Braille	56%	44%
190 Bilingual Target Language Proficiency Test	47%	53%
231 English Language Arts and Reading 7-12	64%	36%
268 Principal as Instructional Leader (PAIL)	60%	40%
283 Braille (UEB)	50%	50%
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%

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 exams 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 2018–2019 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 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.

The following exams were excluded from the Exam Form Statistics report due to no administrations occurring during the academic year: 088 Master Mathematics Teacher 4-8, 090 Master Science Teacher EC-4, and 091 Master Science Teacher 4-8.

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, 085 Master Reading Teacher, 086 Master Technology Teacher EC-12, 087 Master Mathematics Teacher EC-4, 089 Master Mathematics Teacher 8-12, 092 Master Science Teacher 8-12, 183 Braille, 283 Braille, 610 LOTE-French, 611 LOTE-German, and 612 LOTE-Latin.

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 2018–2019 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 086 Master Technology Teacher EC-12, 087 Master Mathematics Teacher EC-4, 089 Master Mathematics Teacher 8-12, 092 Master Science Teacher 8-12, and 183 Braille.

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 exams during the 2018–2019 academic 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 2018-2019 academic year.
- **Mean Reported Score.** The average reported scale score of test-takers who tested during the 2018-2019 academic year.
- **Mean Standard Deviation.** The average standard deviation of the reported scale score of test-takers who tested during the 2018-2019 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 2018-2019 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 2018-2019 academic year.
- **Pass Rate.** The average passing rate of test-takers who tested during the 2018-2019 academic year.

Caution should be used when interpreting data with a low number of candidates. When too few test-takers were administered an exam (i.e., less than 10 candidates), mean scores and standard deviations are not reported. Additionally, estimates of reliability and SEM cannot be calculated. Such cases are noted in the endnotes of the appendix. The following exam fields are not represented within the table as there were no administrations of these exams during the 2018-2019 testing year: 088 Master Mathematics Teacher 4-8, 090 Master Science Teacher EC-4, and 091 Master Science Teacher 4-8.

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
September 1, 2018 - August 31, 2019
Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Constructed-Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient	
Exam Field	Form								I Fixed	I Random
068 PRINCIPAL	A	3,748	239	14.9	8.1	100	0.70	--	--	--
	B	3,638	239	12.9	7.0	100	0.71	--	--	--
	C	191	246	13.5	6.8	100	0.74	--	--	--
	D	180	245	14.1	8.0	100	0.68	--	--	--
072 TEXAS ASSESSMENT OF SIGN COMMUNICATION (TASC)	A	35	3	0.9	--	--	--	1	--	--
073 TEXAS ASSESSMENT OF SIGN COMMUNICATION (TASC-ASL)	A	81	3	0.9	--	--	--	1	--	--
085 MASTER READING TEACHER	A	41	259	16.5	--	80	--	1	--	--
086 MASTER TECHNOLOGY TEACHER EC-12	A	4	--	--	--	80	--	3	--	--
	B	2	--	--	--	80	--	3	--	--
087 MASTER MATHEMATICS TEACHER EC-4	A	4	--	--	--	80	--	1	--	--
089 MASTER MATHEMATICS TEACHER 8-12	A	2	--	--	--	80	--	1	--	--
092 MASTER SCIENCE TEACHER 8-12	A	1	--	--	--	80	--	1	--	--
113 ENGLISH LANGUAGE ARTS AND READING/SOCIAL STUDIES 4-8	A	279	248	20.7	7.4	100	0.87	--	--	--
	B	268	250	20.7	6.6	100	0.90	--	--	--
114 MATHEMATICS/SCIENCE 4-8	A	215	241	23.7	6.8	100	0.92	--	--	--
	B	207	237	27.2	7.5	100	0.92	--	--	--
	C	26	231	24.6	--	100	--	--	--	--
	D	19	230	22.0	--	100	--	--	--	--

Texas Educator Certification Examination Program
September 1, 2018 - August 31, 2019
Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section G Coefficient	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
115 MATHEMATICS 4-8	A	595	241	30.3	9.1	80	0.91	--	--	--
	B	592	241	31.0	8.9	80	0.92	--	--	--
	C	284	237	30.3	9.6	80	0.90	--	--	--
	D	254	239	28.6	9.3	80	0.89	--	--	--
	E	188	236	27.8	9.5	80	0.88	--	--	--
	F	185	238	31.2	9.3	80	0.91	--	--	--
	G	133	236	25.9	9.3	80	0.87	--	--	--
	H	111	237	25.3	9.2	80	0.87	--	--	--
116 SCIENCE 4-8	A	590	235	23.8	8.8	80	0.86	--	--	--
	B	575	233	21.9	7.9	80	0.87	--	--	--
	C	258	237	22.3	9.0	80	0.84	--	--	--
	D	234	233	22.7	8.2	80	0.87	--	--	--
117 ENGLISH LANGUAGE ARTS AND READING 4-8	A	795	252	22.5	7.7	80	0.88	--	--	--
	B	783	251	23.3	8.7	80	0.86	--	--	--
	C	316	248	24.2	7.6	80	0.90	--	--	--
	D	292	249	23.8	8.0	80	0.89	--	--	--
118 SOCIAL STUDIES 4-8	A	592	238	24.3	8.5	80	0.88	--	--	--
	B	588	236	26.0	9.1	80	0.88	--	--	--
	C	98	235	25.7	--	80	--	--	--	--
	D	92	239	24.7	--	80	--	--	--	--

Texas Educator Certification Examination Program
September 1, 2018 - August 31, 2019
Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Constructed-Response Section		
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient	
									I Fixed	I Random
129 SPEECH 7-12	A	199	247	22.0	7.6	80	0.88	--	--	--
	B	183	249	21.4	7.4	80	0.88	--	--	--
	C	36	242	24.5	--	80	--	--	--	--
	D	24	256	19.2	--	80	--	--	--	--
150 SCHOOL LIBRARIAN	A	264	248	16.7	8.8	80	0.72	--	--	--
	B	237	249	16.9	7.8	80	0.78	--	--	--
151 READING SPECIALIST	A	117	275	11.0	5.0	80	0.80	--	--	--
	B	96	275	11.0	--	80	--	--	--	--
	C	21	274	13.0	--	80	--	--	--	--
	D	21	269	13.0	--	80	--	--	--	--
152 SCHOOL COUNSELOR	A	555	261	13.9	7.8	80	0.68	--	--	--
	B	523	259	13.9	6.6	80	0.77	--	--	--
	C	81	259	13.9	--	80	--	--	--	--
	D	62	258	18.4	--	80	--	--	--	--
153 EDUCATIONAL DIAGNOSTICIAN	A	329	257	16.4	7.4	80	0.80	--	--	--
	B	311	254	15.8	7.5	80	0.78	--	--	--

*Texas Educator Certification Examination Program
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Statistics Report by Exam Form (All Forms)*

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
154 ENGLISH AS A SECOND LANGUAGE SUPPLEMENTAL (ESL)	A	5,895	250	18.8	9.6	60	0.74	--	--	--
	B	5,820	251	19.0	9.9	60	0.73	--	--	--
	C	3,364	254	17.8	9.7	60	0.70	--	--	--
	D	3,326	253	18.1	9.5	60	0.72	--	--	--
	E	3,202	254	18.7	10.1	60	0.71	--	--	--
	F	3,089	253	19.1	9.7	60	0.74	--	--	--
	G	1,829	248	18.7	9.9	60	0.72	--	--	--
	H	1,791	250	19.3	9.8	60	0.74	--	--	--
157 HEALTH EC-12	A	396	259	16.1	7.3	80	0.79	--	--	--
	B	380	259	17.3	7.9	80	0.79	--	--	--
158 PHYSICAL EDUCATION EC-12	A	1,144	251	18.0	9.5	80	0.72	--	--	--
	B	1,118	251	19.4	9.6	80	0.75	--	--	--
	C	442	251	19.6	9.5	80	0.76	--	--	--
	D	427	249	19.6	9.7	80	0.76	--	--	--
160 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES EC-12	A	5,942	256	18.6	7.8	90	0.82	--	--	--
	B	5,762	256	18.1	7.8	90	0.82	--	--	--
	C	2,753	256	18.5	8.3	90	0.80	--	--	--
	D	2,739	254	18.7	8.3	90	0.80	--	--	--
	E	2,724	257	17.9	8.2	90	0.79	--	--	--
	F	2,691	258	17.8	8.2	90	0.79	--	--	--
	G	2,389	257	18.1	8.0	90	0.81	--	--	--
	H	2,348	257	18.6	8.5	90	0.79	--	--	--

Texas Educator Certification Examination Program
September 1, 2018 - August 31, 2019
Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Constructed-Response Section		
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient	
									I Fixed	I Random
161 SPECIAL EDUCATION EC-12	A	1,654	247	19.4	6.7	119	0.88	--	--	--
	B	1,261	247	19.5	6.7	119	0.88	--	--	--
	C	1,171	247	19.2	6.8	119	0.87	--	--	--
	D	1,079	245	18.8	6.3	120	0.89	--	--	--
	E	1,009	245	18.9	6.5	120	0.88	--	--	--
	F	784	248	18.7	6.6	119	0.88	--	--	--
	G	640	245	19.1	6.6	120	0.88	--	--	--
	H	632	245	19.0	6.5	120	0.88	--	--	--
162 GIFTED AND TALENTED SUPPLEMENTAL	A	179	257	12.8	6.8	60	0.72	--	--	--
	B	167	258	13.4	6.5	60	0.77	--	--	--
	C	42	259	11.6	--	60	--	--	--	--
	D	31	257	9.8	--	60	--	--	--	--
163 SPECIAL EDUCATION SUPPLEMENTAL	A	373	251	15.8	7.2	80	0.79	--	--	--
	B	365	252	14.0	5.8	80	0.83	--	--	--
	C	72	252	17.2	--	80	--	--	--	--
	D	65	251	15.2	--	80	--	--	--	--
	E	60	248	16.4	--	80	--	--	--	--
	F	46	249	12.2	--	80	--	--	--	--
164 BILINGUAL EDUCATION SUPPLEMENTAL	A	951	249	17.1	8.2	60	0.77	--	--	--
	B	943	246	15.6	7.9	60	0.74	--	--	--
	C	497	246	16.4	8.2	60	0.75	--	--	--
	D	486	247	17.8	8.6	60	0.77	--	--	--

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Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
171 TECHNOLOGY EDUCATION 6-12	A	187	263	15.3	5.0	80	0.89	--	--	--
	B	182	265	16.9	4.9	80	0.91	--	--	--
177 MUSIC EC-12	A	645	251	15.5	6.8	80	0.81	--	--	--
	B	621	248	18.5	7.2	80	0.85	--	--	--
178 ART EC-12	A	467	263	19.3	8.0	80	0.83	--	--	--
	B	461	263	13.5	5.9	80	0.81	--	--	--
180 THEATRE EC-12	A	245	248	20.3	7.1	80	0.88	--	--	--
	B	214	251	19.0	6.9	80	0.87	--	--	--
181 DEAF AND HARD-OF-HEARING	A	55	254	21.1	--	80	--	--	--	--
	B	52	252	17.7	--	80	--	--	--	--
182 VISUALLY IMPAIRED	A	28	251	12.9	--	80	--	--	--	--
	B	17	253	11.9	--	80	--	--	--	--
183 BRAILLE (CONTRACTED BRAILLE)	A	4	--	--	--	20	--	4	--	--
184 AMERICAN SIGN LANGUAGE (ASL)	A	39	253	21.9	--	60	--	--	--	--
	B	25	255	27.0	--	60	--	--	--	--
190 BILINGUAL TARGET LANGUAGE PROFICIENCY TEST (BTLPT) - SPANISH	A	1,214	242	23.9	9.2	72	0.85	8	0.95	0.73
	B	871	243	24.4	8.2	72	0.85	8	0.96	0.82
	C	396	244	24.5	7.7	72	0.87	8	0.95	0.82
	D	382	242	25.1	8.6	72	0.87	8	0.93	0.77

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Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section G Coefficient	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
195 SUPERINTENDENT	A	218	254	11.6	6.9	80	0.65	--	--	--
	B	202	255	11.8	6.6	80	0.69	--	--	--
	C	6	--	--	--	80	--	--	--	--
	D	4	--	--	--	80	--	--	--	--
231 ENGLISH LANGUAGE ARTS AND READING 7-12	A	1,008	244	22.6	9.2	80	0.86	2	0.95	0.54
	B	999	244	21.9	9.1	80	0.87	2	0.94	0.51
	C	554	240	27.2	11.3	80	0.86	2	0.94	0.53
	D	502	239	23.2	10.3	80	0.83	2	0.95	0.53
	E	184	237	22.8	10.3	80	0.86	2	0.89	0.24
	F	151	233	25.6	10.7	80	0.86	2	0.94	0.42
232 SOCIAL STUDIES 7-12	A	962	234	24.3	7.0	120	0.92	--	--	--
	B	887	233	24.5	7.4	120	0.91	--	--	--
	C	389	232	25.2	7.5	120	0.91	--	--	--
	D	389	233	24.6	7.1	120	0.92	--	--	--
	E	373	233	26.8	7.5	120	0.92	--	--	--
	F	357	231	25.8	7.6	120	0.91	--	--	--
233 HISTORY 7-12	A	517	241	24.1	8.4	80	0.88	--	--	--
	B	444	238	25.8	8.1	80	0.90	--	--	--
	C	104	237	24.3	9.3	80	0.85	--	--	--
	D	102	235	24.4	8.6	80	0.88	--	--	--

Texas Educator Certification Examination Program
September 1, 2018 - August 31, 2019
Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Constructed-Response Section		
			Mean	Std. Dev	SEM	Length	KR20	Length	G Coefficient	
Exam Field	Form								I Fixed	I Random
235 MATHEMATICS 7-12	A	620	240	30.3	8.2	80	0.93	--	--	--
	B	556	239	31.4	8.6	80	0.93	--	--	--
	C	251	240	31.1	8.2	80	0.93	--	--	--
	D	250	235	28.5	8.5	80	0.91	--	--	--
	E	172	235	29.7	8.6	80	0.92	--	--	--
	F	156	238	31.7	8.3	80	0.93	--	--	--
	G	112	238	30.2	8.4	80	0.92	--	--	--
236 SCIENCE 7-12	A	450	234	26.7	7.3	120	0.93	--	--	--
	B	428	238	25.6	7.1	120	0.92	--	--	--
	C	215	236	26.5	7.5	120	0.92	--	--	--
	D	215	236	29.4	7.2	120	0.94	--	--	--
	E	196	236	27.7	7.0	120	0.94	--	--	--
	F	175	232	27.0	7.7	120	0.92	--	--	--
237 PHYSICAL SCIENCE 6-12	A	73	225	34.6	--	80	--	--	--	--
	B	63	225	35.8	--	80	--	--	--	--
238 LIFE SCIENCE 7-12	A	337	237	27.1	9.7	80	0.87	--	--	--
	B	309	236	26.1	8.7	80	0.89	--	--	--
	C	149	231	25.9	9.4	80	0.87	--	--	--
	D	129	232	27.9	10.4	80	0.86	--	--	--
	E	96	234	27.5	--	80	--	--	--	--
	F	91	232	24.6	--	80	--	--	--	--

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September 1, 2018 - August 31, 2019
Statistics Report by Exam Form (All Forms)

September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
240 CHEMISTRY 7-12	A	85	236	33.7	--	80	--	--	--	--
	B	43	233	33.3	--	80	--	--	--	--
	C	24	250	24.2	--	80	--	--	--	--
241 COMPUTER SCIENCE 8-12	A	106	222	32.8	10.0	80	0.91	--	--	--
	B	98	223	32.7	--	80	--	--	--	--
242 TECHNOLOGY APPLICATIONS EC-12	A	402	238	22.5	9.6	80	0.82	--	--	--
	B	396	235	22.0	9.1	80	0.83	--	--	--
243 PHYSICS/MATHEMATICS 7-12	A	31	251	24.0	--	100	--	--	--	--
	B	29	241	33.1	--	100	--	--	--	--
	C	25	238	33.4	--	100	--	--	--	--
	D	19	243	20.0	--	100	--	--	--	--
256 JOURNALISM 7-12	A	67	247	18.1	--	80	--	--	--	--
	B	58	247	20.9	--	80	--	--	--	--
268 PRINCIPAL AS INSTRUCTIONAL LEADER (PAIL)	A	1,085	253	19.1	8.1	58	0.73	4	0.91	0.75
270 PPR TRADE & INDUSTRIAL EDUC 6-12	A	108	248	16.6	6.6	80	0.84	--	--	--
	B	106	248	19.6	7.2	80	0.87	--	--	--
	C	9	--	--	--	80	--	--	--	--
	D	8	--	--	--	80	--	--	--	--
272 AGRICULTURAL, FOOD, AND NATURAL RESOURCES 6-12	A	182	259	15.9	6.9	80	0.81	--	--	--
	B	176	260	15.7	6.8	80	0.81	--	--	--

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September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section	
			Mean	Std. Dev	SEM	Length	KR20		G Coefficient	
Exam Field	Form							I Fixed	I Random	
273 HEALTH SCIENCE 6-12	A	99	253	18.5	--	80	--	--	--	
	B	95	252	18.0	--	80	--	--	--	
274 MATHEMATICS/PHYSICAL SCIENCE/ENGINEERING 6-12	A	41	254	22.6	--	110	--	--	--	
	B	37	248	28.1	--	110	--	--	--	
275 MARKETING 6-12	A	41	244	19.9	--	80	--	--	--	
	B	30	252	19.5	--	80	--	--	--	
276 BUSINESS AND FINANCE 6-12	A	633	232	19.1	9.2	80	0.77	--	--	
	B	559	234	20.3	9.2	80	0.79	--	--	
279 DANCE 6-12	A	154	248	19.9	8.5	80	0.82	--	--	
	B	131	250	18.3	8.1	80	0.81	--	--	
283 BRAILLE (UEB)	A	65	257	28.6	--	25	--	4	--	
610 LANGUAGES OTHER THAN ENGLISH (LOTE) - FRENCH	A	44	229	23.2	--	102	--	8	--	
	B	43	228	25.5	--	102	--	8	--	
611 LANGUAGES OTHER THAN ENGLISH (LOTE) - GERMAN	A	35	243	27.0	--	102	--	8	--	
612 LANGUAGES OTHER THAN ENGLISH (LOTE) - LATIN	A	6	--	--	--	81	--	12	--	
	B	5	--	--	--	81	--	12	--	
613 LANGUAGES OTHER THAN ENGLISH (LOTE) - SPANISH	A	580	231	20.6	7.1	102	0.86	8	0.96	0.69
	B	540	231	23.3	7.9	102	0.88	8	0.95	0.63
	C	227	228	21.2	7.3	102	0.87	8	0.95	0.67

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September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
801 CORE SUBJECTS EC-6: ENGLISH LANGUAGE ARTS AND READING/SCIENCE OF TEACHING READING (ELAR/STR)	A	4,288	250	23.5	9.3	65	0.85	--	--	--
	B	4,266	251	23.3	9.3	65	0.84	--	--	--
	C	2,372	251	23.4	8.5	65	0.87	--	--	--
	D	2,315	249	26.0	9.8	65	0.86	--	--	--
	E	1,697	251	23.0	8.9	65	0.85	--	--	--
	F	1,648	250	23.2	9.3	65	0.84	--	--	--
802 CORE SUBJECTS EC-6: MATHEMATICS	A	4,196	247	27.2	11.8	40	0.81	--	--	--
	B	4,145	249	26.3	11.7	40	0.80	--	--	--
	C	2,528	250	29.8	13.9	40	0.78	--	--	--
	D	2,527	250	25.2	11.9	40	0.78	--	--	--
	E	2,196	250	25.8	11.6	40	0.80	--	--	--
	F	2,134	249	27.7	12.1	40	0.81	--	--	--
803 CORE SUBJECTS EC-6: SOCIAL STUDIES	A	4,605	243	25.9	13.0	35	0.75	--	--	--
	B	4,484	244	26.2	13.1	35	0.75	--	--	--
	C	2,795	243	25.9	13.0	35	0.75	--	--	--
	D	2,705	242	26.6	13.2	35	0.75	--	--	--
	E	2,342	242	24.6	12.8	35	0.73	--	--	--
	F	2,337	245	25.0	12.8	35	0.74	--	--	--

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September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section G Coefficient	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
804 CORE SUBJECTS EC-6: SCIENCE	A	4,632	248	21.5	10.4	45	0.77	--	--	--
	B	4,362	242	23.8	10.6	45	0.80	--	--	--
	C	2,711	245	22.9	10.9	45	0.77	--	--	--
	D	2,685	242	23.5	11.6	45	0.75	--	--	--
	E	2,316	247	22.5	10.8	45	0.77	--	--	--
	F	2,303	243	23.0	10.8	45	0.78	--	--	--
805 CORE SUBJECTS EC-6: FINE ARTS, HEALTH, AND PHYSICAL EDUCATION	A	4,528	253	18.7	9.4	45	0.75	--	--	--
	B	3,835	251	24.4	11.8	45	0.77	--	--	--
	C	2,493	252	21.0	10.4	45	0.76	--	--	--
	D	2,178	253	21.7	10.9	45	0.75	--	--	--
	E	1,583	254	20.5	9.8	45	0.77	--	--	--
	F	1,353	251	23.2	12.0	45	0.73	--	--	--
806 CORE SUBJECTS 4-8: ENGLISH LANGUAGE ARTS AND READING (ELAR)	A	1,045	242	25.5	10.0	65	0.85	--	--	--
	B	1,011	242	24.6	10.4	65	0.82	--	--	--
	C	246	244	20.8	9.2	65	0.81	--	--	--
	D	237	243	23.4	9.5	65	0.83	--	--	--
	E	195	241	25.9	10.7	65	0.83	--	--	--
	F	164	244	24.1	10.7	65	0.80	--	--	--

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September 1, 2018 - August 31, 2019		Number of Exams Taken	Total Exam Scaled Score Indices			Selected-Response Section		Length	Constructed-Response Section G Coefficient	
Exam Field	Form		Mean	Std. Dev	SEM	Length	KR20		I Fixed	I Random
807 CORE SUBJECTS 4-8: MATHEMATICS	A	976	247	25.9	10.2	35	0.84	--	--	--
	B	919	242	32.0	11.8	35	0.86	--	--	--
	C	240	242	30.8	12.8	35	0.83	--	--	--
	D	210	242	29.2	11.6	35	0.84	--	--	--
	E	180	250	29.4	11.3	35	0.85	--	--	--
	F	154	240	31.7	12.6	35	0.84	--	--	--
808 CORE SUBJECTS 4-8: SOCIAL STUDIES	A	838	242	26.9	13.1	35	0.76	--	--	--
	B	809	242	27.1	14.1	35	0.73	--	--	--
	C	356	244	26.4	14.0	35	0.72	--	--	--
	D	342	246	24.9	13.0	35	0.73	--	--	--
	E	210	247	27.1	12.7	35	0.78	--	--	--
	F	192	246	22.2	12.2	35	0.70	--	--	--
809 CORE SUBJECTS 4-8: SCIENCE	A	1,002	244	26.3	12.9	35	0.76	--	--	--
	B	953	245	24.9	11.1	35	0.80	--	--	--
	C	236	246	26.1	12.9	35	0.76	--	--	--
	D	228	246	24.4	11.1	35	0.79	--	--	--
	E	173	247	27.8	12.6	35	0.80	--	--	--
	F	172	249	22.5	11.3	35	0.75	--	--	--

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

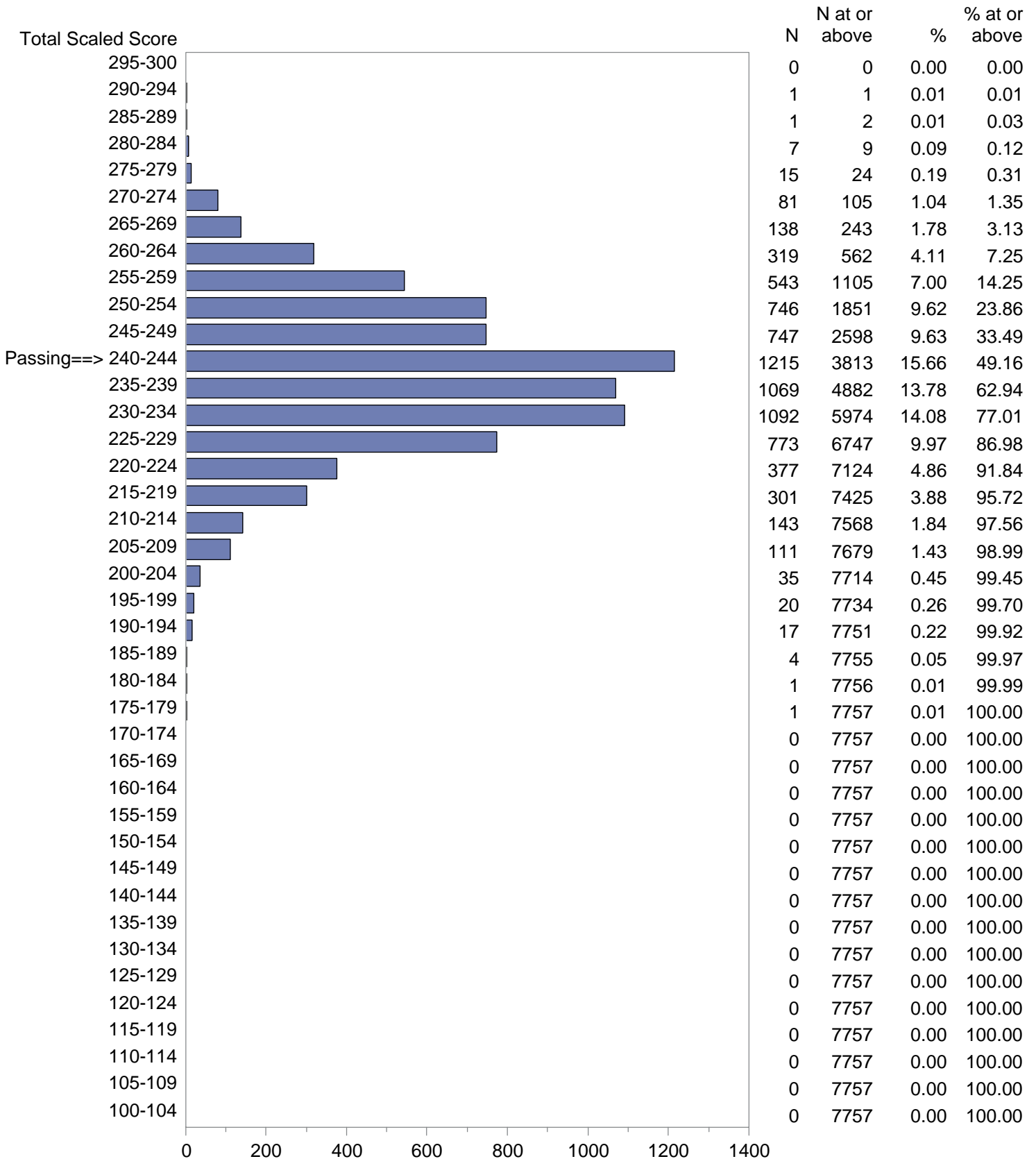
*Texas Educator Certification Examination Program
September 1, 2018 - August 31, 2019
Statistics Report for Exam Fields with Constructed-Response Items (All Forms)*

Exam Field and Item(s)		Number of Exams Taken	Number of Scorable Responses	Constructed-Response Items			Inter-rater Reliability
				Scorer Agreement (%)			
				Total	Exact	Adjacent	
190 BILINGUAL TARGET LANGUAGE PROFICIENCY TEST (BTLPT) – SPANISH	1	2,863	2,749	98.9	72.9	26.0	0.82
	2	2,863	2,746	99.1	68.4	30.6	0.78
	3	2,863	2,725	99.3	69.5	29.8	0.83
	4	2,863	2,792	99.5	74.0	25.4	0.82
	5	2,863	2,812	99.4	74.2	25.2	0.79
	6	2,863	2,772	99.5	76.8	22.7	0.87
	7	2,863	2,183	98.9	75.4	23.6	0.91
	8	2,863	2,768	99.4	75.4	24.1	0.86
231 ENGLISH LANGUAGE ARTS AND READING 7-12	1	3,398	3,378	99.2	73.1	26.2	0.88
	2	3,398	2,914	88.8	55.5	33.3	0.82
268 PRINCIPAL AS INSTRUCTIONAL LEADER (PAIL)	1	1,085	1,083	94.8	49.4	45.4	0.62
	2	1,085	1,068	98.2	60.1	38.1	0.77
	3	1,085	1,068	95.1	48.9	46.3	0.74
	4	1,085	1,062	92.1	48.6	43.5	0.67
613 LANGUAGES OTHER THAN ENGLISH (LOTE) – SPANISH	1	1,347	1,306	99.6	77.6	22.1	0.87
	2	1,347	1,315	99.7	78.9	20.8	0.86
	3	1,347	1,263	99.9	80.5	19.4	0.91
	4	1,347	1,294	99.7	75.1	24.6	0.86
	5	1,347	1,308	99.6	74.2	25.5	0.84
	6	1,347	1,327	99.6	83.9	15.7	0.88
	7	1,347	917	99.6	77.1	22.5	0.93
	8	1,347	1,109	99.5	78.4	21.2	0.90

Appendix 3. Total Scaled Score Distribution by Exam Field

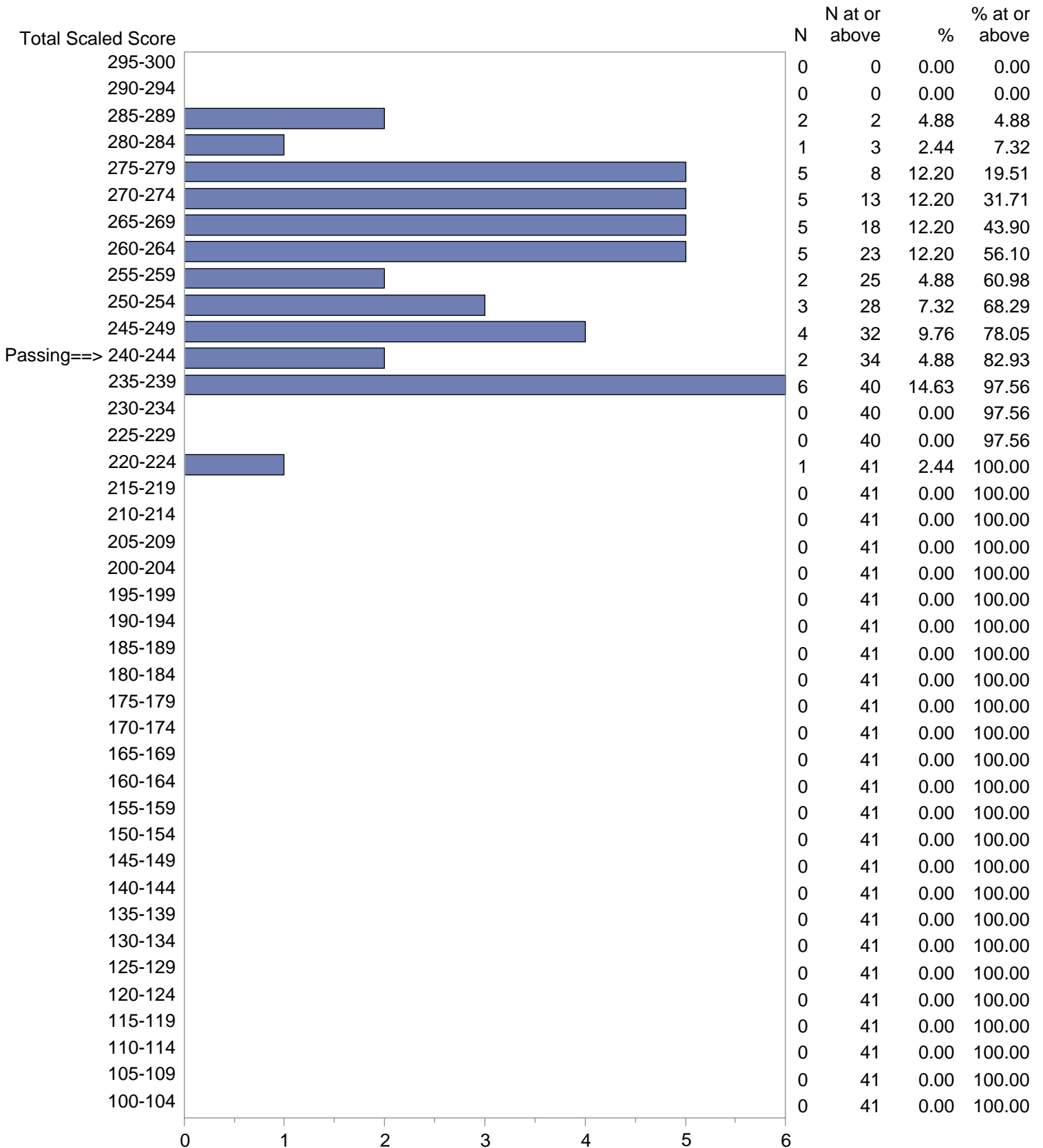
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=068 PRINCIPAL



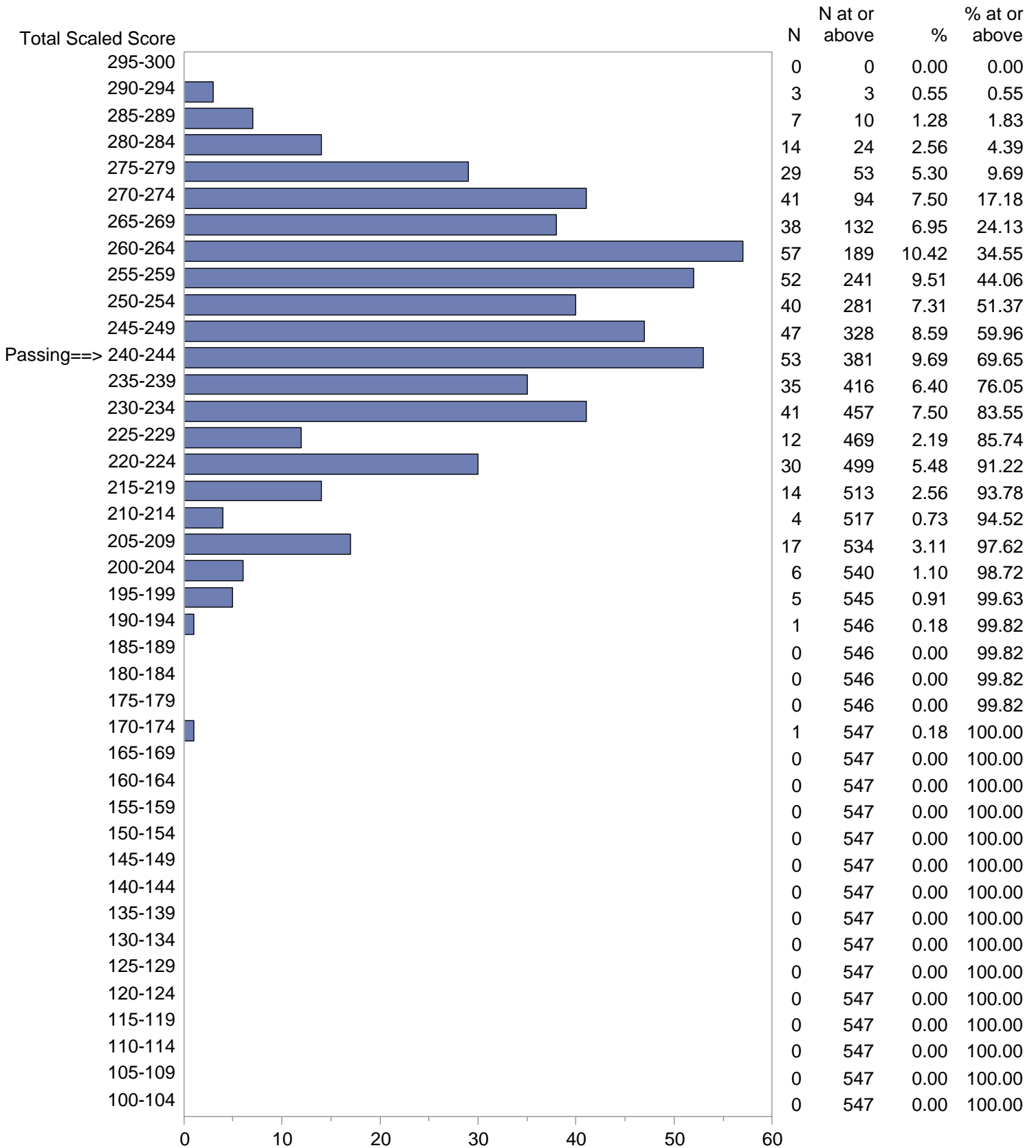
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=085 MASTER READING TEACHER



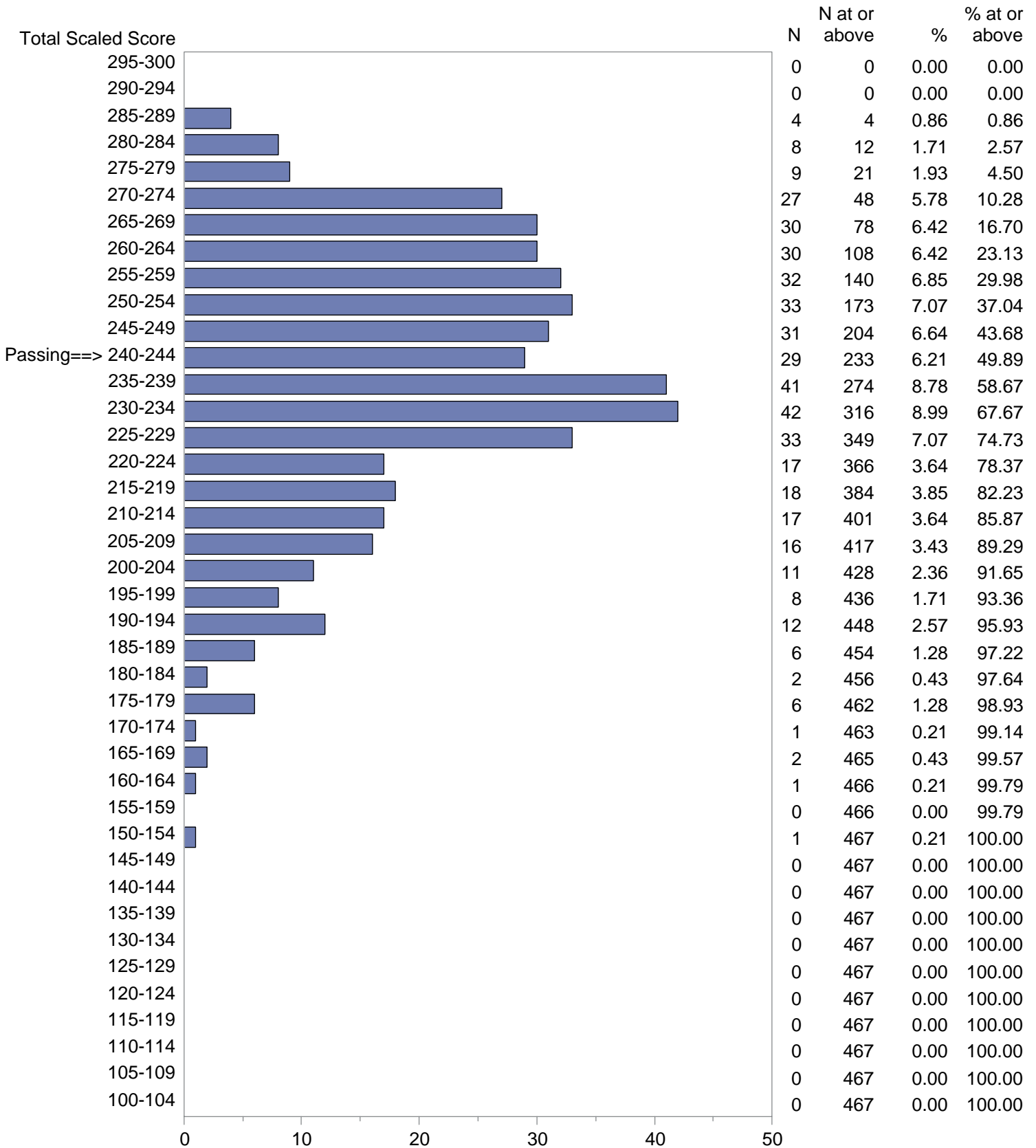
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

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



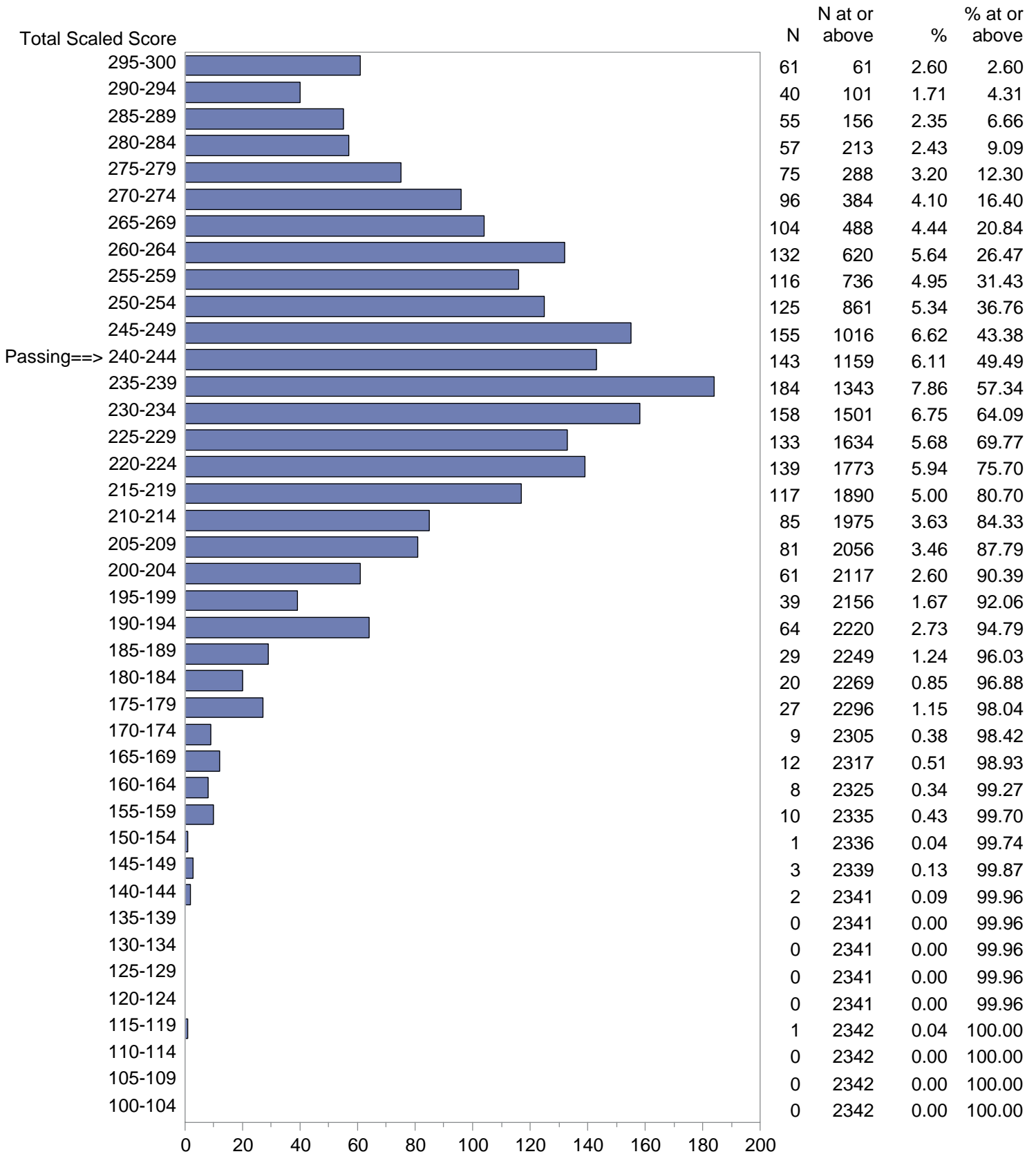
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=114 MATHEMATICS/SCIENCE 4-8



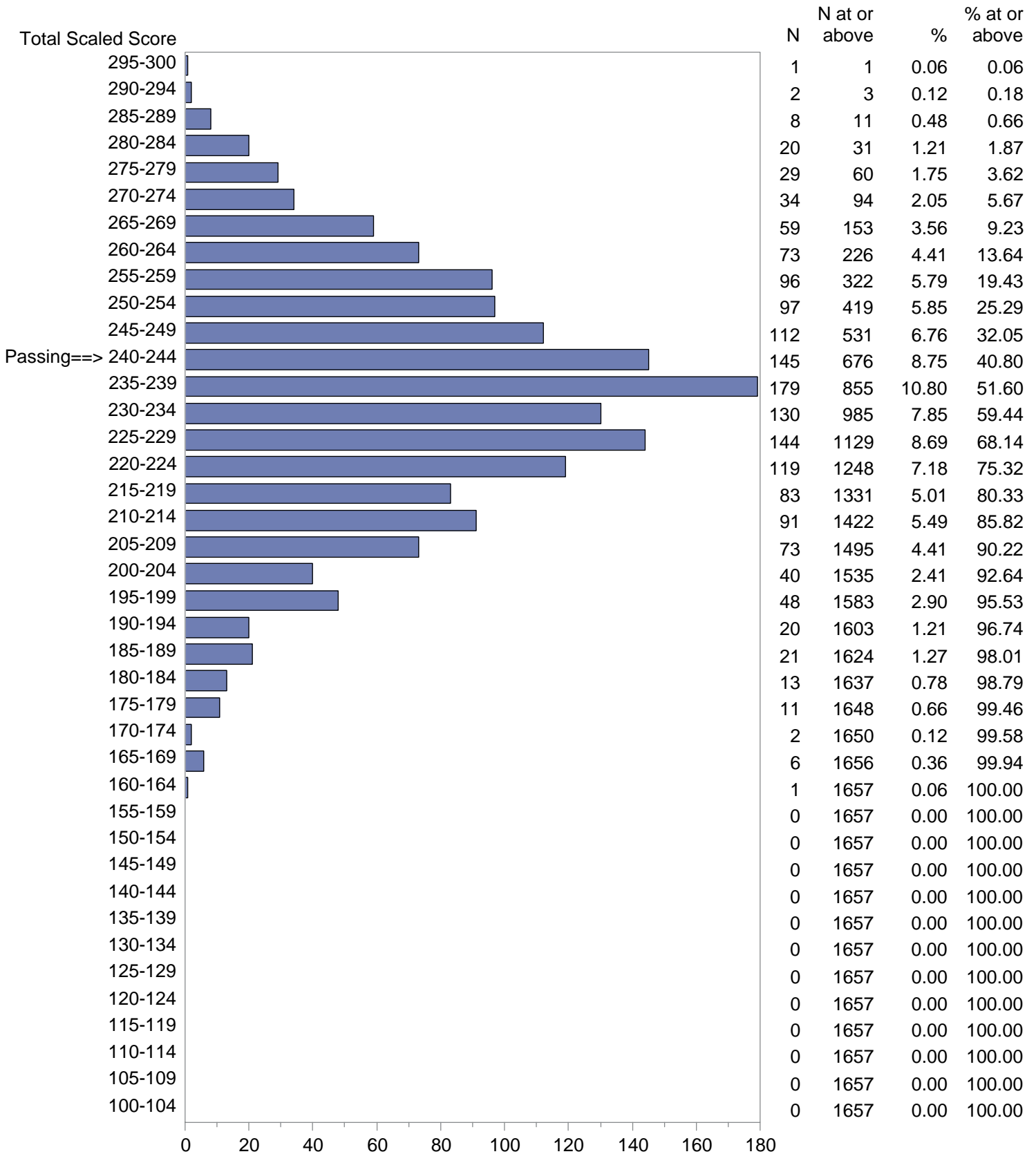
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=115 MATHEMATICS 4-8



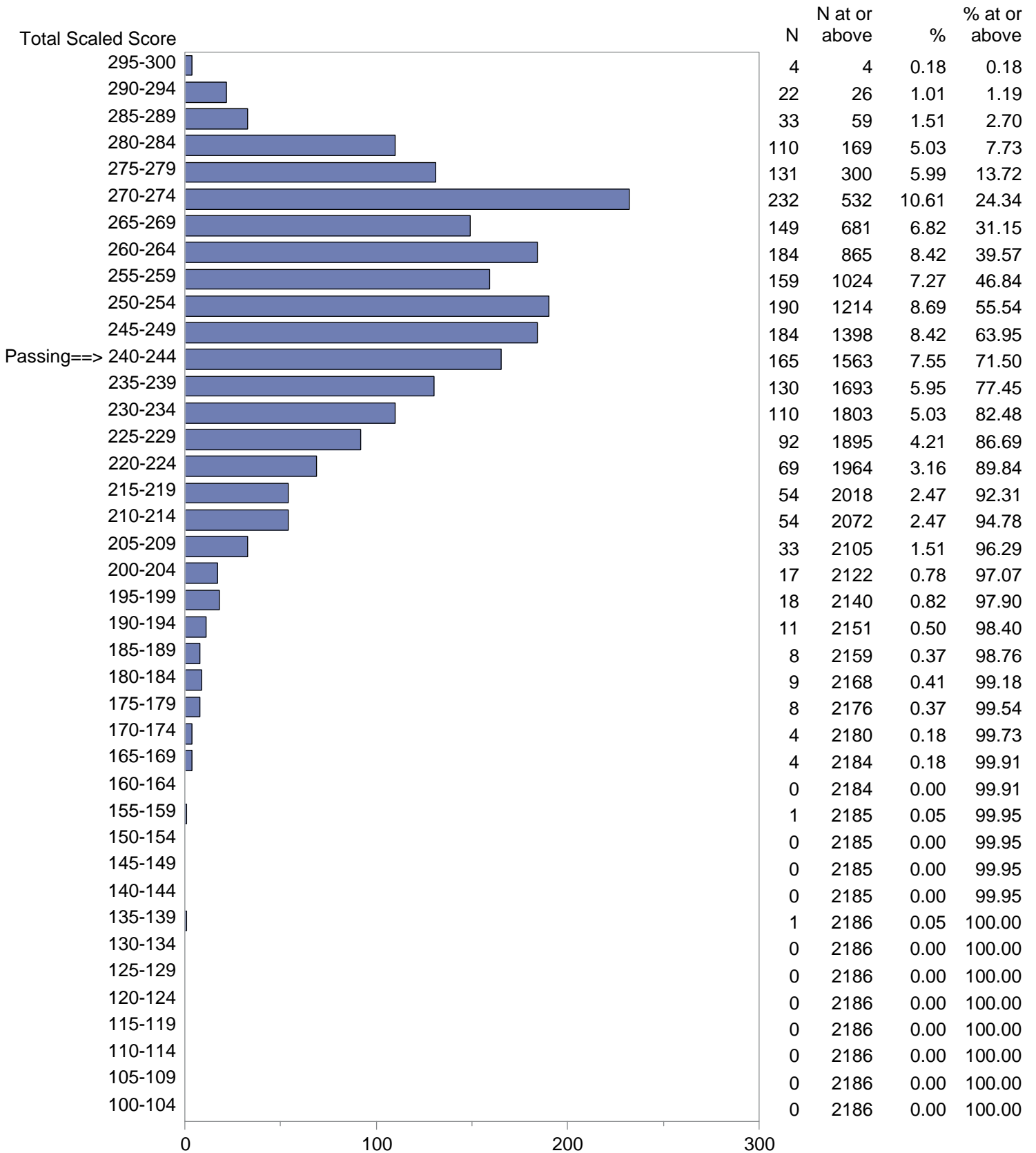
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=116 SCIENCE 4-8



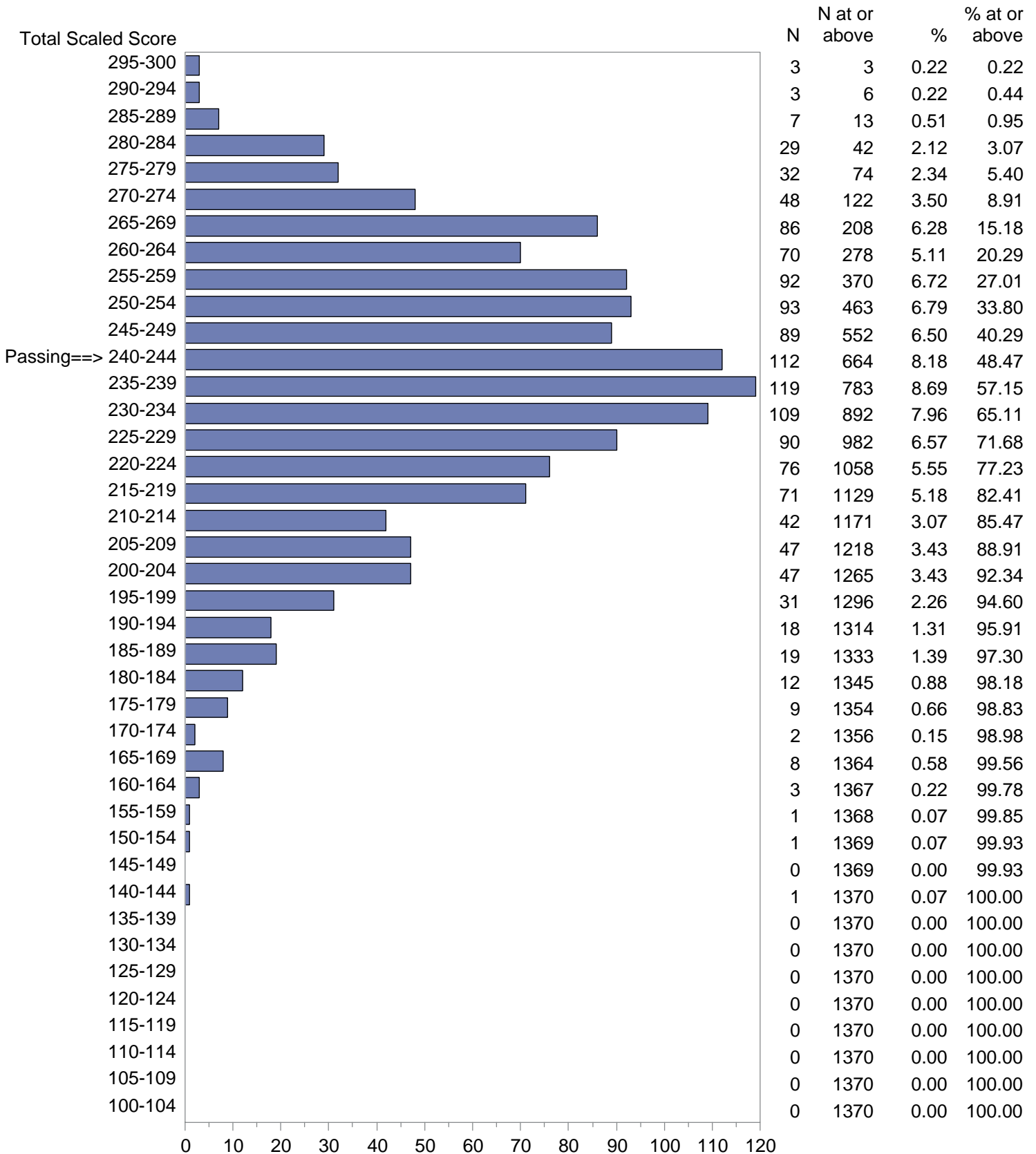
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=117 ENGLISH LANGUAGE ARTS AND READING 4-8



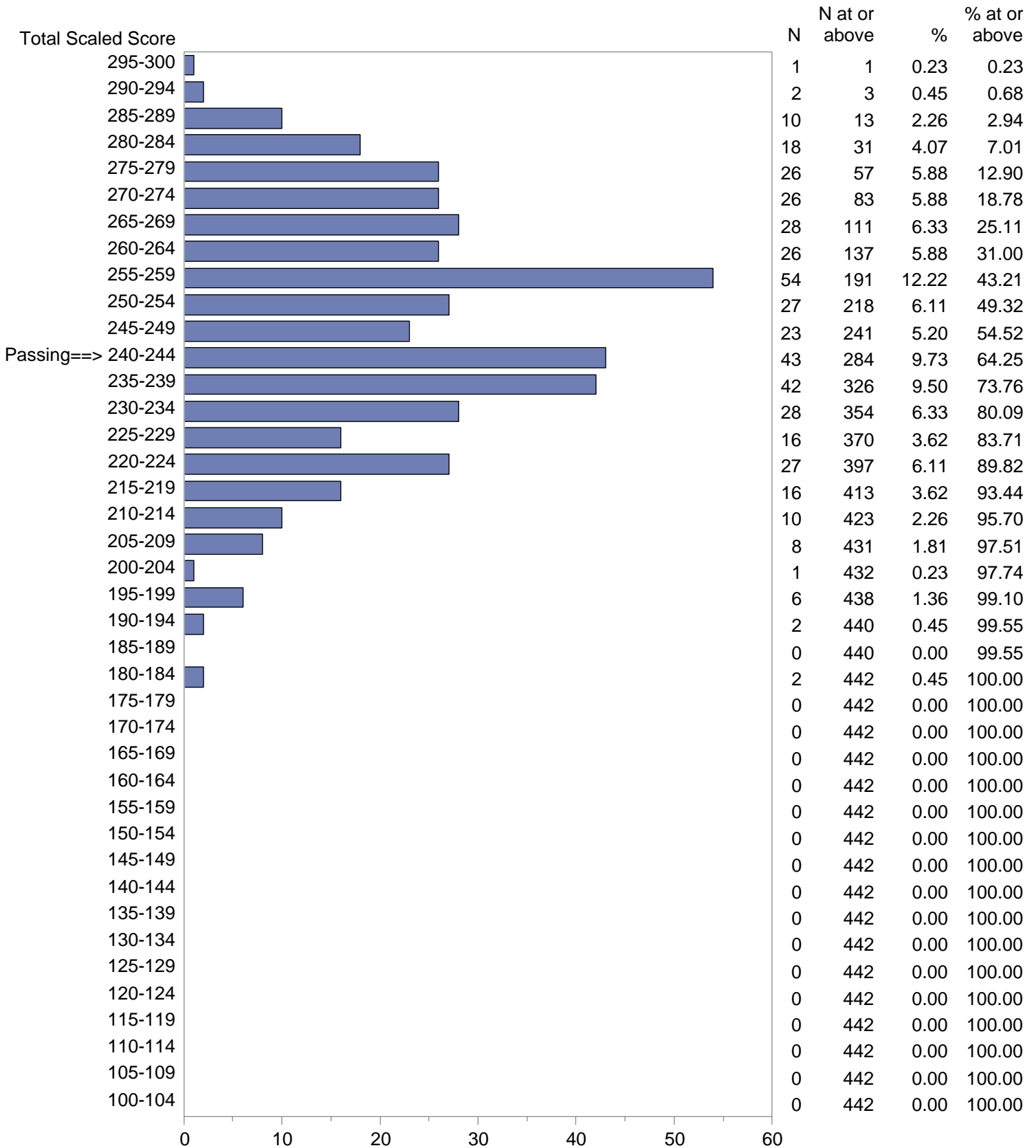
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=118 SOCIAL STUDIES 4-8



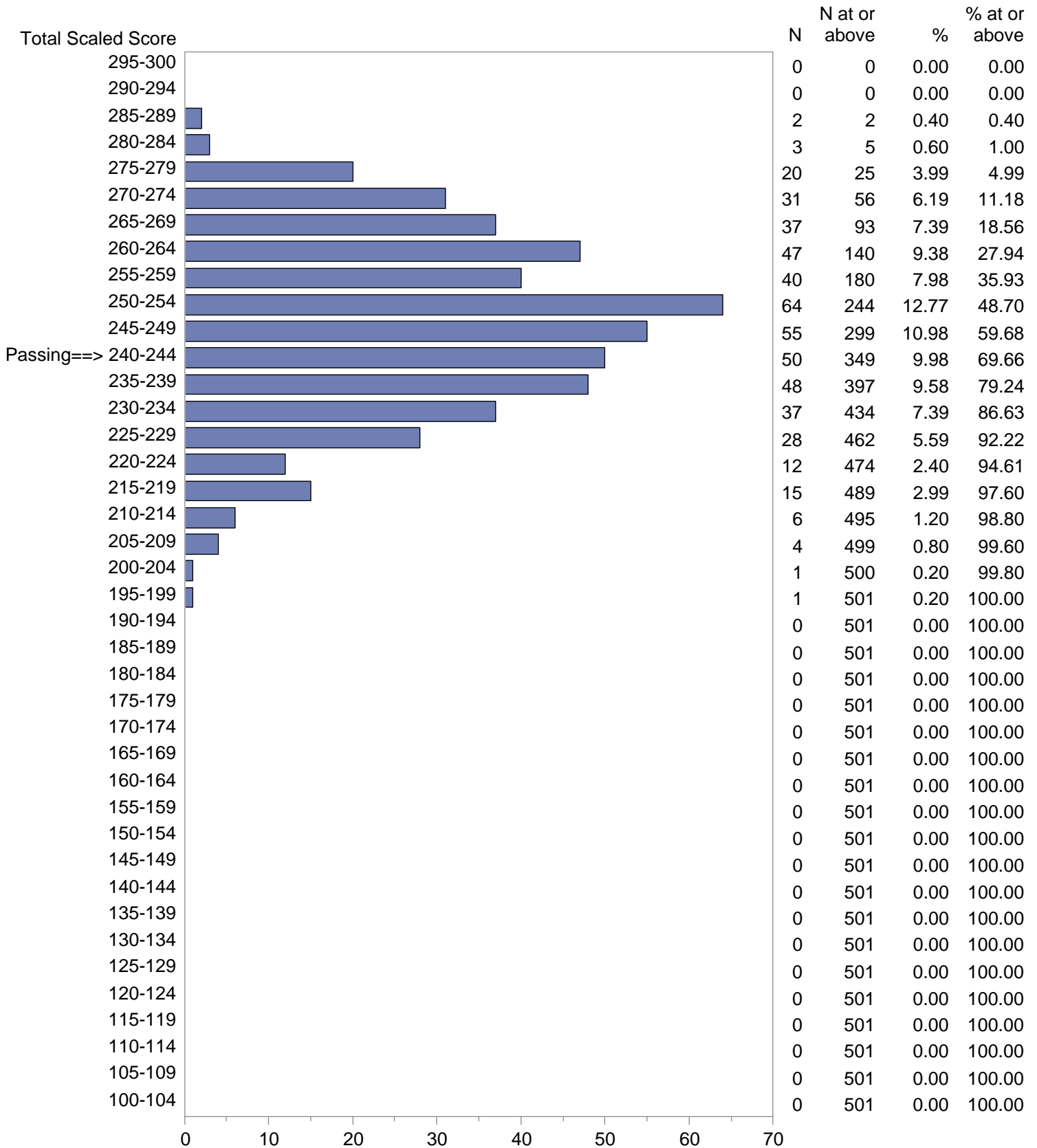
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=129 SPEECH 7-12



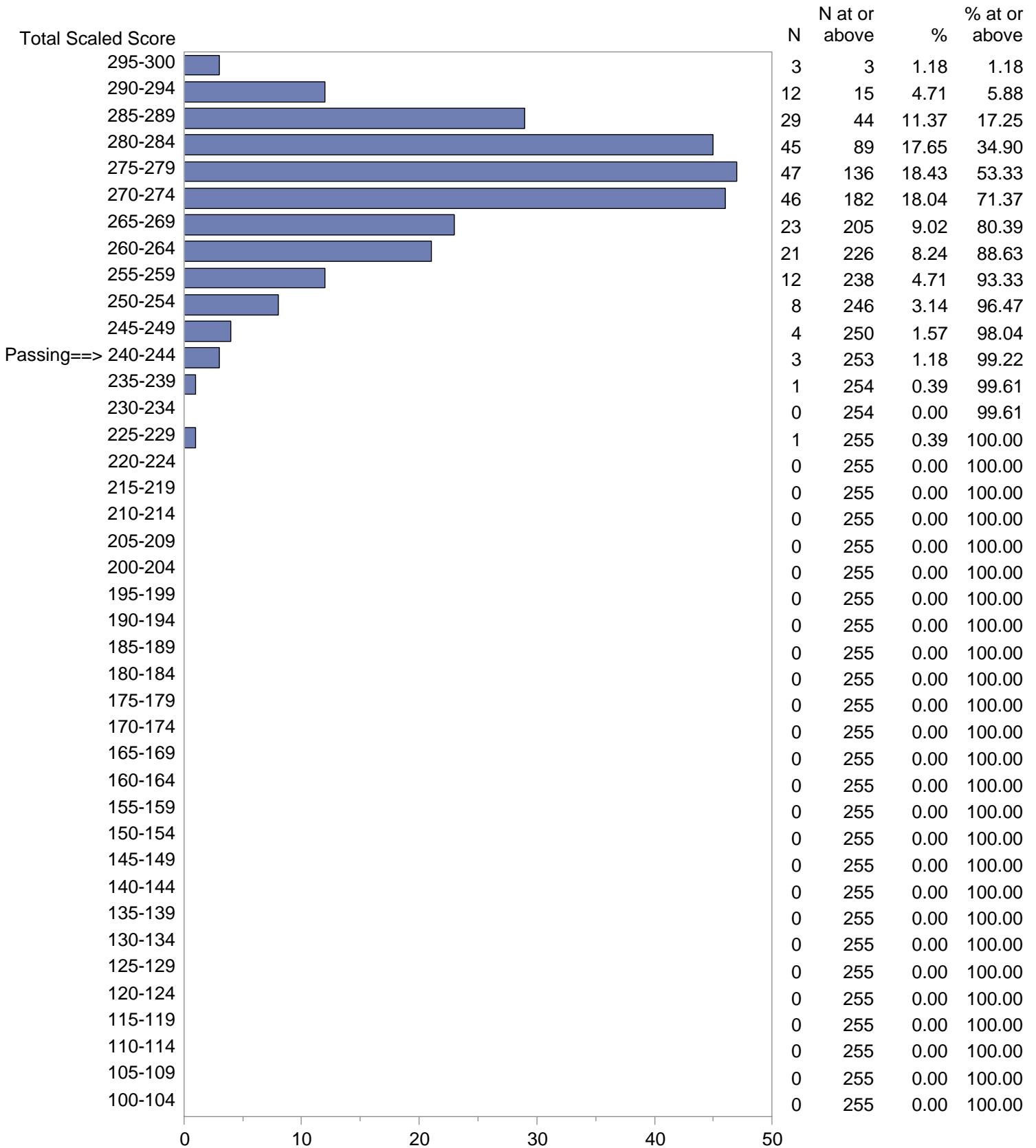
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=150 SCHOOL LIBRARIAN



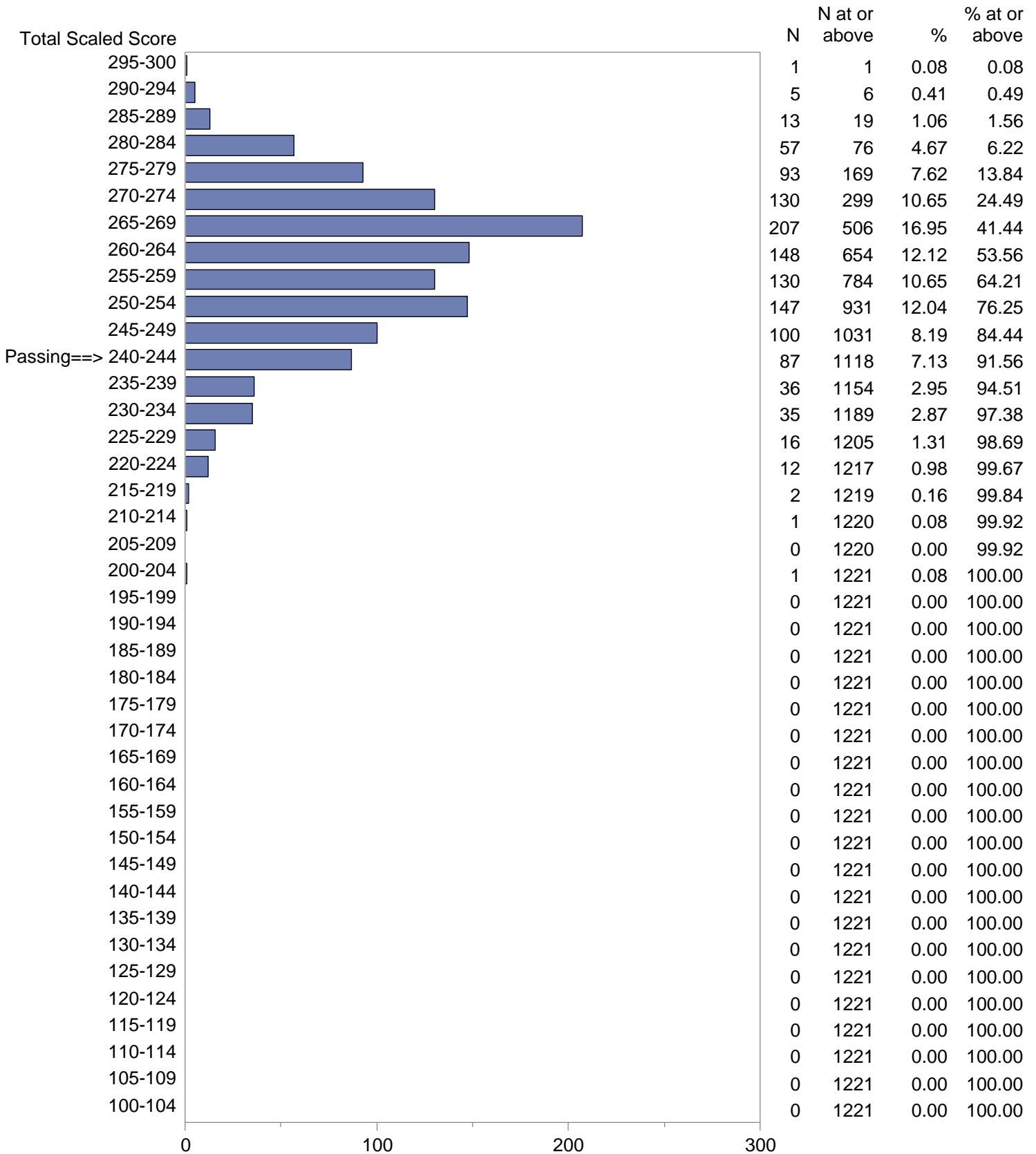
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=151 READING SPECIALIST



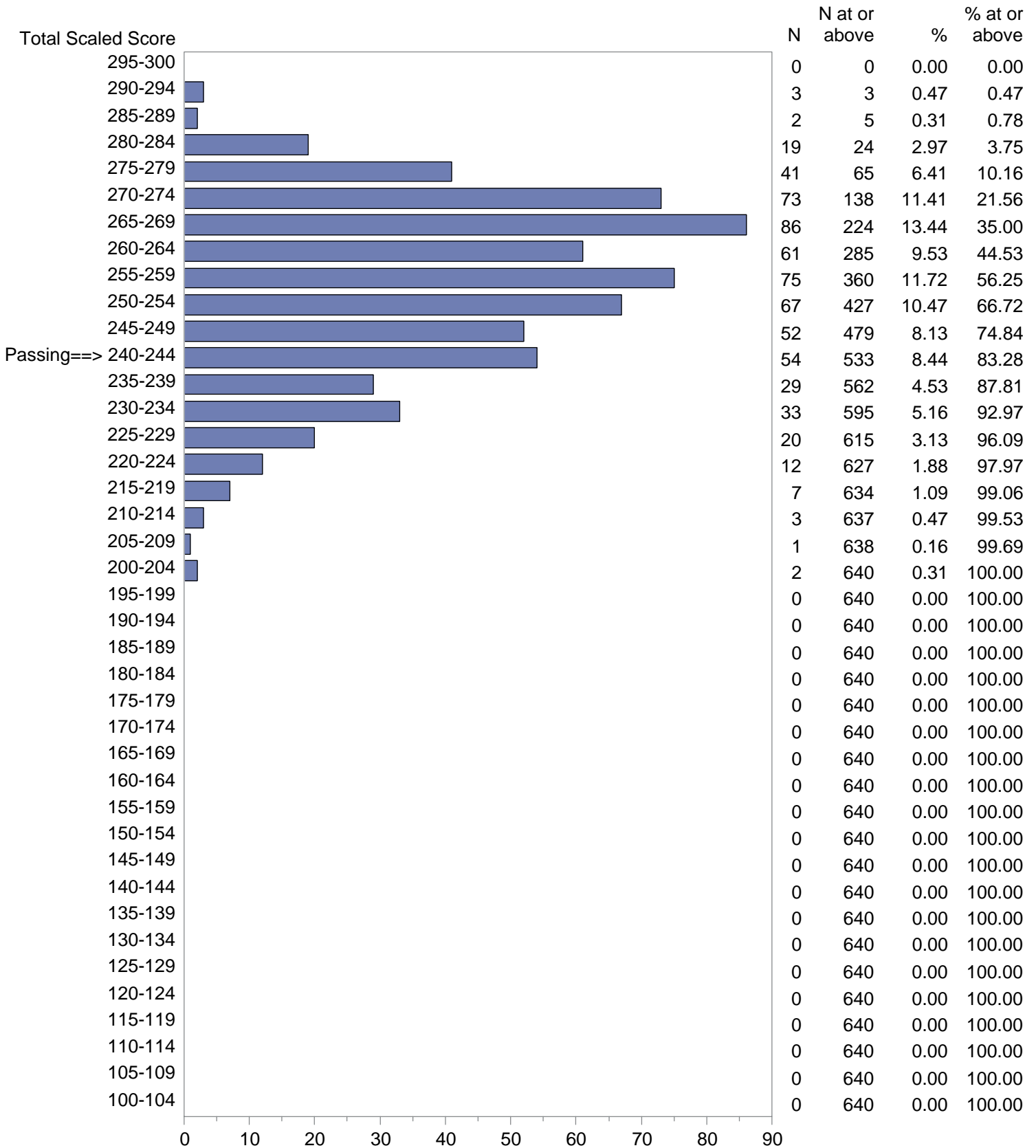
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=152 SCHOOL COUNSELOR



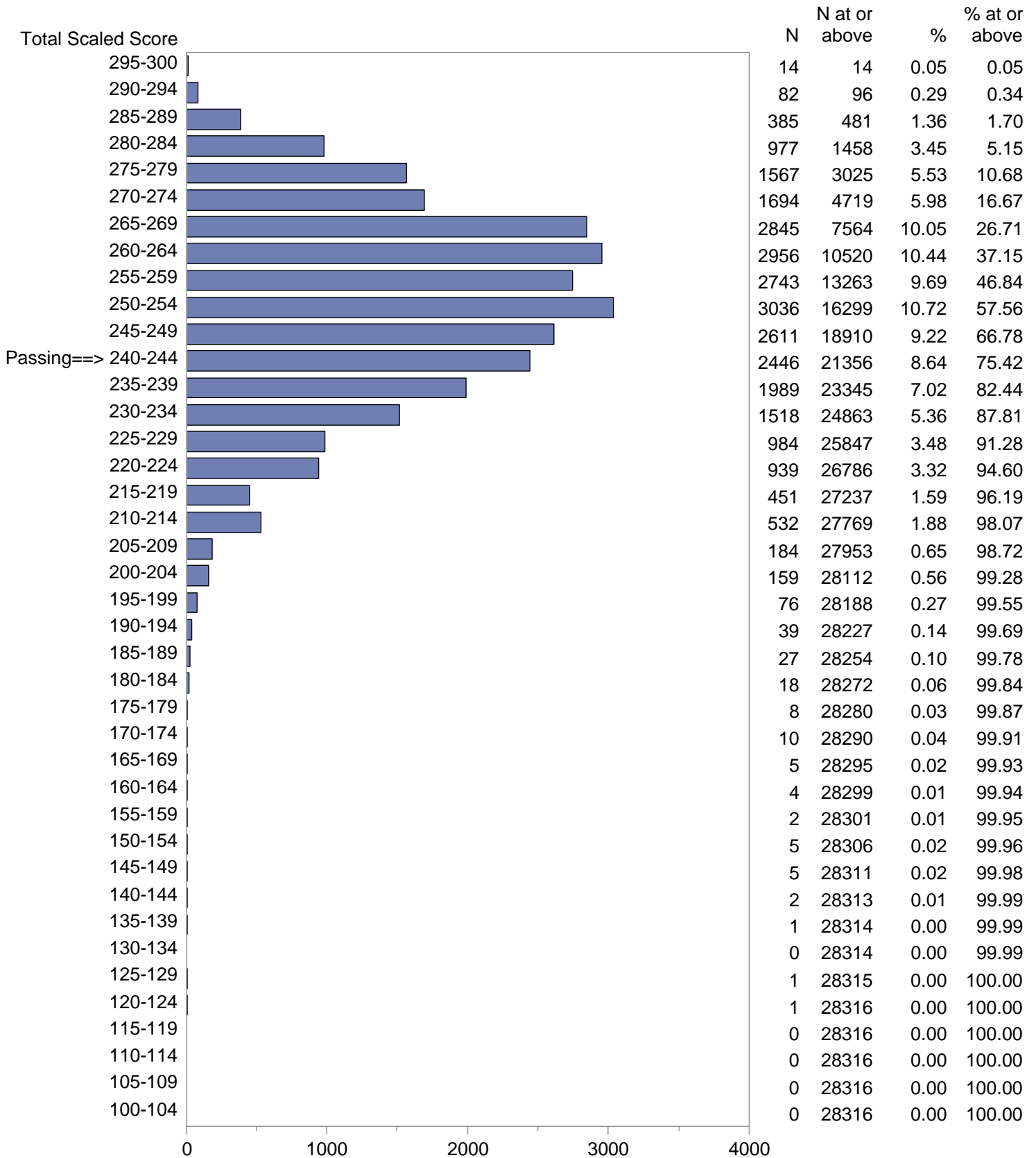
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=153 EDUCATIONAL DIAGNOSTICIAN



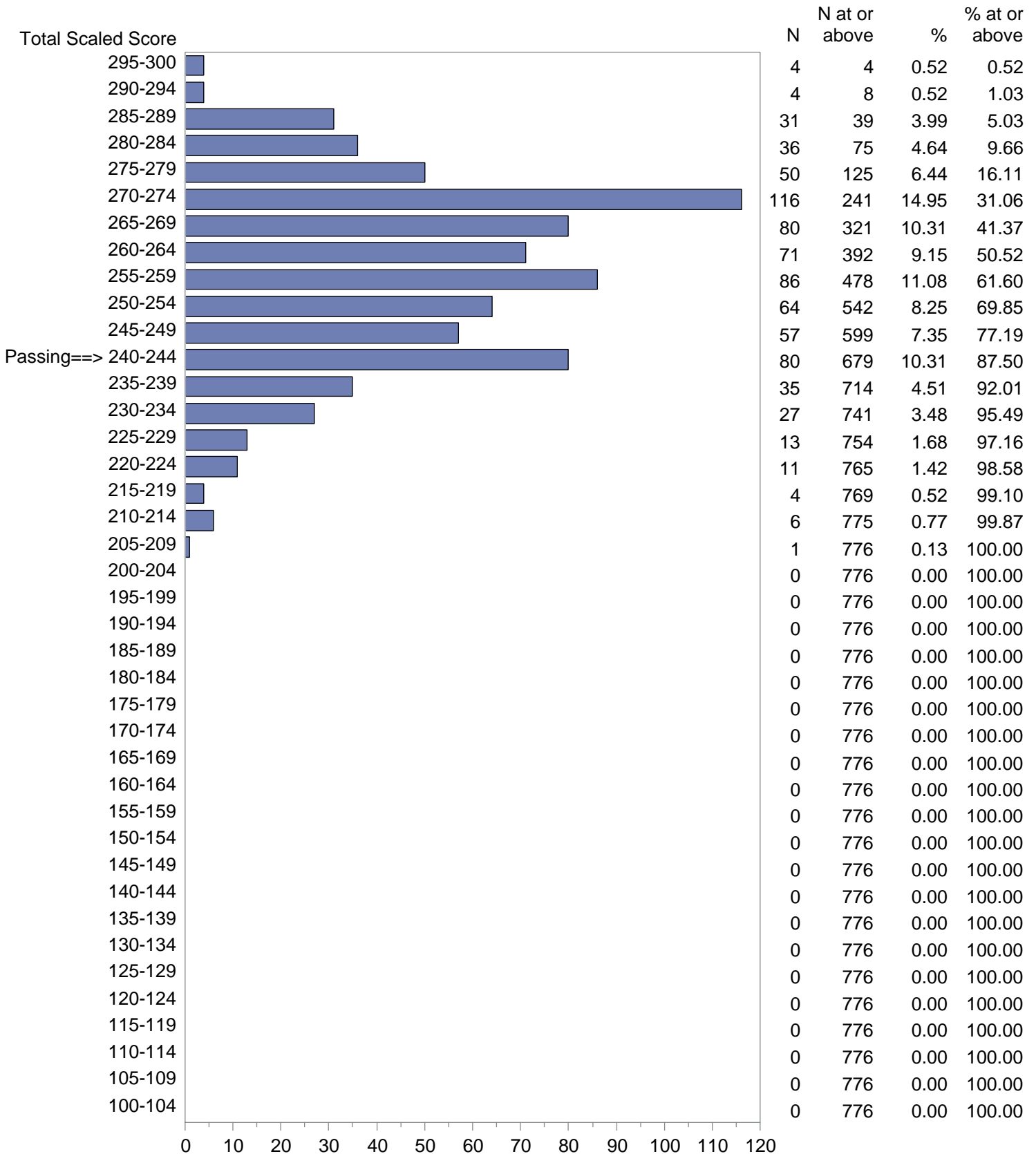
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

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



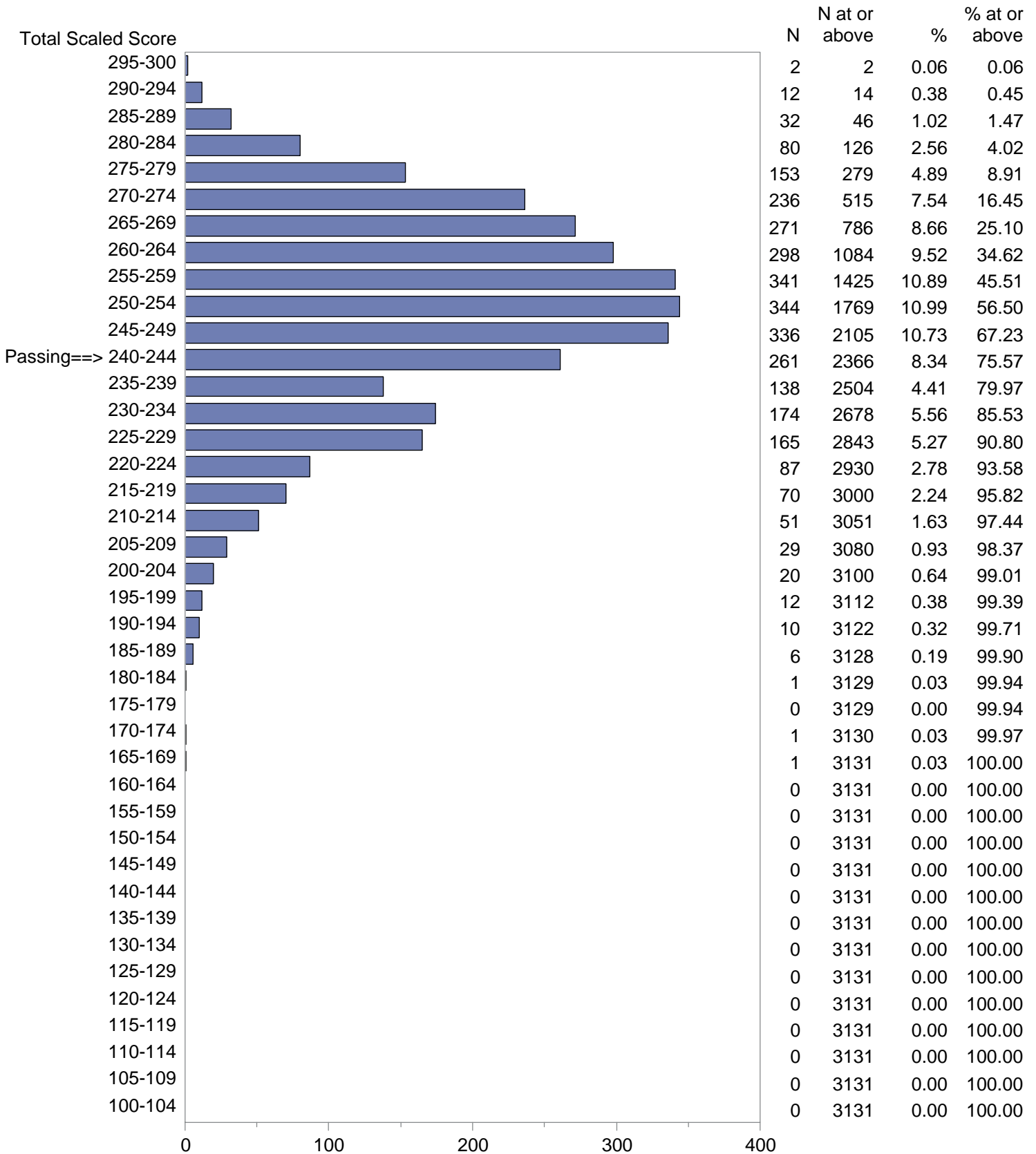
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=157 HEALTH EC-12



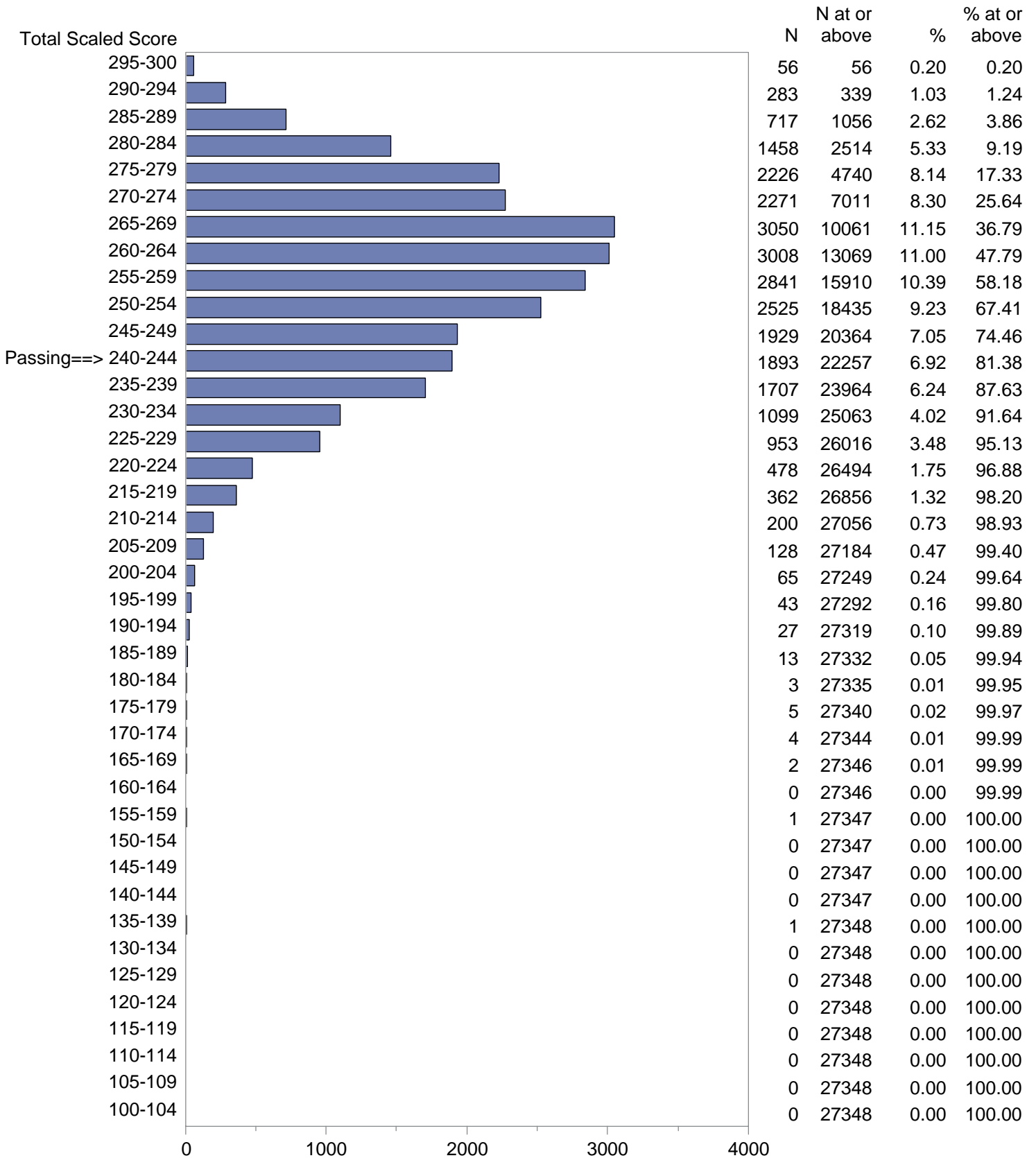
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=158 PHYSICAL EDUCATION EC-12



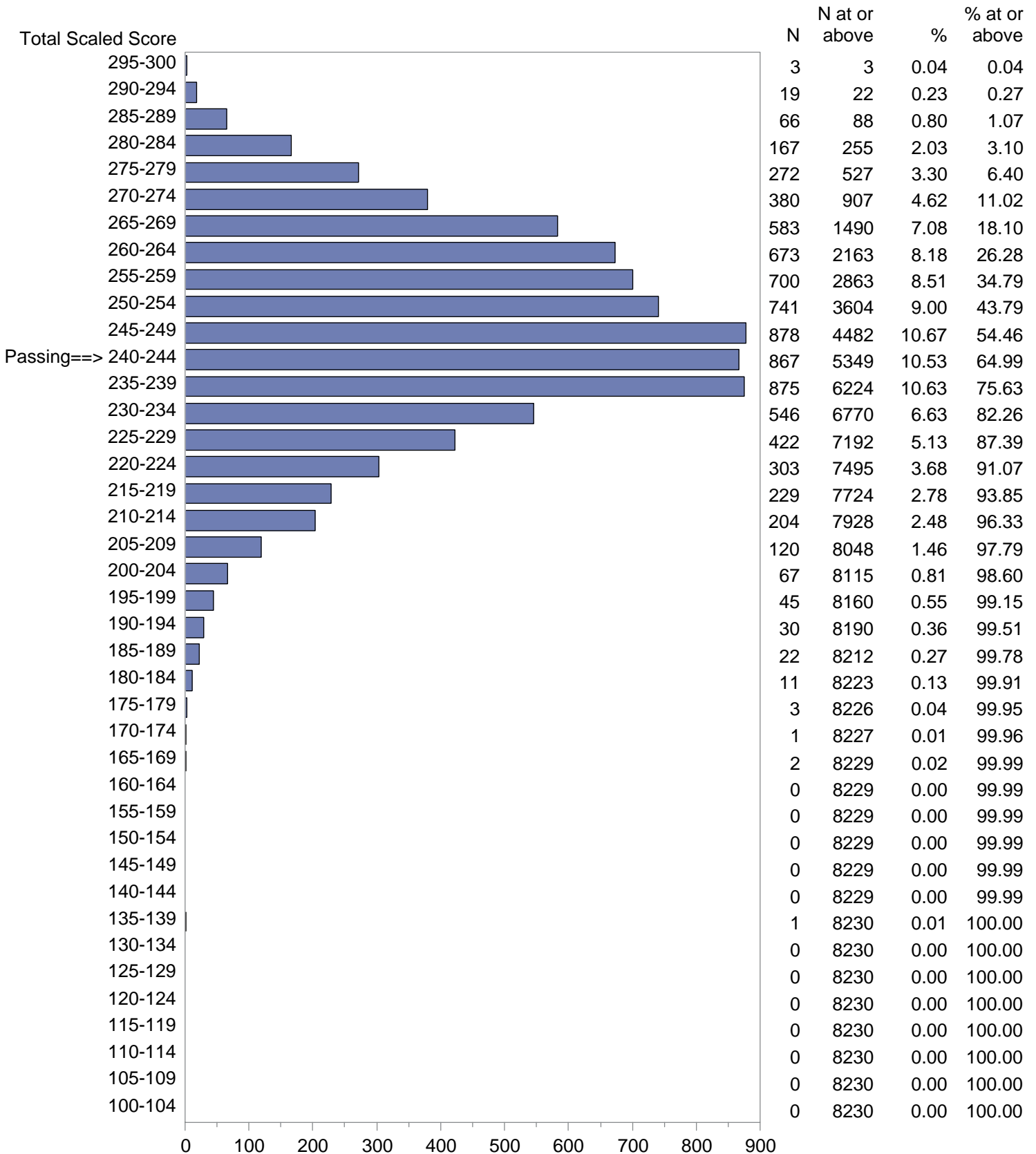
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=160 PEDAGOGY AND PROFESSIONAL RESPONSIBILITIES EC-12



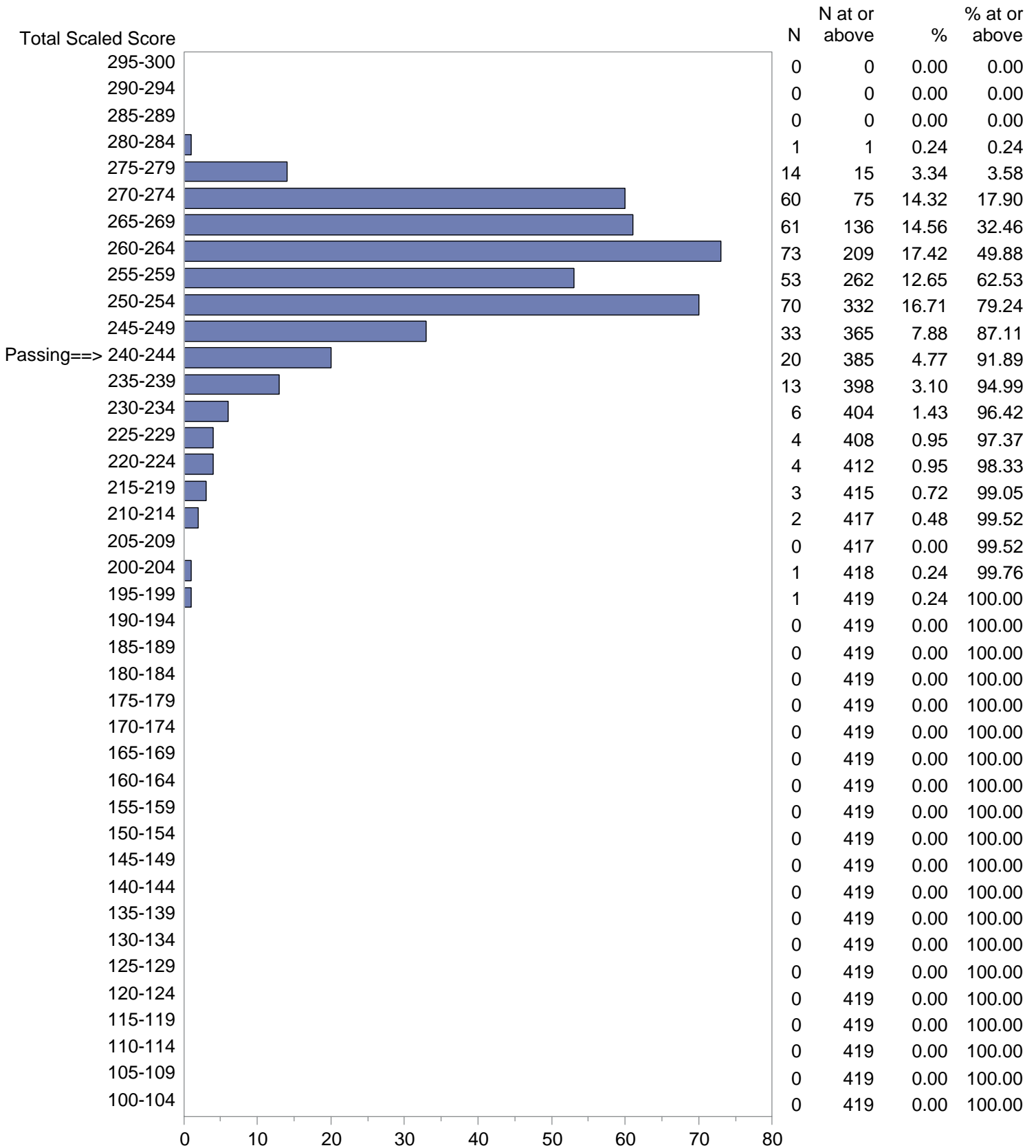
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=161 SPECIAL EDUCATION EC-12



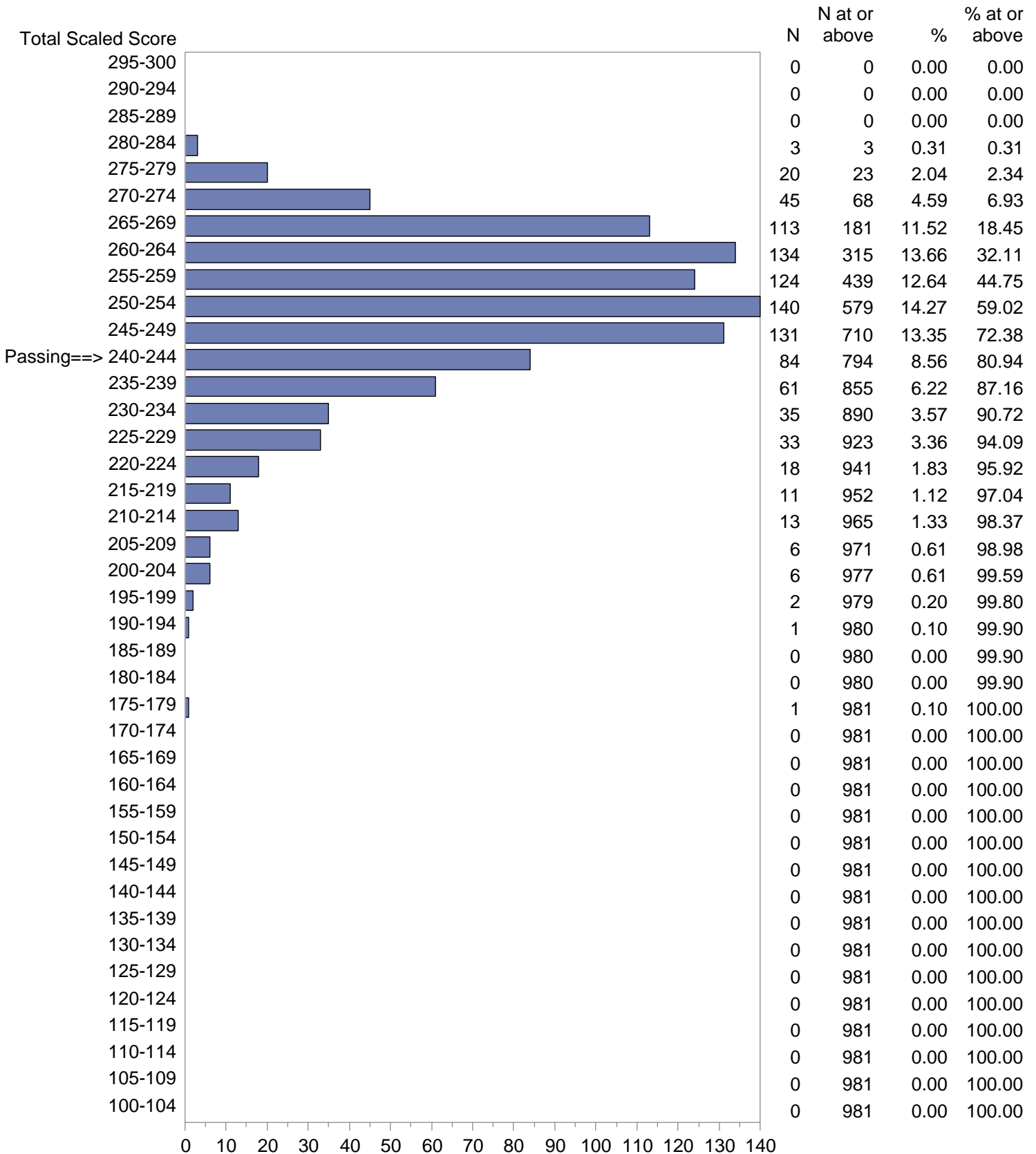
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=162 GIFTED AND TALENTED SUPPLEMENTAL



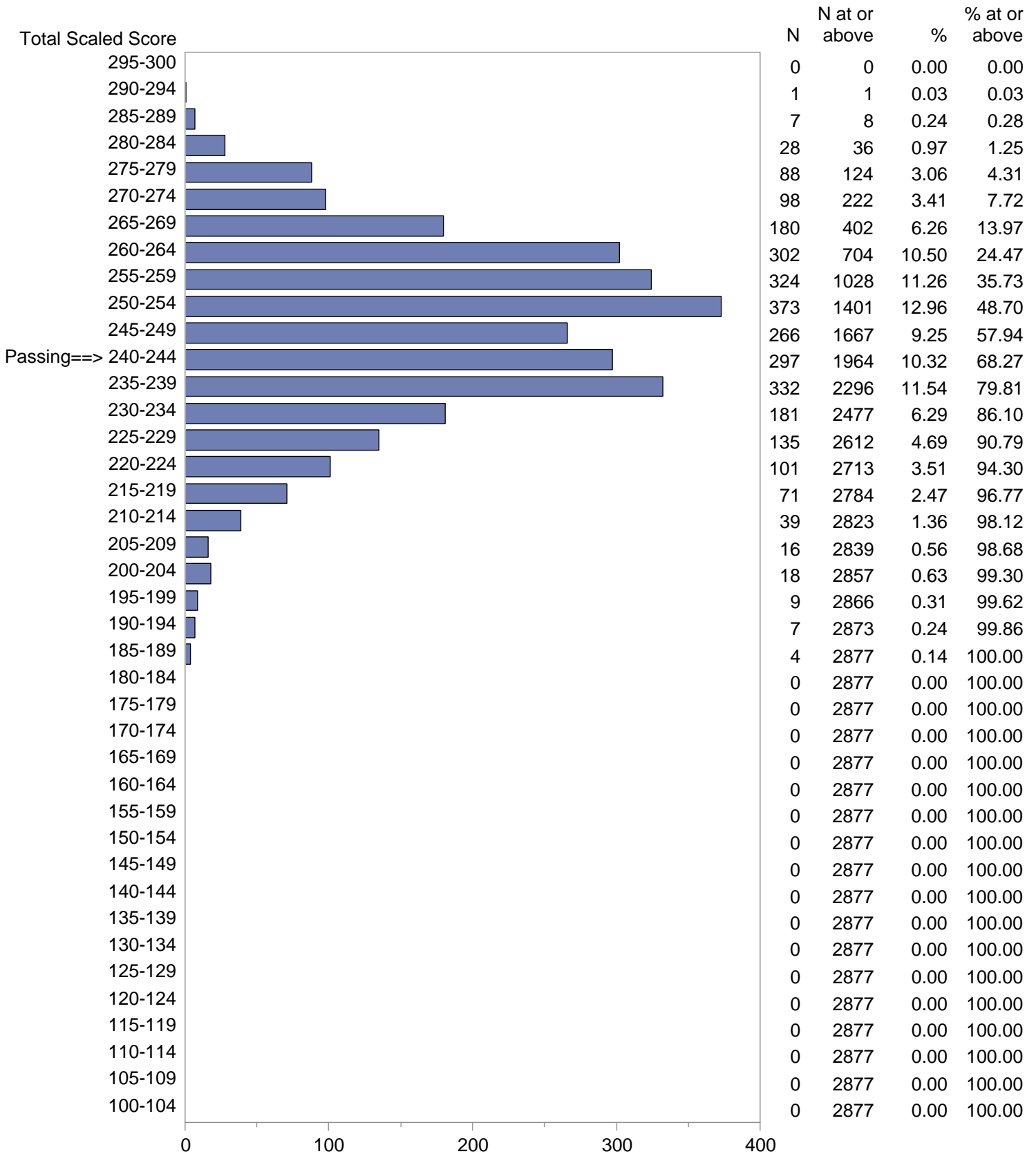
Texas Educator Certification Examination Program
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Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=163 SPECIAL EDUCATION SUPPLEMENTAL



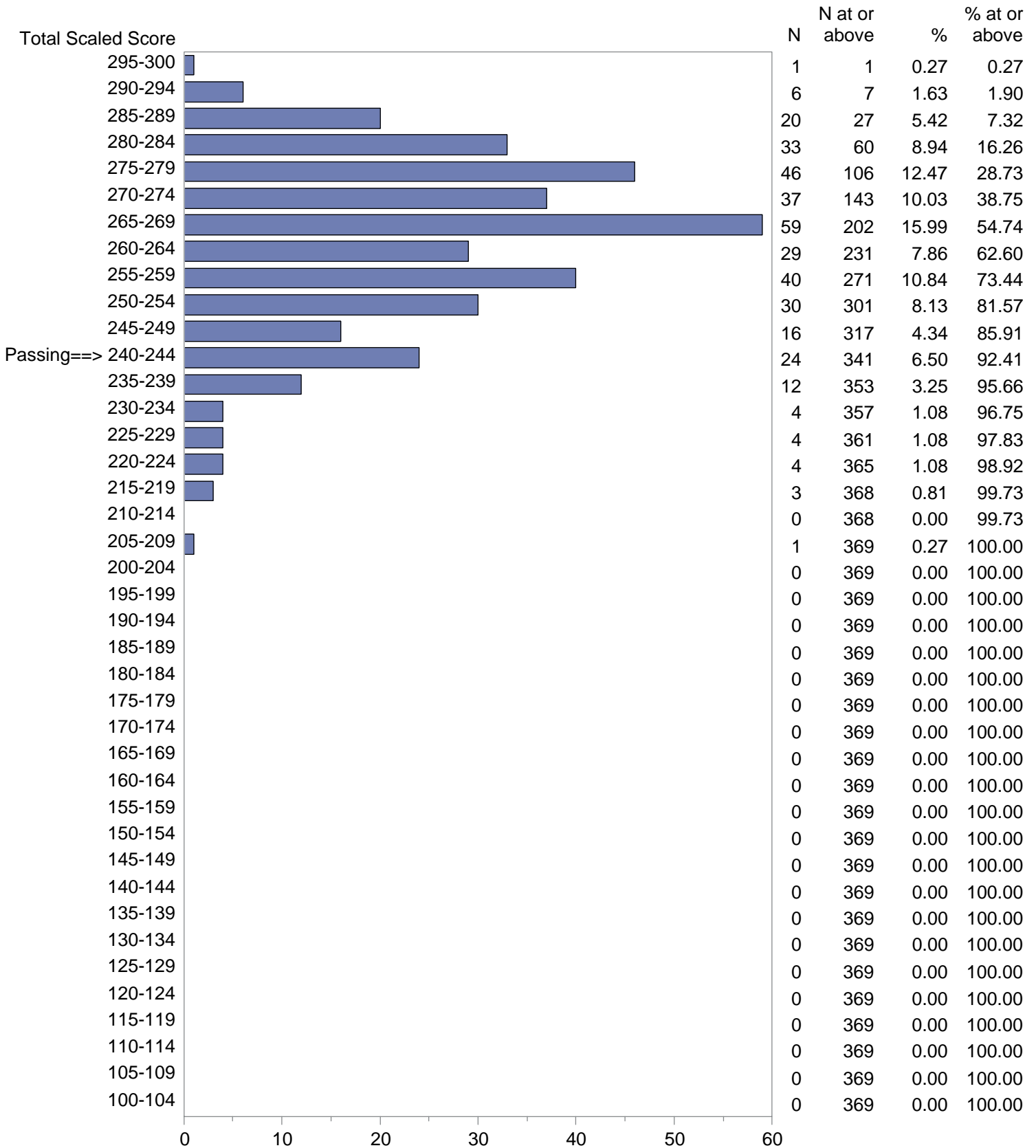
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=164 BILINGUAL EDUCATION SUPPLEMENTAL



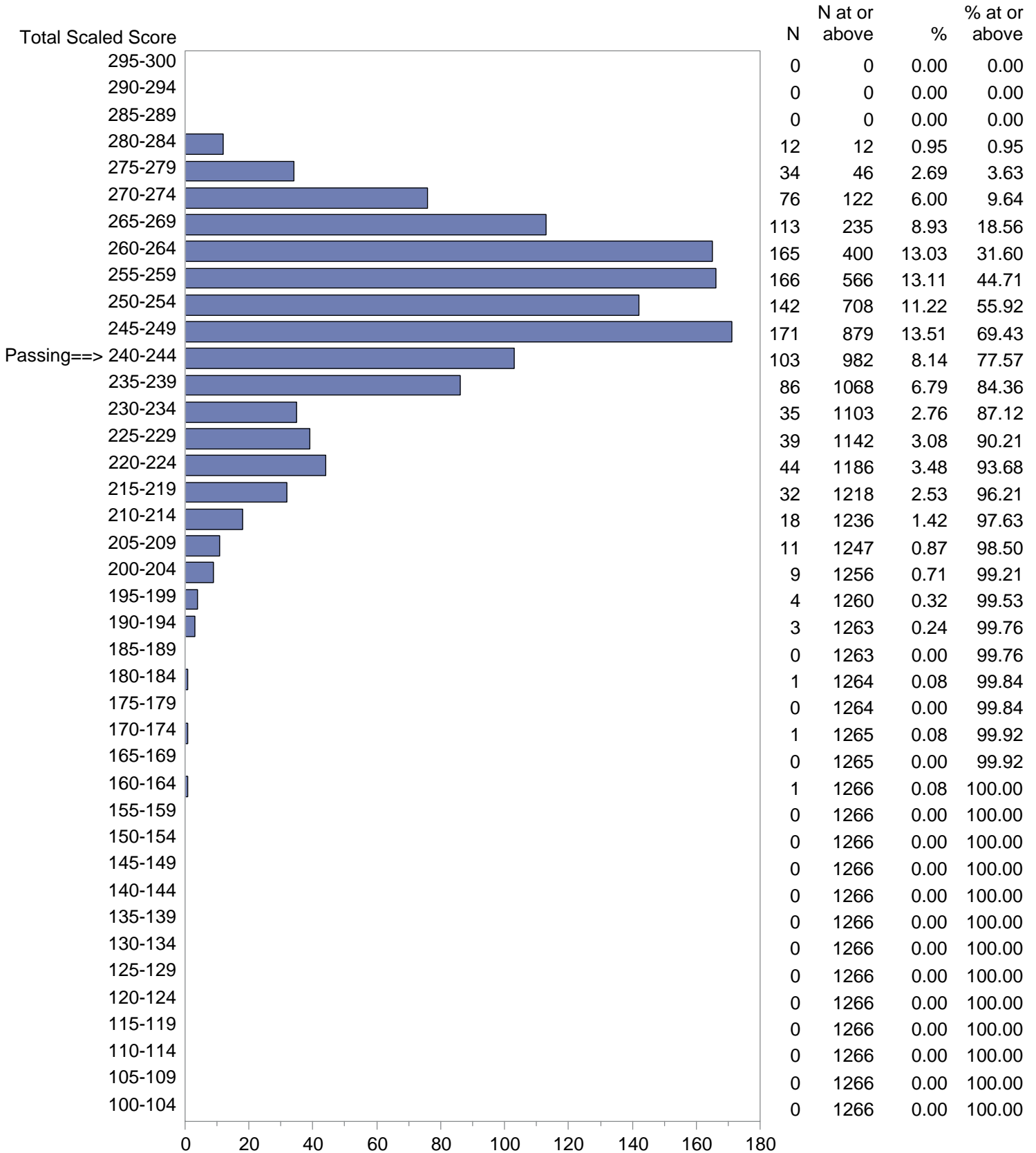
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=171 TECHNOLOGY EDUCATION 6-12



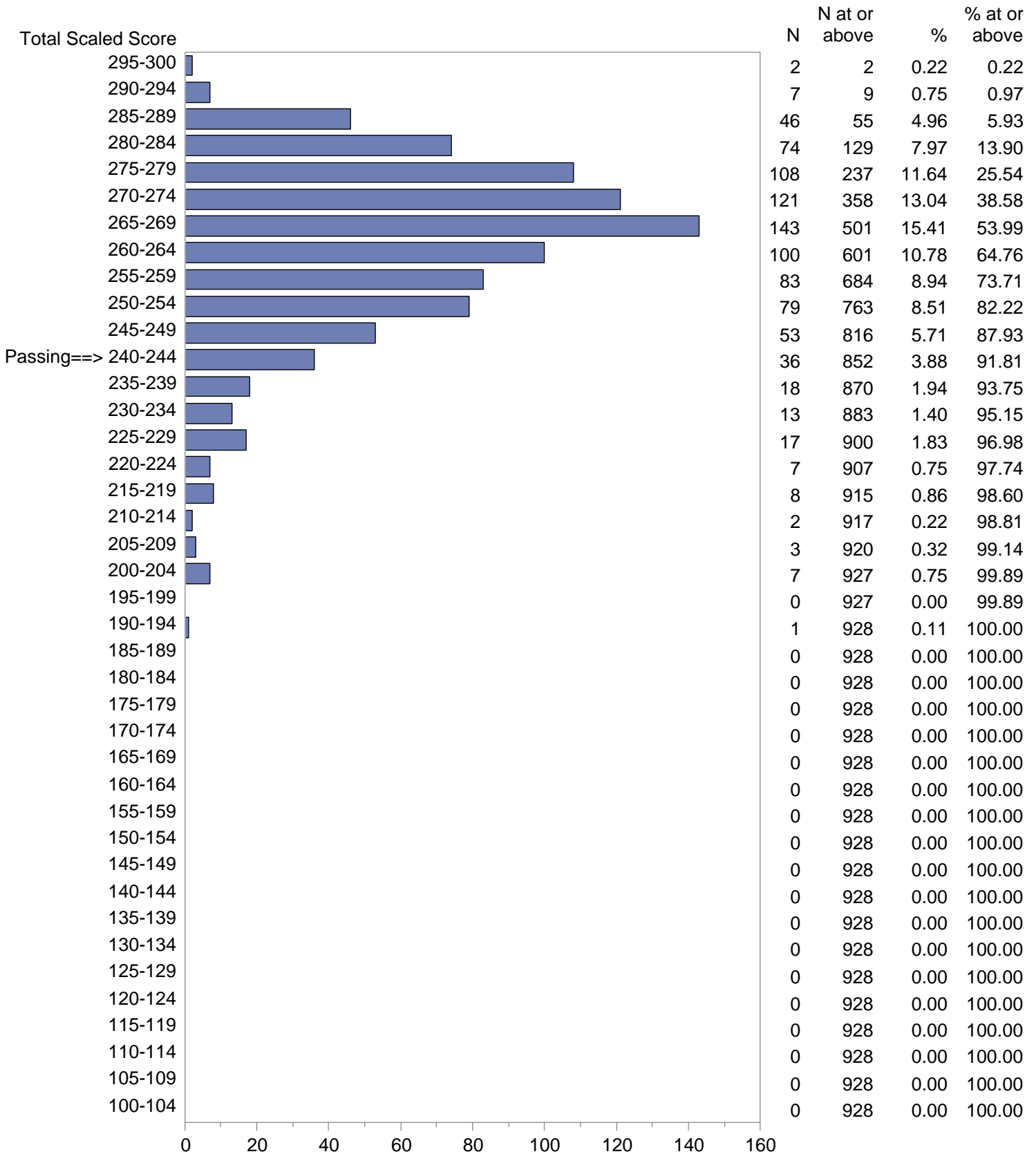
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=177 MUSIC EC-12



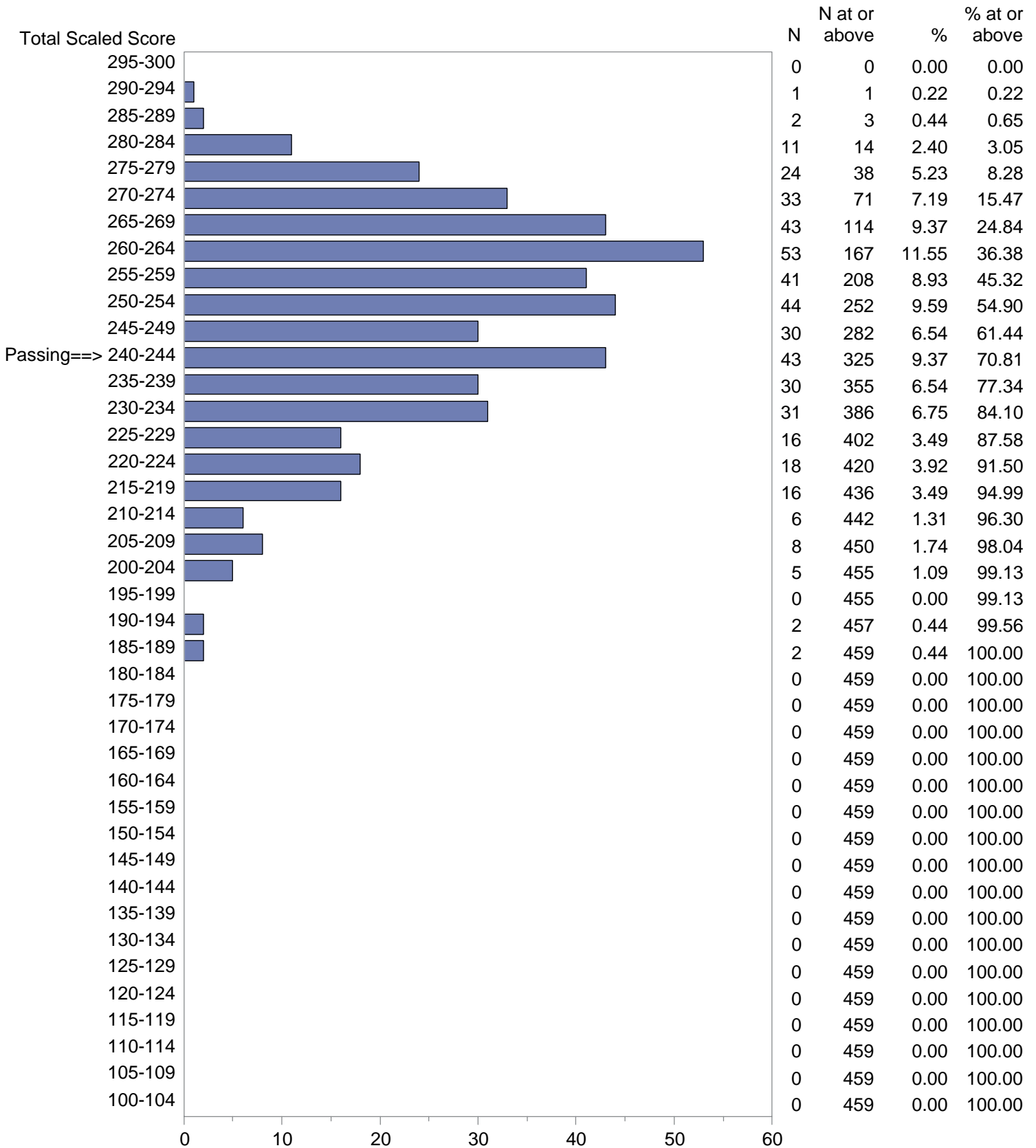
Texas Educator Certification Examination Program
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 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=178 ART EC-12



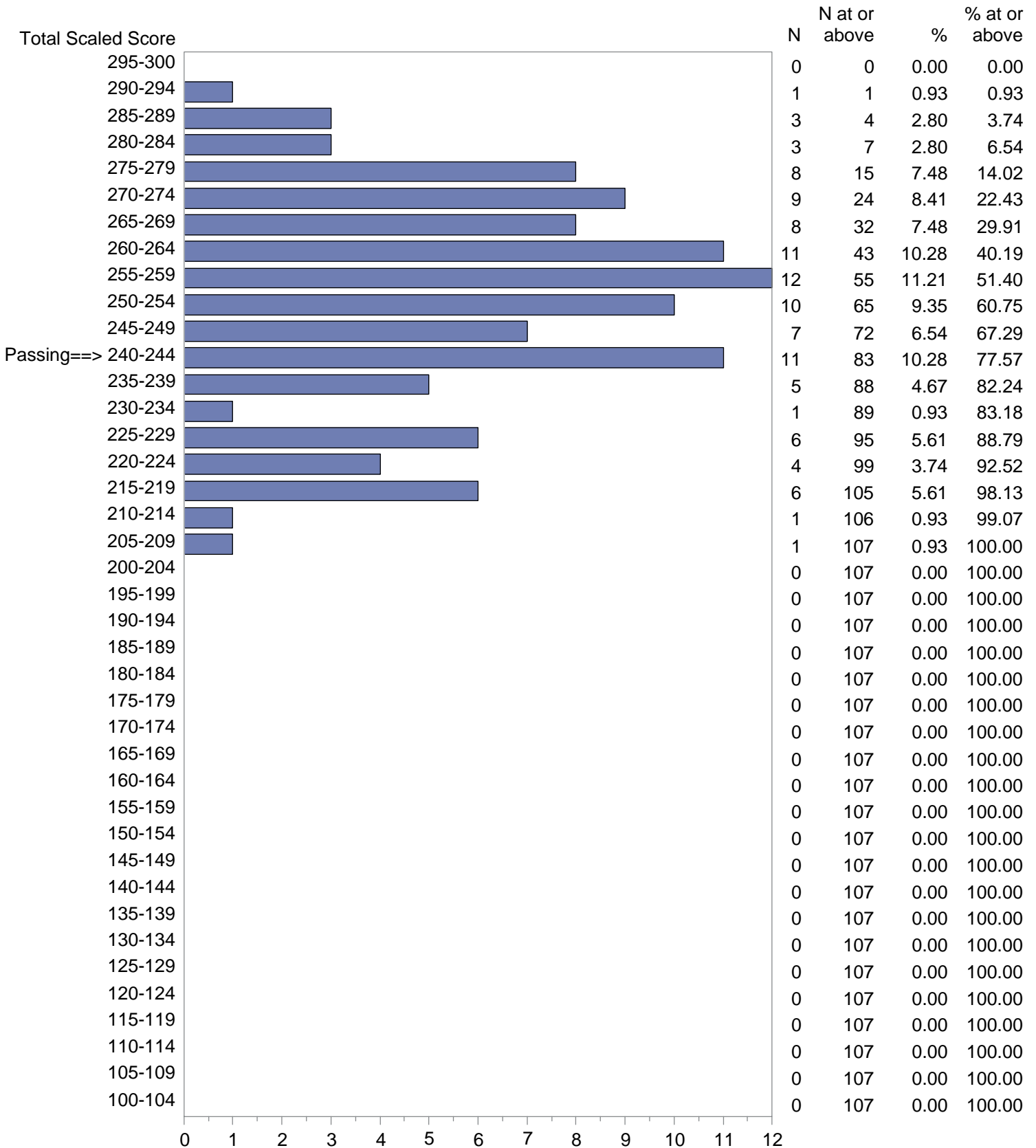
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=180 THEATRE EC-12



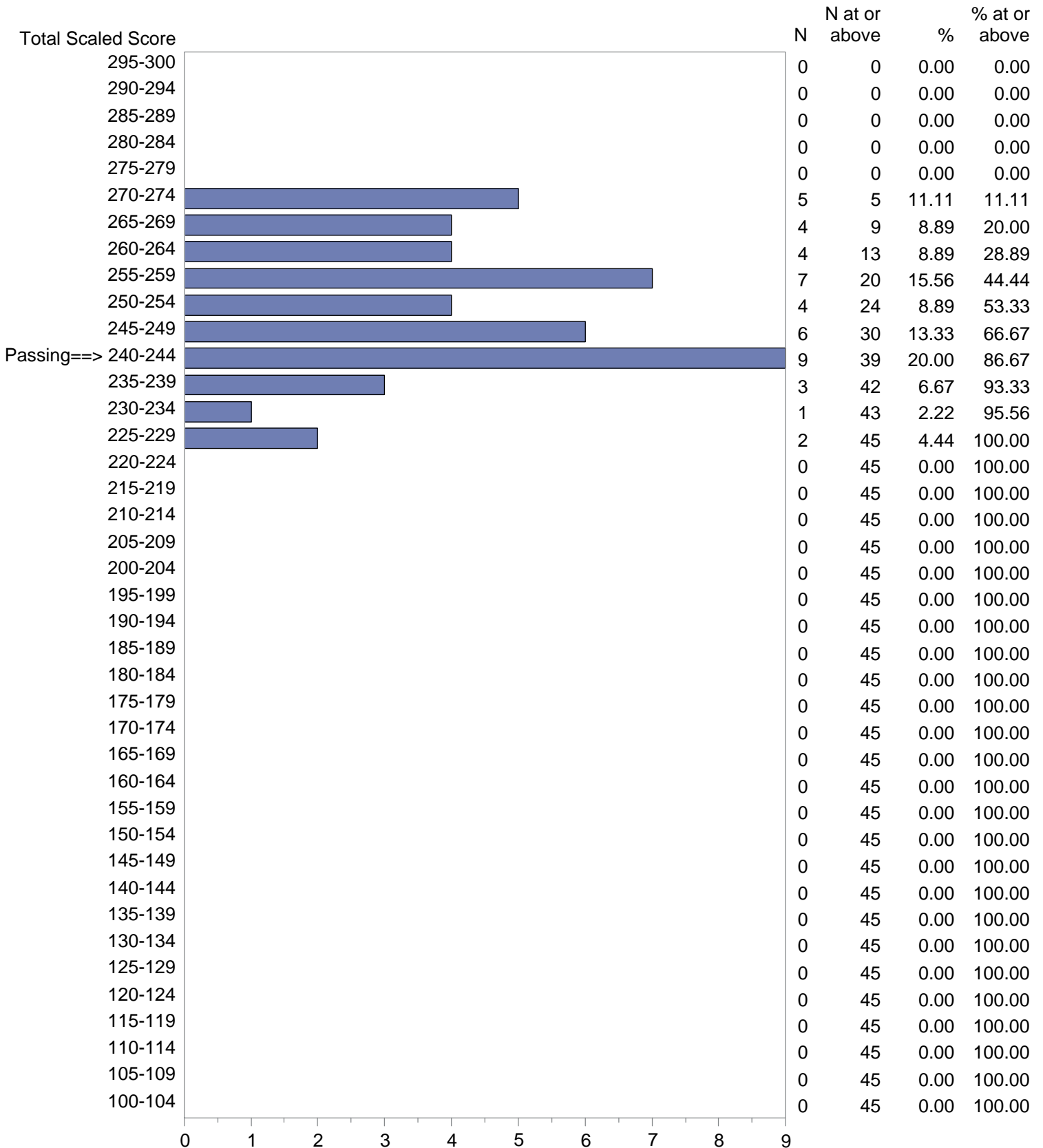
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=181 DEAF AND HARD OF HEARING



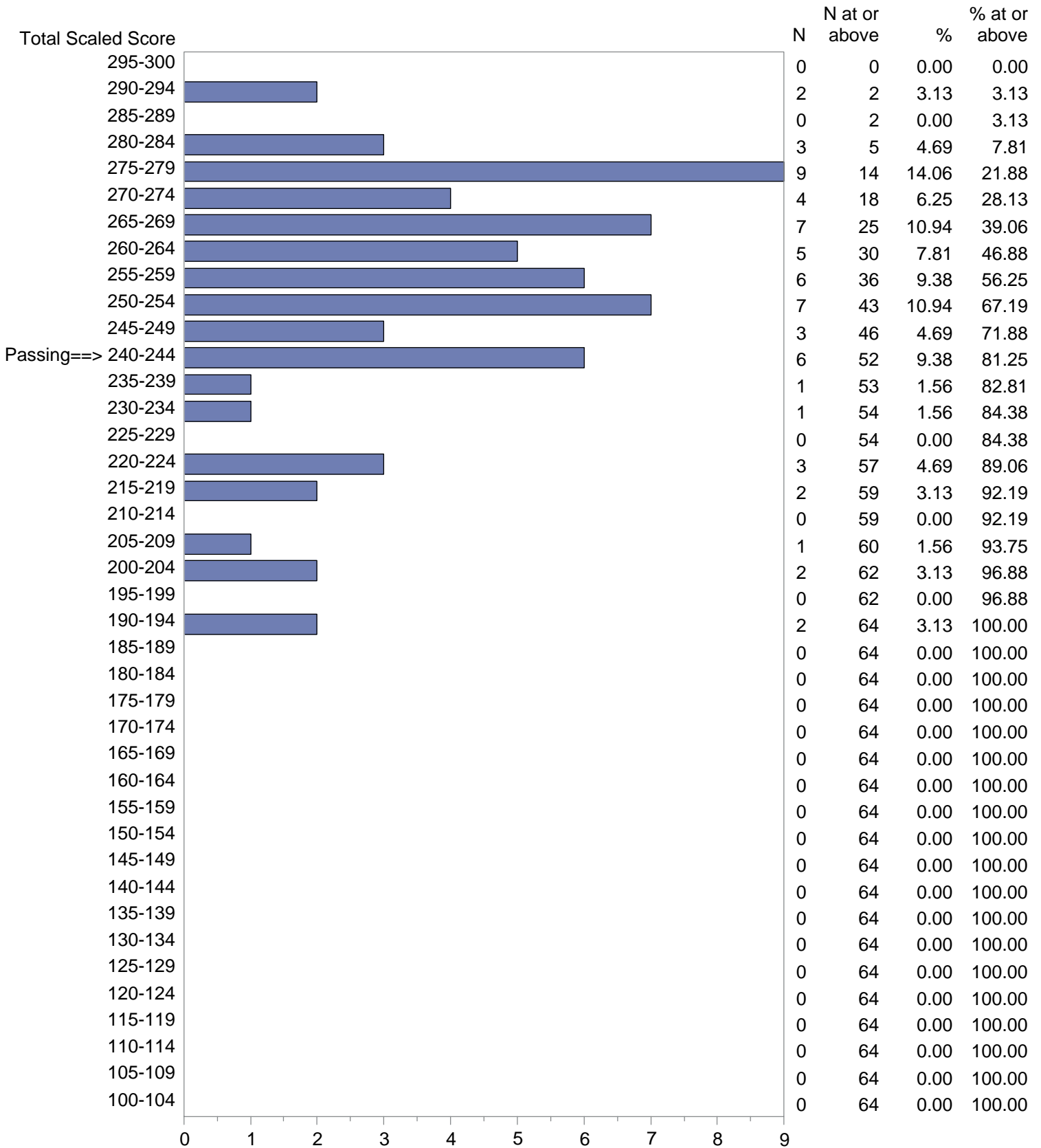
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=182 VISUALLY IMPAIRED



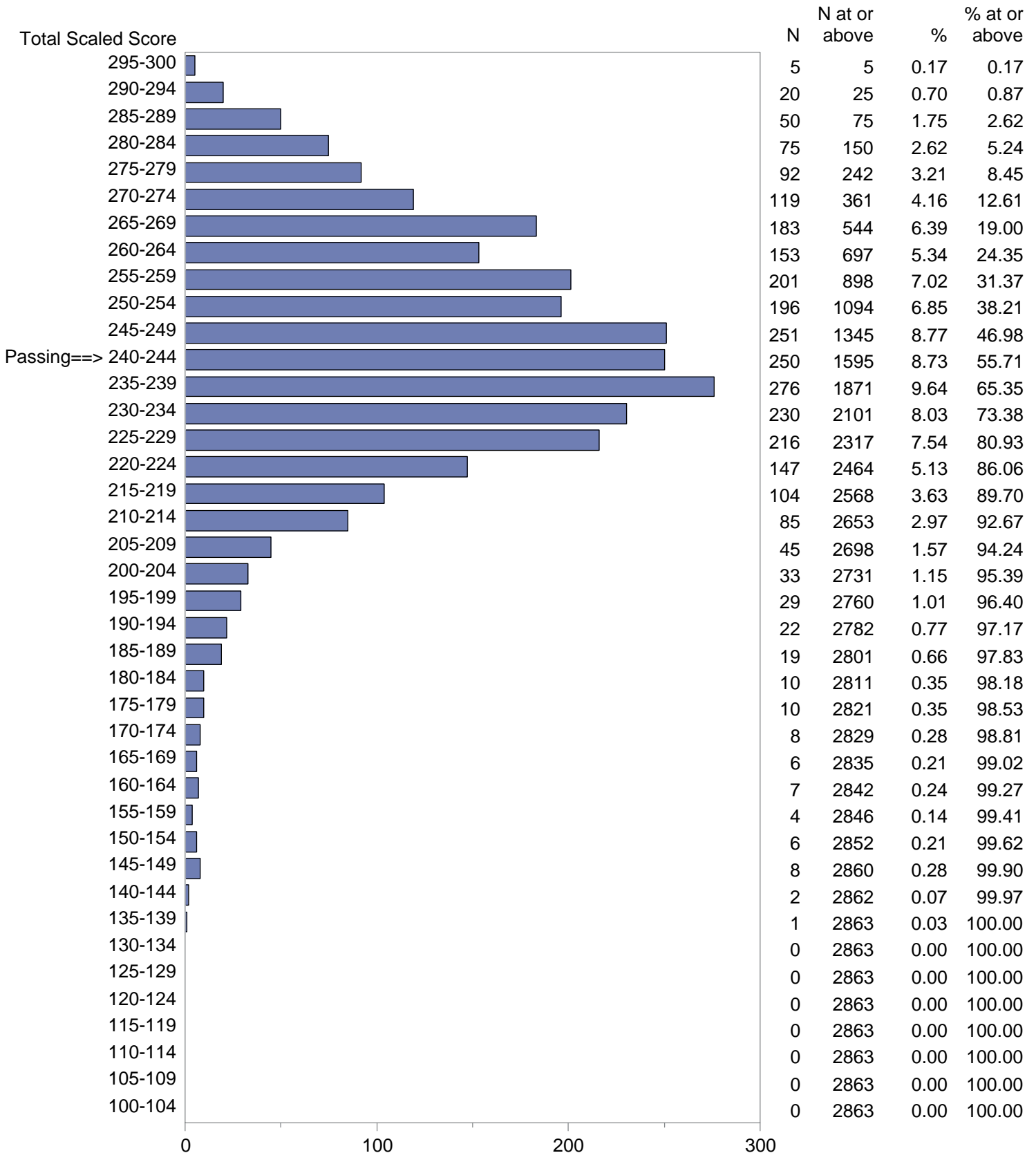
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=184 AMERICAN SIGN LANGUAGE (ASL)



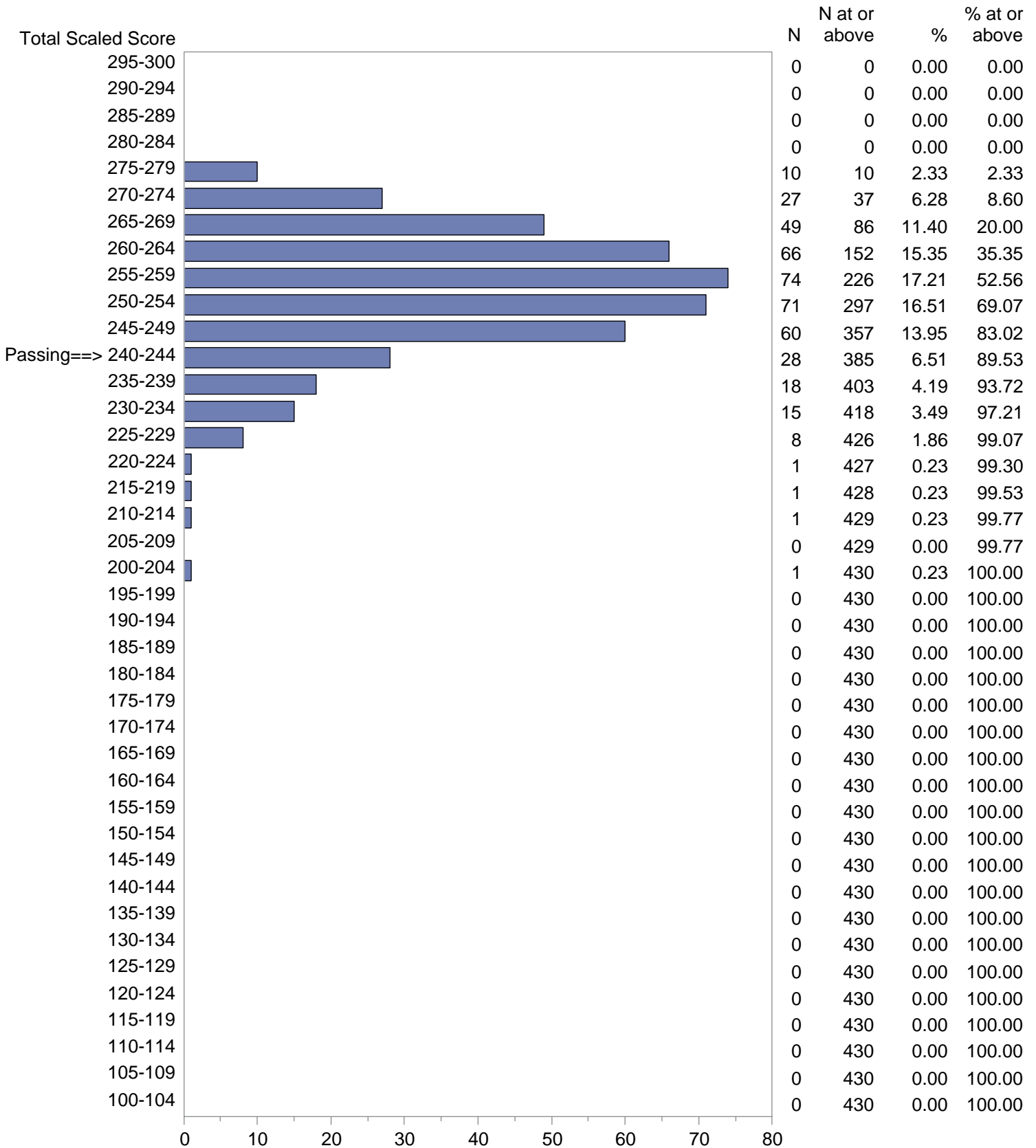
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=190 BILINGUAL TARGET LANGUAGE PROFICIENCY TEST



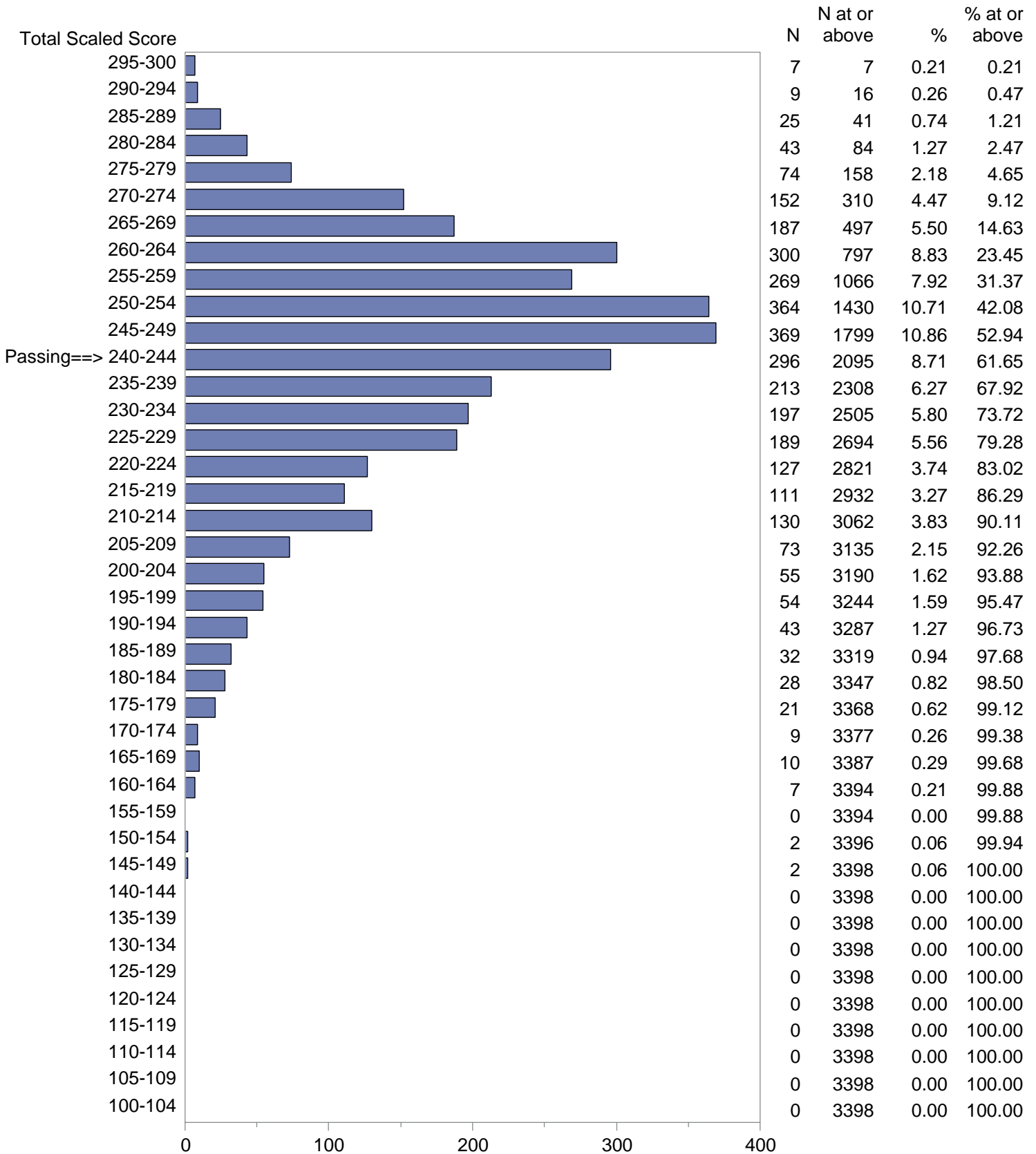
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=195 SUPERINTENDENT



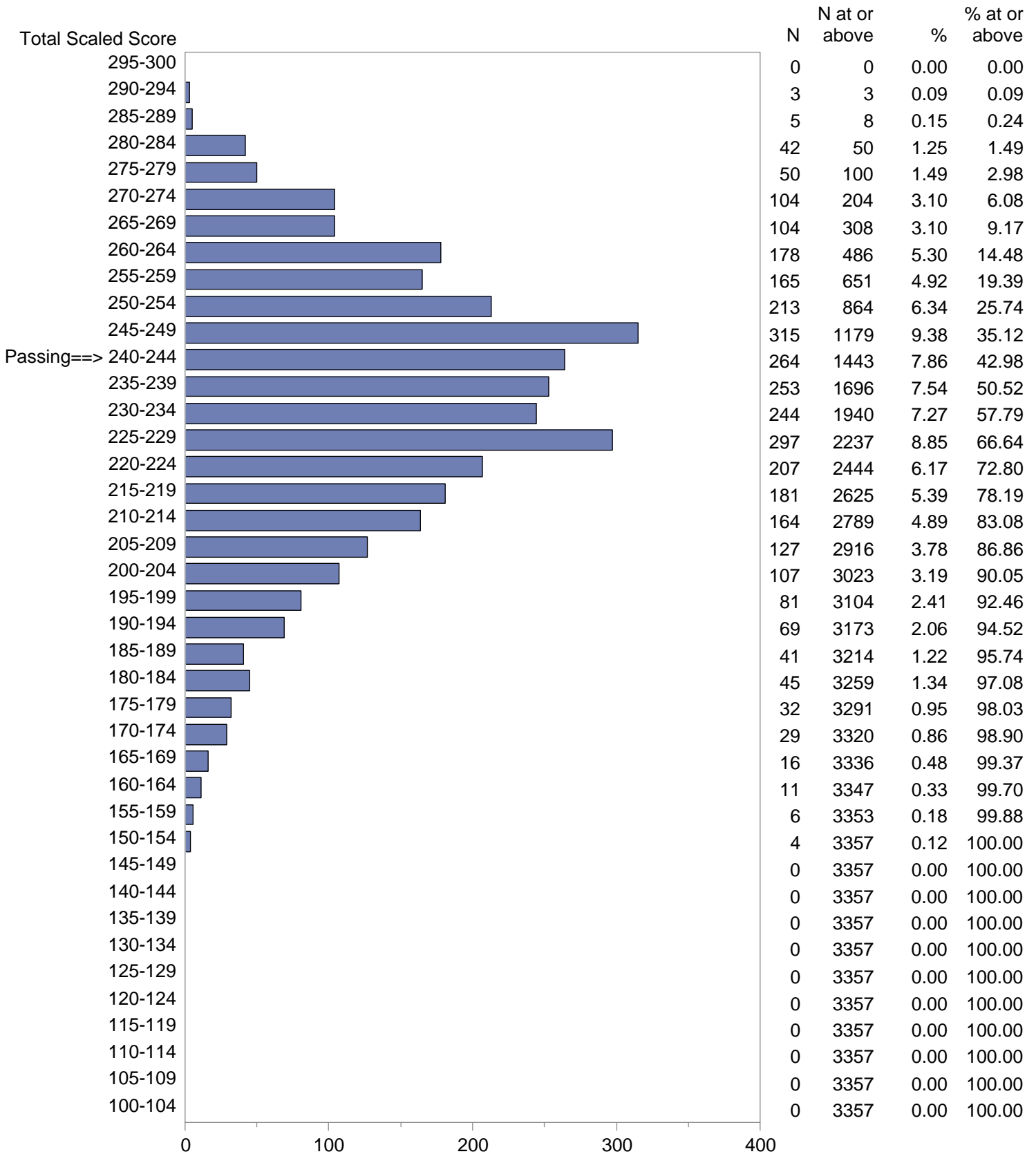
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

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



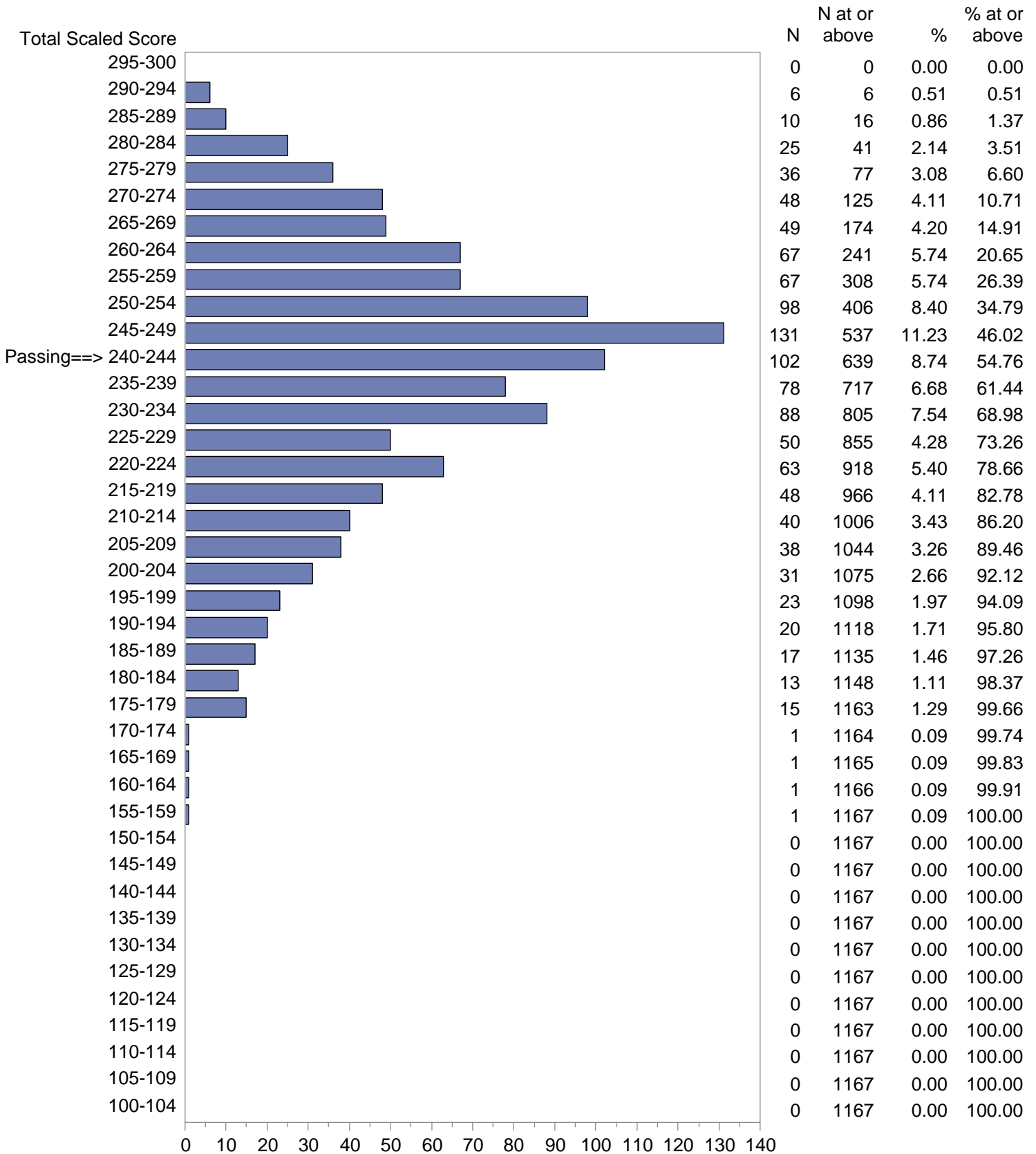
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=232 SOCIAL STUDIES 7-12



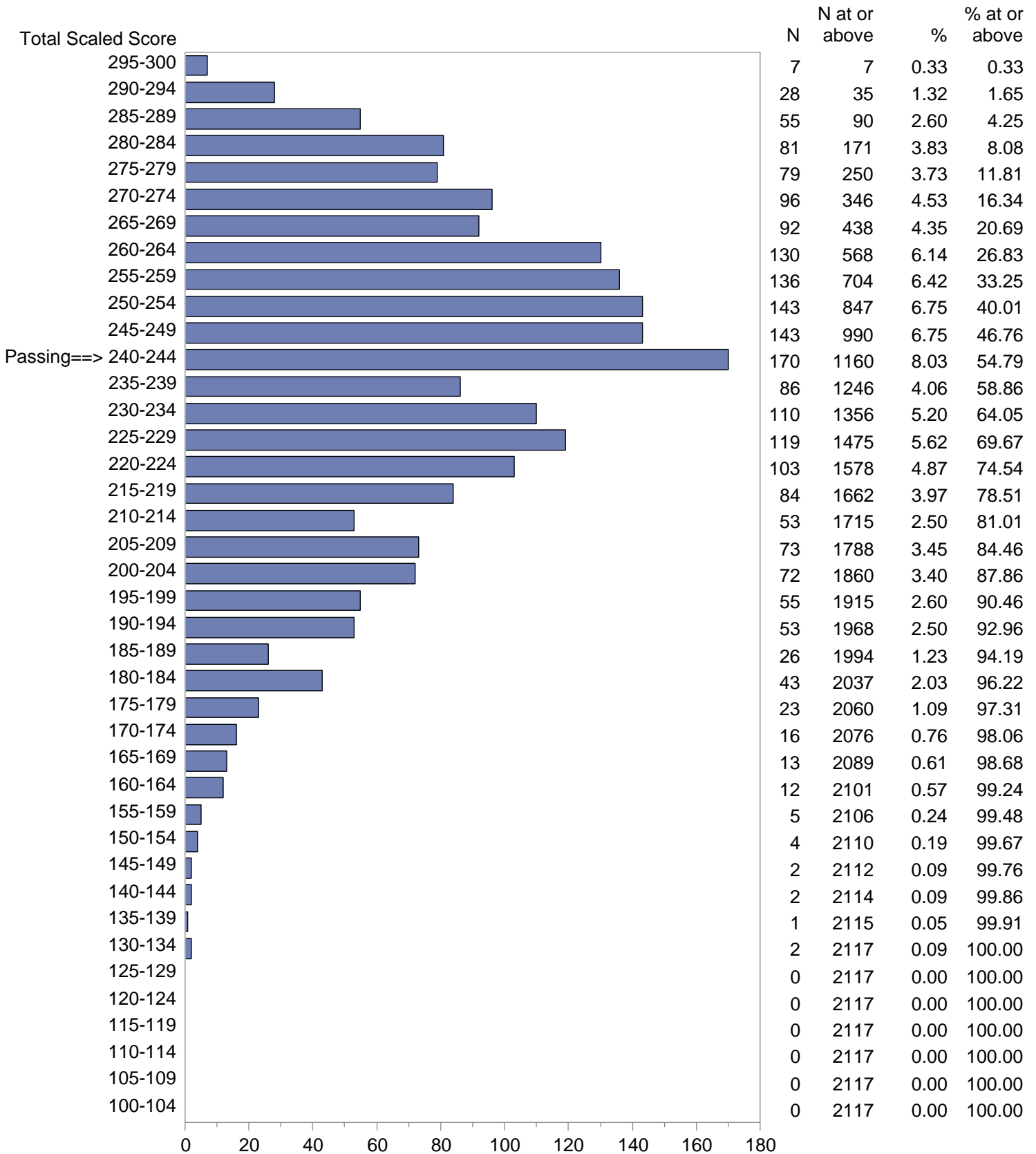
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=233 HISTORY 7-12



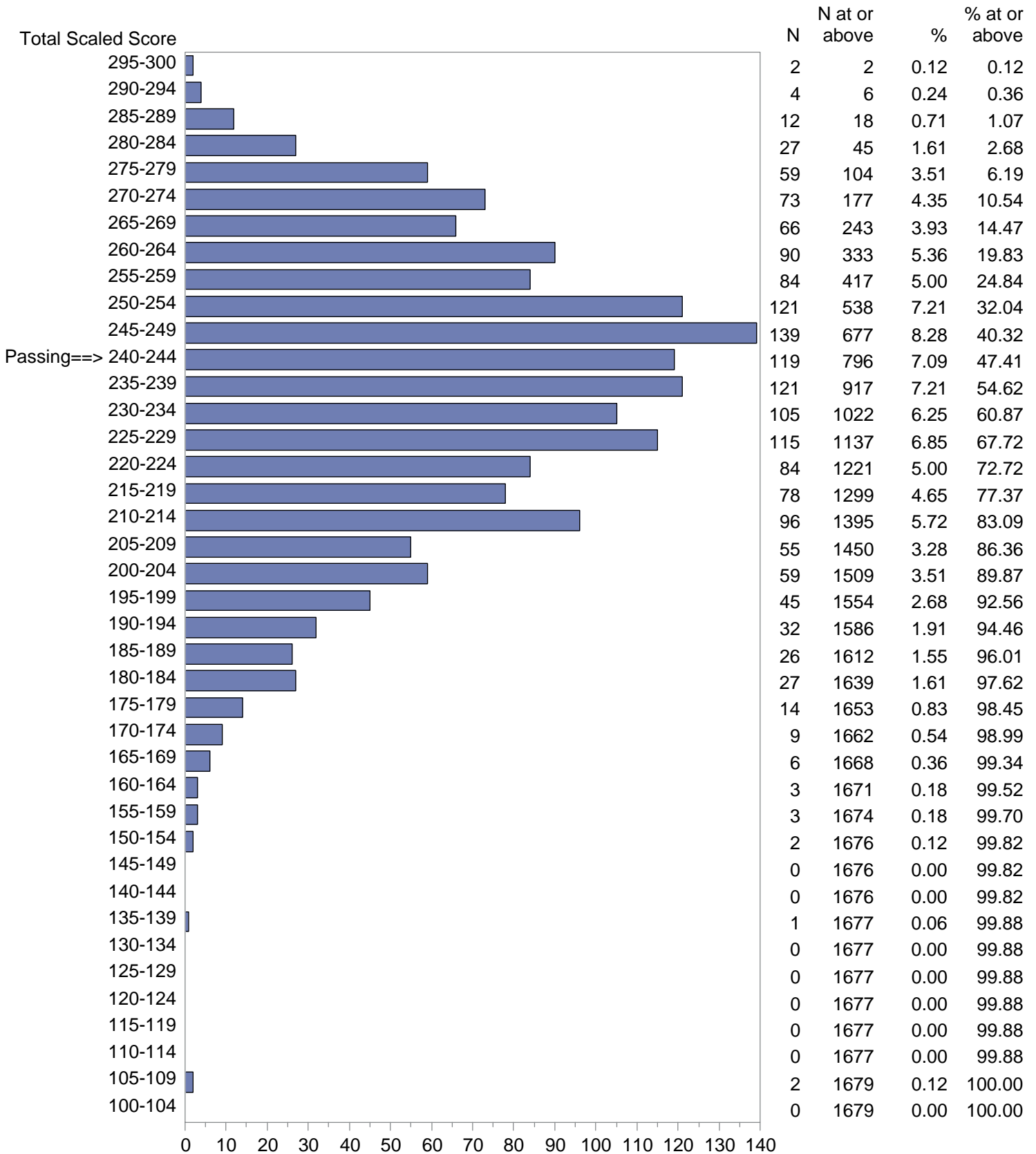
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=235 MATHEMATICS 7-12



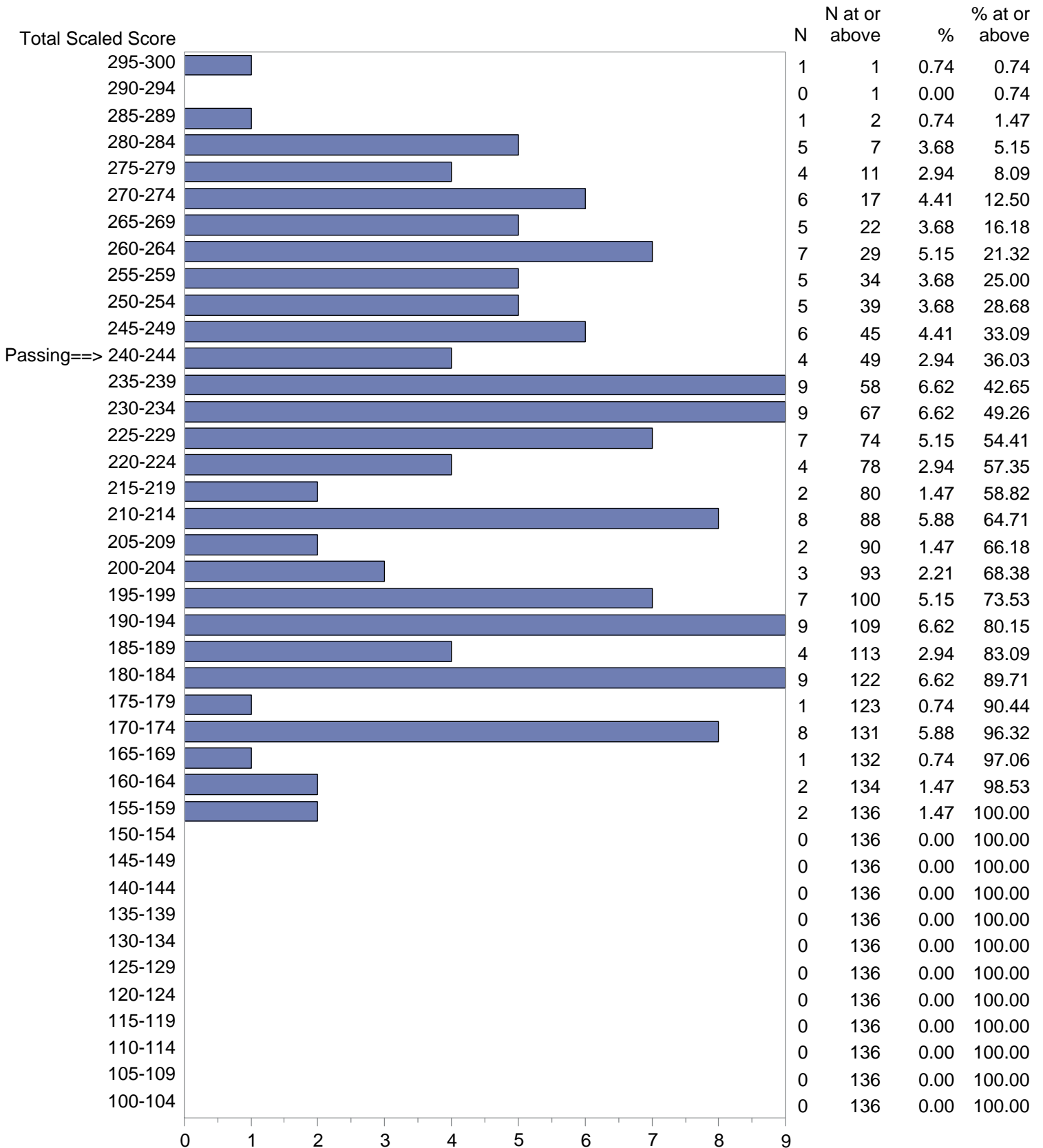
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=236 SCIENCE 7-12



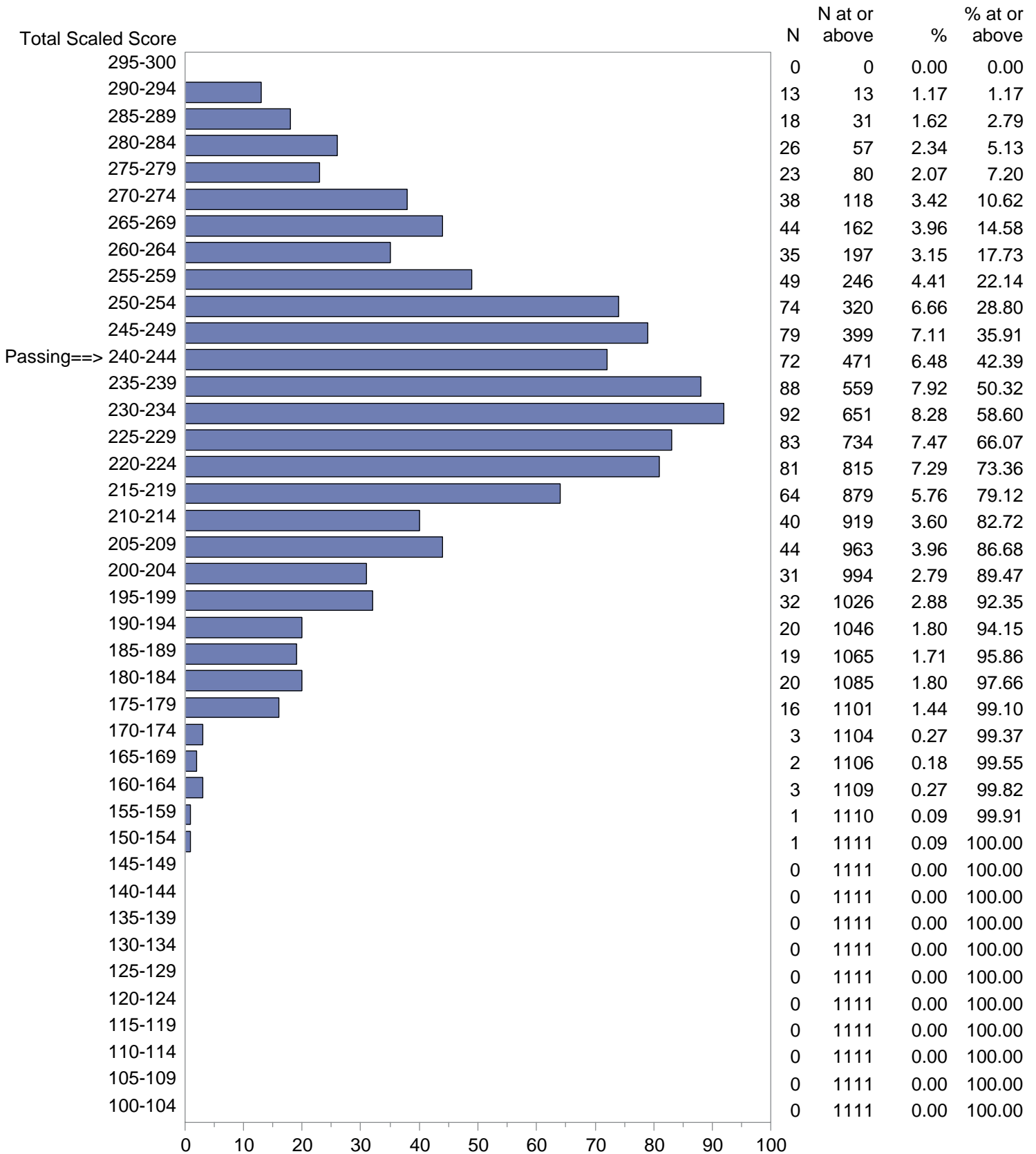
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=237 PHYSICAL SCIENCE 6-12



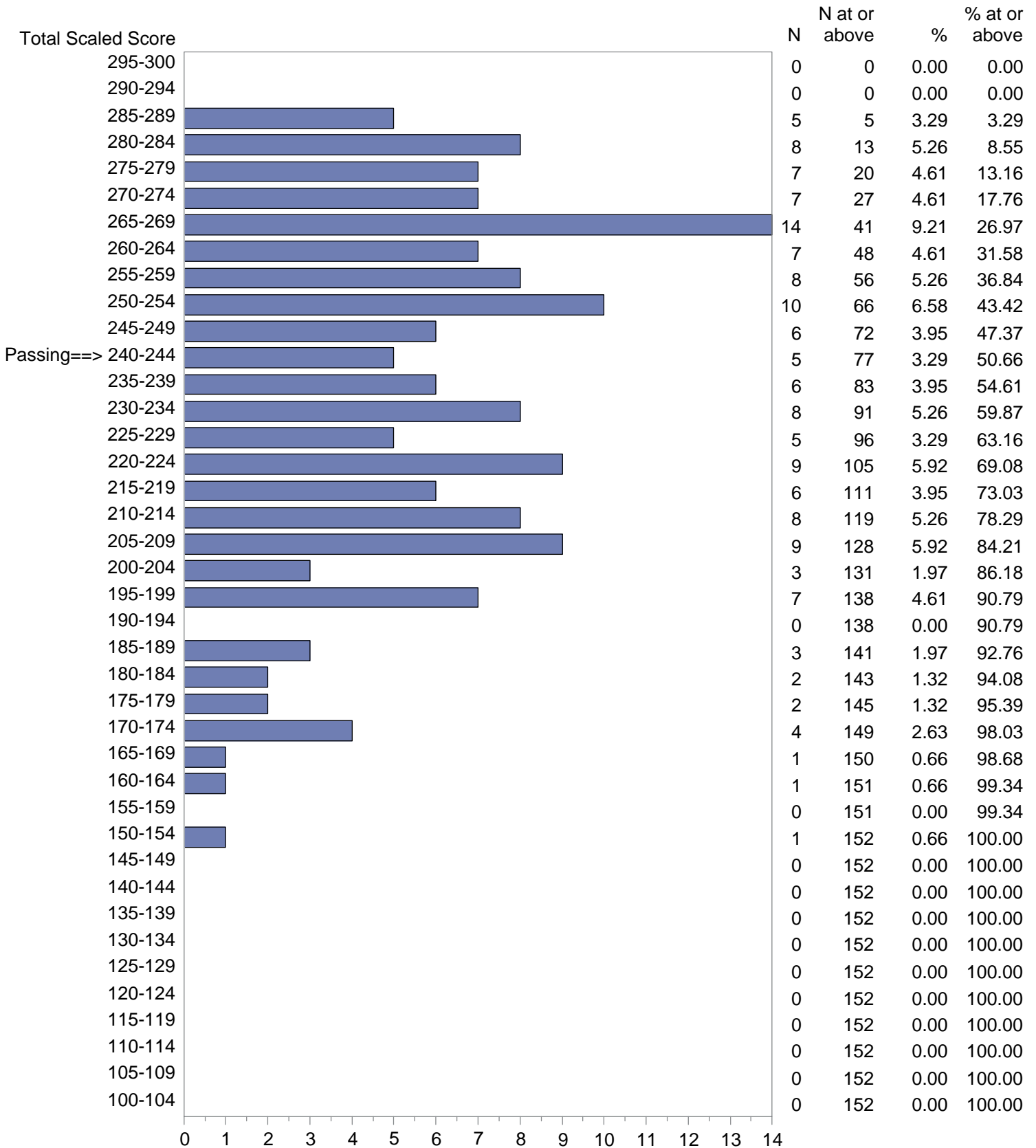
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=238 LIFE SCIENCE 7-12



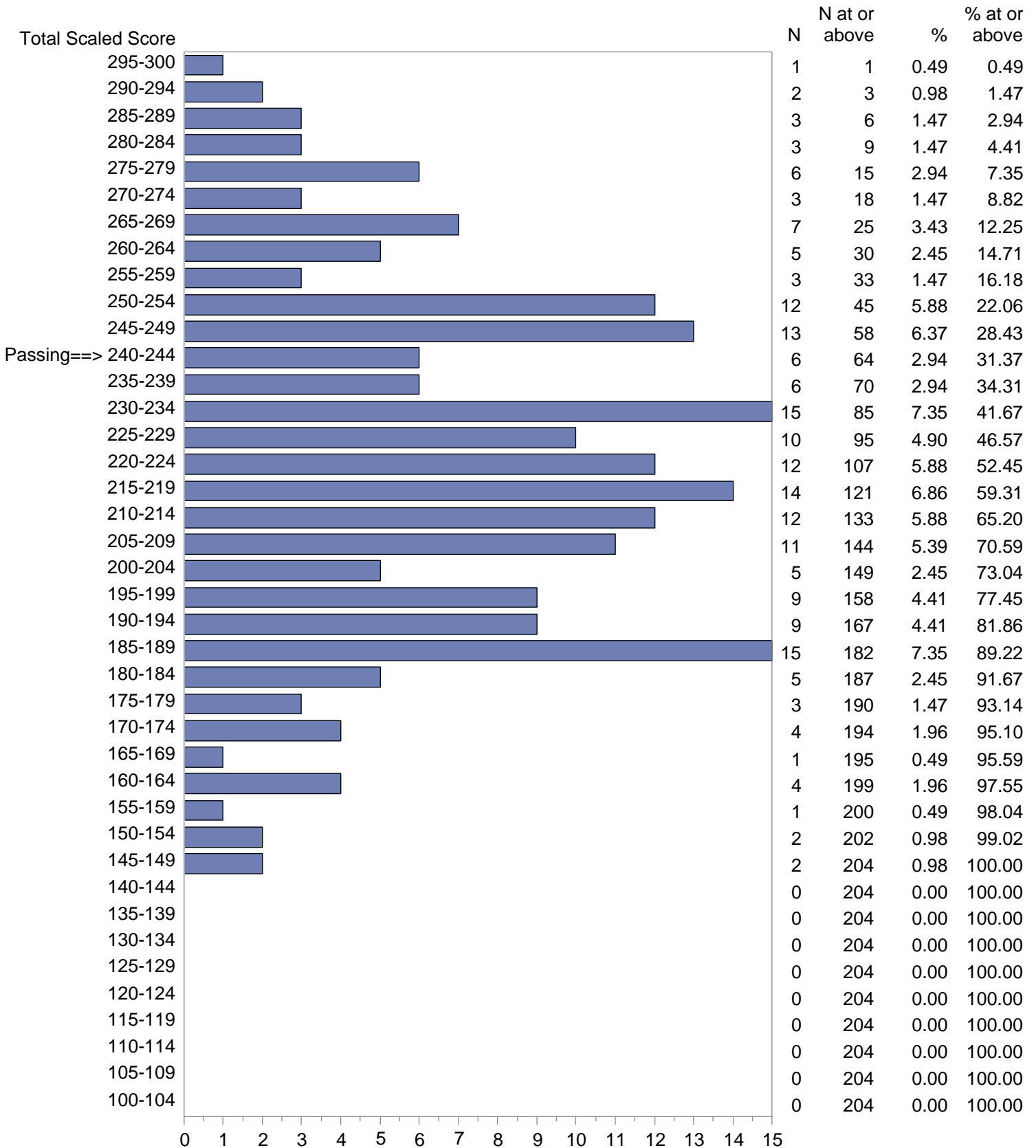
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=240 CHEMISTRY 7-12



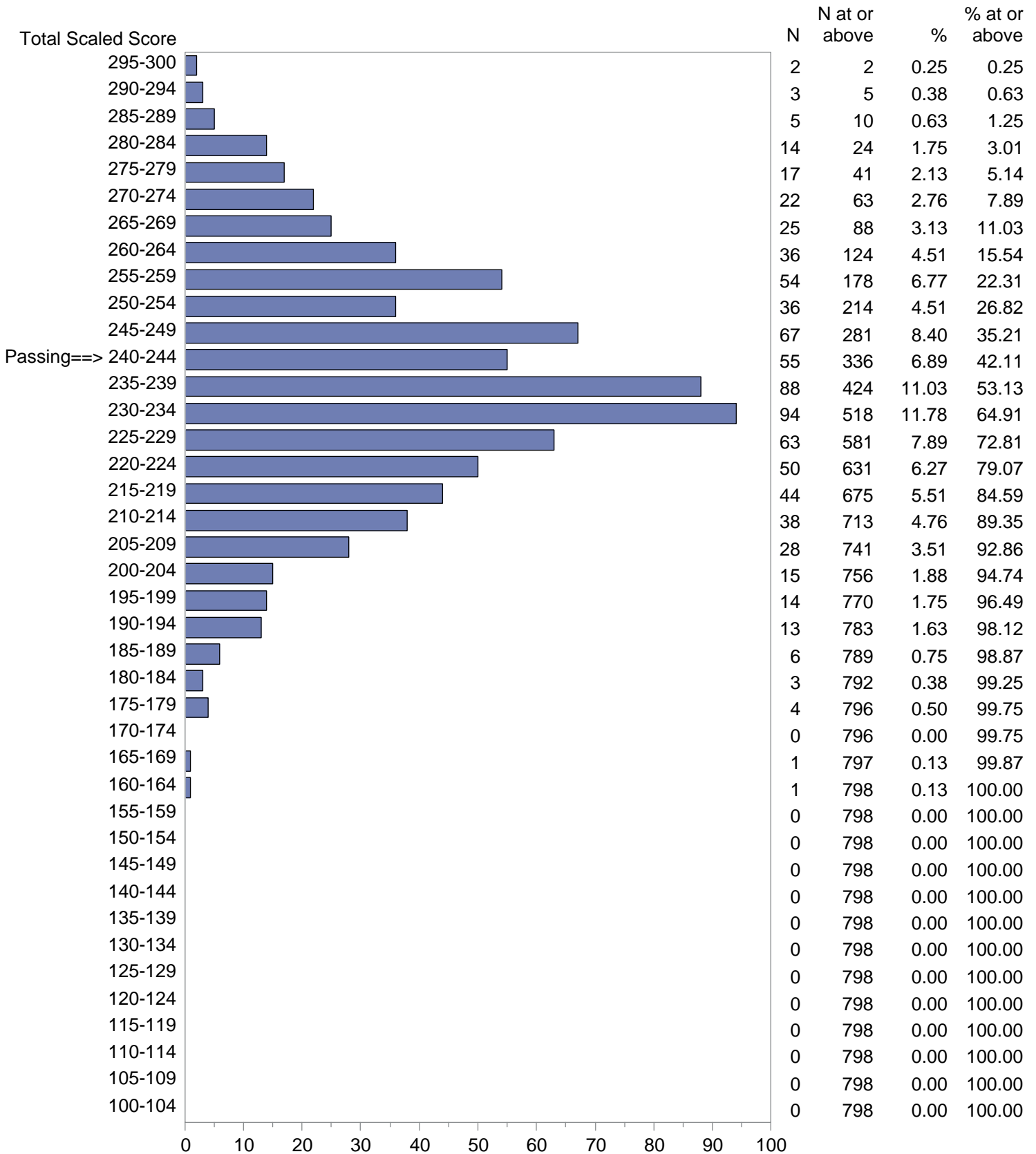
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=241 COMPUTER SCIENCE 8-12



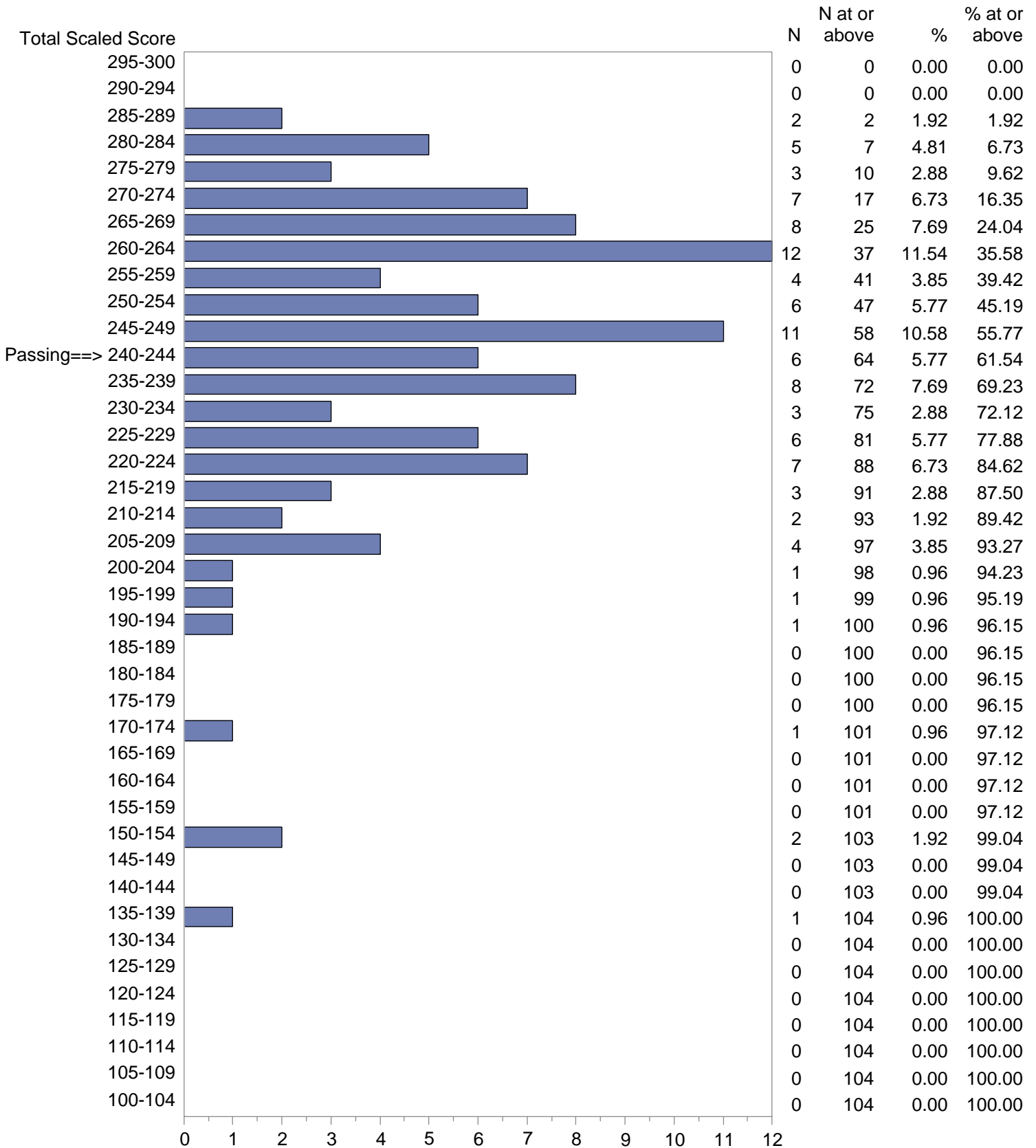
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=242 TECHNOLOGY APPLICATIONS EC-12



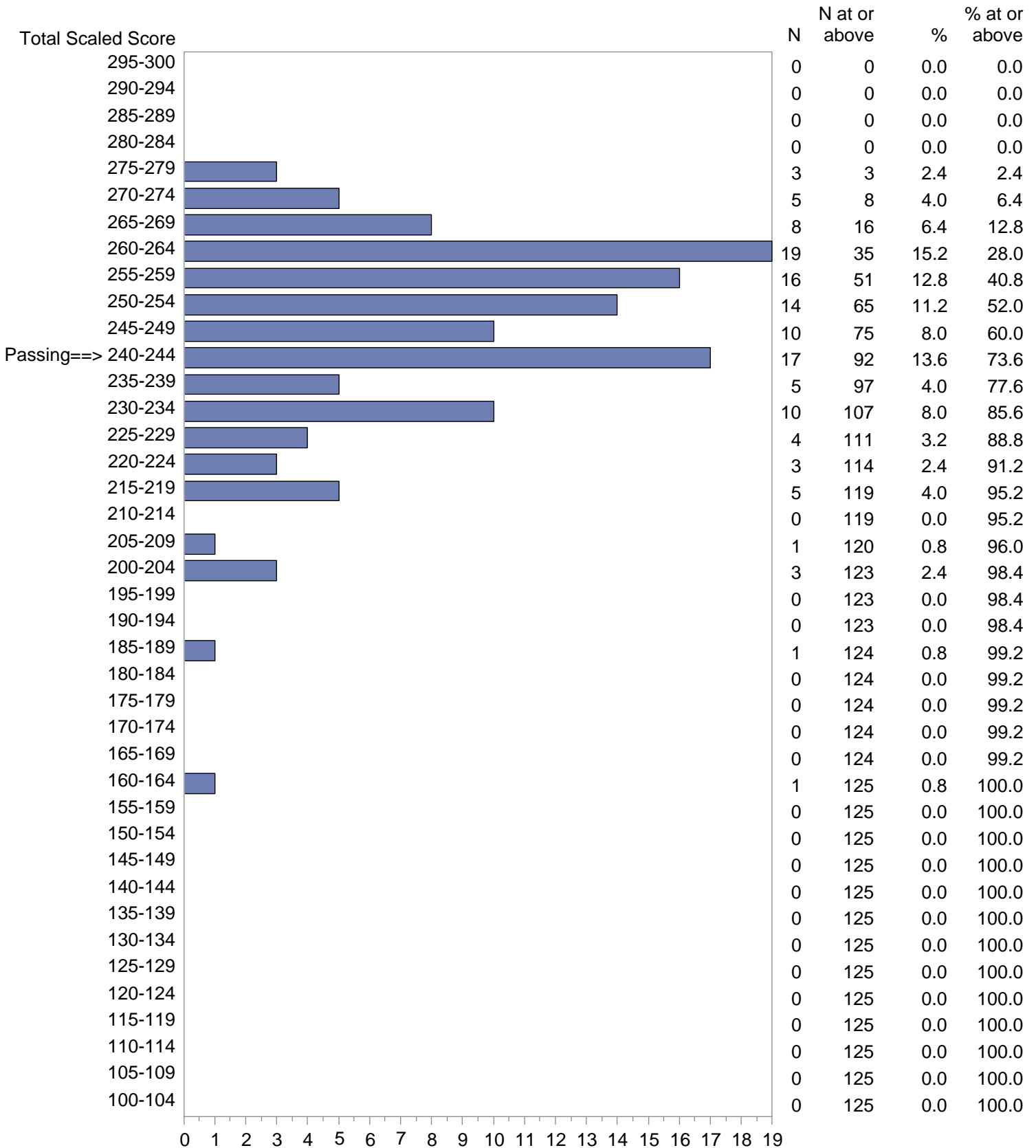
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=243 PHYSICS/MATHEMATICS 7-12



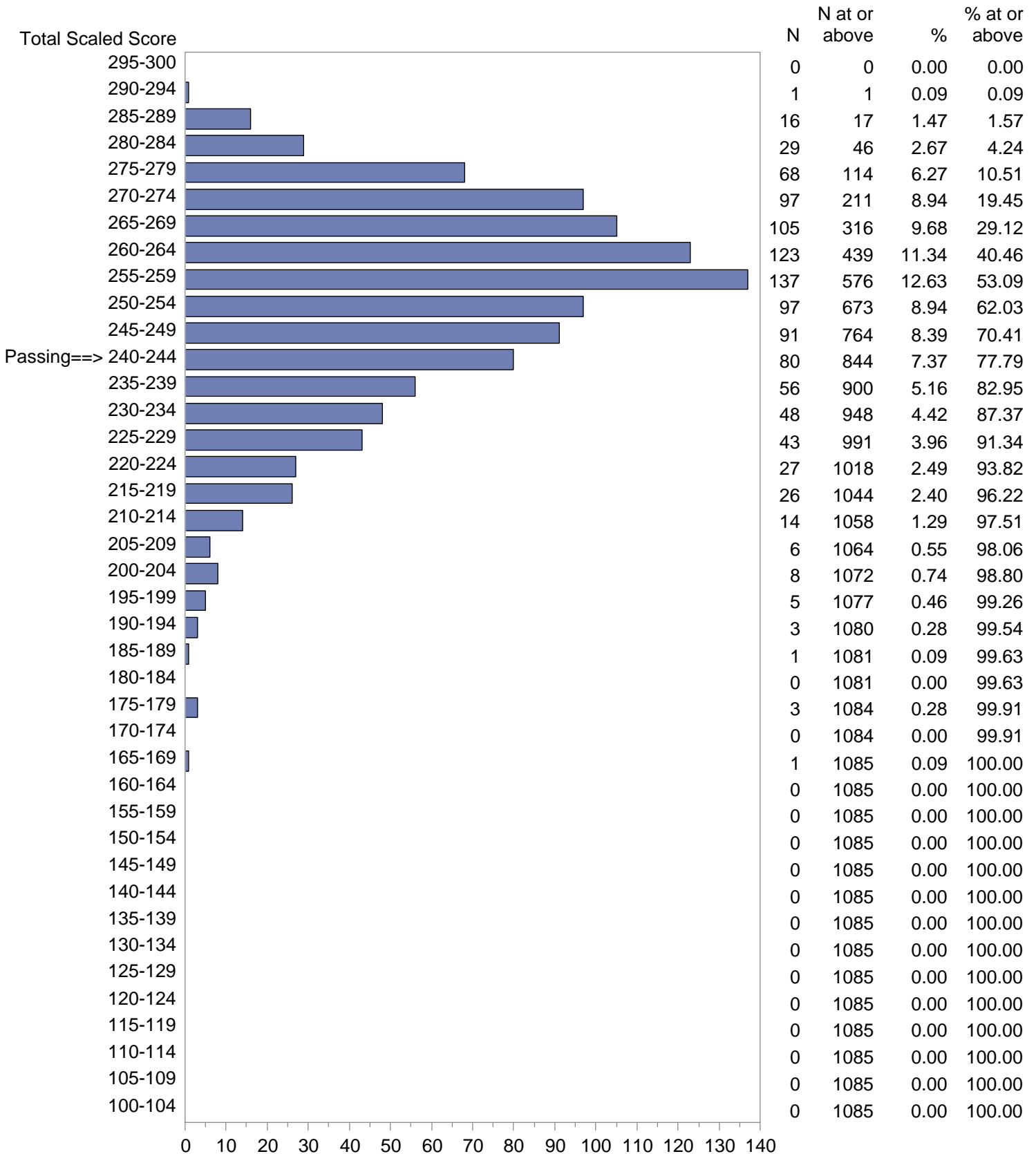
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=256 JOURNALISM 7-12



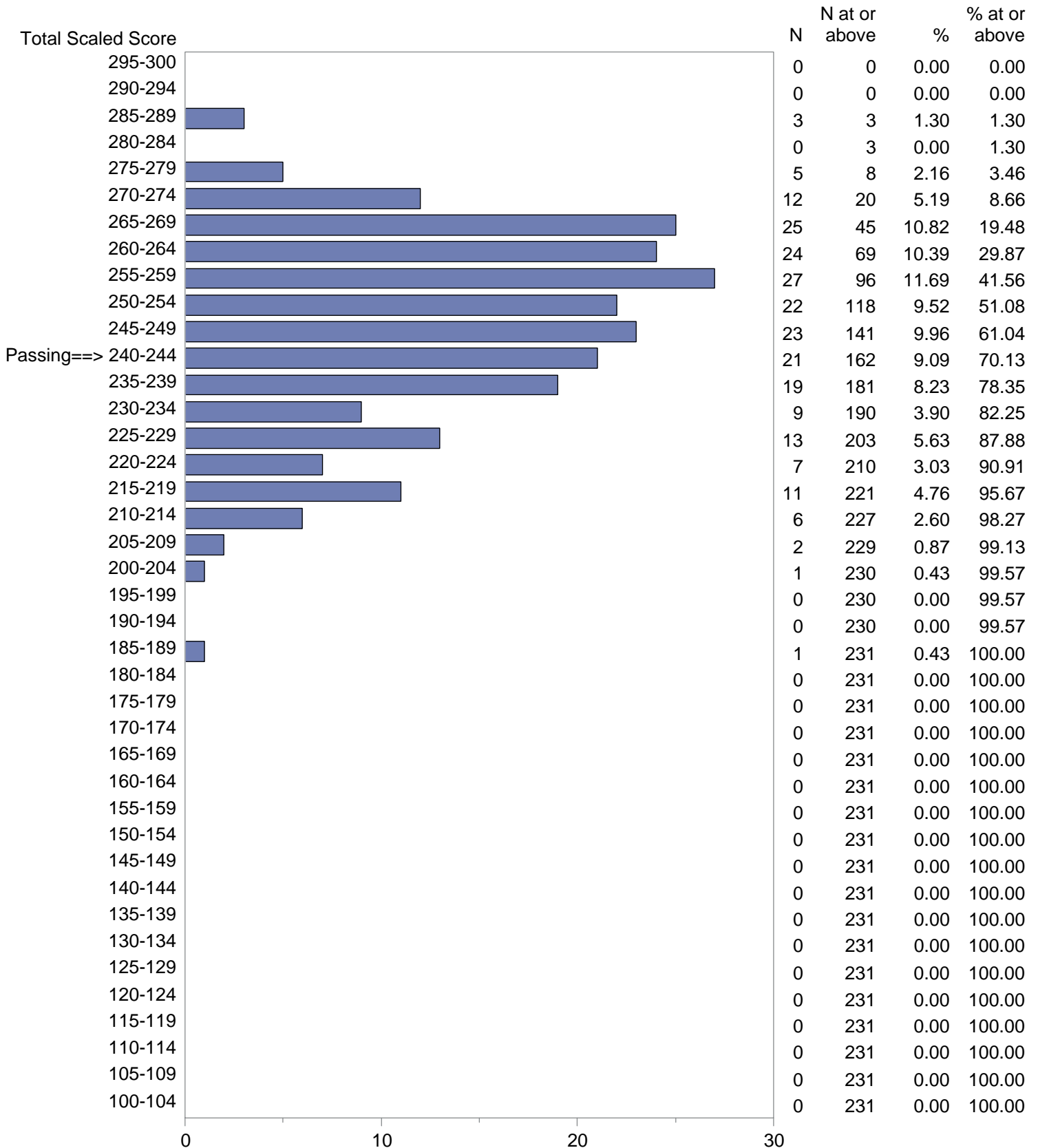
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=268 PRINCIPAL AS INSTRUCTIONAL LEADER



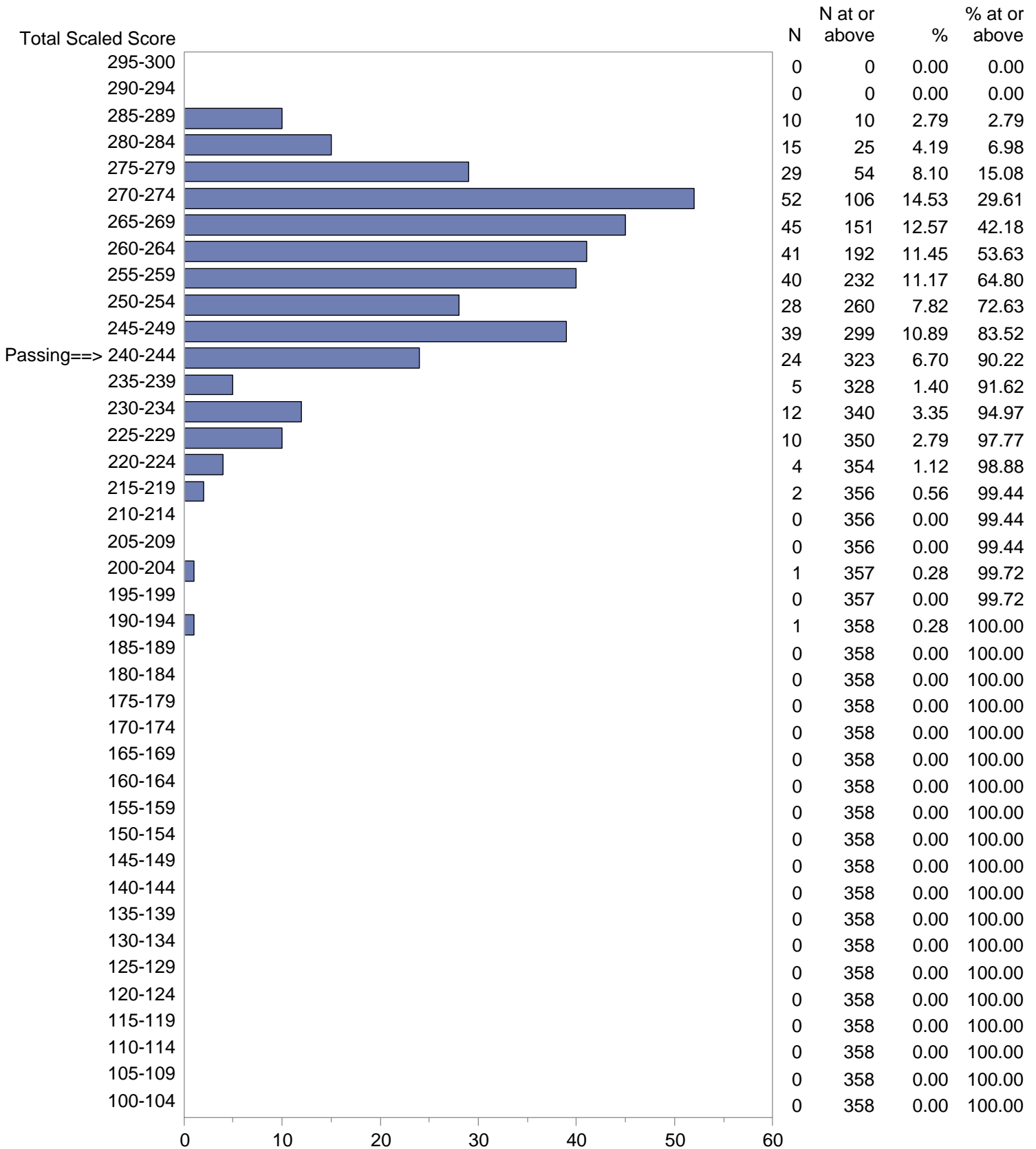
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=270 PPR TRADE & INDUSTRIAL EDUC 6-12



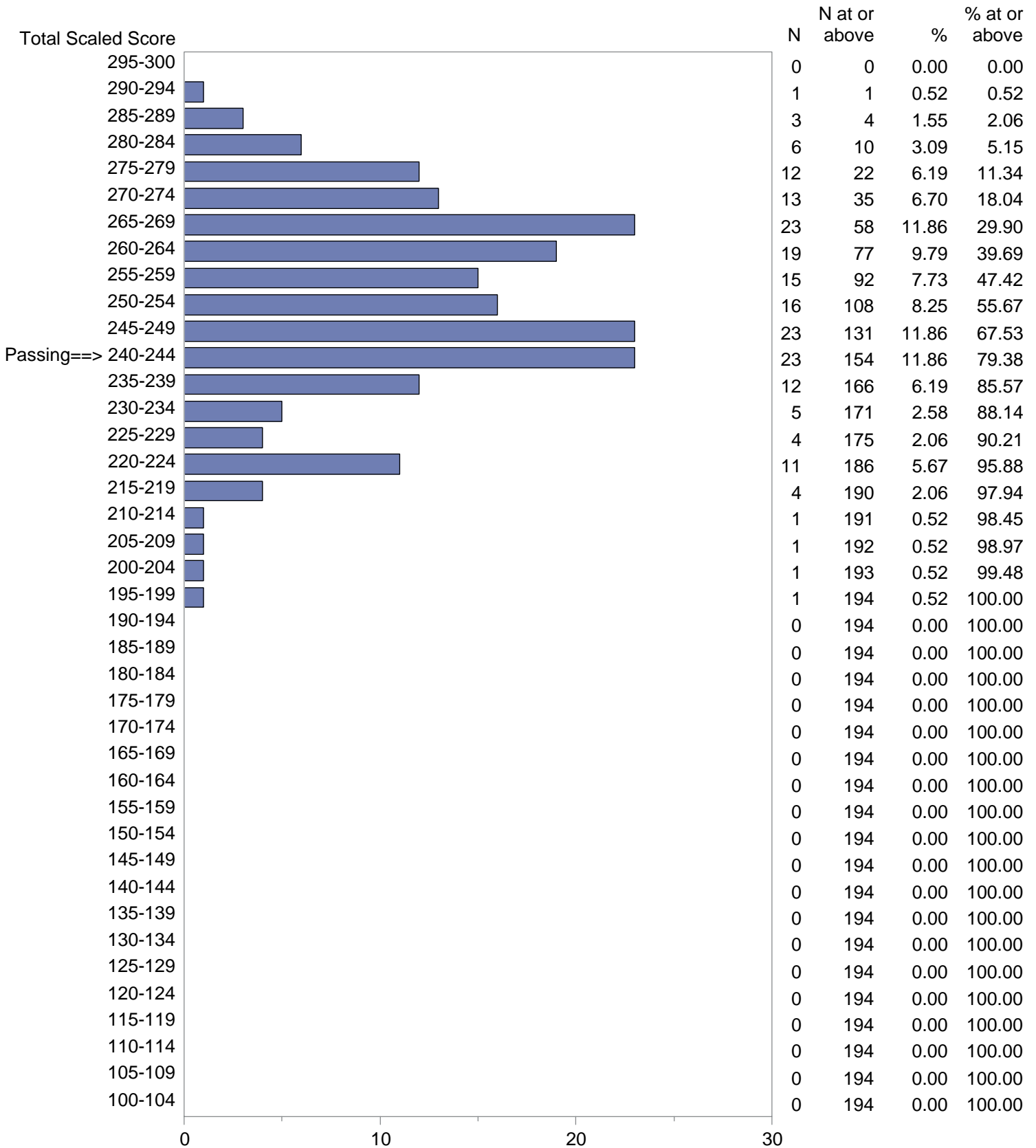
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

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



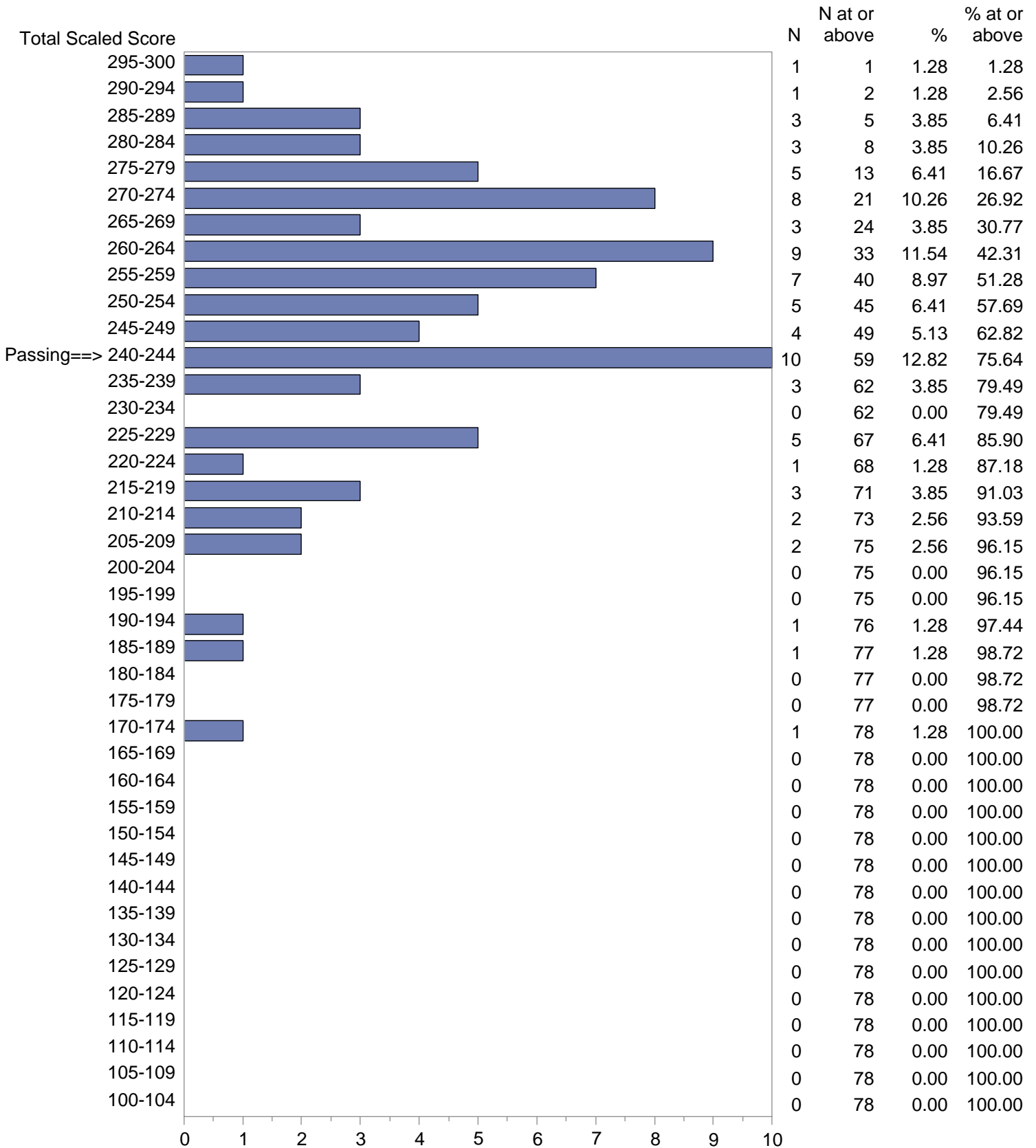
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=273 HEALTH SCIENCE 6-12



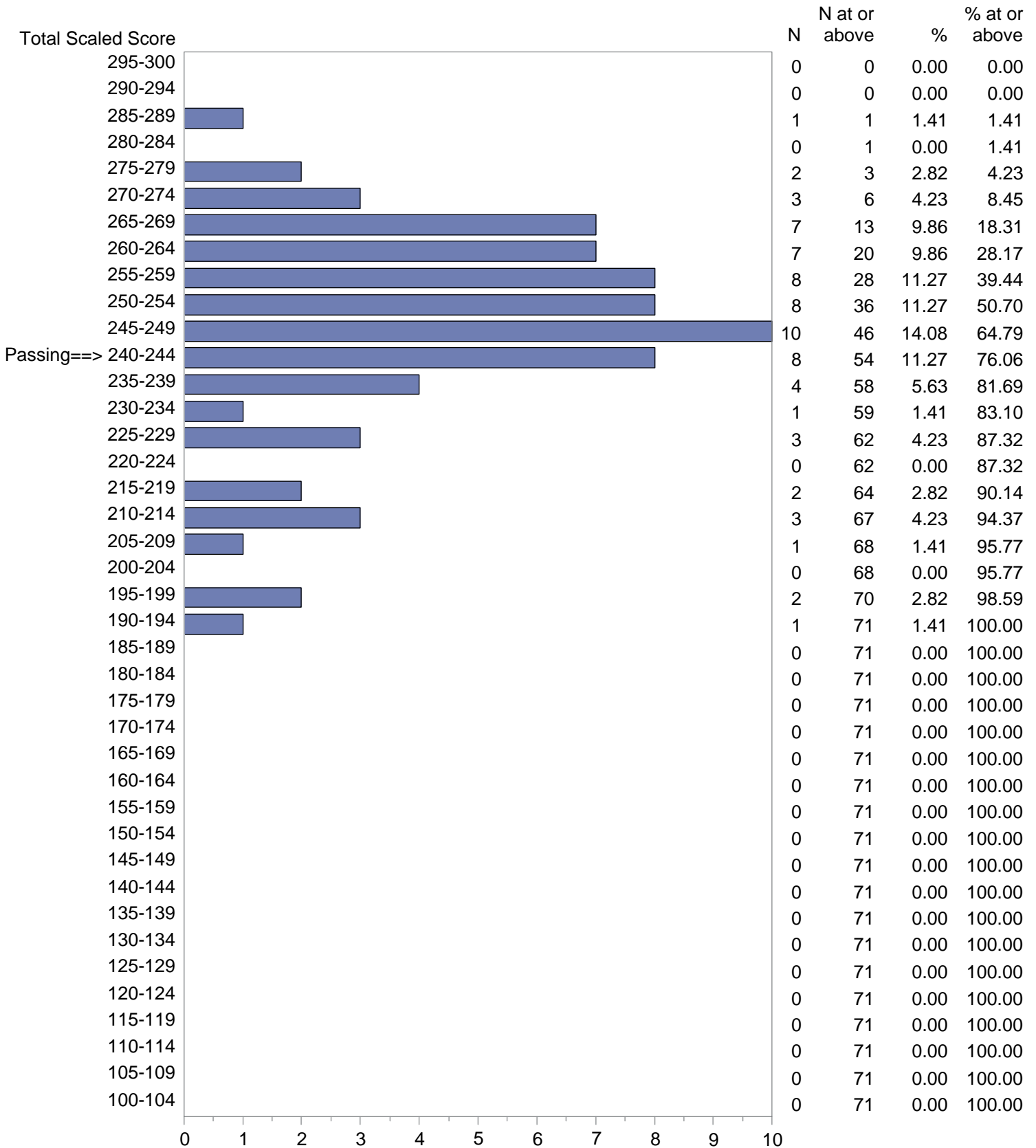
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

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



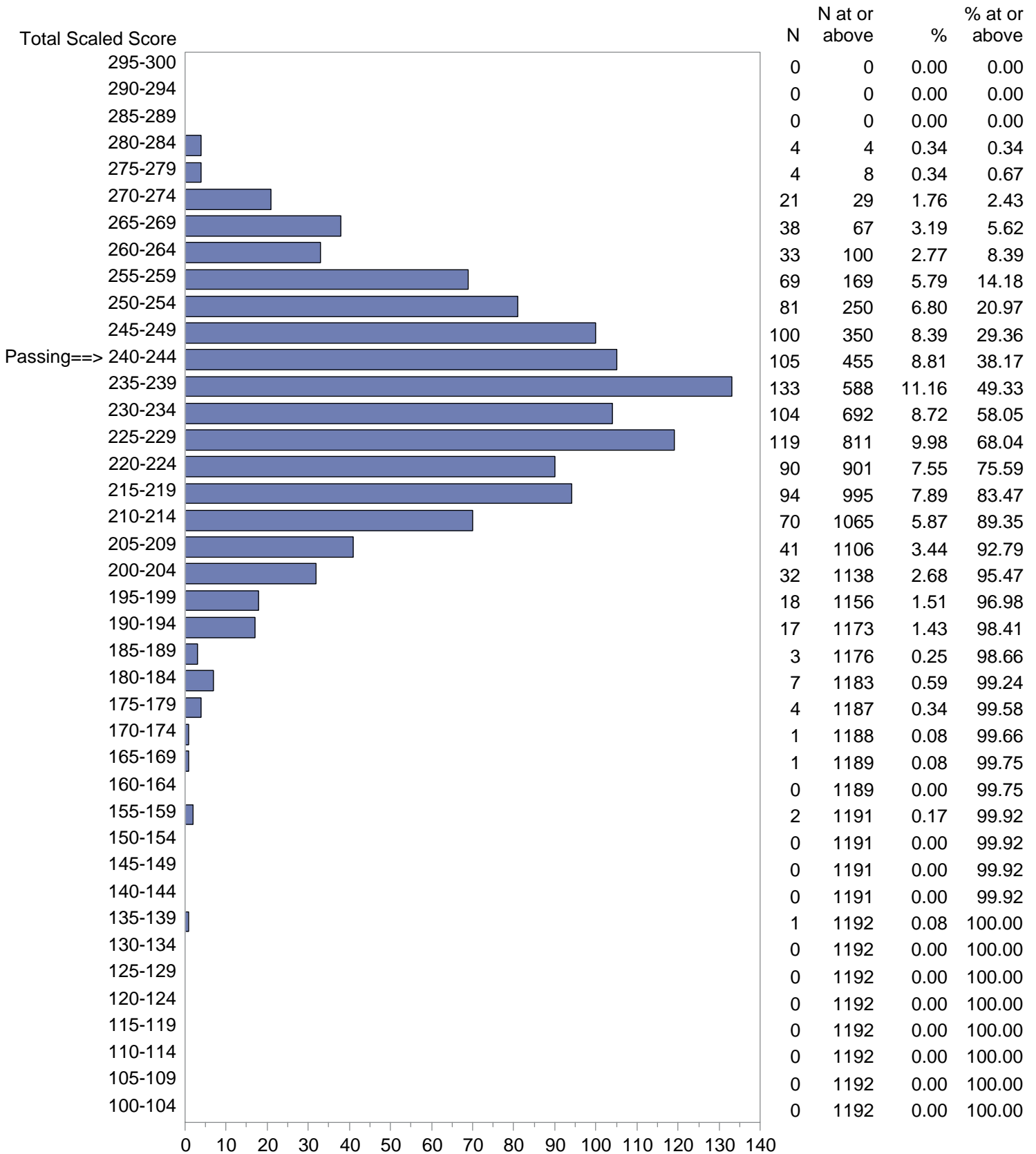
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=275 MARKETING 6-12



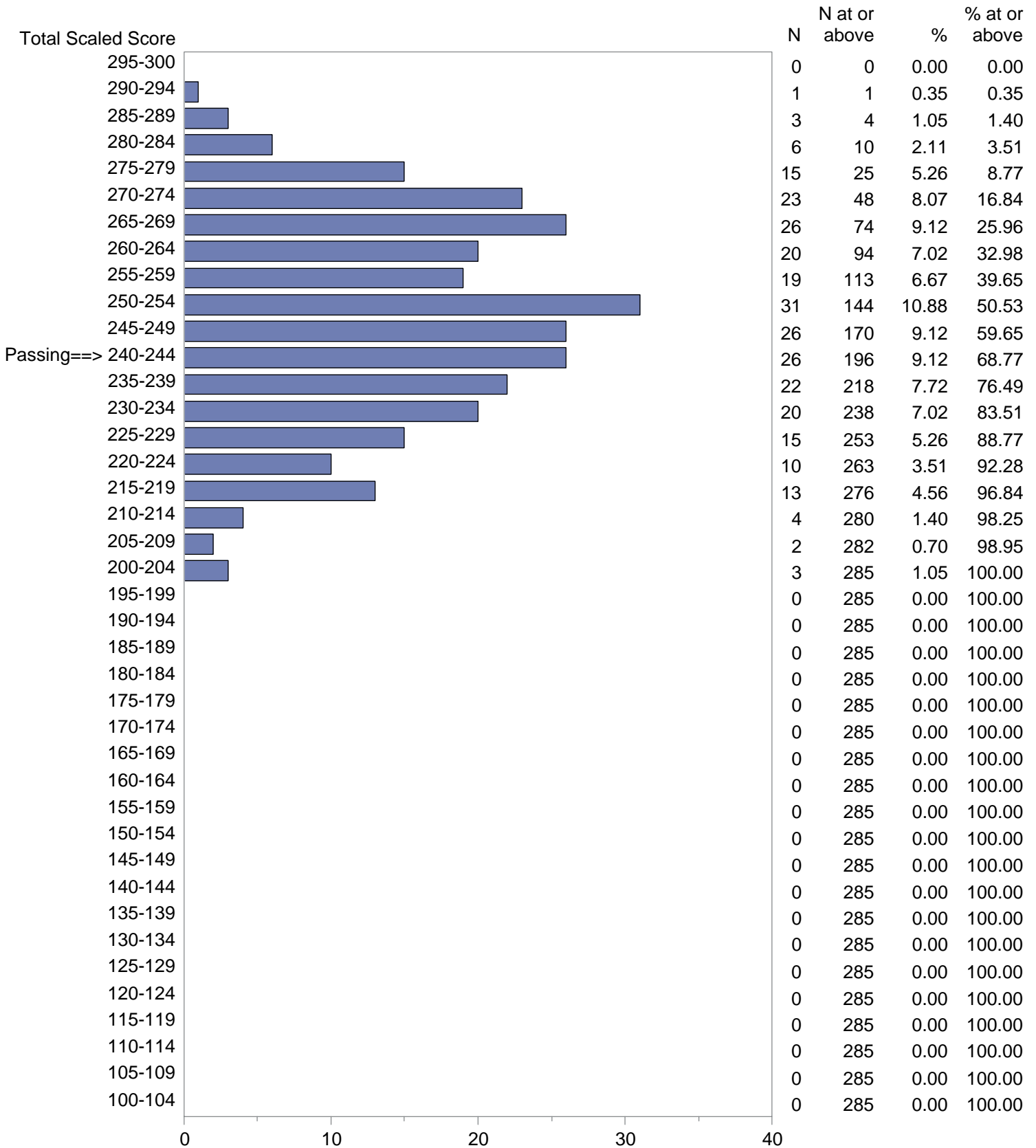
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=276 BUSINESS AND FINANCE 6-12



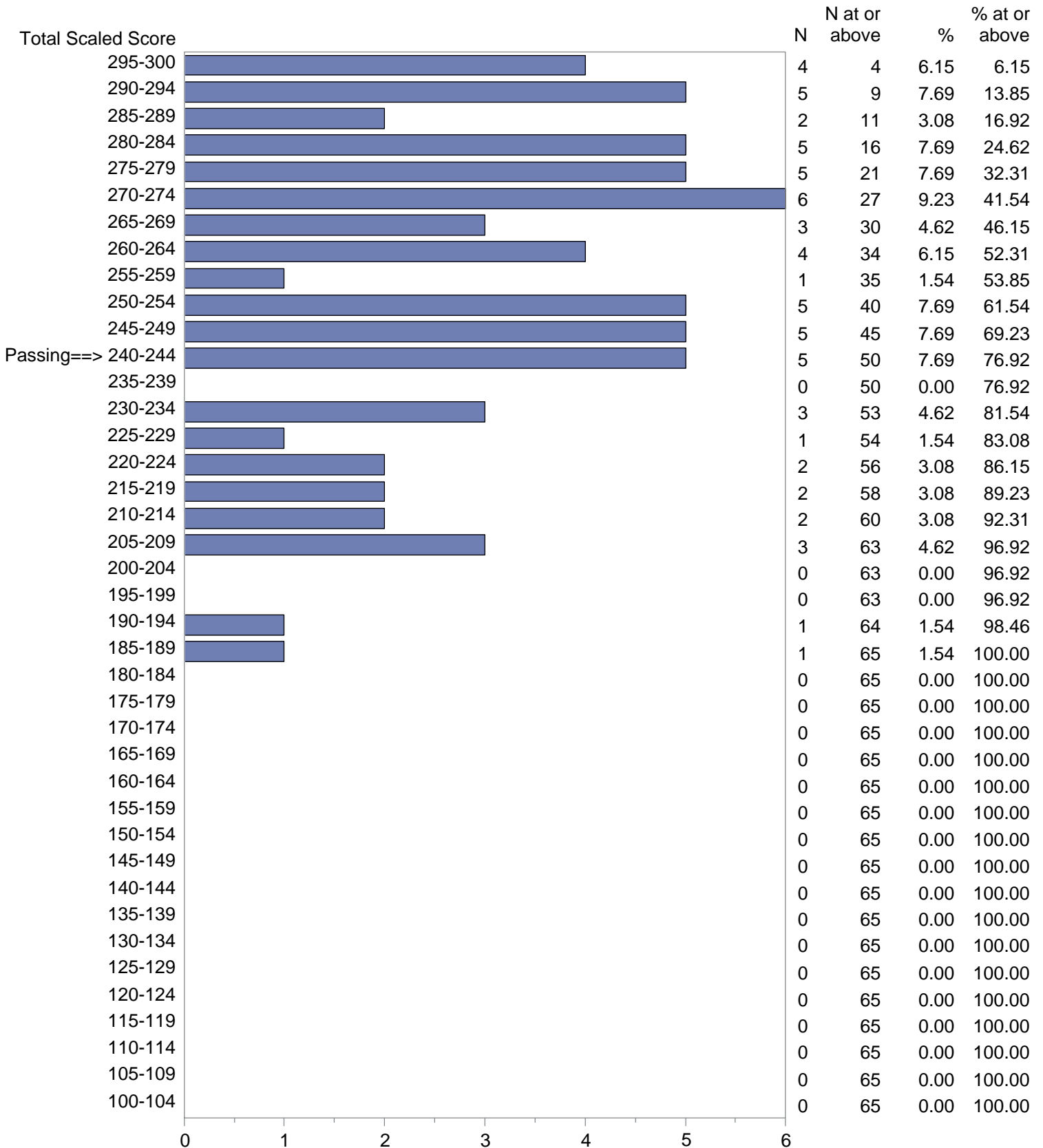
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=279 DANCE 6-12



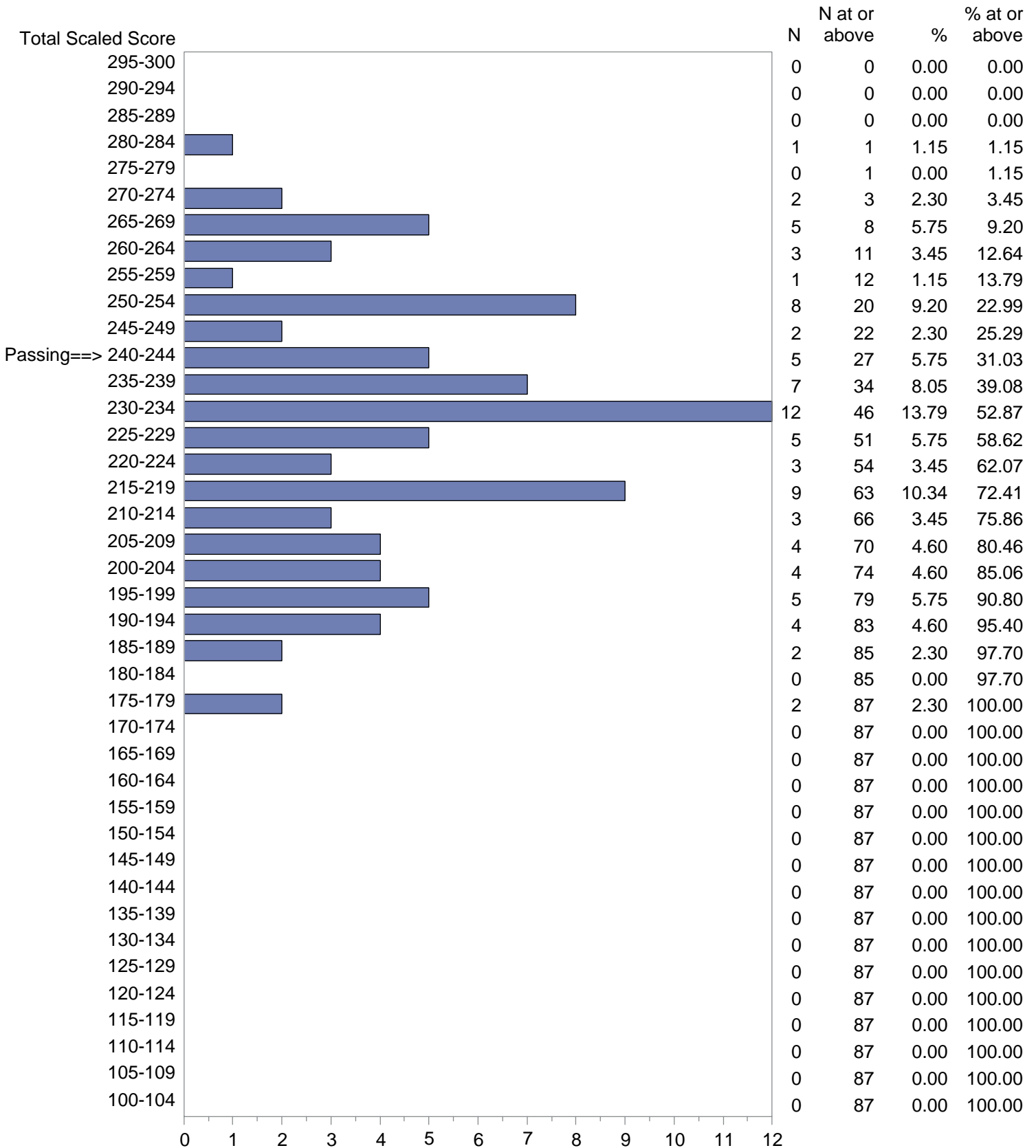
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=283 BRAILLE



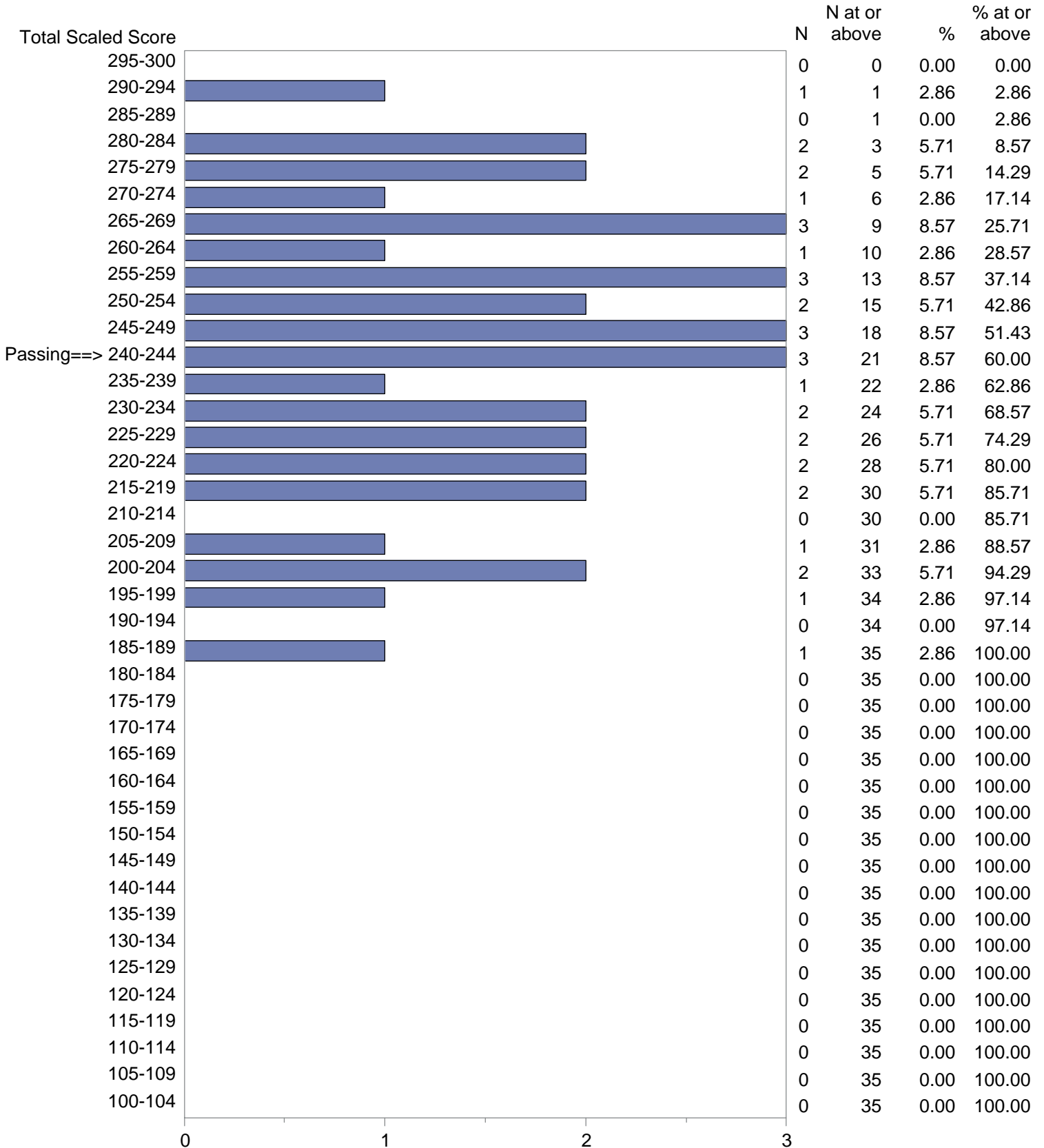
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=610 LANGUAGES OTHER THAN ENGLISH-FRENCH



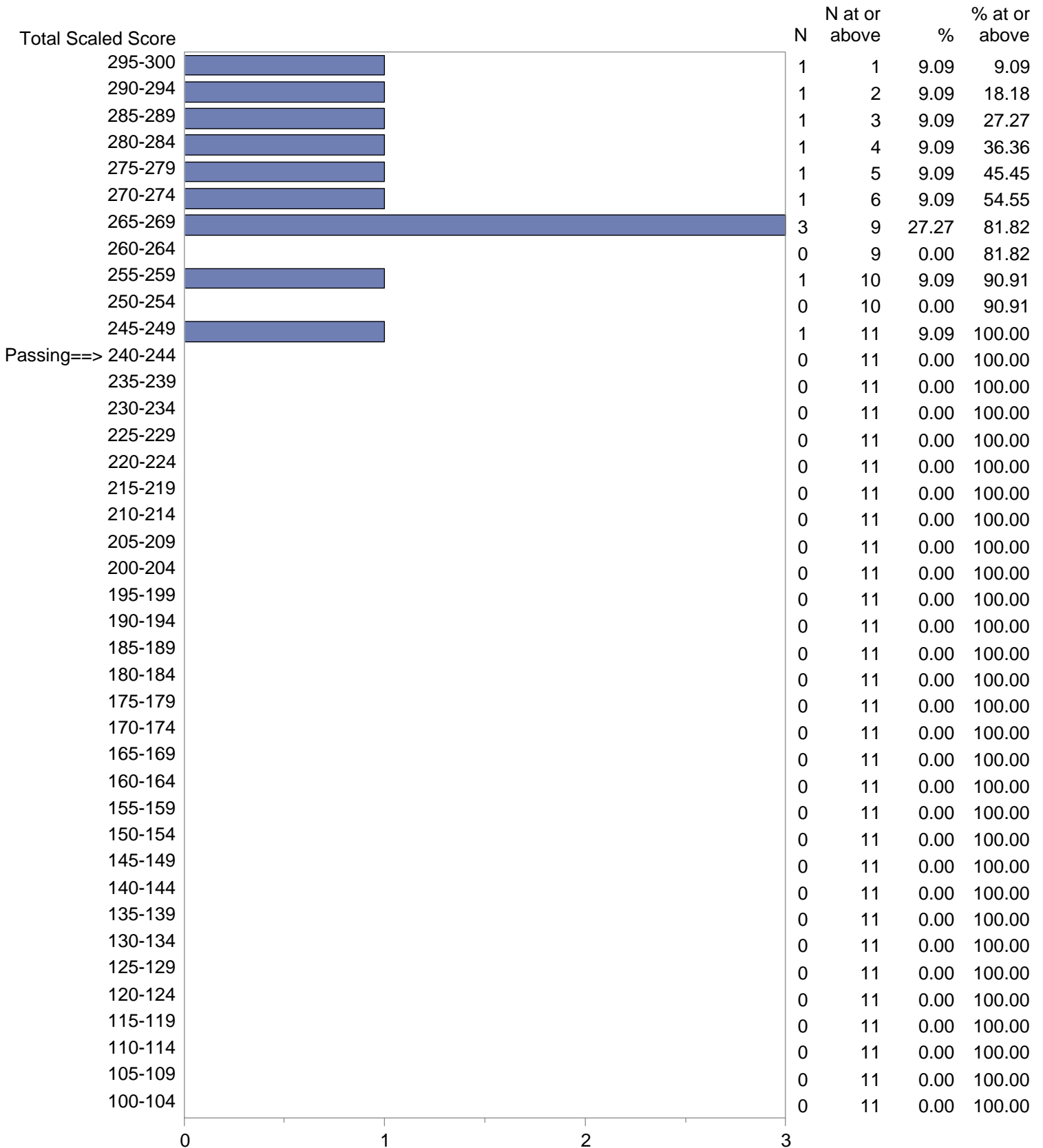
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=611 LANGUAGES OTHER THAN ENGLISH-GERMAN



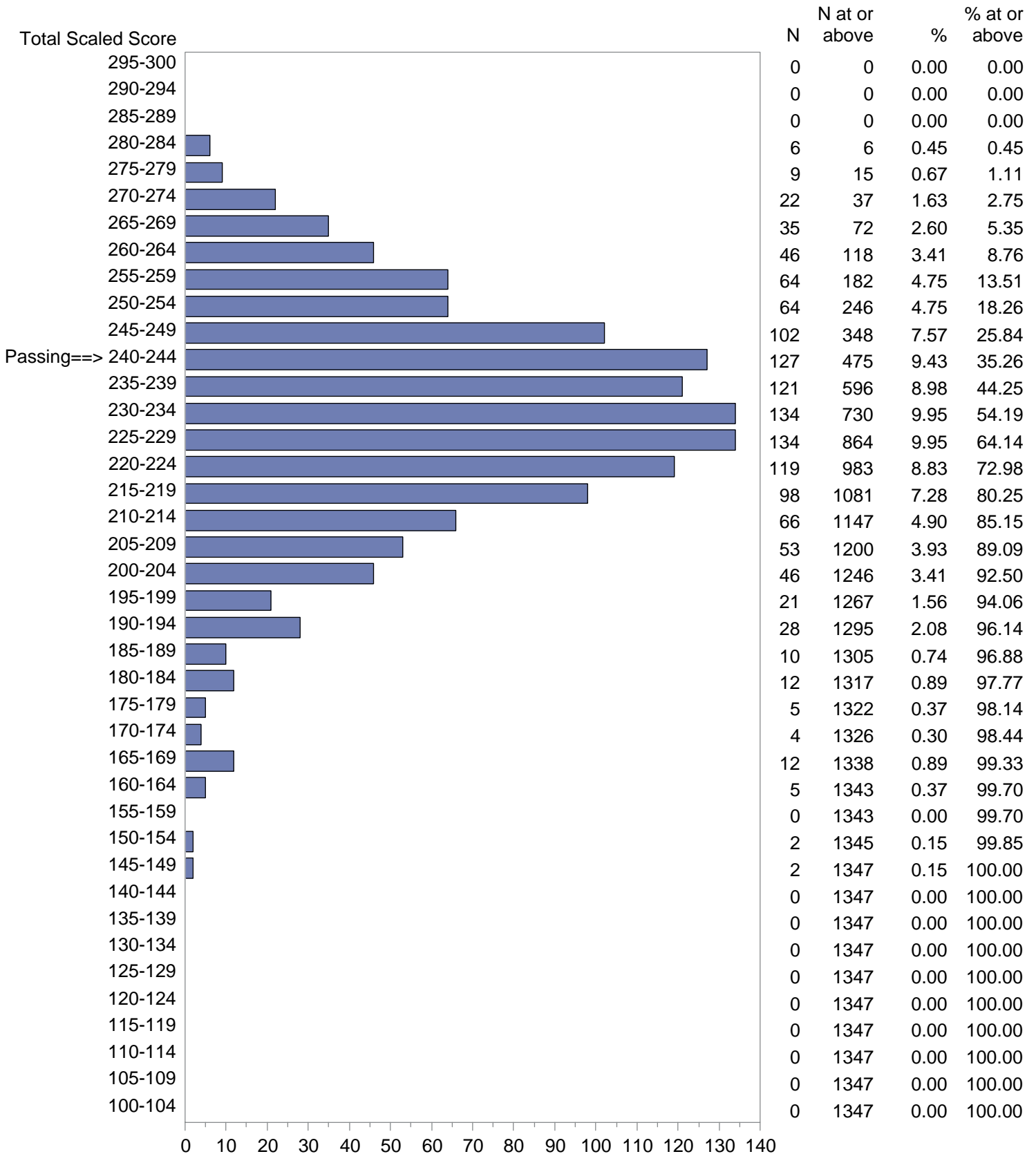
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=612 LANGUAGES OTHER THAN ENGLISH-LATIN



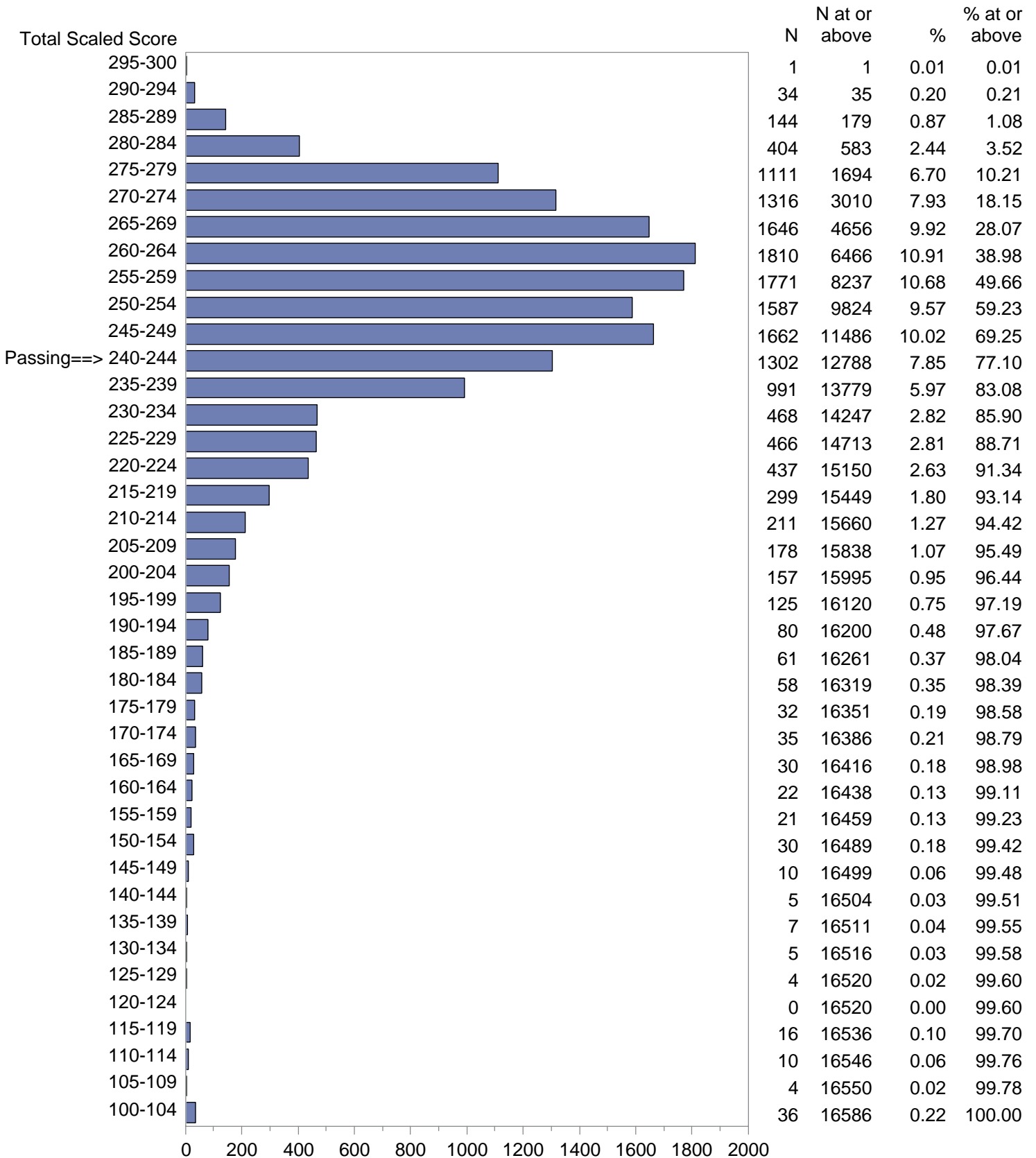
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=613 LANGUAGES OTHER THAN ENGLISH-SPANISH



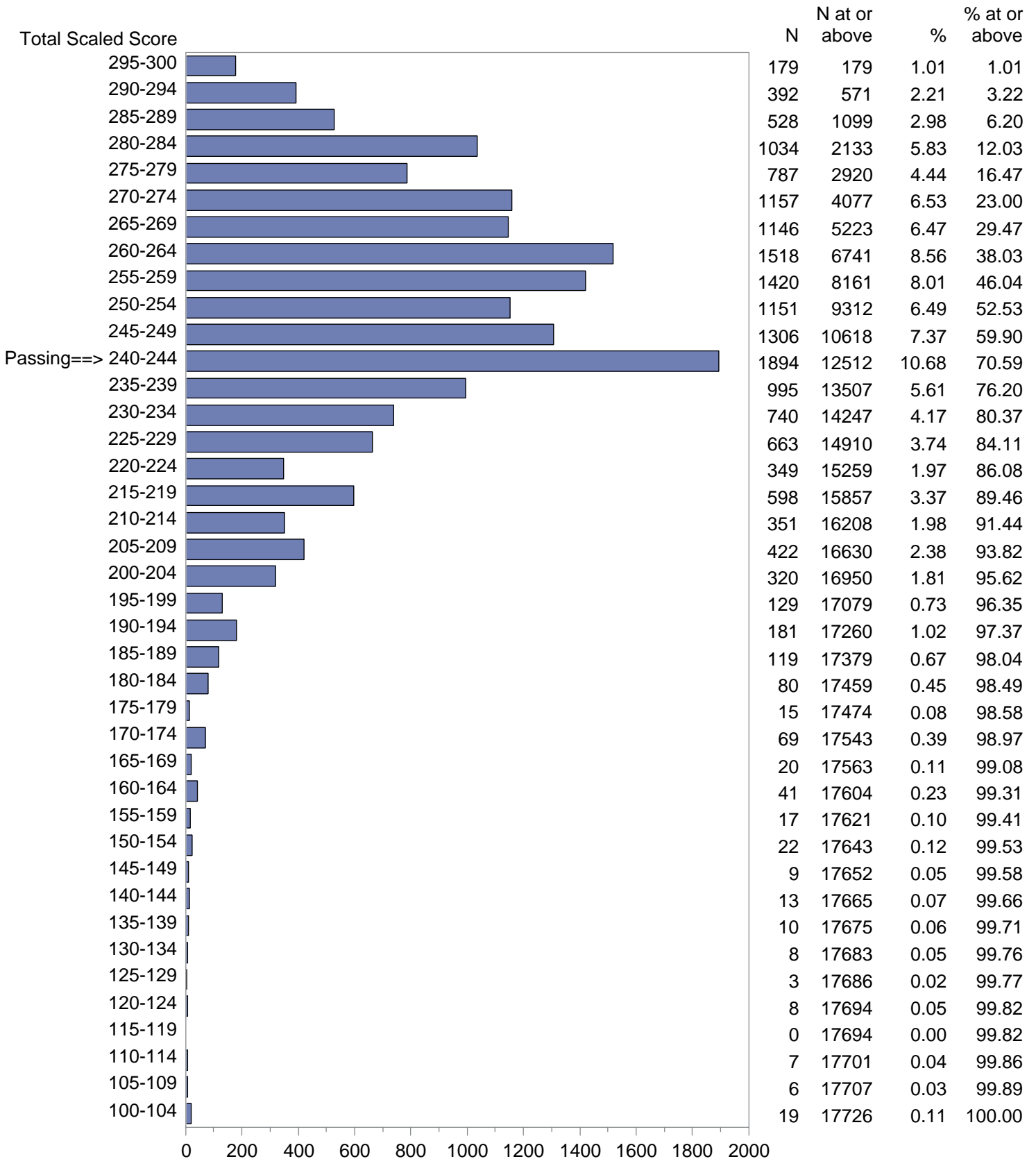
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=801 CORE SUBJECTS EC-6 ELAR/STR



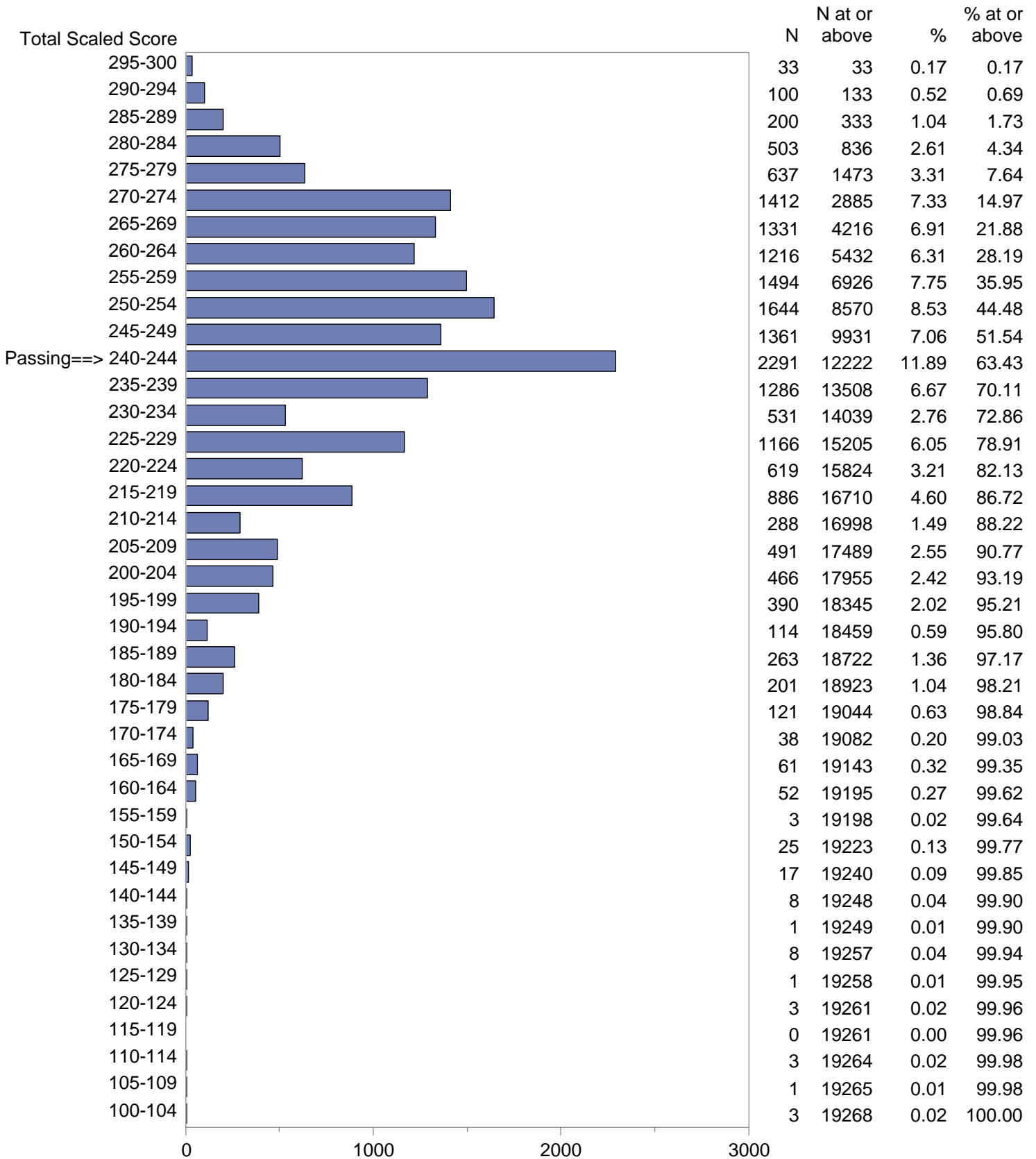
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=802 CORE SUBJECTS EC-6 MATHEMATICS



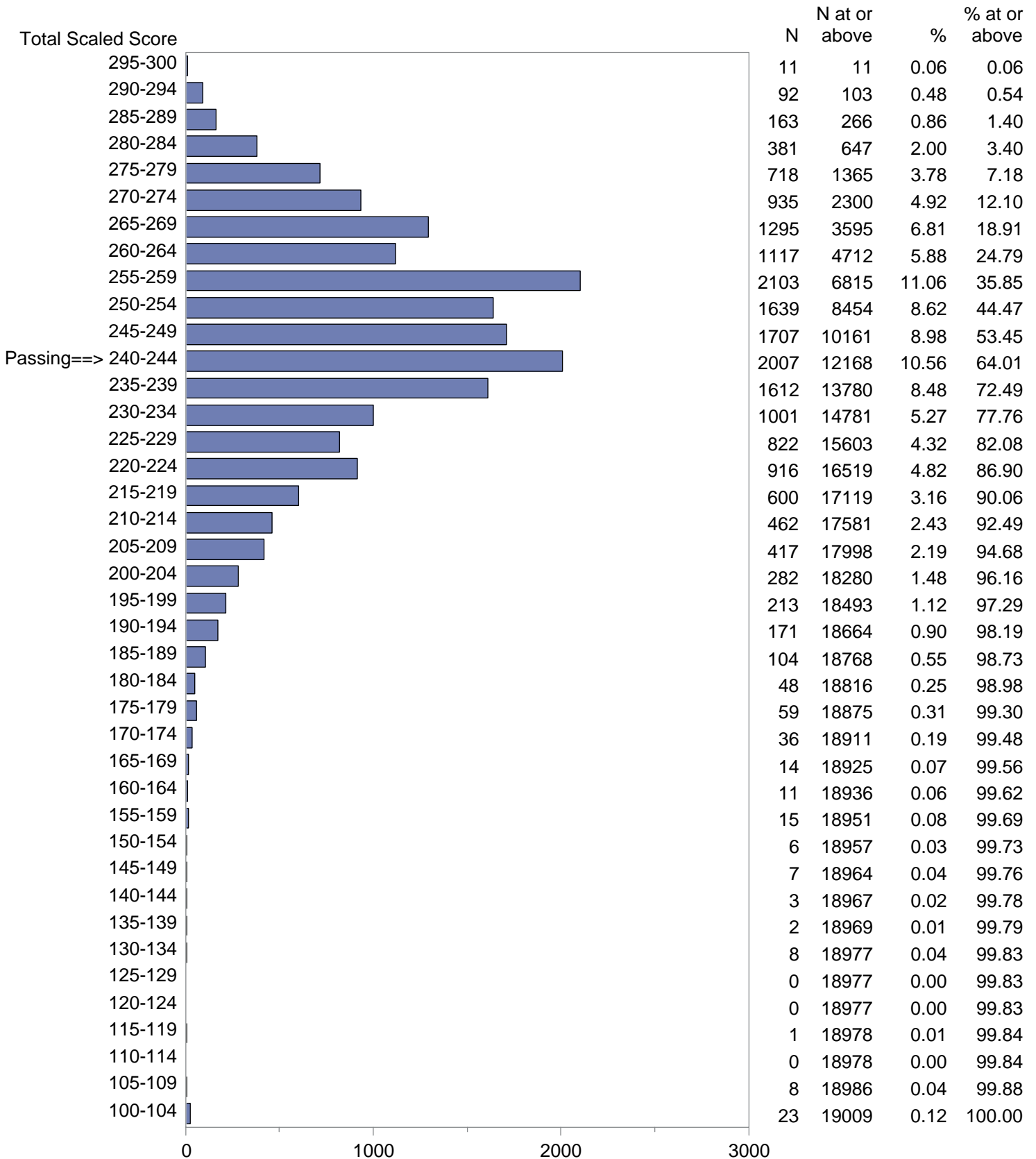
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=803 CORE SUBJECTS EC-6 SOCIAL STUDIES



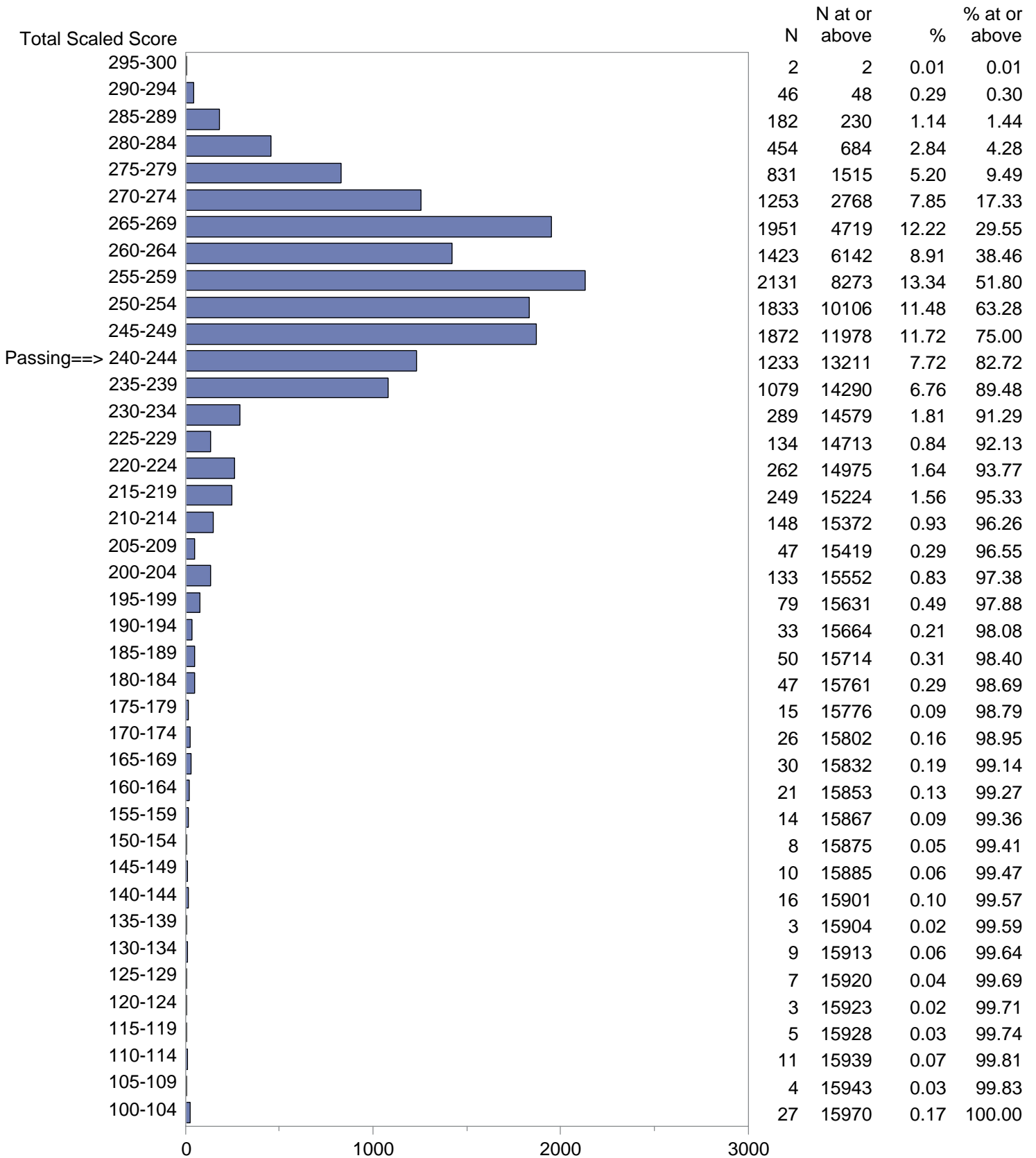
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=804 CORE SUBJECTS EC-6 SCIENCE



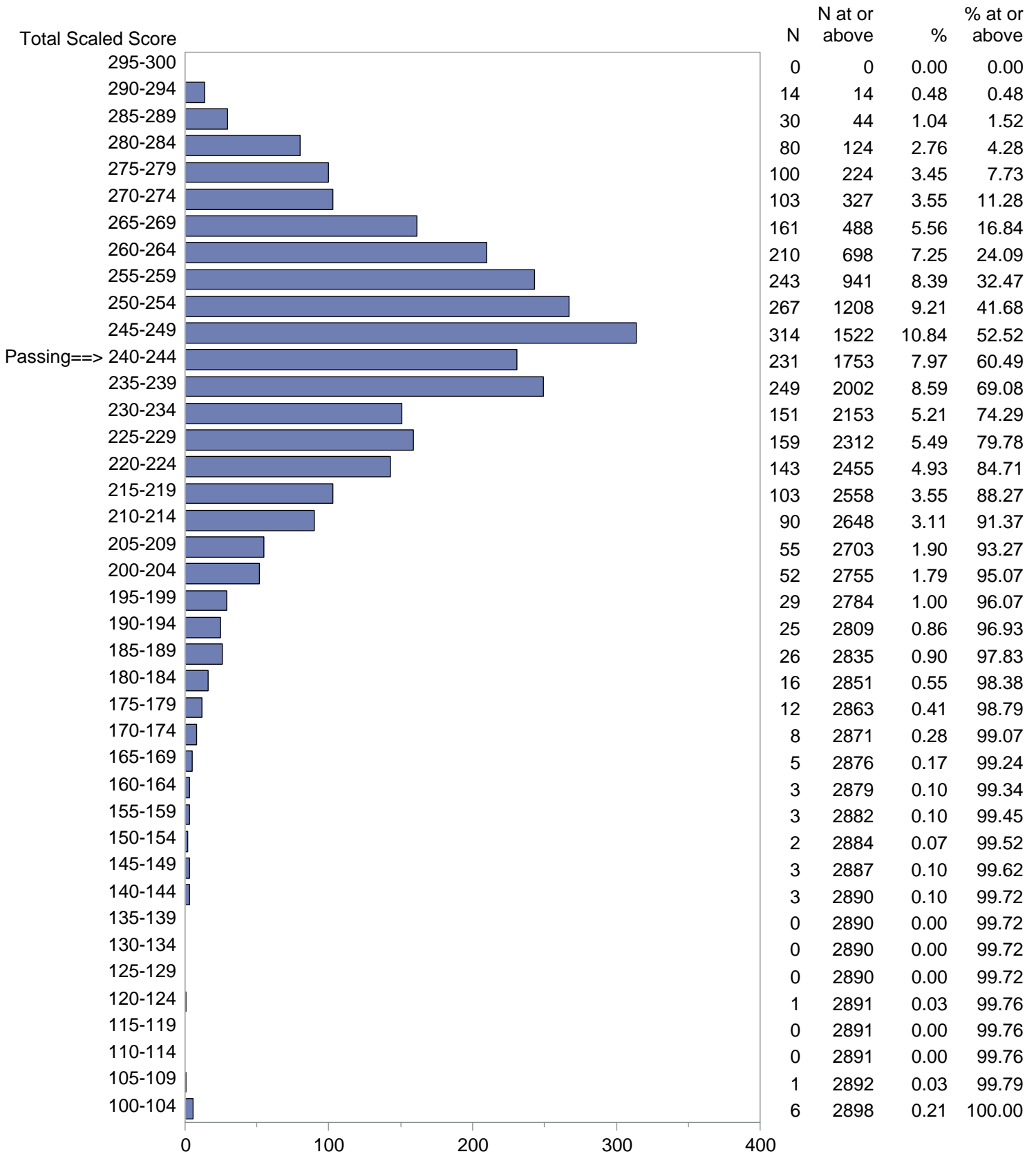
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=805 CORE SUBJECTS EC-6 FINE ARTS/HEALTH/PE



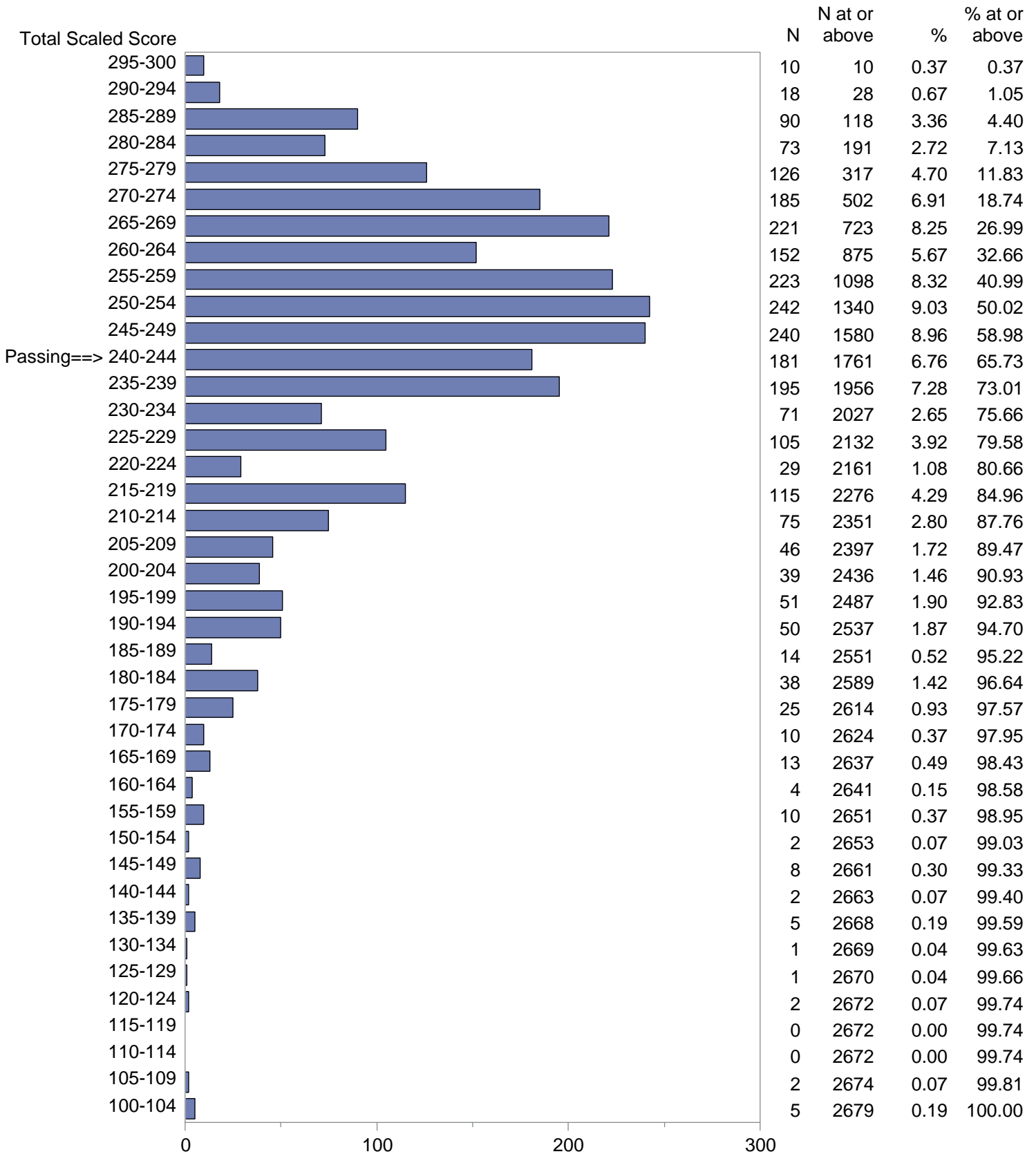
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=806 CORE SUBJECTS 4-8 ELAR



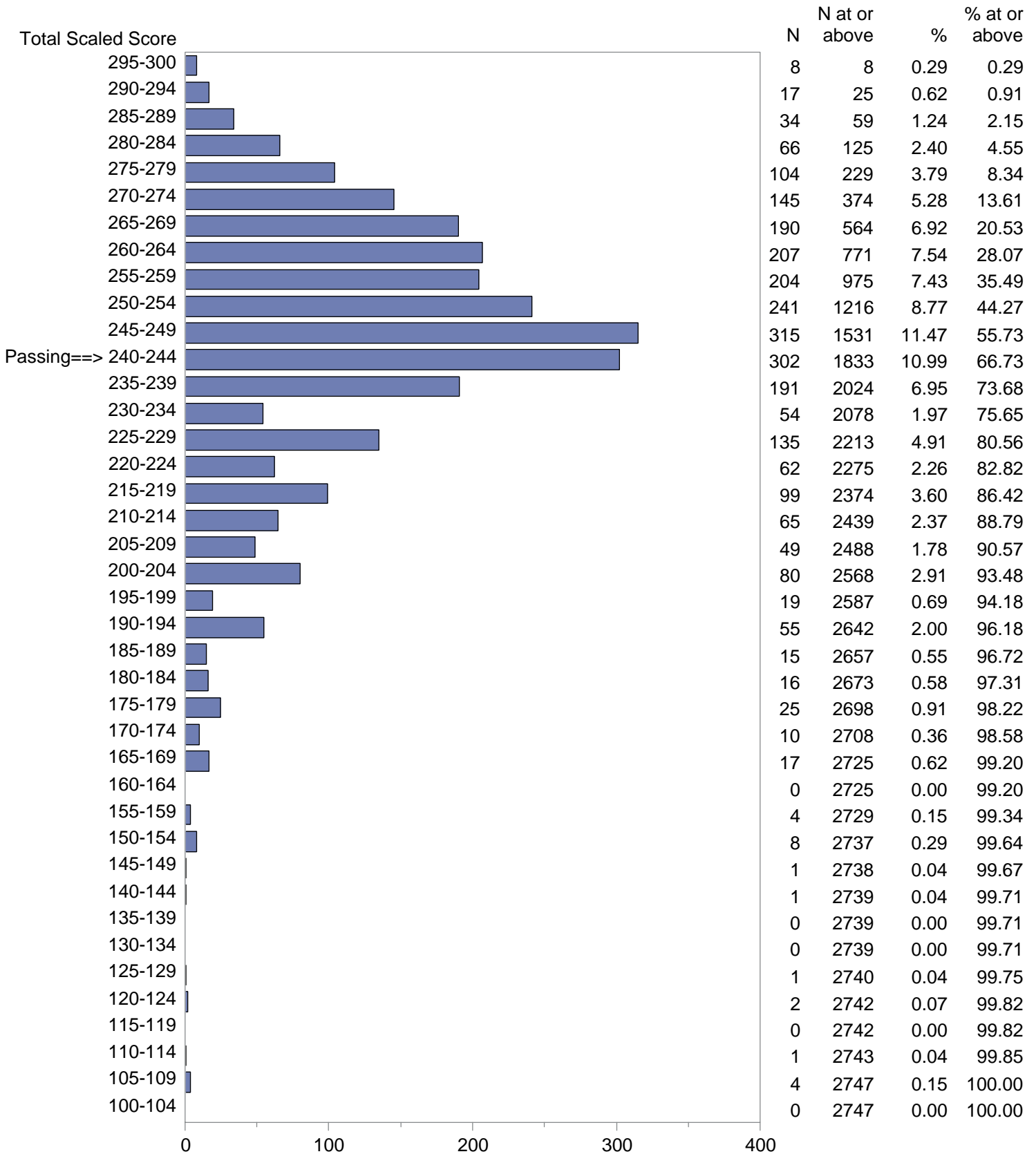
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=807 CORE SUBJECTS 4-8 MATHEMATICS



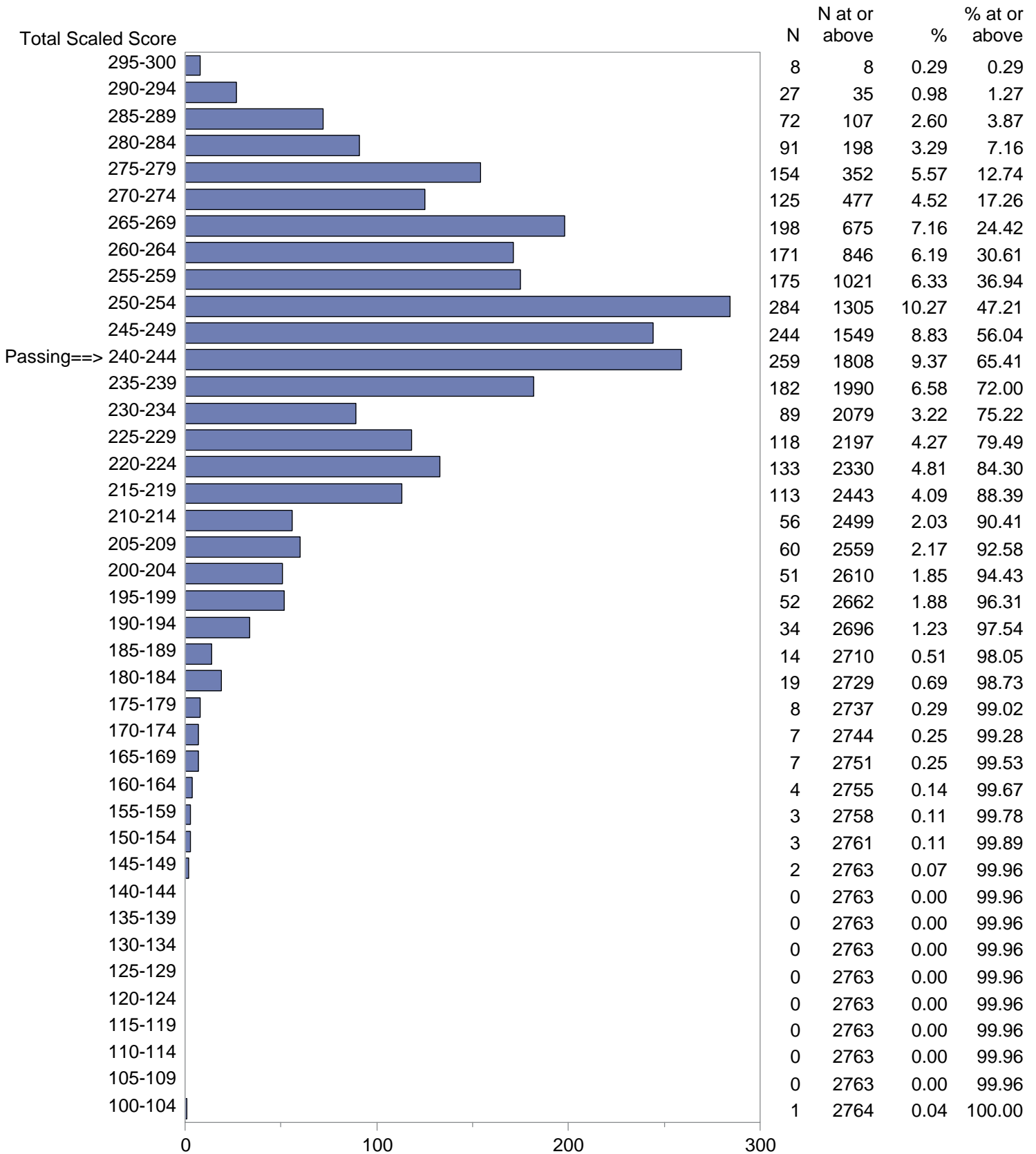
Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=808 CORE SUBJECTS 4-8 SOCIAL STUDIES



Texas Educator Certification Examination Program
 September 1, 2018 - August 31, 2019
 Total Scaled Score Distribution by Exam Field (All Forms)

Exam Field=809 CORE SUBJECTS 4-8 SCIENCE



Appendix 4. Total Scaled Score Summary Statistics by Exam Field

Texas Educator Certification Examination Program
September 1, 2018 - August 31, 2019
Total Scaled Score Summary Statistics Report by Exam Field

Exam Code	Exam Field	Number of Test-Takers	Mean Reported Score	Mean Standard Deviation	Mean SEM	Mean KR20	Pass Rate
068	Principal	7,757	239.24	14.01	7.55	0.71	49%
072 ^{ab}	Texas Assessment of Sign Communication (TASC)	35	3.23	0.88	-	-	80%
073 ^{ab}	Texas Assessment of Sign Communication (TASC-ASL)	81	2.56	0.91	-	-	46%
085 ^b	Master Reading Teacher	41	259.41	16.54	-	-	83%
086 ^{bc}	Master Technology Teacher EC-12	6	-	-	-	-	-
087 ^{bc}	Master Mathematics Teacher EC-4	4	-	-	-	-	-
089 ^{bc}	Master Mathematics Teacher 8-12	2	-	-	-	-	-
092 ^{bc}	Master Science Teacher 8-12	1	-	-	-	-	-
113	English Language Arts and Reading/Social Studies 4-8	547	248.85	20.72	6.99	0.89	70%
114	Mathematics/Science 4-8	467	238.30	25.44	7.11	0.92	50%
115	Mathematics 4-8	2,342	239.14	29.74	9.20	0.90	49%
116	Science 4-8	1,657	234.16	22.78	8.43	0.86	41%
117	English Language Arts and Reading 4-8	2,186	250.31	23.26	8.11	0.88	72%
118	Social Studies 4-8	1,370	237.22	25.14	8.83	0.88	48%
129	Speech 7-12	442	247.89	21.89	7.48	0.88	64%
150	School Librarian	501	248.31	16.74	8.35	0.75	70%
151	Reading Specialist	255	274.15	11.44	4.98	0.80	99%
152	School Counselor	1,221	259.48	14.15	7.25	0.72	92%
153	Educational Diagnostician	640	255.59	16.13	7.42	0.79	83%
154	English as a Second Language Supplemental (ESL)	28,316	251.58	18.75	9.77	0.73	75%
157	Health EC-12	776	258.84	16.69	7.62	0.79	88%
158	Physical Education EC-12	3,131	250.52	18.94	9.57	0.74	76%
160	Pedagogy and Professional Responsibilities EC-12	27,348	256.49	18.34	8.06	0.81	81%
161	Special Education EC-12	8,230	246.24	19.16	6.60	0.88	65%
162	Gifted and Talented Supplemental	419	257.48	12.71	6.61	0.74	92%
163	Special Education Supplemental	981	251.13	15.12	6.50	0.81	81%
164	Bilingual Education Supplemental	2,877	247.15	16.73	8.17	0.76	68%
171	Technology Education 6-12	369	263.76	16.11	4.99	0.90	92%
177	Music EC-12	1,266	249.84	17.12	7.00	0.83	78%
178	Art EC-12	928	262.96	16.67	6.94	0.82	92%
180	Theatre EC-12	459	249.52	19.73	7.01	0.87	71%
181 ^b	Deaf and Hard-of-Hearing	107	252.96	19.44	-	-	78%
182 ^b	Visually Impaired	45	252.13	12.45	-	-	87%
183 ^{bc}	Braille (Contracted Braille)	4	-	-	-	-	-
184 ^b	American Sign Language (ASL)	64	253.78	23.87	-	-	81%
190	Bilingual Target Language Proficiency Test (BTLPT) – Spanish	2,863	242.39	24.28	8.60	0.85	56%
195	Superintendent	430	254.42	11.70	6.75	0.67	90%
231	English Language Arts and Reading 7-12	3,398	241.94	23.61	9.81	0.86	62%

Texas Educator Certification Examination Program
September 1, 2018 - August 31, 2019
Total Scaled Score Summary Statistics Report by Exam Field

Exam Code	Exam Field	Number of Test-Takers	Mean Reported Score	Mean Standard Deviation	Mean SEM	Mean KR20	Pass Rate
232	Social Studies 7-12	3,357	232.98	24.94	7.31	0.91	43%
233	History 7-12	1,167	238.83	24.84	8.39	0.88	55%
235	Mathematics 7-12	2,117	238.40	30.53	8.37	0.92	55%
236	Science 7-12	1,679	235.41	26.92	7.27	0.93	47%
237 ^b	Physical Science 6-12	136	224.82	35.04	-	-	36%
238	Life Science 7-12	1,111	234.73	26.64	9.41	0.88	42%
240 ^b	Chemistry 7-12	152	237.25	32.56	-	-	51%
241	Computer Science 8-12	204	222.61	32.67	9.99	0.91	31%
242	Technology Applications EC-12	798	236.58	22.27	9.33	0.82	42%
243 ^b	Physics/Mathematics 7-12	104	243.63	28.64	-	-	62%
256 ^b	Journalism 7-12	125	247.18	19.38	-	-	74%
268	Principal as Instructional Leader (PAIL)	1,085	252.69	19.11	8.06	0.73	78%
270	Pedagogy and Professional Responsibilities for Trade and Industrial Education 6-12	231	247.76	18.36	6.87	0.85	70%
272	Agriculture, Food, and Natural Resources 6-12	358	259.35	15.81	6.88	0.81	90%
273 ^b	Health Science 6-12	194	252.48	18.20	-	-	79%
274 ^b	Math/Physical Science/Engineering 6-12	78	251.24	25.35	-	-	76%
275 ^b	Marketing 6-12	71	247.35	19.97	-	-	76%
276	Business and Finance 6-12	1,192	233.10	19.68	9.18	0.78	38%
279	Dance 6-12	285	248.82	19.17	8.30	0.81	69%
283 ^b	Braille (UEB)	65	257.15	28.55	-	-	77%
610 ^b	Languages Other Than English (LOTE) - French	87	228.54	24.23	-	-	31%
611 ^b	Languages Other Than English (LOTE) - German	35	243.09	27.02	-	-	60%
612 ^b	Languages Other Than English (LOTE) - Latin	11	273.64	15.40	-	-	100%
613	Languages Other Than English (LOTE) - Spanish	1,347	230.76	21.84	7.48	0.87	35%
801	Core Subjects EC-6: English Language Arts and Reading/Science of Teaching of Reading (ELAR/STR)	16,586	250.30	23.75	9.21	0.85	77%
802	Core Subjects EC-6: Mathematics	17,726	248.89	27.02	12.10	0.80	71%
803	Core Subjects EC-6: Social Studies	19,268	243.21	25.84	13.01	0.75	63%
804	Core Subjects EC-6: Science	19,009	244.48	22.94	10.79	0.77	64%
805	Core Subjects EC-6: Fine Arts, Health, and Physical Education	15,970	252.52	21.53	10.59	0.75	83%
806	Core Subjects 4-8: English Language Arts and Reading	2,898	242.53	24.58	10.10	0.83	60%
807	Core Subjects 4-8: Mathematics	2,679	244.27	29.53	11.30	0.85	66%
808	Core Subjects 4-8: Social Studies	2,747	243.41	26.43	13.42	0.74	67%
809	Core Subjects 4-8: Science	2,764	245.47	25.54	12.01	0.78	65%

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 exams were taken by too few test-takers to estimate reliability and the standard error of measurement.

^c These exams were taken by too few test-takers to report averages.

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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