



**COURT REPORTERS BOARD**  
OF CALIFORNIA

REVIEW OF THE NATIONAL COURT REPORTERS ASSOCIATION  
REGISTERED PROFESSIONAL REPORTER  
ONLINE SKILLS TEST AND WRITTEN KNOWLEDGE TEST

STATE OF CALIFORNIA



DEPARTMENT OF CONSUMER AFFAIRS



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ONLINE SKILLS TEST AND WRITTEN KNOWLEDGE TEST



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This report is mandated by California Business and Professions (B&P) Code § 139 and by DCA Licensure Examination Validation Policy OPES 18-02.

## EXECUTIVE SUMMARY

Licensing boards and bureaus within the California Department of Consumer Affairs (DCA) are required to ensure that examination programs used in California licensure comply with psychometric and legal standards. To become a licensed court reporter in California, a candidate must have the requisite education and experience and pass three California examinations:

1. The Dictation Examination
2. The English Examination
3. The Professional Practice Examination

The Court Reporters Board of California requested that DCA's Office of Professional Examination Services (OPES) complete a comprehensive review of the Registered Professional Reporter Online Skills Test (SKT) and Written Knowledge Test (WKT), which are developed by the National Court Reporters Association (NCRA). OPES performed this review to evaluate the SKT and WKT to be considered for court reporter licensure reciprocity in California.

OPES, in collaboration with the Court Reporters Board of California, reviewed documentation of the NCRA's occupational analysis (OA) of the registered professional reporter profession conducted in 2017–18. This documentation was provided by NCRA in the *National Court Reporters Association Registered Professional Reporter Exam Job Task Analysis Report* (NCRA OA, 2018). In addition, OPES also reviewed other NCRA documents regarding practices and procedures used to develop and validate the SKT and WKT. OPES performed a comprehensive evaluation of the documents to determine whether the following SKT and WKT program components met professional guidelines and technical standards: (a) OA, (b) examination development, (c) passing scores and passing rates, (d) test administration, (e) examination scoring and performance, and (f) test security procedures. OPES and the Court Reporters Board of California exchanged follow-up emails and held meetings with NCRA representatives to clarify processes.

For the WKT, OPES found that the procedures used to establish and support the validity and defensibility of the components listed above appear to meet professional guidelines and technical standards outlined in the *Standards for Educational and Psychological Testing* (2014) (*Standards*) and in California Business and Professions (B&P) Code § 139. Importantly, the WKT is linked to the 2018 NCRA OA, which provided the basis for the WKT examination outline or blueprint (see Table 3 on page 25).

For the SKT, however, OPES found that the procedures used to establish and support the validity and defensibility of the components listed above do not fully meet professional guidelines and technical standards. This is primarily because there is no OA linked to the SKT, and therefore no examination outline for the SKT. To fully comply with the *Standards* and B&P Code § 139, OPES recommends that NCRA conduct a comprehensive OA of the court reporter profession that can be linked to both the SKT and the WKT.

In addition to reviewing documents provided by NCRA, OPES convened a workshop of California licensed court reporters in May 2021. The court reporters served as subject matter experts (SMEs) and reviewed the SKT and WKT. The SMEs were selected to represent the profession in terms of geographic location and experience. The review had two purposes:

1. Compare the content of the WKT blueprint with the content of the examination outlines of the English Examination and the Professional Practice Examination, which both resulted from the *Occupational Analysis of the Certified Shorthand Reporter Profession* conducted by OPES in 2017 (California OA, 2017).
2. Compare the format of the SKT with the format of the Dictation Examination. Because the SKT is not linked to an OA, the SMEs could not compare the content of the SKT with the content of the examination outline of the Dictation Examination. Instead, the SMEs compared key features of the two examinations, including number of voices, test length, allowed errors, number of words transcribed, words per minute, and time allowed to transcribe notes. The goal of the format comparison was to determine whether the SKT adequately assesses the skills required for entry-level practice in California.

During this workshop, the SMEs first compared the formats of the SKT and the Dictation Examination. Next, the SMEs compared the examination content of the WKT with the tasks and knowledge statements from the California examination outlines. The SMEs performed a linkage study to identify whether there were areas of California court reporting practice that are not measured by the WKT.

The results of the format comparison indicated that the format of the SKT was not sufficiently parallel to the format of the Dictation Examination. For example, the Dictation Examination has 4-voice recording, and the SKT has 2-voice recording; the Dictation Examination has 10 minutes of continuous writing, and the SKT has 5 minutes of continuous writing; and the Dictation Examination requires a higher accuracy rate for passing than does the SKT. The SMEs concluded that the SKT does not adequately measure the skills required for entry-level court reporter practice in California, e.g., that entry-level court reporters in California should be tested using 4-voice recording and 10 minutes of continuous writing at a higher accuracy rate.

The results of the linkage study indicated that the tasks and knowledge statements included in the English Examination outline were fully assessed by the WKT; however, only 31% of the tasks and 41% of the knowledge statements included in the Professional Practice Examination outline were assessed by the WKT. As a result, the SMEs concluded that the WKT does not adequately assess the knowledge required for entry-level court reporter practice in California.

Based on the SMEs' findings regarding the SKT and WKT, OPES determined that the SKT and WKT are not sufficiently parallel to the California examinations to be considered for reciprocity at this time.

Given the findings regarding the SKT and WKT, OPES recommends that the Court Reporters Board of California (Board) continue to require the California Dictation, English, and

Professional Practice Examinations. OPES supports the Board's continued exploration of NCRA examinations and other examinations for reciprocity. OPES recommends that the Board conduct another review when NCRA completes the next Registered Professional Reporter OA.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	iii
<b>CHAPTER 1   INTRODUCTION.....</b>	<b>1</b>
<b>CHAPTER 2   OCCUPATIONAL ANALYSIS .....</b>	<b>3</b>
<b>CHAPTER 3   EXAMINATION DEVELOPMENT .....</b>	<b>7</b>
<b>CHAPTER 4   PASSING SCORES AND PASSING RATES.....</b>	<b>11</b>
<b>CHAPTER 5   TEST ADMINISTRATION .....</b>	<b>13</b>
<b>CHAPTER 6   EXAMINATION SCORING AND PERFORMANCE .....</b>	<b>19</b>
<b>CHAPTER 7   TEST SECURITY.....</b>	<b>21</b>
<b>CHAPTER 8   COMPARISON OF THE WKT BLUEPRINT WITH THE EXAMINATION OUTLINES OF THE CALIFORNIA ENGLISH AND PROFESSIONAL PRACTICE EXAMINATIONS; COMPARISON OF THE SKT FORMAT WITH THE FORMAT OF THE CALIFORNIA DICTATION EXAMINATION .....</b>	<b>23</b>
<b>CHAPTER 9   CONCLUSIONS.....</b>	<b>29</b>
<b>CHAPTER 10   REFERENCES.....</b>	<b>31</b>



## LIST OF TABLES

TABLE 1 – CALIFORNIA DICTATION EXAMINATION AND SKT FORMAT .....	24
TABLE 2 – CONTENT DOMAINS OF THE WKT BLUEPRINT .....	25
TABLE 3 – CONTENT AREAS OF THE 2017 CALIFORNIA DICTATION EXAMINATION OUTLINE .....	25
TABLE 4 – CONTENT AREAS OF THE 2017 CALIFORNIA ENGLISH EXAMINATION OUTLINE .....	26
TABLE 5 – CONTENT AREAS OF THE 2017 CALIFORNIA PROFESSIONAL PRACTICE EXAMINATION OUTLINE .....	27



# CHAPTER 1 | INTRODUCTION

## PURPOSE OF THE COMPREHENSIVE REVIEW

Licensing boards and bureaus within the California Department of Consumer Affairs (DCA) must ensure that examination programs used in California licensure comply with psychometric and legal standards. The public must be reasonably confident that an individual passing a licensure examination has the requisite knowledge and skills to competently and safely practice in the profession.

The Court Reporters Board of California (Board) requested that DCA's Office of Professional Examination Services (OPES) complete a comprehensive review of the Registered Professional Reporter Online Skills Test (SKT) and Written Knowledge Test (WKT) developed by the National Court Reporters Association (NCRA). The SKT is a three-part practical examination including literary phrases, jury charge, and testimony/Q&A. The WKT is a multiple-choice examination that measures a candidate's knowledge of technology and innovation; industry practices; and NCRA, professionalism, and ethics.

NCRA's registered professional reporter tests are considered the baseline, entry-level examination for the court reporter profession. The registered professional reporter certification is NCRA's "foundational certification designed for entry-level freelance and official reporters" (NCRA website); the occupational analysis (OA) conducted for NCRA was titled *National Court Reporters Association Registered Professional Reporter Exam Job Task Analysis Report*.

The OPES review had three purposes:

1. To evaluate the SKT and WKT to be considered for court reporter licensure reciprocity in California.
2. To determine whether the SKT and WKT meet the professional guidelines and technical standards outlined in the *Standards for Educational and Psychological Testing* (2014) (*Standards*<sup>1</sup>) and in California Business and Professions (B&P) Code § 139.
3. To identify any areas of California court reporter practice that the SKT and WKT do not assess.

In relation to the *Standards*, evaluating the acceptability of an examination does not involve determining whether the examination satisfies each individual standard interpreted literally. The importance of each standard varies according to circumstances. As commented in the *Standards*:

Individual standards should not be considered in isolation. Therefore, evaluating acceptability depends on (a) professional judgment that is based on a knowledge of behavioral science, psychometrics, and the relevant standards in the professional field to

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<sup>1</sup> See Chapter 10 for the complete reference to the *Standards*.

which the test applies; (b) the degree to which the intent of the standard has been satisfied by the test developer and user; (c) the alternative measurement devices that are readily available; (d) research and experiential evidence regarding the feasibility of meeting the standard; and (e) applicable laws and regulations (p. 7).

OPES, in collaboration with the Board, requested documentation from NCRA to determine whether the following SKT and WKT components met professional guidelines and technical standards outlined in the *Standards* and B&P Code § 139: (a) OA,<sup>2</sup> (b) examination development, (c) passing scores and passing rates,<sup>3</sup> (d) test administration, (e) examination scoring and performance, and (f) test security procedures.

## CALIFORNIA LAW AND POLICY

Section 139(a) of the B&P Code states:

The Legislature finds and declares that occupational analyses and examination validation studies are fundamental components of licensure programs.

It further requires that DCA develop a policy to address the minimum requirements for psychometrically sound examination validation, examination development, and OAs, including standards for the review of state and national examinations.

DCA Licensure Examination Validation Policy OPES 18-02 (OPES 18-02) specifies the *Standards* as the most relevant technical and professional standards to be followed to ensure that examinations used for licensure in California are psychometrically sound, job-related, and legally defensible.

## FORMAT OF THE REPORT

The chapters of this report provide the relevant standards related to psychometric aspects of the SKT and WKT and describe the findings and recommendations that OPES identified during its review.

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<sup>2</sup> An occupational analysis is also known as a job analysis, practice analysis, or task analysis.

<sup>3</sup> A passing score is also known as a pass point or cut score.

## CHAPTER 2 | OCCUPATIONAL ANALYSIS

### STANDARDS

The following standard is most relevant to conducting OAs for licensure examinations, as referenced in the *Standards*:

#### **Standard 11.13**

The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale and evidence should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in that occupation and are consistent with the purpose for which the credentialing program was instituted (pp. 181-182).

The comment following Standard 11.13 emphasizes its relevance:

**Comment:** Typically, some form of job or practice analysis provides the primary basis for defining the content domain. If the same examination is used in the credentialing of people employed in a variety of settings and specialties, a number of different job settings may need to be analyzed. Although the job analysis techniques may be similar to those used in employment testing, the emphasis for credentialing is limited appropriately to knowledge and skills necessary for effective practice (p. 182).

In tests used for licensure, knowledge and skills that may be important to success but are not directly related to the purpose of licensure (i.e., protecting the public) should not be included (p. 182).

B&P Code § 139 requires that each California licensure board, bureau, commission, and program report annually on the frequency of its OA and the validation and development of its examinations. OPES 18-02 states:

Generally, an occupational analysis and examination outline<sup>4</sup> should be updated every five years to be considered current; however, many factors are taken into consideration when determining the need for a different interval. For instance, an occupational analysis and examination outline must be updated whenever there are significant changes in a profession's job tasks and/or demands, scope of practice, equipment, technology, required knowledge, skills and abilities, or law and regulations governing the profession (p. 4).

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<sup>4</sup> An examination outline is also known as an examination blueprint or examination plan.

## FINDINGS

In 2017, NCRA contracted with Pearson VUE to conduct the OA for the WKT. This OA was conducted at the national level, and the results were documented in the *National Court Reporters Association Registered Professional Reporter Exam Job Task Analysis Report* (NCRA OA, 2018). Additional information regarding this study was obtained through NCRA's website, email communications, and meetings with NCRA representatives.

### Occupational Analysis – Methodology and Time Frame

The purpose of the OA was to update and validate the test specifications for the WKT (NCRA OA, 2018). Updating and validating the SKT was not included in the stated purpose of the OA. The methodology used to conduct the OA study was an online survey. The survey, which had been developed and reviewed by NCRA and SMEs, described the major responsibilities of court reporters who hold a registered professional reporter (RPR) credential. The final survey was sent to 5,300 RPR credential holders (NCRA OA, 2018).

**Finding 1:** The OA began in 2017 and was completed in 2018. The OA was conducted within a time frame considered to be current and legally defensible.

**Finding 2:** The OA did not include the full scope of registered professional reporter practice that could be used to link to the SKT.

### Occupational Analysis – Development of Survey

In October 2017, a survey development meeting was held between NCRA, SMEs, and Pearson VUE psychometricians to review and refine the OA survey and demographics. Based on the results of the meeting, Pearson VUE designed the OA survey for piloting with the SMEs. The purpose of piloting the survey was to ensure clarity, to ensure that there were no typographical errors, to ensure clarity in the rating scales, and to determine how long the survey would take to complete, as well as to make additional changes to the survey tasks and demographic questions (NCRA OA, 2018).

The final survey included two sections and was administered to RPR credential holders located in the United States. The first section of the survey included an introduction, instructions, and the tasks and knowledge statements for three domain areas related to court reporting practice. In this section, respondents were asked to rate each task on two rating scales, frequency and importance, and to rate each knowledge statement on one rating scale of importance. After completing each domain area of the first section of the survey, respondents were invited to make comments or suggestions. The second section of the survey included demographic questions designed to gather information about the survey respondents.

**Finding 3:** The procedures used by Pearson VUE and NCRA to develop the survey instrument meet professional guidelines and technical standards.

## Occupational Analysis – Sampling Plan and Response Rate

The sampling plan for the OA study included a total of 5,300 RPR credential holders. A total of 535 respondents opened the online survey. Complete data from 260 responses were used in analyses, for a response rate of 4.9%. Of the 260 respondents who indicated the state in which they conducted the majority of their work, 11% (28) indicated California.

**Finding 4:** The intent of the sampling plan was reasonable and meets professional guidelines and technical standards.

## Occupational Analysis – Survey Results

After administering the survey, NCRA and Pearson VUE collected the data and analyzed the survey results.

**Finding 5:** Survey respondents were RPR credential holders located throughout the United States. Approximately 5% of the respondents from the sample reported that they had been practicing for less than 5 years. The majority of respondents were split in how they categorized their primary work setting, with 46% indicating official and 40% indicating freelance. The demographic data indicate that ratings provided by respondents licensed 5 years or less should be increased in the future to ensure that an entry-level perspective is achieved.

## Occupational Analysis – Development of Blueprints

In May 2018, a Job Task Analysis Panel met to set test specifications. The panel included SMEs, NCRA staff, and a Pearson VUE psychometrician. The panel reviewed the OA survey results and finalized the blueprint specifications for the WKT.

Preliminary domain weights were presented to the SMEs for review. The weights were based on the results of the survey, in which respondents were asked to assign a weight to each of the three domains. The SMEs reviewed the survey results and discussed the weights in comparison to the previous 2011 blueprint. The SMEs then reached a consensus about the number of items that should be devoted to each of the domains on the WKT blueprint. The new blueprint was subsequently adopted by NCRA and was reflected on forms beginning in 2019.

**Finding 6:** The processes used to establish a link between domains identified by the OA as required for court reporter practice demonstrate a sufficient level of validity, thereby meeting professional guidelines and technical standards.

## RECOMMENDATIONS

**Recommendation 1:** OPES recommends that the next NCRA OA incorporate the full scope of court reporter practice so that it can be linked to both the WKT and the SKT. The SKT must be linked to an OA in order to be fully compliant with the *Standards* and B&P Code § 139.

## CONCLUSIONS

Given the findings, the OA for the WKT conducted by Pearson VUE and NCRA appears to meet professional guidelines and technical standards. Additionally, the development of the blueprints for the WKT is based on the results of the most recent OA and appears consistent with professional guidelines and technical standards.



## CHAPTER 3 | EXAMINATION DEVELOPMENT

### STANDARDS AND REGULATIONS

Examination development includes many steps within an examination program, from the development of an examination content outline to scoring and analyzing items after the administration of an examination. Several specific activities involved in the examination development process are evaluated in this section. These activities include development of examination content, linkage of examination content to the examination outline, and development of the scoring criteria and the examination forms.

The following standards are most relevant to examination development for licensure examinations, as referenced in the *Standards*.

#### **Standard 4.7**

The procedures used to develop, review, and try out items and to select items from the item pool should be documented (p. 87).

#### **Standard 4.12**

Test developers should document the extent to which the content domain of a test represents the domain defined in the test specifications (p. 89).

The following regulations are relevant to the integrity of the examination development process:

B&P Code § 139 requires DCA to develop a policy on examination validation that includes minimum requirements for psychometrically sound examination development.

DCA Participation in Examination Development Policy OPES 20-01 (OPES 20-01), as mandated by B&P Code § 139, specifies that board members, committee members, and instructors should not serve as expert consultants in the licensure examination development process. This is due to potential conflict of interest, undue influence, and security considerations.

### FINDINGS

#### **Examination Development – Subject Matter Experts (SMEs)**

Examination development for the SKT and WKT is performed by SMEs who serve on a Skills Committee, Item Writing Committee, and Test Advisory Committee (TAC). NCRA solicits certified RPR court reporters through open call on their website and NCRA publications. SMEs can also be recommended by state associations or recommended by NCRA staff and board members. SMEs are selected to represent the court reporters profession in terms of training background, professional expertise, and work setting. All SMEs are required to sign a confidentiality agreement.

**Finding 7:** The criteria used to select SMEs to perform examination development appear relatively consistent with professional guidelines and technical standards. However, the use of educators in examination development processes is not fully compliant with OPES 20-01, as mandated by B&P Code § 139.

### **Examination Development – WKT Linkage to Examination Blueprint**

In May 2018, the Job Task Analysis Panel convened to link the competency content areas derived from the 2018 NCRA OA with the domain areas assessed on the WKT (NCRA OA, 2018). The panel provided a recommendation regarding the number of examination items that should be devoted to each of the OA domains. The panel’s recommendation for the new WKT blueprints was subsequently adopted by NCRA.

**Finding 8:** The methods used to establish a link between examination content and the competencies necessary for practice appear consistent with professional guidelines and technical standards.

### **Examination Development – WKT Item Development and Pretesting**

The SMEs on the NCRA Item Writing Committee are tasked with the development and review of items for the WKT. The SMEs are responsible for submitting new examination items, for reviewing items, and for constructing examination forms.

The WKT includes 120 items. Candidates are scored on 100 items; the remaining 20 items are new or pretest items and are not counted toward a candidate’s score. Item analyses are then performed, and poorly performing items are reviewed by SMEs to determine whether the items meet criteria for inclusion on future examination forms. Items that do not meet defined performance criteria are returned for revision or are eliminated.

**Finding 9:** The procedures used to develop, review, and pretest new items appear consistent with professional guidelines and technical standards.

### **Examination Development – WKT Forms**

Examination forms for the WKT are constructed based on the examination blueprint. Throughout the construction process, SMEs ensure that examination content reflects current practice. In addition, all examination forms are constructed using the same criteria to ensure that forms are comparable in terms of content and item difficulty. Final forms of the WKT are reviewed by the TAC.

**Finding 10:** The procedures used to construct WKT forms appear consistent with professional guidelines and technical standards.

## **Examination Development – SKT Development and Pilot Testing**

The SMEs on the NCRA Skills Committee and the TAC work together to develop the content of the SKT. SMEs are given writing assignments to submit for review to the TAC. The TAC meets in person to review the submitted tests and then to practice writing each test on their steno machines. The TAC performs a quality review of the selected tests and then submits them to NCRA for final approval.

NCRA reviews and finalizes the tests before they are sent to the recording studio to be recorded. Before and after recording, the tests are put through several quality control processes.

**Finding 11:** The procedures used to develop, review, and pilot test new SKTs appear consistent with professional guidelines and technical standards.

## **RECOMMENDATIONS**

**Recommendation 2:** If the Board were to accept the SKT or WKT for reciprocity in the future, OPES recommends phasing out or limiting the service of educators during examination development processes in order to be fully compliant with OPES 20-01.

## **CONCLUSIONS**

Given the findings, the examination development procedures conducted by NCRA generally appear consistent with professional guidelines and technical standards.



## CHAPTER 4 | PASSING SCORES AND PASSING RATES

### STANDARDS

The passing score of an examination is the score that represents the level of performance that divides those candidates for licensure who are minimally competent from those who are not competent.

The following standards are most relevant to passing scores, cut points, or cut scores for licensure examinations, as referenced in the *Standards*.

#### **Standard 5.21**

When proposed score interpretations involve one or more cut scores, the rationale and procedures used for establishing cut scores should be documented clearly (p. 107).

#### **Standard 11.16**

The level of performance required for passing a credentialing test should depend on the knowledge and skills necessary for credential-worthy performance in the occupation or profession and should not be adjusted to control the number or proportion of persons passing the test (p. 182).

The supporting commentary on passing or cut scores in Chapter 5 of the *Standards*, “Scores, Scales, Norms, Score Linking, and Cut Scores” states that the standard setting process used should be clearly documented and defensible. The qualifications and the process of selection of the judges involved should be part of the documentation. A sufficiently large and representative group of judges should be involved, and care must be taken to ensure that judges understand the process and procedures they are to follow (p.101).

In addition, the supporting commentary in Chapter 11 of the *Standards*, “Workplace Testing and Credentialing” states that the focus of tests used in credentialing is on “the standards of competence needed for effective performance (e.g., in licensure this refers to safe and effective performance in practice)” (p. 175). It further states, “Standards must be high enough to ensure that the public, employers, and government agencies are well served, but not so high as to be unreasonably limiting” (p. 176).

OPES 20-01, as mandated by B&P Code § 139, specifies that board members, committee members, and instructors should not serve as expert consultants in the licensure examination development process. This is due to potential conflict of interest, undue influence, and security considerations.

## FINDINGS

### Passing Scores – WKT Process, Participation of SMEs, and Methodology

The WKT uses a criterion-referenced passing standard that is set on a base form of the examination. A modified Angoff procedure was used to establish the passing standard, which relies on the expert judgment of SMEs to determine the knowledge a candidate should possess in order to be minimally competent for safe and effective court reporter practice.

To determine the passing standard, NCRA works with a Pearson VUE psychometrician and a panel of 10–12 SMEs.

Item Response Theory (IRT) is used to statistically produce equivalent forms of the WKT based on the criterion-referenced passing standard. Candidates must achieve a scaled score of 70 or higher to pass the WKT.

**Finding 12:** The number of SMEs involved in setting the passing standard meets professional guidelines and technical standards. However, the participation of educators in the process is not fully compliant with OPES 20-01, as mandated by B&P Code § 139.

**Finding 13:** The methods used to set the passing standard for the WKT and scale scores generally appear consistent with professional guidelines and technical standards.

## PASSING RATES

For 2020, the overall passing rates for candidates in all states were:

- WKT: 58%
- SKT: Literary 67%, Jury Charge 35%, Testimony/Q&A 23%

**Finding 14:** OPES found that these passing rates meet expectations for passing rates for this profession.

## RECOMMENDATIONS

**Recommendation 3:** In order to be fully compliant with OPES 20-01, OPES recommends phasing out or limiting the service of board members and educators during determination of passing standards.

## CONCLUSIONS

Given the findings, the passing score methodologies used by NCRA to set the passing standard and scale scores on the WKT demonstrate a sufficient degree of validity, thereby meeting professional guidelines and technical standards.

## CHAPTER 5 | TEST ADMINISTRATION

### STANDARDS

The following standards are most relevant to the test administration process for licensure examinations, as referenced in the *Standards*.

#### **Standard 3.4**

Test takers should receive comparable treatment during the test administration and scoring process (p. 65).

#### **Standard 4.15**

The directions for test administration should be presented with sufficient clarity so that it is possible for others to replicate the administration conditions under which the data on reliability, validity, and (where appropriate) norms were obtained. Allowable variations in administration procedures should be clearly described. The process for reviewing requests for additional testing variations should also be documented (p. 90).

#### **Standard 4.16**

The instructions presented to test takers should contain sufficient detail so that test takers can respond to a task in the manner that the test developer intended. When appropriate, sample materials, practice or sample questions, criteria for scoring, and a representative item identified with each item format or major area in the test's classification or domain should be provided to the test takers prior to the administration of the test or should be included in the testing material as part of the standard administration instructions (p. 90).

#### **Standard 6.1**

Test administrators should follow carefully the standardized procedures for administration and scoring specified by the test developer and any instructions from the test user (p. 114).

#### **Standard 6.2**

When formal procedures have been established for requesting and receiving accommodations, test takers should be informed of these procedures in advance of testing (p. 115).

#### **Standard 6.3**

Changes or disruptions to standardized test administration procedures or scoring should be documented and reported to the test user (p. 115).

#### **Standard 6.4**

The testing environment should furnish reasonable comfort with minimal distractions to avoid construct-irrelevant variance (p. 116).

#### **Standard 6.5**

Test takers should be provided appropriate instructions, practice, and other support necessary to reduce construct-irrelevant variance (p. 116).

#### **Standard 8.1**

Information about test content and purposes that is available to any test taker prior to testing should be available to all test takers. Shared information should be available free of charge and in accessible formats (p. 133).

#### **Standard 8.2**

Test takers should be provided in advance with as much information about the test, the testing process, the intended test use, test scoring criteria, testing policy, availability of accommodations, and confidentiality protection as is consistent with obtaining valid responses and making appropriate interpretations of test scores (p. 134).

## **FINDINGS**

NCRA contracts with Pearson VUE to administer the WKT (NCRA Website). Every year, the WKT is administered during four 2-week windows via computer at Pearson VUE testing centers or through online proctoring. A brief optional tutorial is provided on the Pearson VUE website and before the examination begins. The tutorial familiarizes candidates with computer operation and the steps involved in proceeding through the examination.

NCRA contracts with the online learning and proctoring companies Realtime Coach and ProctorU, to administer and proctor the online SKT (NCRA Website). Every year, the SKT is administered during six 2-week windows. Candidates take the test via computer at their home, office, or other secure location. Step-by-step videos and practice tests are available to candidates. Candidates are highly encouraged to take unproctored and proctored practice tests before taking the test to familiarize themselves with the steps involved in proceeding through the online test.

NCRA provides information about the WKT and SKT, as well as about test administration, to candidates and prospective candidates through its website at <https://www.ncra.org>.

### **Test Administration – Candidate Registration**

Candidates register to take the WKT and SKT by submitting their registration through the NCRA website. After applications have been processed, candidates receive an email with scheduling instructions.



The NCRA website provides detailed instructions and information regarding the application and registration process, including:

- Application procedures
- Examination fees
- Examination schedule
- Rescheduling or canceling a test appointment
- Policies regarding re-application and eligibility for re-examination

**Finding 15:** The WKT and SKT registration process appears straightforward. The information available to candidates is comprehensive. The candidate registration process appears to meet professional guidelines and technical standards.

**Finding 16:** NCRA sells a study guide that includes information about the WKT and SKT.

### **Test Administration – Accommodation Requests**

NCRA complies with the Americans with Disabilities Act and provides reasonable accommodations to candidates. Candidates who require testing accommodations can email NCRA at [testing@ncra.org](mailto:testing@ncra.org) to request an accommodation.

**Finding 17:** NCRA’s accommodation procedures appear consistent with professional guidelines and technical standards.

### **Test Administration – Test Centers and Online Testing**

The WKT is administered at Pearson VUE testing centers located throughout the U.S. or through OnVue, Pearson VUE’s online proctoring platform (Pearson VUE website). The SKT is administered online by Realtime Coach and proctored by ProctorU.

**Finding 18:** Candidates have access to authorized testing centers that administer the WKT or can take the exam at a secure location of their choosing. The test centers and online testing platform have trained proctors and controlled testing conditions. Candidates testing through the online platform must connect to the secure OnVue system.

**Finding 19:** Candidates can access the SKT from any secure location of their choosing. Candidates are continuously monitored by trained proctors through ProctorU and must connect to the secure ProctorU system.

## Test Administration – Directions and Instructions to Candidates

The NCRA website provides detailed information about the WKT and SKT. In addition, the Pearson VUE website, Realtime Coach website, and ProctorU website provide detailed information to candidates regarding:

- Purpose of the examination
- Examination specifications
- Examination preparation and resources
- Practice tests
- Examination scoring and results
- Eligibility requirements
- Examination fees, scheduling, and application procedures
- Testing center procedures, remote testing procedures, and administration
- Testing accommodations
- Examination regulations and testing rules of conduct
- Examination privacy and security
- Examination irregularities and appeals

Through the Pearson VUE examination software link, candidates are able to access an online tutorial to familiarize themselves with the examination software used to administer the WKT. If taking the WKT online, candidates can access an online tutorial to familiarize themselves with the online testing environment and online administration process. Through the Realtime Coach and ProctorU websites, candidates are able to access online tutorials to familiarize themselves with the SKT online testing environment and with the online administration process.

In addition, through the NCRA website, candidates can purchase the RPR Study Guide, which includes WKT practice items (NCRA website). These practice items are designed to assist candidates in identifying their strengths and weaknesses when preparing for the WKT and to familiarize them with the content and format of the examination.

**Finding 20:** The directions and instructions provided to candidates appear straightforward. The information available to candidates is detailed and comprehensive.

## Test Administration – Standardized Procedures and Testing Environment

Candidates who test at Pearson VUE testing centers are tested in similar testing environments, using the same equipment, under the same conditions. Candidates taking the WKT or SKT online are tested following the same remote testing policies and procedures; however, standardization across testing environments and equipment cannot be confirmed. All candidates are assessed on the same examination content.

**Finding 21:** The procedures established for the test administration process and testing environment appear to be consistent with professional guidelines and technical standards.

## RECOMMENDATIONS

**Recommendation 4:** In agreement with Standard 4.16 and in the spirit of transparency and fairness, OPES recommends that NCRA offer their study guide to all registered candidates at no cost.

## CONCLUSIONS

Given the findings, the test administration protocols put in place by NCRA appear consistent with professional guidelines and technical standards. It should be noted that using online- or remote-proctored examination cannot guarantee a standardized experience across candidates.



## CHAPTER 6 | EXAMINATION SCORING AND PERFORMANCE

### STANDARDS

The following standards are most relevant to scoring and performance for licensure examinations, as listed in the *Standards*.

#### **Standard 2.3**

For each total score, subscore, or combination of scores that is to be interpreted, estimates of relevant indices of reliability/precision should be reported (p. 43).

#### **Standard 4.10**

When a test developer evaluates the psychometric properties of items, the model used for that purpose (e.g., classical test theory, item response theory, or another model) should be documented. The sample used for estimating item properties should be described and should be of adequate size and diversity for the procedure. The process by which items are screened and the data used for screening, such as item difficulty, item discrimination, or differential item functioning (DIF) for major examinee groups, should also be documented. When model-based methods (e.g., IRT) are used to estimate item parameters in test development, the item response model, estimation procedures, and evidence of model fit should be documented (pp. 88-89).

### FINDINGS

#### **Examination Scoring – WKT**

The WKT consists of 100 scored multiple-choice items and 20 non-scored pretest items administered by computer. Examination forms are constructed to align with the test blueprint. The items are scored dichotomously (correct or incorrect). In calculating a candidate's score, a raw score is first obtained by computing the number of items answered correctly (NCRA website). The raw score is then statistically converted to a scale score. A minimum score of 70 is required to pass the WKT.

Examination results are typically available 3–4 weeks after the examination date (NCRA website). Candidates receive emails indicating their pass/fail status.

**Finding 22:** The scoring criteria is applied equitably, and the examination scoring process appears consistent with professional guidelines and technical standards.

## Examination Scoring – SKT

The SKT consists of three 5-minute test legs: Literary, Jury Charge, and Testimony/Q&A. Each leg is completed at different speeds of words per minute (wpm). The Literary is at 180 wpm, the Jury Charge is at 200 wpm, and the Testimony/Q&A is at 225 wpm. Candidates must transcribe their notes to 95% accuracy on each leg to pass the SKT.

As part of the scoring process, candidates with an SKT score of 92–94% are reviewed a second time by an NCRA-qualified grader for accuracy before results are distributed (NCRA website). In addition, candidates can pay to receive feedback about the types of errors made on their test to identify areas of weakness in preparation for future attempts.

Examination results are typically emailed to candidates within 7 business days after the examination date (NCRA website).

**Finding 23:** The scoring criteria are applied equitably, and the examination scoring process appears consistent with professional guidelines and technical standards.

## Examination Performance

After administration of the WKT, Pearson VUE's psychometricians perform item analyses and evaluate overall examination statistics to identify any problem items or irregularities within the examination. Items identified as problematic are put on hold and reviewed.

**Finding 24:** The process for evaluating examination-level statistics to review examination performance appears consistent with professional guidelines and technical standards.

## CONCLUSIONS

The steps taken by NCRA to score the WKT and SKT appear to provide a fair and objective evaluation of candidate performance. The steps taken by NCRA to evaluate examination performance also appear to be reasonable.

## CHAPTER 7 | TEST SECURITY

### STANDARDS

The following standards are most relevant to test security for licensure examinations, as referenced in the *Standards*.

#### **Standard 6.6**

Reasonable efforts should be made to ensure the integrity of test scores by eliminating opportunities for test takers to attain scores by fraudulent or deceptive means (p. 116).

#### **Standard 6.7**

Test users have the responsibility of protecting the security of test materials at all times (p. 117).

### FINDINGS

#### **Test Security – Examination Materials and Candidate Information**

To ensure that the security of examination materials is maintained, NCRA copyrights all examination items and materials to establish ownership and to restrict dissemination or unauthorized use (NCRA website). In addition, NCRA has developed policies and procedures for maintaining the custody of materials and conveying responsibility for examination security to examination developers, administrators, and users.

NCRA screens all personnel who manage examination materials, including staff, vendors, and SMEs involved in examination development processes. Staff are trained in procedures for handling secure materials and are required to comply with NCRA policies regarding confidentiality. In addition, SMEs involved in examination development processes must complete agreements regarding confidentiality.

**Finding 25:** The security procedures practiced by NCRA with regard to the maintenance of examination materials are consistent with professional guidelines and technical standards.

## Test Security – Test Sites and Online Administration

NCRA contracts with Pearson VUE for administration of the WKT both in-person and online. NCRA contracts with Realtime Coach and ProctorU for the online administration of the SKT. Pearson VUE, Realtime Coach, and ProctorU staff are trained in procedures for maintaining security of examination materials at test facilities and through online administration.

At both test sites and online, candidates are required to provide current and valid government-issued identification to sit for the WKT and SKT. The Pearson VUE, Realtime Coach, and ProctorU websites list items that candidates are prohibited from bringing into or having in secure testing areas. Prohibited items include, but are not limited to, outside books or reference materials, electronic devices, and accessories. In addition, the NCRA website, along with the Pearson VUE, Realtime Coach, and ProctorU websites, describes the examination rules of conduct and prohibited behaviors, including examination subversion or falsification of information.

During candidate check-in, Pearson VUE or ProctorU staff perform visual inspections to check for recording devices or other prohibited items. At Pearson VUE test centers, staff may also use a wand to detect electronic devices. During the online check-in by Pearson VUE or ProctorU, candidates are required to show a 360-degree pan of their workspace.

All in-person testing sessions for the WKT are monitored by staff at the test center. Proctors at Pearson VUE testing centers are trained to recognize potential test security breaches. In addition, testing sessions at Pearson VUE sites are video recorded.

All online sessions for the WKT and SKT are monitored by live audio and video connections. The WKT is administered online through Pearson VUE's OnVue online platform and proctors. The SKT is administered by Realtime Coach and proctored by ProctorU. For both the WKT and SKT, during the entire test administration, proctors view a live feed of the candidate's monitor through screen-sharing technology. This monitoring includes multiple levels of recording and reporting, including full session video and audio and screen capturing (NCRA website). The proctor can also view a list of the candidate's current running processes to monitor for unauthorized connections and can remotely disable or close unauthorized software (NCRA website).

**Finding 26:** The security procedures practiced by NCRA regarding test sites are consistent with professional guidelines and technical standards.

## CONCLUSIONS

Given the findings, the security procedures for Pearson VUE test centers, Pearson VUE online, and Realtime Coach and ProctorU online appear to meet professional guidelines and technical standards.



## CHAPTER 8 | COMPARISON OF THE WKT BLUEPRINT WITH THE EXAMINATION OUTLINES OF THE CALIFORNIA ENGLISH AND PROFESSIONAL PRACTICE EXAMINATIONS; COMPARISON OF THE SKT FORMAT WITH THE FORMAT OF THE CALIFORNIA DICTATION EXAMINATION

### PARTICIPATION OF SUBJECT MATTER EXPERTS

OPES convened a one-day teleconference workshop on May 1, 2021 with two purposes:

1. Compare the format of the SKT format with the format of the Dictation Examination. The goal of the format comparison was to determine whether the SKT adequately assesses the skills required for entry-level practice in California.
2. Evaluate the WKT blueprint resulting from the 2018 NCRA OA and to compare it with the English and Professional Practice Examination outlines based on the *Occupational Analysis of the Certified Shorthand Reporter Occupation* conducted by OPES in 2017 (California OA, 2017).

The Board recruited nine SMEs to participate in the workshop. The SMEs represented the profession in terms of geographical location in California. One of the SMEs had been licensed for 1–5 years, one had been licensed for 6–10 years, two had been licensed for 11–19 years, and five had been licensed for more than 20 years. Six SMEs were working as freelance reporters, and three were working as official reporters.

### WORKSHOP PROCESS

Before the workshop, the SMEs completed OPES' security agreement, self-certification, secure area agreement, and personal data (demographic) forms. On the day of the workshop, the OPES facilitator explained the importance of, and the guidelines for, security during and outside the workshop.

Next, the OPES facilitator gave a PowerPoint presentation about the purpose and importance of OA, validity, content validity, reliability, test administration standards, examination security, and the role of SMEs. The OPES facilitator also explained the purpose of the workshop.

The SMEs were instructed to evaluate and compare the format of the Dictation Examination to the format of the SKT. The SMEs worked as a group to complete this task.

The SMEs were then instructed to evaluate and link each task and knowledge statement of the English and Professional Practice Examination outlines to the WKT blueprint. The SMEs worked as a group to evaluate and link all of the tasks and knowledge statements of the two California examination outlines.

Table 1 shows a comparison between the formats of the Dictation Examination and the SKT. Table 2 provides the domain areas of the 2018 WKT blueprint. Table 3, Table 4, and Table 5 provide the content areas of the 2017 California examination outlines. Note that there is no blueprint for the SKT because the 2018 NCRA OA is linked only to the WKT.

**TABLE 1 – CALIFORNIA DICTATION EXAMINATION AND SKT FORMAT**

<b>COMPONENT</b>	<b>DICTATION EXAMINATION FORMAT</b>	<b>SKT FORMAT</b>
Administration format	One examination taken at one time	Three legs taken at three different times
Test length	13 minutes – only the last 10 minutes are transcribed	5 minutes per leg
Passing Score	97.5%	95% for each leg
Number of speakers	4 voices	Literary 1 voice Jury Charge 1 voice Testimony/Q&A 2 voices
Number of allowed errors	50	Literary 45 Jury Charge 50 Testimony/Q&A 57
Number of words transcribed	2,000	Literary 900 Jury Charge 1,000 Testimony/Q&A 1,125
Words per minute requirement	200 wpm	Literary 180 wpm Jury Charge 200 wpm Testimony/Q&A 225 wpm
Time allowed to transcribe notes	2 hours 30 minutes	1 hour 15 minutes per leg
Error review	20 errors from the passing score	Scores of 92% or above are reviewed

TABLE 2 – CONTENT DOMAINS OF THE WKT BLUEPRINT

DOMAIN	WEIGHT
1. Technology and Innovation	43%
2. Industry Practices	34%
3. NCRA, Professionalism, and Ethics	23%
<b>Total</b>	<b>100%</b>

TABLE 3 – CONTENT AREAS OF THE 2017 CALIFORNIA DICTATION EXAMINATION OUTLINE

Content Area	Content Area Description
1. Reporting Proceedings	This area assesses the candidate’s ability to utilize stenographic equipment and computer-aided transcription software to create a verbatim record.
2. Transcribing Proceedings	This area assesses the candidate’s ability to create an accurate transcript from the stenographic record formatted to applicable standards.
3. Research and Language Skills	This area assesses the candidate’s ability to utilize current rules of punctuation, grammar, word usage, and vocabulary.
4. Transcript Management	This area assesses the candidate’s ability to prepare and deliver transcripts in a timely manner.
5. Ethics	This area assesses the candidate’s ability to adhere to laws, regulations, and CRB Best Practices pertaining to professional and ethical conduct.

TABLE 4 – CONTENT AREAS OF THE 2017 CALIFORNIA ENGLISH EXAMINATION  
OUTLINE

<b>Content Area</b>	<b>Content Area Description</b>	<b>Weight</b>
Research and Language Skills	This area assesses the candidate's knowledge of proper grammar, punctuation, word usage, and general and specialized vocabulary.	100%
	1. Grammar	23%
	2. Proofreading	56%
	3. Vocabulary	21%
<b>Total</b>		<b>100%</b>

TABLE 5 – CONTENT AREAS OF THE 2017 CALIFORNIA PROFESSIONAL PRACTICE EXAMINATION OUTLINE

Content Area	Content Area Description	Weight
1. Reporting Proceedings	This area assesses the candidate’s knowledge of procedures for gathering information and methods for managing and reporting proceedings, adhering to laws, regulations, and CRB Best Practices, in order to facilitate the creation of a verbatim record.	32%
2. Transcribing Proceedings	This area assesses the candidate’s knowledge of requirements to produce a certified transcript in a format that conforms to laws, regulations, and CRB Best Practices.	22%
3. Research and Language Skills	This area assesses the candidate’s knowledge of current rules of punctuation, grammar, word usage, and vocabulary.	9%
4. Transcript Management	This area assesses the candidate’s knowledge of laws, regulations, and CRB Best Practices regarding preparation, sale, notification, delivery, and retention of stenographic records, transcripts, and exhibits.	20%
5. Ethics	This area assesses the candidate’s knowledge of laws, regulations, and CRB Best Practices pertaining to professional and ethical conduct.	17%
<b>Total</b>		<b>100%</b>

## FINDINGS

The SMEs compared the formats of the Dictation Examination and the SKT. The SMEs concluded that the SKT is not sufficiently parallel to the Dictation Examination. For example, the Dictation Examination employs 4-voice recording, whereas the SKT employs 2-voice recording; the Dictation Examination has 10 minutes of continuous writing, whereas the SKT has 5 minutes of continuous writing; and the Dictation Examination has a passing score of 97.5% accuracy, whereas the SKT has a passing score of 95% accuracy. The SMEs concluded that the SKT does not adequately measure the skills required for entry-level court reporter practice in California, e.g., that entry-level court reporters in California should be tested using 4-voice recording and 10 minutes of continuous writing at a higher accuracy rate.

Additionally, the SMEs compared the tasks and knowledge statements of the 2017 California English and Professional Practice Examination outlines and the WKT blueprints. The SMEs found that all the tasks and knowledge statements on the English Examination could be linked to the WKT blueprint. However, for the Professional Practice Examination, only 31% of the tasks and 45% of the knowledge statements could be linked to the WKT blueprint. As a result, the SMEs concluded that the WKT does not adequately assess the knowledge required for entry-level court reporter practice in California.

**Finding 27:** The SMEs concluded that the format of the SKT does not adequately measure the skills required for entry-level court reporter practice in California. For example, the SMEs concluded that assessing such skills requires 4-voice recording and 10 minutes of continuous writing at a higher accuracy rate, while the SKT has only 2-voice recording and 5 minutes of continuous writing at a lower accuracy rate.

**Finding 28:** The SMEs concluded that the content of the WKT does not adequately assess the skills or knowledge required for entry-level court reporter practice in California. Although the content of the English Examination is assessed by the WKT, the content of the Professional Practice Examination is inadequately assessed by the WKT. More specifically, the Professional Practice Examination assesses California “CRB Best Practices” and California law, which are not assessed on the WKT.

**Finding 29:** The SMEs concluded that the Board should continue to require the Dictation, English, and Professional Practice Examinations for licensure in California and not accept the SKT or WKT for reciprocity in California at this time.

## CONCLUSIONS

Given the findings from the May 2021 workshop, the format of the SKT and the content of the WKT do not adequately assess the skills or knowledge necessary for entry-level court reporter practice in California. Therefore, they should not be used for licensure reciprocity in California at this time.

## CHAPTER 9 | CONCLUSIONS

OPES completed a comprehensive analysis and evaluation of the documents provided by NCRA.

OPES finds that the procedures used to establish and support the validity and defensibility of the WKT appear to meet professional guidelines and technical standards outlined in the *Standards* and in B&P Code § 139. Importantly, the WKT is linked to an OA that resulted in an examination blueprint.

However, OPES finds that the procedures used to establish and support the validity and defensibility of the SKT do not fully meet professional guidelines and technical standards due to the lack of an OA linked to the SKT. To fully comply with the *Standards* and B&P Code § 139, OPES recommends that NCRA conduct a comprehensive OA of the court reporter profession that can be linked to both the SKT and the WKT.

In a May 2021 workshop, SMEs representing the court reporter profession in California compared the formats of the SKT and the Dictation Examination and conducted a linkage study comparing the content of the WKT blueprint with the examination outlines of the English and Professional Practice Examinations.

The results of the format comparison indicated that the format of the SKT is not sufficiently parallel to the format of the Dictation Examination. For example, the Dictation Examination has 4-voice recording, and the SKT has 2-voice recording; the Dictation Examination has 10 minutes of continuous writing, and the SKT has 5 minutes of continuous writing; and the Dictation Examination requires a higher accuracy rate for passing than does the SKT. The SMEs concluded that the SKT does not adequately measure the skills required for entry-level court reporter practice in California, e.g., assessment of such skills requires 4-voice recording, 10 minutes of continuous writing, and a higher accuracy rate.

The results of the linkage study indicated that the content associated with the practice areas included in the English Examination outline was adequately linked to the content of the WKT; however, the majority of the content associated with the practice areas included in the Professional Practice Examination outline was not adequately linked to the content of the WKT. As a result, the SMEs concluded that the WKT does not adequately assess the knowledge required for entry-level court reporter practice in California.

Given the findings regarding the SKT and WKT, OPES recommends that the Court Reporters Board of California continue to require the California Dictation, English, and Professional Practice Examinations. OPES supports the Board's continued exploration of NCRA examinations and other examinations for reciprocity. OPES recommends that the Board conduct another review when NCRA completes the next Registered Professional Reporter OA.



## CHAPTER 10 | REFERENCES

California Business and Professions (B&P) Code § 139. State of California.

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