



# Texas

## Educator Certification Examination Program

### **Texas Educator Certification Examination Program**

### **Annual Technical Manual Planning Document 2018-2019 Program Year**

September 4, 2019

Prepared for:  
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**2018-2019 Program Year**

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## Overview

An important component of exam development for educator certification testing is to provide documentation on the ongoing processes employed, and information to support the validity of score interpretations. As recommended by the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 2014), a clear definition of the 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. The production of an annual technical manual will serve this purpose for the Texas Educator Certification Examination Program exams. The technical manual will consist of two companion documents: the *Technical Administration Manual* and the *Technical Development Manual*.

The purpose of the *Texas Educator Certification Examination Program Annual Technical Administration Manual* is to provide a description of exam administration, implementation, and scoring activities for the Texas Educator Certification Examination program by highlighting the steps that were taken to support the validity and reliability of the exams. Pearson will produce this manual annually and include detailed descriptions of the psychometric and technical methods established as part of the ongoing development, administration, scoring and reporting activities. Performance data collected during the program year will be reported as part of the manual.

To further document the development of the Texas Educator Certification Examination Program exams, a companion document will be produced to detail the specific development activities that resulted in a new certification exam being officially launched by TEA during the program year. This document will be called the *Texas Educator Certification Examination Program Annual Technical Development Manual* and will provide specific details related to the exam development processes that support the validity of the exams.

The purpose of this *Texas Educator Certification Examination Program Annual Technical Manual Planning* document is to provide TEA with a proposed outline and brief description of the contents of the *Annual Technical Manuals*. The intent of both technical manuals is to inform policy makers, state educators, and other interested stakeholders about the Texas Educator Certification Examination Program, its purpose, exam development processes, performance information (statistical and qualitative) on the examinations, and statistical characteristics of the exams. In the following section, these components will be outlined for TEA consideration. A process is proposed for the review, approval, revision, and posting of the *Annual Technical Manuals* to the Texas Educator Certification Examination Program website.

## Proposed Contents: Annual Technical Administration Manual

Below is a summary of the sections proposed for the *Annual Technical Administration Manual*. Any performance data reported as part of this manual will be confined to the program year (i.e., September 1 through August 31).

### 1. Program Purpose, Policy, and Policy Changes

Section 1 provides an introduction to the manual, including:

- a brief overview of the State Board for Educator Certification (SBEC), the role of the Commissioner of Education and TEA;
- a brief description of legislation and administrative code relevant to educator standards and obtaining certification, including the relationship of the Texas Essential Knowledge and Skills (TEKS) to educator standards; and
- a brief description of the purpose and use of the Texas Educator Certification Examination program exams (i.e., for certification and for PACT).

### 2. Examination Design and Framework

Section 2 describes the design of the exams included in the Texas Educator Certification Examination Program, including:

- a description of the examination design and formats (high-level specifications; e.g., all MCQ or MCQ + CRI);
- an overview of exam frameworks and their purpose; and
- a description of the alignment of the frameworks to Texas standards.

### 3. Examination Administration

Section 3 summarizes key features of the administration process during the program year, including:

- registration and exam preparation materials (registration bulletin, prep guides);
- administration procedures (broad overview); and
- examinee volumes.
- A listing of the currently operational exams available under the Texas Educator Certification Examination Program will be included in this section.

### 4. Psychometrics

Section 4 describes the processes used to establish and reinforce the psychometric properties of the examinations administered during the program year, including:

- Classical Item Analyses;
- latency analyses for speededness;
- Differential Item Functioning (DIF) analyses;
- exam equating analyses;

- scaling processes; and
- the computation of exam reliability indices.

## 5. Technical Properties of the Scores

Section 5 describes the technical properties of the scores, including:

- a brief summary of content-based validity evidence;
- a summary of scoring-based validity evidence (a description of the scoring process and reporting scale; holistic scoring procedures for written/spoken assignments, including a discussion of performance indicators and scoring rubrics; setting and maintaining the reporting scale);
- a description of generalization-based validity evidence (e.g., exam reliability, decision consistency, and other statistics used);
- a description of quality assurance procedures;
- a description of exam reliability; and
- total scaled score distribution information.

## 6. Exam Administration Statistics

Section 6 will provide an introduction to the exam administration data tables for all Texas Educator Certification Examination Program exams. The following will be reported in these data tables as an appendix.

- Total Scale Score Distribution charts by exam field
- SRI form statistics (including reliability indices)
- CRI prompt statistics (including scorer agreement, interrater reliability statistics)
- Total Scale Score descriptive statistics and pass rates by attempt type (initial, best, all attempts).

## 7. Score Reporting

Section 7 describes score reporting of the exams, including:

- a description of the score reporting processes and policies;
- a summary of the content and format of examinee score reports;
- a brief description of TEA's and EPP's access to examinee results through *Results Analyzer*<sup>®</sup>; and
- an overview of Title II reporting.

## Proposed Contents: Annual Technical Development Manual

Below is a summary of the sections proposed for the *Annual Technical Development Manual*. To maintain consistency in annual reporting, only exam development activities resulting in an official launch of an exam during the program year of the manual will be included. For example, Phase I fields were launched in July 2019 so the first technical development manual will provide relevant development outcomes (i.e., Principal as Instructional Leader). Phase III fields are progressing according to the development schedule but were not launched during the 2018-19 program year; therefore outcomes from these activities will not be included in the 2018-19 technical development manual.

### 1. Program Purpose, Policy, and Policy Changes

Section 1 provides an introduction to the manual, including:

- a brief overview of the State Board for Educator Certification (SBEC), the role of the Commissioner of Education and TEA;
- a brief description of legislation and administrative code relevant to educator standards and obtaining certification, including the relationship of the Texas Essential Knowledge and Skills (TEKS) to educator standards; and
- a brief description of the purpose and use of the Texas Educator Certification Examination program exams (i.e., for certification and for PACT).

### 2. Examination Development Process

Section 2 will provide descriptions of activities related to the development and validation of the framework and development of the exam questions. The following tasks in the process will be described.

- Task 1: Conduct Program Planning
- Task 2: Establish Advisory Committees and Equity Assurance Panel
- Task 3: Align with Texas Standards
- Task 4: Conduct Job Analysis Study
- Task 5: Develop Examination Frameworks
- Task 6: Conduct Content Validation Surveys
- Task 7: Develop Examination and Item Specifications
- Task 8: Prepare and Review Examination Items
- Task 9: Conduct Pilot Testing
- Task 10: Review Pilot Test Results and Establish Marker Responses
- Task 11: Build and Administer First Operational Examination Form
- Task 12: Conduct Standard Setting
- Task 13: Provide Annual Technical Development Manual

### 3. Program Year-Specific Outcomes

Section 3 will provide descriptions of development activities related to the exams that were launched during the program year. It will identify the conferences, meetings and surveys that were conducted as part of the content-based validity evidence collection and development process. Relevant outcomes from such development work will be included as an appendix (e.g., framework alignment studies, content validation survey results).

For the *2018-2019 Technical Development Manual*, this will include 268 – *Principal as Instructional Leader* development activities related to pilot testing, marker selection, and standard setting.

### Proposed Annual Technical Manual Strategy and Schedule

Below is a proposed strategy and tentative schedule for the development and release of the *Annual Technical Administration* and *Annual Technical Development Manuals*. Milestones include their production by Pearson, review and approval by TEA, and publishing to the program website.

Publishing a first edition of the *2018-2019 Technical Administration* and *Technical Development Manuals* will include all of the descriptions and technical details outlined in this document and approved by TEA. Specific development activity outcomes that supported an exam launch within the program year will be included as appendices.

Performance data collected throughout the program year (i.e., September 1 through August 31) will be included in any reported analyses. To facilitate the inclusion of all examinee data, analyses will begin after the last score reporting window for the program year.

Milestone	Proposed Timeline
TEA Approval of Annual Technical Manuals Reporting Strategy and Schedule	Early September
Last Score Reporting cycle	Early September
Technical Administration Manual and Technical Development Manual preparation	September / October
Deliver Technical Manuals to TEA for review	Late October
TEA provide feedback and/or approval of Technical Manuals	Mid-November
Revisions to Technical Manuals (if necessary)	Late November
TEA second review (if necessary)	Late November
Final Technical Administration Manual and Technical Development Manual provided to TEA for Annual Review meeting, and published to website	December

The following timeline assumes that the Technical Manuals are created as PDF files that are made available for viewing or download on the Texas Educator Certification Examination Program website (under *EPPs, Additional Resources*).



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**Texas**  
Educator Certification  
Examination Program

I have reviewed and approve the plans contained in this Annual Technical Manual Planning Document, 2018-2019 Program Year, which is dated September 4, 2019, and is attached and incorporated herein.

  
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Grace Wu

9/6/2019  
Date

Director of Educator Standards, Testing, and Preparation  
Texas Education Agency

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