

# OCCUPATIONAL ANALYSIS OF THE SPECTACLE LENS DISPENSER PROFESSION



#### CALIFORNIA STATE BOARD OF OPTOMETRY

# OCCUPATIONAL ANALYSIS OF THE SPECTACLE LENS DISPENSER PROFESSION



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#### **EXECUTIVE SUMMARY**

The California State Board of Optometry (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) of spectacle lens dispenser (SLD) practice in California. The purpose of the OA is to define current practice for SLDs in terms of the actual tasks that new SLDs must be able to perform safely and competently at the time of licensure. The results of this OA provide a description of practice for the SLD profession that can then be used to review the National Opticianry Competency Examination (NOCE) developed by the American Board of Opticianry (ABO).

OPES test specialists began by researching the profession and conducting interviews with licensed SLDs working in locations throughout California. The purpose of these interviews was to identify the tasks performed by SLDs and to specify the knowledge required to perform those tasks in a safe and competent manner. Using the information gathered from the research and the interviews, OPES test specialists developed a preliminary list of tasks performed in SLD practice, along with statements representing the knowledge needed to perform those tasks.

In August 2019, OPES convened a workshop to review and refine the preliminary lists of task and knowledge statements. The workshop was comprised of licensed SLDs, or subject matter experts (SMEs), with diverse backgrounds in the profession (e.g., location of practice, years licensed, specialty). These SMEs also identified changes and trends in SLD practice, determined demographic questions for the OA questionnaire, and performed a preliminary linkage of the task and knowledge statements to ensure that all tasks had a related knowledge statement and all knowledge statements had a related task. Additional task and knowledge statements were created as needed to complete the scope of the content areas of the description of practice.

After the workshop, OPES test specialists developed a three-part OA questionnaire to be completed by SLDs statewide. Development of the OA questionnaire included a pilot study that was conducted using a group of licensed SLDs. The pilot study participants' feedback was incorporated into the final questionnaire, which was administered in October 2019.

In the first part of the OA questionnaire, SLDs were asked to provide demographic information relating to their work settings and practice. In the second part, SLDs were asked to rate specific tasks in terms of frequency (i.e., how often the SLD performs the task in the SLD's current work) and importance (i.e., how important the task is to effective performance of the SLD's current work). In the third part, SLDs were asked to rate specific knowledge statements in terms of how important each knowledge statement is to effective performance of the SLD's current work.

In November 2019, on behalf of the Board, OPES distributed the questionnaire to licensed SLDs in California who had an email address on file with the Board (a total of 643 SLDs), inviting them to complete the OA questionnaire online. Invitation letters were also sent by mail to the entire population of licensed SLDs (2,728). A total of 284 SLDs, or 10.4% of the SLDs receiving the invitation, responded by accessing the online OA questionnaire. The final sample size included in the data analysis was 223 respondents, or 8.2% of the population invited to

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complete the questionnaire. This response rate reflects two adjustments: OPES excluded data from respondents who indicated they were not currently licensed and practicing as SLDs in California, and OPES excluded data from respondents who only responded to the demographics portion of the questionnaire. The demographic composition of the respondent sample appears representative of the SLD population in California.

OPES test specialists then performed data analyses of the task and knowledge ratings obtained from the OA questionnaire respondents. The task frequency and importance ratings were combined to derive an overall criticality index for each task statement. The mean importance rating was used as the criticality index for each knowledge statement.

Once the data was analyzed, OPES conducted an additional workshop with SMEs in November 2019. The SMEs evaluated the criticality indices and determined whether any task or knowledge statements should be eliminated. The SMEs in this workshop also established the final linkage between tasks and knowledge statements, organized the task and knowledge statements into content areas, and defined those areas. The SMEs then evaluated and confirmed the content area weights of the examination outline.

The examination outline is structured into six content areas weighted by criticality relative to the other content areas. This outline provides a description of the scope of practice for SLDs, and it also identifies the tasks and knowledge critical to safe and competent SLD practice in California at the time of licensure. Additionally, this examination outline provides a basis for evaluating the degree to which the content of any examination under consideration measures content critical to SLD practice in California.

At this time, California licensure as an SLD is granted by passing the NOCE.

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## OVERVIEW OF THE SLD EXAMINATION OUTLINE

	Content Area	Content Area Description	Weight
1.	Prescription Assessment	This area assesses a candidate's knowledge of interpreting patient spectacle lens prescriptions, neutralizing current eyewear, prescription requirements, and conditions for referral of patients to medical professionals.	16%
2.	Eyewear Selection and Ordering	This area assesses a candidate's knowledge of assisting patients with frame and lens selection based on patient lifestyle, pre-fitting spectacle frames, and taking patient measurements.	30%
3.	Manufacturing	This area assesses a candidate's knowledge of spectacle lens manufacturing, including frame measurements, calculating decentration, identifying optical centers, and mounting lenses into frames.	10%
4.	Quality Control	This area assesses a candidate's knowledge of procedures for verifying that finished eyewear matches patient prescription and order specifications, is aligned and free from defects, and meets ANSI standards.	16%
5.	Dispensing	This area assesses a candidate's knowledge of adjusting and repairing spectacle frames; educating patients on eyewear use, care, and warranty; and troubleshooting patient concerns.	25%
6.	Advertising and Supervising	This area assesses a candidate's knowledge of laws and regulations related to advertising and supervising trainees.	3%
	Total		100%

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## **CHAPTER 1** | INTRODUCTION

#### PURPOSE OF THE OCCUPATIONAL ANALYSIS

The California State Board of Optometry (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) as part of the Board's comprehensive review of spectacle lens dispenser (SLD) practice in California. The purpose of the OA is to identify the critical activities performed by SLDs in California. The results of this OA provide a description of practice for the SLD profession that can then be used to review the National Opticianry Competency Examination (NOCE) developed by the American Board of Opticianry (ABO).

#### CONTENT VALIDATION STRATEGY

OPES used a content validation strategy to ensure that the OA reflected the actual tasks performed by practicing SLDs. OPES incorporated the technical expertise of California SLDs throughout the OA process to ensure that the identified task and knowledge statements directly reflect requirements for performance in current practice.

#### PARTICIPATION OF SUBJECT MATTER EXPERTS

The Board selected California SLDs to participate as subject matter experts (SMEs) during the OA. These SMEs were selected from a broad range of work settings, geographic locations, and experience backgrounds. The SMEs provided information regarding the different aspects of current SLD practice during the development phase of the OA. The SMEs also provided technical expertise during the workshop that was convened to evaluate and refine the content of task and knowledge statements before administration of the OA questionnaire. After the administration of the OA questionnaire, OPES convened an additional group of SMEs to review the results and finalize the examination outline, which ultimately provides the basis of the description of practice.

#### ADHERENCE TO LEGAL STANDARDS AND GUIDELINES

Licensure, certification, and registration programs in the State of California adhere strictly to federal and state laws and regulations, as well as to professional guidelines and technical standards. For the purpose of OAs, the following laws and guidelines are authoritative:

- California Business and Professions Code section 139.
- Uniform Guidelines on Employee Selection Procedures (1978), Code of Federal Regulations, Title 29, Section 1607.

- California Fair Employment and Housing Act, Government Code section 12944.
- Principles for the Validation and Use of Personnel Selection Procedures (2018), Society for Industrial and Organizational Psychology (SIOP).
- Standards for Educational and Psychological Testing (2014), American Educational Research Association, American Psychological Association, and National Council on Measurement in Education.

For a licensure program to meet these standards, it must be solidly based upon the tasks and knowledge required for practice.

#### **DESCRIPTION OF OCCUPATION**

The SLD occupation is described as follows in sections 2559.1 – 2559.6 of the California Business and Professions Code:

2559.1. On and after January 1, 1988, no individual may fit and adjust spectacle lenses unless the registration requirement of Section 2550 is complied with, and unless (1) the individual is a duly registered spectacle lens dispenser as provided in Section 2559.2 or (2) the individual performs the fitting and adjusting under the direct responsibility and supervision of a duly registered spectacle lens dispenser whose certificate of registration is then conspicuously and prominently displayed on the premises. A supervising registered dispenser shall be on the registered premises when an unregistered technician fits and adjusts spectacle lenses, allowing for usual and customary absences including illness and vacation.

2559.2. (a) An individual shall apply for registration as a registered spectacle lens dispenser on forms prescribed by the board. The board shall register an individual as a registered spectacle lens dispenser upon satisfactory proof that the individual has passed the registry examination of the American Board of Opticianry or any successor agency to that board. In the event the board should determine, after hearing, that the registry examination is not appropriate to determine entry level competence as a spectacle lens dispenser or is not designed to measure specific job performance requirements, the board may thereafter prescribe or administer a written examination that meets those specifications. If an applicant for renewal has not engaged in the full-time or substantial part-time practice of fitting and adjusting spectacle lenses within the last five years then the board may require the applicant to take and pass the examination referred to in this section as a condition of registration. Any examination prescribed or administered by the board shall be given at least twice each year on dates publicly announced at least 90 days before the examination dates. The board is authorized to contract for administration of an examination.

- (b) The board may deny registration where there are grounds for denial under the provisions of Division 1.5 (commencing with Section 475).
- (c) The board shall issue a certificate to each qualified individual stating that the individual is a registered spectacle lens dispenser.

- (d) Any individual who had been approved as a manager of dispensing operations of a registered dispensing optician under the provisions of Section 2552 as it existed before January 1, 1988, and who had not been subject to any disciplinary action under the provisions of Section 2555.2 shall be exempt from the examination requirement set forth in this section and shall be issued a certificate as a registered spectacle lens dispenser, provided an application for that certificate is filed with the board on or before December 31, 1989.
- (e) A registered spectacle lens dispenser is authorized to fit and adjust spectacle lenses at any place of business holding a certificate of registration under Section 2553 provided that the certificate of the registered spectacle lens dispenser is displayed in a conspicuous place at the place of business where he or she is fitting and adjusting.
- 2559.3. A certificate issued to a registered spectacle lens dispenser may, in the discretion of the board, be suspended or revoked for violating or attempting to violate any provision of this chapter or any regulation adopted under this chapter, or for incompetence, gross negligence, or repeated similar negligent acts performed by the certificate holder. A certificate may also be suspended or revoked if the individual certificate holder has been convicted of a felony as provided in Section 2555.1.

Any proceedings under this section shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the board shall have all the powers granted therein.

2559.4. This article shall not apply to an assistant fitting spectacle lenses pursuant to Section 2544 if the assistant is acting under the direct responsibility and supervision of a physician and surgeon or optometrist who engages in the practice of fitting spectacle lenses for his or her patients.

2559.5. This article shall become operative on January 1, 1988. However, the board may, prior to that date, accept and process applications, including the collection of fees, and perform other functions necessary to implement this article.

2559.6. No spectacle lens prescription that is issued on or after January 1, 1999, shall be dispensed unless the prescription meets the requirements of Section 2541.1. No spectacle lens prescription shall be dispensed after the expiration date of the prescription unless authorized pursuant to subdivision (e) of Section 2541.1. A person violating this section shall not be guilty of a misdemeanor pursuant to Section 2558. A violation of this section shall be considered unprofessional conduct by the board that issued the dispenser's certificate to practice. A registered dispensing optician may defend this proceeding by establishing that the expiration date of the prescription was not established consistent with Section 2541.1. Nothing in this section shall be construed to authorize a registered dispensing optician to fill a prescription after the expiration date or to make any judgment regarding the appropriateness of the expiration date.

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### **CHAPTER 2** | OCCUPATIONAL ANALYSIS QUESTIONNAIRE

#### TASK AND KNOWLEDGE STATEMENTS

To develop task and knowledge statements, OPES test specialists integrated the information gathered from literature reviews of profession-related sources (e.g., laws and regulations, articles, industry publications) and from interviews with SLD SMEs.

In August 2019, OPES test specialists facilitated a workshop with 10 SLDs from diverse backgrounds (e.g., years licensed, work setting, and work location) to evaluate the task and knowledge statements for technical accuracy and comprehensiveness.

OPES presented the task and knowledge statements to the SMEs, and they assigned each statement to a content area and verified that the content areas were independent and nonoverlapping. In addition, the SMEs performed a preliminary linkage of the task and knowledge statements to ensure that every task had a related knowledge statement and every knowledge statement had a related task. The SMEs also verified proposed demographic questions for the OA questionnaire, including questions regarding scope of practice and work setting, and identified changes and trends in SLD practice.

Once the lists of task and knowledge statements and the demographic questions were verified, OPES used this information to develop an online questionnaire that was sent to California SLDs for completion and evaluation.

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#### QUESTIONNAIRE DEVELOPMENT

OPES test specialists developed an online OA questionnaire designed to solicit SLDs' ratings of the task and knowledge statements. The surveyed SLDs were instructed to rate each task in terms of how often they perform the task (Frequency) and in terms of how important the task is to the effective performance of their current work (Importance). In addition, they were instructed to rate each knowledge statement in terms of how important the specific knowledge is to the effective performance of their current work (Importance). The OA questionnaire also included a demographic section for the purpose of developing an accurate profile of the respondents. The OA questionnaire can be found in Appendix F.

#### PILOT STUDY

Before administering the final questionnaire, OPES conducted a pilot study of the online questionnaire. The pilot study was reviewed by the Board and then sent to 10 SMEs who had participated in the task and knowledge statement development workshop. The respondents provided information about the technical accuracy of the task and knowledge statements, online navigation, and ease of use of the study. OPES used this feedback to develop the final questionnaire.

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## **CHAPTER 3** | RESPONSE RATE AND DEMOGRAPHICS

#### SAMPLING STRATEGY AND RESPONSE RATE

In November 2019, on behalf of the Board, OPES distributed a questionnaire to licensed SLDs in California who had an email address on file with the Board (a total of 643 SLDs), inviting them to complete the OA questionnaire online. Invitation letters were also sent by mail to the entire population of SLDs (a total of 2,728 SLDs). The invitation letter and email can be found in Appendices D and E.

Of the 2,728 SLDs in the sample, 284 SLDs (10.4%) responded by accessing the online questionnaire. The final sample size included in the data analysis was 223 respondents, or 8.2% of the SLDs who were invited to complete the questionnaire. This response rate reflects two adjustments: OPES excluded data from respondents who indicated they were not currently licensed and practicing as SLDs in California, and OPES excluded data from respondents who only completed the demographics portion of the questionnaire. Because respondents were permitted to skip items, response rates vary from item to item. The respondent sample appears to be representative of the population of California SLDs based on the sample's demographic composition.

#### **DEMOGRAPHIC SUMMARY**

As shown in Table 1 and Figure 1, 36.3% of the respondents included in the analysis reported having been licensed for 5 years or fewer, 15.2% for 6-10 years, 18.8% for 11-20 years, and 29.6% for more than 20 years.

Table 2 and Figure 2 show that 34.1% of respondents reported working for a big box store, while 24.2% reported working for an independent optical store, and 22.4% reported working for a national chain optical store. Table 3 and Figure 3 show that 48.9% of respondents reported their job title as licensed optician, and 21.5% reported their job title as manager/supervisor.

Table 4 and Figure 4 show that the greatest percentage of respondents (42.6%) reported working between 40-49 hours per week, and 40.8% reported working 30-39 hours per week. Table 5 and Figure 5 show that 72.2% of respondents reported that they have a registered dispensing optician (RDO) license, and 28.3% reported that they are a licensed contact lens dispenser.

When asked to indicate the location of their primary work setting, 88.8% of the respondents reported that they work in an urban area. See Table 6 and Figure 6.

As shown in Table 7 and Figure 7, 65.9% of respondents reported having 1-3 other registered SLDs in their facility, and 17.5% reported having 4-6 other registered SLDs. As shown in Table 8 and Figure 8, 49.3% reported having 1-3 nonregistered SLDs working in their facility, and 27.4% reported working with no nonregistered SLDs.

When asked to report their education and training, 54.3% reported having on-the-job training and 26% reported having attended vocational schools. See Table 9 and Figure 9.

More detailed demographic information from respondents can be found in Tables 1-10 and Figures 1-9.

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TABLE 1 - NUMBER OF YEARS LICENSED AS AN SLD

YEARS	NUMBER (N)	PERCENT
0-5 years	81	36.3
6-10 years	34	15.2
11-20 years	42	18.8
More than 20 years	66	29.6
Total	223	100*

<sup>\*</sup>NOTE: Percentages do not add to 100 due to rounding.

FIGURE 1 – NUMBER OF YEARS LICENSED AS AN SLD

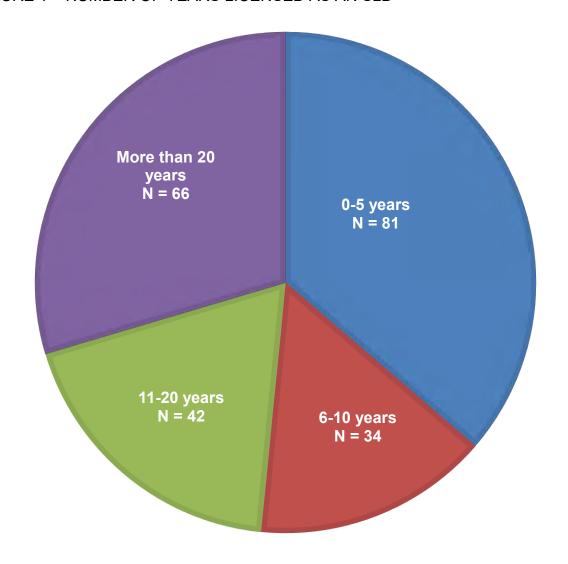
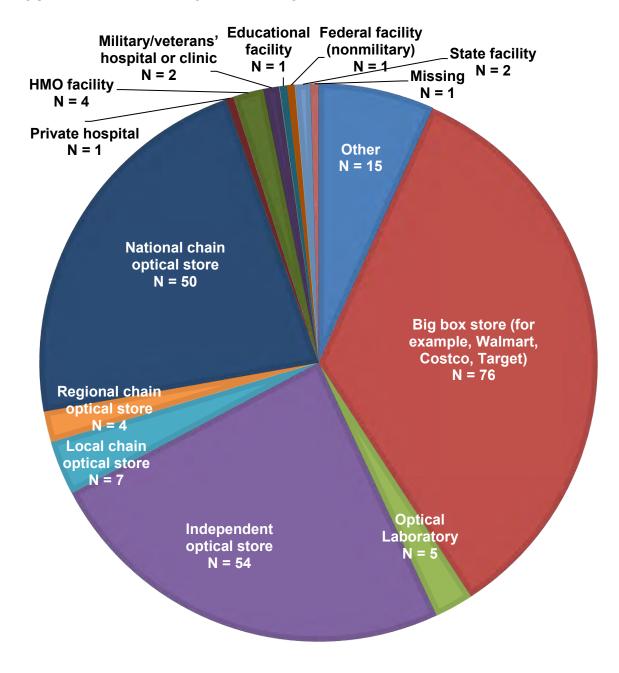


TABLE 2 - PRIMARY WORK SETTING

SETTING	NUMBER (N)	PERCENT
Big box store (for example, Walmart, Costco, Target)	76	34.1
Optical laboratory	5	2.2
Independent optical store	54	24.2
Local chain optical store	7	3.1
Regional chain optical store	4	1.8
National chain optical store	50	22.4
Private hospital	1	0.4
HMO facility	4	1.8
Military/veterans' hospital or clinic	2	0.9
Educational facility	1	0.4
Federal facility (nonmilitary)	1	0.4
State facility	2	0.9
Other	15	6.7
Missing	1	0.4
Total	223	100*

<sup>\*</sup>NOTE: Percentages do not add to 100 due to rounding.

#### FIGURE 2 - PRIMARY WORK SETTING

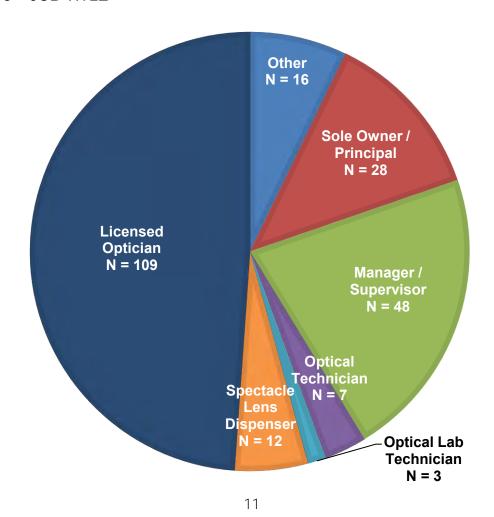


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TABLE 3 – JOB TITLE

TITLE	NUMBER (N)	PERCENT
Sole Owner / Principal	28	12.6
Manager/Supervisor	48	21.5
Optical Technician	7	3.1
Optical Lab Technician	3	1.3
Spectacle Lens Dispenser	12	5.4
Licensed Optician	109	48.9
Other	16	7.2
Missing	0	0.0
Total	223	100

FIGURE 3 – JOB TITLE

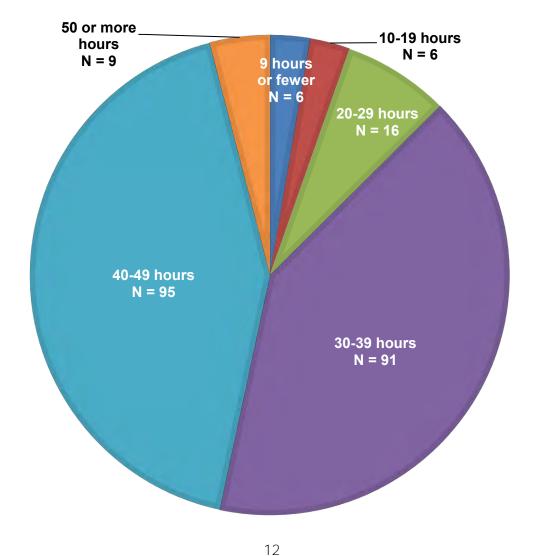


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TABLE 4 – HOURS WORKED PER WEEK

HOURS	NUMBER (N)	PERCENT
9 hours or fewer	6	2.7
10-19 hours	6	2.7
20-29 hours	16	7.2
30-39 hours	91	40.8
40-49 hours	95	42.6
50 or more hours	9	4.0
Missing	0	0.0
Total	223	100

FIGURE 4 – HOURS WORKED PER WEEK



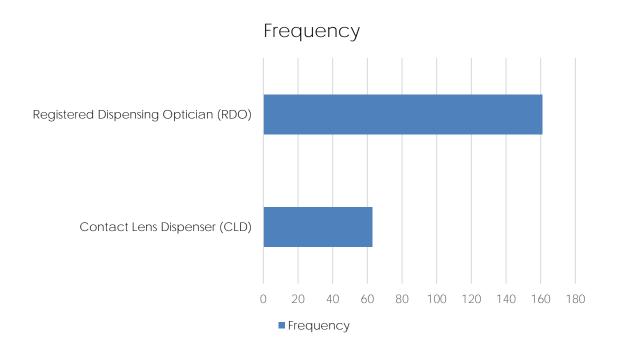
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TABLE 5 - OTHER LICENSES HELD\*

License	NUMBER (N)	PERCENT
Registered Dispensing Optician (RDO)	161	72.2
Contact Lens Dispenser (CLD)	63	28.3

<sup>\*</sup>NOTE: Respondents were asked to select all that apply.

FIGURE 5 - OTHER LICENSES HELD

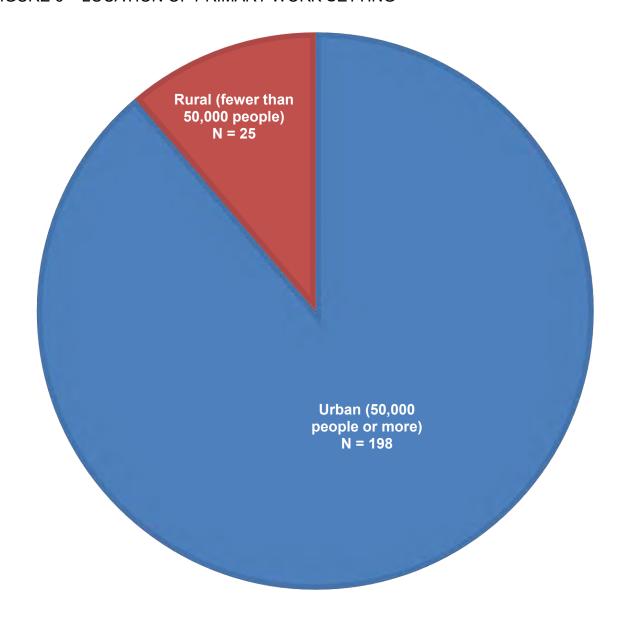


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TABLE 6 - LOCATION OF PRIMARY WORK SETTING

LOCATION	NUMBER (N)	PERCENT
Urban (50,000 people or more)	198	88.8
Rural (fewer than 50,000 people)	25	11.2
Total	223	100

FIGURE 6 – LOCATION OF PRIMARY WORK SETTING



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TABLE 7 - NUMBER OF REGISTERED SLDs WORKING AT FACILITY

SLDs	NUMBER (N)	PERCENT
0	20	9.0
1-3	147	65.9
4-6	39	17.5
7 or more	16	7.2
Missing	1	0.4
Total	223	100

FIGURE 7 - NUMBER OF REGISTERED SLDs WORKING AT FACILITY

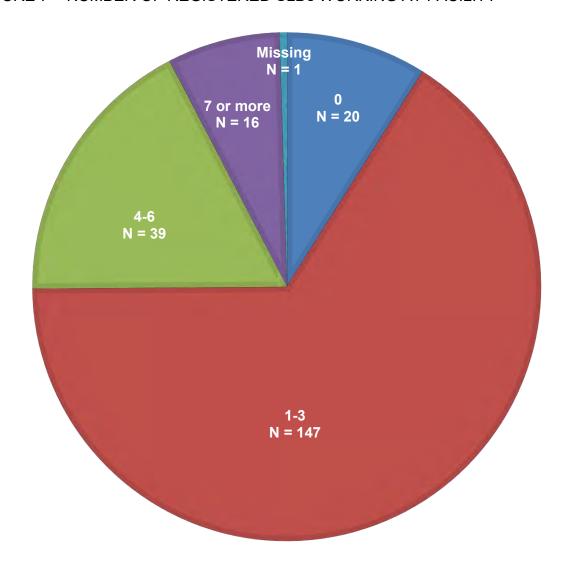
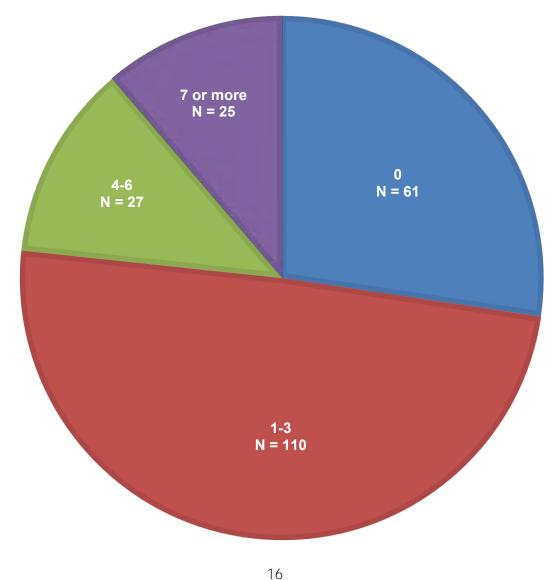


TABLE 8 - NUMBER OF NONREGISTERED SLDs WORKING AT FACILITY

SLDs	NUMBER (N)	PERCENT
0	61	27.4
1-3	110	49.3
4-6	27	12.1
7 or more	25	11.2
Total	223	100

FIGURE 8 – NUMBER OF NONREGISTERED SLDs WORKING AT FACILITY



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TABLE 9 - EDUCATION AND TRAINING\*

EDUCATION	NUMBER (N)	PERCENT
On-the-job training	121	54.3
Vocational program	58	26.0
Associate degree	48	21.5
Bachelor's degree	53	23.8
Master's degree	7	3.1
Doctorate	2	0.9
Other	15	6.7

<sup>\*</sup>NOTE: Respondents were asked to select all that apply.

FIGURE 9 - EDUCATION AND TRAINING

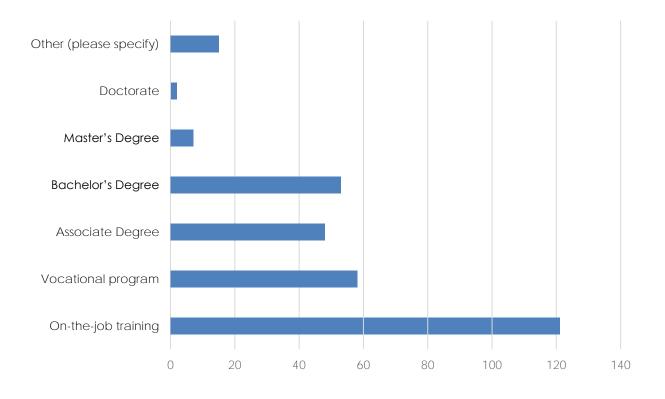


TABLE 10 - RESPONDENTS BY REGION

REGION NAME	NUMBER (N)	PERCENT
Los Angeles County and Vicinity	79	35.4
San Francisco Bay Area	41	18.4
San Joaquin Valley	21	9.4
Sacramento Valley	16	7.2
San Diego County and Vicinity	22	9.9
Shasta-Cascade	2	0.9
Riverside and Vicinity	23	10.3
Sierra Mountain Valley	3	1.3
North Coast	2	0.9
South Coast and Central Coast	13	5.8
Missing	1	0.4
Total	223	100*

<sup>\*</sup> NOTE: Percentages do not add to 100 due to rounding.

Appendix A shows a more detailed breakdown of the frequencies by region.

### **CHAPTER 4** | DATA ANALYSIS AND RESULTS

#### **RELIABILITY OF RATINGS**

OPES evaluated the task and knowledge ratings obtained by the questionnaire results with a standard index of reliability, coefficient alpha ( $\alpha$ ), which ranges from 0 to 1. Coefficient alpha is an estimate of the internal consistency of the respondents' ratings of the task and knowledge statements. A higher coefficient value indicates more consistency between respondent ratings. Coefficients were calculated for all respondent ratings.

Table 11 displays the reliability coefficients for the task statement rating scale in each content area. The overall ratings of task frequency and task importance across content areas were highly reliable (frequency  $\alpha$  = .910; importance  $\alpha$  = .929). Table 12 displays the reliability coefficients for the knowledge statement rating scale in each content area. The overall ratings of knowledge statement importance across content areas were also highly reliable ( $\alpha$  = .962). These results indicate that the responding SLDs rated the task and knowledge statements consistently throughout the questionnaire.

TABLE 11 – TASK SCALE RELIABILITY

	CONTENT AREA	NUMBER OF TASKS	α FREQUENCY	α IMPORTANCE
1.	Vision Pretest	9	.934	.937
2.	Prescription Assessment	6	.688	.718
3.	Eyewear Selection and Ordering	13	.848	.883
4.	Manufacturing	5	.821	.811
5.	Quality Control	5	.865	.883
6.	Dispensing	9	.922	916
7.	Laws and Regulations	3	.928	.524
	Total	50	.910	.929

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TABLE 12 - KNOWLEDGE SCALE RELIABILITY

	CONTENT AREA	NUMBER OF KNOWLEDGE STATEMENTS	α IMPORTANCE
1.	Vision Pretest	14	.948
2.	Prescription Assessment	10	.844
3.	Eyewear Selection and Ordering	22	.939
4.	Manufacturing	7	.906
5.	Quality Control	12	.893
6.	Dispensing	12	.906
7.	Laws and Regulations	3	.652
	Total	80	.962

#### TASK CRITICALITY INDICES

OPES convened a workshop consisting of six SMEs in November 2019. The purpose of this workshop was to identify the essential tasks and knowledge required for safe and effective SLD practice at the time of licensure. The SMEs reviewed the mean frequency and importance ratings for each task and its criticality index and evaluated the mean importance ratings for all knowledge statements.

To calculate the criticality indices of the task statements, OPES test specialists used the following formula. For each respondent, OPES first multiplied the frequency rating (Fi) and the importance rating (Ii) for each task. Next, OPES averaged the multiplication products across respondents as shown below.

Task criticality index = 
$$mean [(Fi) X (Ii)]$$

The task statements were sorted in descending order of their criticality index and by content area. The task statements, their mean frequency and importance ratings, and their associated criticality indices are presented in Appendix B.

The SMEs who participated in the November 2019 workshop evaluated the task criticality indices derived from the questionnaire results. SMEs were provided with the mean criticality indices across all respondents.

OPES test specialists instructed the SMEs to identify a cutoff value to determine if any of the tasks did not have a high enough criticality index to be retained. Based on the SMEs' judgment of the relative importance of tasks to SLD practice, the SMEs determined that no cutoff value should be established for content areas 2 through 7 and that all task statements would remain in the examination outline. For content area 1, the SMEs identified a cutoff value of 7.0 and eliminated tasks 3 through 9.

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#### KNOWLEDGE IMPORTANCE RATINGS

To determine the importance of each knowledge statement, the mean importance (K Imp) rating for each knowledge statement was calculated. The knowledge statements and their mean importance ratings, sorted by content area and in descending order, are presented in Appendix C.

The SMEs who participated in the November 2019 workshop that evaluated the task criticality indices also reviewed the knowledge statement mean importance ratings. After reviewing the mean importance ratings and considering their relative importance to SLD practice, the SMEs determined that no cutoff value should be established. However, the SMEs determined that any knowledge statements only associated with eliminated tasks should be eliminated. All other knowledge statements remained in the examination outline.

In further evaluating the tasks and knowledge statements, the SMEs determined that T2, T15, T33, and K18 should be reworded for clarity. The SMEs also determined that T48, "Provide copies of spectacle lens prescriptions to patients after eye exams," addressed a responsibility of optometrists, and should not be included on the examination outline for SLDs.

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## **CHAPTER 5 | EXAMINATION OUTLINE**

#### TASK-KNOWLEDGE LINKAGE

The SMEs who participated in the November 2019 workshop reviewed the preliminary assignments of the task and knowledge statements to content areas from the August 2019 workshop. The SMEs established the final linkage of specific knowledge statements to task statements.

The SMEs reviewed the content areas and wrote descriptions for each content area. The SMEs also renamed content area 7 (originally titled Laws and Regulations) to Advertising and Supervising. Additionally, the SMEs determined that content area 1 should be eliminated and the remaining associated tasks and knowledges moved to content area 2; the content area numbering was adjusted to reflect this change as seen in Tables 13 and 14.

#### **CONTENT AREA WEIGHTS**

The SMEs in the November 2019 workshop were asked to evaluate the tasks within each content area and determine whether they should be categorized into subareas. The SMEs determined that no subareas were needed.

The SMEs were also asked to finalize the weights for the content areas on the SLD examination outline. OPES test specialists presented the SMEs with preliminary weights of the content areas that were calculated by dividing the sum of the criticality indices for the tasks in each content area by the overall sum of the criticality indices for all tasks, as shown below.

<u>Sum of Criticality Indices for Tasks in Content Area</u> = Percent Weight of Sum of Criticality Indices for All Tasks = Content Area

The SMEs evaluated the preliminary weights by reviewing the following elements for each content area: the group of tasks and knowledge statements, the linkage established between the tasks and knowledge, and the relative importance of the tasks to SLD practice in California. The SMEs adjusted the preliminary weights based on what they perceived as the relative importance of the tasks' content to SLD practice in California. The preliminary and final content area weights for the SLD examination outline are presented in Tables 13 and 14.

TABLE 13 - PRELIMINARY CONTENT AREA WEIGHTS

Content Area	Weight
Vision Pretest	8%
2. Prescription Assessment	13%
3. Eyewear Selection and Ordering	32%
4. Manufacturing	8%
5. Quality Control	13%
6. Dispensing	22%
7. Laws and Regulations	5%
Total*	100%

<sup>\*</sup>NOTE: Percentages do not add to 100 due to rounding.

TABLE 14 - FINAL CONTENT AREA WEIGHTS

	Content Area	Weight
1. Prescrip	tion Assessment	16%
2. Eyewea	r Selection and Ordering	30%
3. Manufa	cturing	10%
4. Quality	Control	16%
5. Dispens	ing	25%
6. Advertis	ing and Supervising	3%
	Total	100%

The examination outline for the SLD profession is presented in Table 15.

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	TASKS		ASSOCIATED KNOWLEDGE STATEMENTS
T1.	Obtain patient medical and vision history.	K1.	Knowledge of common medical conditions and medications that could affect spectacle use.
		K2.	Knowledge of anatomy and physiology of the eye.
		K3.	Knowledge of methods to obtain patient medical and vision history.
T2.	Neutralize current eyewear to determine existing prescription.	K4.	Knowledge of methods for identifying refractive errors in patient prescriptions.
		K5.	Knowledge of interpreting lensometer findings.
T10.	Review spectacle lens prescriptions provided by patients to ensure they are valid and current.	K15.	Knowledge of requirements for patients to have prescriptions before ordering spectacle lenses.
		K16.	Knowledge of required elements for spectacle lens prescriptions
		K17.	Knowledge of spectacle lens prescription expiration dates.
		K78.	Knowledge of laws and regulations related to spectacle lens prescriptions.
T11.	Refer patients to optometrists or ophthalmologists to obtain current prescriptions.	K15.	Knowledge of requirements for patients to have prescriptions before ordering spectacle lenses.
		K16.	Knowledge of required elements for spectacle lens prescriptions.
		K18.	Knowledge of patient medical conditions that should be monitored or evaluated by a medical professional.
T12.	Obtain patient authorization to contact optometrists or ophthalmologists for patient prescriptions.	K16.	Knowledge of required elements for spectacle lens prescriptions.
		K17.	Knowledge of spectacle lens prescription expiration dates.
		K19.	Knowledge of HIPAA requirements for patient consent for release of medical records.
T13.	Verify insurance eligibility to determine eyewear coverage.	K20.	Knowledge of methods for obtaining eligibility information from patients and third-party vision insurance carriers.
		K21.	Knowledge of third-party vision insurance carriers and network coverage.

T14.	Interpret spectacle lens prescriptions to understand vision corrections.	K22.	Knowledge of how to interpret spectacle lens prescriptions.
		K23.	Knowledge of methods for identifying the quantity and direction of prescribed prism.
		K24.	Knowledge of types of specialty and occupational lenses.
T15.	Recommend patients visit medical professional to address possible medical conditions.	K18.	Knowledge of patient medical conditions that should be monitored or evaluated by a medical professional.

	2.	EYEWEAR SELECTION AND ORDERING	30%	This area assesses a candidate's knowledge of assisting patients with frame and lens selection based on patient lifestyle, pre-fitting spectacle frames, and taking patient measurements.
		TASKS		ASSOCIATED KNOWLEDGE STATEMENTS
Т	16.	Determine spectacle frame design by evaluating patient prescription and needs.	K25.	Knowledge of lifestyle factors and hobbies that affect eyewear selection.
			K26.	Knowledge of advantages and disadvantages of different types of spectacle frame design and materials.
			K27.	Knowledge of different brands and styles of lenses and frames.
			K28.	Knowledge of different frame materials (for example, titanium, acetate, optyl).
			K29.	Knowledge of current trends in spectacle frames.
			K30.	Knowledge of methods for educating patients about eyewear designs and features.
			K31.	Knowledge of methods for matching frames to patients' facial characteristics.
ر کہ T	17.	Determine types of spectacle lens materials (for example, glass, CR-39, polycarbonate, trivex, high-index) by evaluating patient prescription and needs.	K25.	Knowledge of lifestyle factors and hobbies that affect eyewear selection.
			K27.	Knowledge of different brands and styles of lenses and frames.
			K30.	Knowledge of methods for educating patients about eyewear designs and features.
			K32.	Knowledge of current trends in spectacle lenses.
			K33.	Knowledge of different types of lens features and their functions (for example, polarization, photochromic, anti-reflective).
Т	18.	Determine spectacle lens type and design (for example, single vision, multifocal) by evaluating patient prescription and needs.	K24.	Knowledge of types of specialty and occupational lenses.
			K25.	Knowledge of lifestyle factors and hobbies that affect eyewear selection.
			K30.	Knowledge of methods for educating patients about eyewear designs and features.
			K33.	Knowledge of different types of lens features and their functions (for example, polarization, photochromic, anti-reflective).
			K34.	Knowledge of different designs of multifocal lenses (for example, progressive, bifocal, trifocal).

T19.	Determine secondary lens options (for example, occupational, low vision, sports vision, blue light protection) and sun protection by evaluating patient prescription and needs.	K24.	Knowledge of types of specialty and occupational lenses.
		K25.	Knowledge of lifestyle factors and hobbies that affect eyewear selection.
		K27. K30.	Knowledge of different brands and styles of lenses and frames.  Knowledge of methods for educating patients about eyewear designs and features.
		K33.	Knowledge of different types of lens features and their functions (for example, polarization, photochromic, anti-reflective).
		K35.	Knowledge of the need for secondary lenses and sun protection.
T20.	Convert spectacle lens prescriptions to intermediate or reading lenses.	K24.	Knowledge of types of specialty and occupational lenses.
		K36.	Knowledge of methods for modifying spectacle lens prescriptions for intermediate or reading powers.
T22.	Determine out-of-pocket costs to assist patient with spectacle selection.	K37.	Knowledge of methods for calculating out-of-pocket eyewear costs.
T23.	Pre-adjust spectacle frame using four point alignment.	K38.	Knowledge of tools used to adjust spectacle frames during prefitting.
		K39.	Knowledge of methods for pre-adjusting spectacle frames.
T24.	Pre-adjust spectacle frame on patient to ensure optimal fit.	K38.	Knowledge of tools used to adjust spectacle frames during prefitting.
		K39. K40.	Knowledge of methods for pre-adjusting spectacle frames. Knowledge of frame tilt (for example, pantoscopic, retroscopic, orthoscopic).
		K41.	Knowledge of the effect of frame tilt on fit.
		K43.	Knowledge of instruments used to measure vertex distance.
T25.	Fit and adjust frame on patient to ensure accurate measurement.	K39.	Knowledge of methods for pre-adjusting spectacle frames.
		K40.	Knowledge of frame tilt (for example, pantoscopic, retroscopic, orthoscopic).
		K41.	Knowledge of the effect of frame tilt on fit.
		K42.	Knowledge of tools used to adjust spectacle frames.
		K43.	Knowledge of instruments used to measure vertex distance.

T26.	Measure vertical fitting heights to determine vertical position of the lens.	K40.	Knowledge of frame tilt (for example, pantoscopic, retroscopic, orthoscopic).
		K41.	Knowledge of the effect of frame tilt on fit.
		K43.	Knowledge of instruments used to measure vertex distance.
		K44.	Knowledge of methods for using a pupillary distance ruler.
T27.	Measure horizontal pupillary distance to determine optical center.	K44.	Knowledge of methods for using a pupillary distance ruler.
		K45.	Knowledge of methods for using a pupillometer.
T28.	Verify prescribed prism and determine specialty lenses (for example, slab-off).	K22.	Knowledge of how to interpret spectacle lens prescriptions.
		K23.	Knowledge of methods for identifying the quantity and direction of prescribed prism.
		K24.	Knowledge of types of specialty and occupational lenses.
		K27.	Knowledge of different brands and styles of lenses and frames.
		K34.	Knowledge of different designs of multifocal lenses (for example, progressive, bifocal, trifocal).
<b>ာ</b>		K46.	Knowledge of the effect of bifocal lenses on image jump (for example, slab-off).

3.	MANUFACTURING	10%	This area assesses a candidate's knowledge of spectacle lens manufacturing, including frame measurements, calculating decentration, identifying optical centers, and mounting lenses into frames.
	TASKS		ASSOCIATED KNOWLEDGE STATEMENTS
T29.	Determine base curve based on prescription information.	K47.	,
		K48.	Knowledge of methods to use a lens clock to identify base curve.
T30.	Determine frame measurements for manufacturing.	K49.	Knowledge of frame dimensions (for example, distance between lenses, effective diameter, frame wrap).
T31.	Calculate horizontal and vertical decentration.	K49.	Knowledge of frame dimensions (for example, distance between lenses, effective diameter, frame wrap).
		K23.	Knowledge of methods for identifying the quantity and direction of prescribed prism.
		K50.	Knowledge of methods for calculating horizontal and vertical decentration.
) 0		K52.	Knowledge of methods for identifying and calculating induced prism.
S		K53.	Knowledge of methods for finishing lenses (for example, tracing, blocking, edging, tinting).
T32.	Identify optical center of lens using a lensometer.	K23.	Knowledge of methods for identifying the quantity and direction of prescribed prism.
		K51.	Knowledge of methods for interpreting lensometer findings to identify optical center of lens.
		K52.	Knowledge of methods for identifying and calculating induced prism.
T33.	Mount edged lenses into frames.	K53.	Knowledge of methods for finishing lenses (for example, tracing, blocking, edging, tinting).
		K81.	Knowledge of methods and techniques for inserting lenses into frames.

4.	QUALITY CONTROL	16%	This area assesses a candidate's knowledge of procedures for verifying that finished eyewear matches patient prescription and order specifications, is aligned and free from defects, and meets ANSI standards.
	TASKS		ASSOCIATED KNOWLEDGE STATEMENTS
T34.	Verify spectacles received from laboratory match doctors' prescriptions.	K22.	Knowledge of how to interpret spectacle lens prescriptions.
		K54.	Knowledge of common transcription errors.
		K55.	Knowledge of procedures for comparing spectacles received to doctors' prescriptions.
		K59.	Knowledge of methods for interpreting lensometer findings to verify that lenses received from the lab match current prescription.
T35.	Verify spectacles received from laboratory match order specifications.	K56.	Knowledge of procedures for comparing spectacles received to order specifications.
T36.	Identify defects (for example, crazing, distortion) in spectacle lenses.	K57.	Knowledge of methods for interpreting lensometer findings to identify defects during the manufacturing process.
20		K58.	Knowledge of procedures for identifying lens defects.
T37.	Verify spectacles received from laboratory meet ANSI standards (for example, lens thickness, prescription, prism, tolerance).	K52.	Knowledge of methods for identifying and calculating induced prism.
		K60.	Knowledge of methods to measure spectacle lens thickness using calipers.
		K61.	Knowledge of ANSI standards for spectacle lenses.
T38.	Adjust spectacle frame using four point alignment.	K40.	Knowledge of frame tilt (for example, pantoscopic, retroscopic, orthoscopic).
		K41.	Knowledge of the effect of frame tilt on fit.
		K62.	Knowledge of instruments used to verify spectacle parameters and fit.
		K63.	Knowledge of tools used to adjust spectacle frames during manufacturing.
		K64.	Knowledge of methods for adjusting spectacle frames during manufacturing.
		K65.	Knowledge of bench alignment techniques (for example, four point alignment).

	5.	DISPENSING	25%	This area assesses a candidate's knowledge of adjusting and repairing spectacle frames; educating patients on eyewear use, care, and warranty; and troubleshooting patient concerns.
-		TASKS		ASSOCIATED KNOWLEDGE STATEMENTS
_	T39.	Adjust spectacle frame on patient to ensure optimal fit.	K40.	Knowledge of frame tilt (for example, pantoscopic, retroscopic, orthoscopic).
			K41.	Knowledge of the effect of frame tilt on fit.
			K66.	Knowledge of tools used to adjust spectacle frames to fit patient.
			K67.	Knowledge of methods for adjusting spectacle frames to fit patient.
			K68.	Knowledge of facial features and anatomy that affect spectacle fit.
-	T40.	Educate patients on use of multifocal lenses.	K24.	Knowledge of types of specialty and occupational lenses.
			K46.	Knowledge of the effect of bifocal lenses on image jump (for example, slab-off).
			K69.	Knowledge of side effects during adaptation period.
చ్త	T41.	Train patients on methods for cleaning and maintaining spectacle lenses.	K70.	Knowledge of methods and materials for cleaning and maintaining spectacle lenses.
-	T42.	Educate patients on the adaptation period for spectacle lenses.	K69.	Knowledge of side effects during adaptation period.
_	T43.	Assess patient comfort and vision clarity with new spectacles.	K71.	Knowledge of methods of assessing visual acuity (for example, Snellen chart, Jaeger card).
_	T44.	Address patient concerns with spectacles.	K72.	Knowledge of methods for troubleshooting common patient concerns.
			K73.	Knowledge of after-sale services available to patients.
-	T45.	Refer patients to prescribing doctor to address prescription problems.	K74.	Knowledge of patient prescription problems that require referral to a medical professional.
-	T46.	Provide patients with eyewear warranty information.	K75.	Knowledge of eyewear manufacturer warranty policies.
_	T47.	Perform common eyewear repairs to extend life of spectacles.	K76.	Knowledge of parts used in eyewear repairs.
_			K77.	Knowledge of methods for repairing eyewear.

6.	ADVERTISING AND SUPERVISING	3%	This area assesses a candidate's knowledge of laws and regulations related to advertising and supervising trainees.
	TASKS		ASSOCIATED KNOWLEDGE STATEMENTS
T49.	Advertise spectacle lens dispenser services in accordance with laws and regulations.	K79.	Knowledge of laws and regulations related to advertising spectacle lens dispenser services.
T50.	Supervise spectacle lens dispenser trainees in accordance with laws and regulations.	K80.	Knowledge of laws and regulations related to supervising spectacle lens dispenser trainees.

### **CHAPTER 6 | CONCLUSION**

The OA of SLD practice described in this report provides a comprehensive description of current SLD practice in California. The procedures employed to perform the OA were based upon a content validation strategy to ensure that the results accurately represent SLD practice. Results of this OA provide information regarding current practice that can be used to review the National Opticianry Competency Examination (NOCE) developed by the American Board of Opticianry (ABO).

By adopting the SLD examination outline contained in this report, the Board ensures that its examination program reflects current practice.

This report provides all documentation necessary to verify that the analysis has been completed in accordance with legal, professional, and technical standards.

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### APPENDIX A | RESPONDENTS BY REGION

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#### LOS ANGELES COUNTY AND VICINITY

County of Practice	Frequency
Los Angeles	61
Orange	18
TOTAL	79

#### **NORTH COAST**

County of Practice	Frequency
Mendocino	1
Sonoma	1
TOTAL	2

#### RIVERSIDE AND VICINITY

<b>County of Practice</b>	Frequency
Riverside	17
San Bernardino	6
TOTAL	23

#### SACRAMENTO VALLEY

County of Practice	Frequency	
Butte	1	
Sacramento	13	
Yolo	1	
Yuba	1	
TOTAL	16	

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#### SAN DIEGO COUNTY AND VICINITY

County of Practice	Frequency
San Diego	22
TOTAL	22

#### SAN FRANCISCO BAY AREA

County of Practice	Frequency	
Alameda	3	
Contra Costa	9	
Marin	4	
Napa	1	
San Francisco	4	
San Mateo	6	
Santa Clara	10	
Santa Cruz	2	
Solano	2	
TOTAL	41	

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### SAN JOAQUIN VALLEY

County of Practice	Frequency
Fresno	4
Kern	6
San Joaquin	5
Stanislaus	5
Tulare	1
TOTAL	21

#### SHASTA-CASCADE

County of Practice	Frequency
Shasta	1
Tehama	1
TOTAL	2

#### SIERRA MOUNTAIN VALLEY

County of Practice	Frequency
Placer	3
TOTAL	3

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### SOUTH COAST AND CENTRAL COAST

County of Practice	Frequency
Monterey	2
San Luis Obispo	4
Santa Barbara	4
Ventura	3
TOTAL	13

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## APPENDIX B | CRITICALITY INDICES FOR ALL TASKS BY CONTENT AREA

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### **Content Area 1 Vision Pretest**

	Task Statements	N	Mean Frequency	N	Mean Importance	N	Task Criticality Index
T2.	Neutralize current eyewear to determine baseline prescription.*	219	3.24	203	3.14	204	12.96
T1.	Obtain patient medical and vision history.	220	2.99	203	3.17	207	12.43
T4.	Perform autorefraction to determine baseline for new prescription.	217	1.62	198	1.95	210	6.30
T5.	Assess patient visual acuity using Snellen chart.	216	1.57	198	1.97	209	5.76
T3.	Perform tonometry to determine intraocular pressure.	217	1.35	198	1.74	210	5.26
T9.	Perform retinal photography to monitor the condition of the retina.	218	1.22	197	1.78	212	4.67
T8.	Assess patient peripheral vision using visual field analyzer.	217	1.28	196	1.67	209	4.61
T6.	Assess patient for color blindness using Ishihara test.	218	1.05	197	1.38	211	3.27
T7.	Assess patient depth perception using stereopsis test.	218	1.02	195	1.36	211	3.18

<sup>\*</sup>T2 was modified by SMEs (reworded for clarity). "Baseline" was changed to "existing." (See Chapter 4.) Note: Shaded task statements were deleted by SMEs. (See Chapter 4.)

### Content Area 2 Prescription Assessment

Task Statements	N	Mean Frequency	N	Mean Importance	N	Criticality Index	
T10. Review spectacle lens prescriptions provided by patients to ensure they are valid and current.	212	4.73	198	4.63	198	22.28	
T14. Interpret spectacle lens prescriptions to understand vision corrections.	211	4.63	197	4.51	195	21.47	
T13. Verify insurance eligibility to determine eyewear coverage.	212	4.08	196	3.97	199	17.90	
T11. Refer patients to optometrists or ophthalmologists to obtain current prescriptions.	212	3.62	195	3.89	195	15.44	
T12. Obtain patient authorization to contact optometrists or ophthalmologists for patient prescriptions.	212	3.27	196	3.73	197	13.68	
T15. Refer patients to medical professional to address possible medical conditions.*	212	2.32	194	3.43	198	9.99	

<sup>\*</sup>T15 was modified by SMEs (reworded for clarity). "Refer patients to" was changed to "Recommend patients visit." (See Chapter 4.)

### Content Area 3 Eyewear Selection and Ordering

	<u> </u>	Mean		Mean		Criticality
Task Statements	N	Frequency	N	Importance	N	Index
T27. Measure horizontal pupillary distance to determine optical center.	199	4.78	185	4.62	184	22.30
T17. Determine types of spectacle lens materials (for example, glass, CR-39, polycarbonate, trivex, high-index) by evaluating patient prescription and needs.	199	4.82	184	4.51	183	21.95
T18. Determine spectacle lens type and design (for example, single vision, multifocal) by evaluating patient prescription and needs.	199	4.77	184	4.54	183	21.84
T25. Fit and adjust frame on patient to ensure accurate measurement.	200	4.71	187	4.54	186	21.58
T16. Determine spectacle frame design by evaluating patient prescription and needs.	198	4.75	185	4.35	183	21.03
T26. Measure vertical fitting heights to determine vertical position of the lens.	199	4.58	185	4.53	185	21.02
T24. Pre-adjust spectacle frame on patient to ensure optimal fit.	199	4.57	187	4.30	186	20.04
T23. Pre-adjust spectacle frame using four point alignment.	200	4.52	187	4.13	186	19.16
T19. Determine secondary lens options (for example, occupational, low vision, sports vision, blue light protection) and sun protection by evaluating patient prescription and needs.	199	4.51	186	4.09	185	18.86
T22. Determine out-of-pocket costs to assist patient with spectacle selection.	199	4.19	186	3.68	185	16.68

T20. Convert spectacle lens prescriptions to intermediate or reading lenses.	200	3.82	185	3.94	185	15.80
T28. Verify prescribed prism and determine specialty lenses (for example, slab-off).	200	3.26	187	3.97	188	14.04
T21. Assess base curve and material of current spectacle lenses.	199	3.58	186	3.67	186	13.89

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### **Content Area 4 Manufacturing**

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Task Statements	N	Mean Frequency	N	Mean Importance	N	Criticality Index
T32. Identify optical center of lens using a lensometer.	194	3.99	180	4.03	181	17.24
T30. Determine frame measurements for manufacturing.	194	3.33	175	3.42	182	13.85
T31. Calculate horizontal and vertical decentration.	194	2.70	179	3.08	182	11.07
T29. Determine base curve based on prescription information.	193	2.87	177	3.01	179	10.59
T33. Finish lenses to prepare for insertion into frame.*	193	2.19	175	2.71	185	9.24

<sup>\*</sup>T33 was modified by SMEs. For clarity, it was reworded to: "Mount edged lenses into frames." (See Chapter 4.)

### **Content Area 5 Quality Control**

		Quanty	Contro	'1		
Task Statements	N	Mean Frequency	N	Mean Importance	N	Criticality Index
T35. Verify spectacles received from laboratory match order specifications.	188	4.47	175	4.47	177	20.97
T34. Verify spectacles received from laboratory match doctors' prescriptions.	188	4.43	174	4.47	176	20.93
T38. Adjust spectacle frame using four point alignment.	187	4.61	175	4.24	175	20.16
T36. Identify defects (for example, crazing, distortion) in spectacle lenses.	188	4.37	176	4.38	176	20.02
T37. Verify spectacles received from laboratory meet ANSI standards (for example, lens thickness, prescription, prism tolerance).	188	3.96	173	4.10	176	18.10

### Content Area 6 Dispensing

		Dispe	FIISHIY			
Task Statements	N	Mean Frequency	N	Mean Importance	N	Criticality Index
T39. Adjust spectacle frame on patient to ensure optimal fit.	188	4.72	175	4.47	175	21.41
T40. Educate patients on use of multifocal lenses.	187	4.63	175	4.51	174	21.18
T43. Assess patient comfort and vision clarity with new spectacles.	188	4.63	177	4.36	176	20.80
T44. Address patient concerns with spectacles.	188	4.47	176	4.40	175	20.04
T42. Educate patients on the adaptation period for spectacle lenses.	188	4.57	176	4.27	175	19.78
T41. Train patients on methods for cleaning and maintaining spectacle lenses.	188	4.49	176	4.06	175	18.76
T47. Perform common eyewear repairs to extend life of spectacles.	188	4.43	177	3.92	176	17.94
T46. Provide patients with eyewear warranty information.	188	4.27	177	3.72	176	16.85
T45. Refer patients to medical professionals to address prescription problems.	188	3.39	177	3.93	177	14.09

Content Area 7
Laws and Regulations

Task Statements	N	Mean Frequency	N	Mean Importance	N	Criticality Index
T50. Supervise spectacle lens dispenser trainees in accordance with laws and regulations.	187	2.86	169	3.40	176	12.62
T48. Provide copies of spectacle lens prescriptions to patients after eye exams.	188	2.86	171	2.85	181	11.96
T49. Advertise spectacle lens dispenser services in accordance with laws and regulations.	187	2.79	172	2.83	179	11.28

Note: Shaded task statement was deleted by SMEs. (See Chapter 4.)

## **APPENDIX C** | KNOWLEDGE IMPORTANCE RATINGS BY CONTENT AREA

Occupational Analysis Board of Optometry

### **Content Area 1 Vision Pretest**

Knowledge Statements	N	Mean Importance
K5. Knowledge of interpreting lensometer findings.	184	4.3207
K4. Knowledge of methods for identifying refractive errors in patient prescriptions.	185	3.5892
K3. Knowledge of methods to obtain patient medical and vision history.	185	3.2865
K2. Knowledge of anatomy and physiology of the eye.	185	3.1946
K1. Knowledge of common medical conditions and medications that could affect spectacle use.	185	2.8486
K10. Knowledge of methods to interpret a Snellen chart.	185	2.2703
K9. Knowledge of methods to perform visual acuity tests.	185	2.1135
K8. Knowledge of methods to perform autorefraction.	185	1.9622
K7. Knowledge of signs and symptoms of abnormal intraocular pressure.	185	1.7838
K6. Knowledge of methods and procedures to perform tonometry.	184	1.7663
K13. Knowledge of methods for using a visual field analyzer to assess peripheral vision.	185	1.7297
K12. Knowledge of methods for administering stereopsis test to assess depth perception.	185	1.5892
K11. Knowledge of methods for administering Ishihara test to identify color blindness.	185	1.5838
K14. Knowledge of methods for operating a fundus camera.	185	1.5243

<sup>\*</sup>Shaded knowledge statements deleted by SMEs because they were only associated with eliminated tasks. (See Chapter 4.)

Content Area 2
Prescription Assessment

Knowledge Statements	N	Mean Importance
K22. Knowledge of how to interpret spectacle lens prescriptions.	184	4.6793
K16. Knowledge of required elements for spectacle lens prescriptions.	181	4.5801
K17. Knowledge of spectacle lens prescription expiration dates.	183	4.5683
K15. Knowledge of requirements for patients to have prescriptions before ordering spectacle lenses.	185	4.4270
K25. Knowledge of lifestyle factors and hobbies that affect eyewear selection.	184	4.3315
K23. Knowledge of methods for identifying the quantity and direction of prescribed prism.	184	4.2446
K24. Knowledge of types of specialty and occupational lenses.	183	4.2240
K19. Knowledge of requirements for patient consent for release of medical records.	184	4.0380
K20. Knowledge of methods for obtaining eligibility information from patients and third-party vision insurance carriers.	184	3.9076
K21. Knowledge of third-party vision insurance carriers and network coverage.	184	3.8152
K18. Knowledge of patient medical conditions that require referral to a medical professional.*	184	3.1196

<sup>\*</sup>K18 was modified by SMEs (reworded for clarity); "that require referral to" was changed to "that should be monitored or evaluated by." (See Chapter 4.)

### Content Area 3 Eyewear Selection and Ordering

Knowledge Statements	N	Mean Importance
K34. Knowledge of different designs of multifocal lenses (for example, progressive, bifocal, trifocal).	184	4.5815
K33. Knowledge of different types of lens features and their functions (for example, polarization, photochromic, anti-reflective).	185	4.5405
K45. Knowledge of methods for using a pupillometer.	185	4.5297
K35. Knowledge of the need for secondary lenses and sun protection.	184	4.4565
K26. Knowledge of advantages and disadvantages of different types of spectacle frame design and materials.	183	4.4317
K40. Knowledge of frame tilt (for example, pantoscopic, retroscopic, orthoscopic).	185	4.3946
K36. Knowledge of methods for modifying spectacle lens prescriptions for intermediate or reading powers.	185	4.3838
K38. Knowledge of tools used to adjust spectacle frames during pre-fitting.	185	4.3838
K41. Knowledge of the effect of frame tilt on fit.	185	4.3730
K39. Knowledge of methods for pre-adjusting spectacle frames.	185	4.3405
K44. Knowledge of methods for using a pupillary distance ruler.	185	4.2865
K42. Knowledge of tools used to pre-adjust spectacle frames.	185	4.2162
K27. Knowledge of different brands and styles of lenses and frames.	182	4.1319
K31. Knowledge of methods for matching frames to patients' facial characteristics.	184	4.1033
K28. Knowledge of different frame materials (for example, titanium, acetate, optyl).	183	4.0765
K30. Knowledge of methods for educating patients about eyewear designs and features.	182	4.0110
K37. Knowledge of methods for calculating out-of-pocket eyewear costs.	184	3.9674
K32. Knowledge of current trends in spectacle lenses.	184	3.9511
K46. Knowledge of the effect of bifocal lenses on image jump (for example, slab-off).	185	3.9459
K29. Knowledge of current trends in spectacle frames.	183	3.7596
K43. Knowledge of instruments used to measure vertex distance.	185	3.5568
K47. Knowledge of methods to identify ideal base curve.	183	3.1421

### **Content Area 4 Manufacturing**

Knowledge Statements	N	Mean Importance
K51. Knowledge of methods for interpreting lensometer findings to identify optical center of lens.	181	4.0939
K49. Knowledge of frame dimensions (for example, distance between lenses, effective diameter, frame wrap).	182	3.9560
K52. Knowledge of methods for identifying and calculating induced prism.	182	3.6429
K48. Knowledge of methods to use a lens clock to identify base curve.	182	3.5385
K50. Knowledge of methods for calculating horizontal and vertical decentration.	182	3.3846
K53. Knowledge of methods for finishing lenses (for example, tracing, blocking, edging, tinting).	182	2.5824

### **Content Area 5 Quality Control**

Knowledge Statements	N	Mean Importance
K59. Knowledge of methods for interpreting lensometer findings to verify that lenses received from the lab match current prescription.	179	4.5251
K56. Knowledge of procedures for comparing spectacles received to order specifications.	179	4.4972
K61. Knowledge of ANSI standards for spectacle lenses.	179	4.3352
K58. Knowledge of procedures for identifying lens defects.	179	4.2793
K57. Knowledge of methods for interpreting lensometer findings to identify defects during the manufacturing process.	179	4.2291
K65. Knowledge of bench alignment techniques (for example, four point alignment).	179	4.2067
K62. Knowledge of instruments used to verify spectacle parameters and fit.	179	4.1508
K60. Knowledge of methods to measure spectacle lens thickness using calipers.	179	3.5140
K63. Knowledge of tools used to adjust spectacle frames during manufacturing.	179	3.3911
K64. Knowledge of methods for adjusting spectacle frames during manufacturing.	178	3.0281

### Content Area 6 Dispensing

Knowledge Statements	N	Mean Importance
K72. Knowledge of methods for troubleshooting common patient concerns.	178	4.5562
K67. Knowledge of methods for adjusting spectacle frames to fit patient.	177	4.5367
K66. Knowledge of tools used to adjust spectacle frames to fit patient.	176	4.4545
K69. Knowledge of side effects during spectacle or lens adaptation period.	178	4.3596
K68. Knowledge of facial features and anatomy that affect spectacle fit.	177	4.3220
K70. Knowledge of procedures for cleaning and maintaining spectacle lenses.	177	4.2712
K73. Knowledge of after-sale services available to patients.	178	4.2191
K76. Knowledge of parts used in eyewear repairs.	178	4.1348
K74. Knowledge of patient prescription problems that require referral to a medical professional.	178	3.8989
K75. Knowledge of eyewear manufacturer warranty policies.	178	3.7921
K71. Knowledge of methods of assessing visual acuity (for example, Snellen chart, Jaeger card).	177	3.1582

### Content Area 7 Laws and Regulations

Laws and Regulations		
Knowledge Statements	N	Mean Importance
K78. Knowledge of laws and regulations related to spectacle lens prescriptions.	179	4.4134
K77. Knowledge of methods for repairing eyewear.	178	4.2978
K80. Knowledge of laws and regulations related to supervising spectacle lens dispenser trainees.	178	3.7303
K79. Knowledge of laws and regulations related to advertising spectacle lens dispenser services.	178	3.5955

<sup>\*</sup>Shaded knowledge statements deleted by SMEs because they were only associated with eliminated tasks. (See Chapter 4.)

## **APPENDIX D** | QUESTIONNAIRE INVITATION LETTER TO PRACTITIONERS

Occupational Analysis Board of Optometry



BUSINESS. CONSUMER SERVICES AND HOUSING ASENCY . GAVIN NEWSOM. SCIVERNOR

### DEPARTMENT OF CONSUMER AFFAIRS \* CALIFORNIA STATE BOARD OF OPTOMETRY 2450 Del Paso Road, Suite 105, Sacramento, CA 95834

P (916) 575-7170 | Toll-Free (866) 585-2666 | www.optometry.ca.gov



October 16, 2019

Name Address City, State, Zip

Dear Spectacle Lens Dispenser:

The Board is conducting an occupational analysis (OA) of the SLD profession. The purpose of the OA is to identify the important tasks performed by currently working SLDs and the knowledge required to perform those tasks. Your participation in the OA is essential to this process. The Board requires responses from many licensees to achieve representation from different geographic regions of the state and from different work settings.

As part of the study, a questionnaire has been developed to identify the important tasks that SLDs perform upon entry into the profession. The questionnaire will be available online until **November 4, 2019**, 24 hours a day, 7 days a week. Please take the time to complete the questionnaire as it relates to your current work. Your responses will be kept confidential and will not be tied to your license or any other personal information. Individual responses will be combined with the responses of other SLDs and only group data will be analyzed.

Please follow one of these two steps to participate in this important project:

Go to the link: https://www.surveymonkey.com/r/SLD2019OA

OR

Scan the QR code:



For your convenience, you do not have to complete the questionnaire in a single session. Before you exit, complete the page that you are on. You can resume where you stopped as long as you reopen the questionnaire from the same computer and use the same web browser. The web link is available 24 hours a day, 7 days a week. The bottom of each page has a progress bar showing you what percentage of the questionnaire you have completed.

If you have any questions or need assistance from the Board, please contact <a href="mailto:odca.ca.gov">odca.ca.gov</a>. The Board welcomes your feedback and appreciates your time!

Sincerely,

Shara Murphy, Executive Officer

Please Note: If you have already received this Occupational Analysis questionnaire via email and have already taken the survey, please disregard this letter.

Occupational Analysis Board of Optometry

## **APPENDIX E** | QUESTIONNAIRE INVITATION EMAIL TO PRACTITIONERS

Occupational Analysis Board of Optometry

# Spectacle Lens Dispenser (SLD) Occupational Analysis Questionnaire

We're conducting an Occupational Analysis of the Spectacle Lens Dispenser profession. Your participation is important for the success of the study, and the Board values your input. Please click the button below to start the survey. Thank you for your participation!

Begin Survey

Occupational Analysis Board of Optometry

### APPENDIX F | QUESTIONNAIRE

Occupational Analysis Board of Optometry



#### Spectacle Lens Dispenser (SLD) Occupational Analysis Questionnaire

#### Cover Letter

Dear Registered Spectacle Lens Dispenser:

Thank you for participating in this study of the Spectacle Lens dispenser (SLD) profession in California, a project of the California State Board of Optometry (Board).

The Board is conducting an occupational analysis (OA) of the SLD profession. The purpose of the OA is to identify the important tasks performed by currently working SLDs and the knowledge required to perform those tasks.

Your participation in the OA is essential to this process. The Board requires responses from many licensees to achieve representation from different geographic regions of the state and from different work settings.

Please take the time to complete the questionnaire as it relates to your current work. Your responses will be kept confidential and will not be tied to your license or any other personal information. Individual responses will be combined with the responses of other SLDs and only group data will be analyzed.

For your convenience, you do not have to complete the questionnaire in a single session. Before you exit, complete the page that you are on. You can resume where you stopped as long as you reopen the questionnaire from the same computer and use the same web browser. The web link is available 24 hours a day, 7 days a week. The bottom of each page has a progress bar showing you what percentage of the questionnaire you have completed.

To begin the survey, please click Next. Any question marked with an asterisk must be answered before you can progress through the questionnaire. Please submit the completed questionnaire by November 4, 2019.

If you have any questions or need assistance from the Board, please contact at @dca.ca.gov.

The Board welcomes your feedback and appreciates your time!

Sincerely,

Shara Murphy
Executive Officer
California State Board of Optometry



#### Spectacle Lens Dispenser (SLD) Occupational Analysis Questionnaire

#### Part I - Personal Data

The information you provide here is voluntary and confidential. It will be treated as personal information subject to the Information Practices Act (Civil Code section 1798 et seq.) and will be used only for the purpose of aiding in interpreting the task and knowledge ratings that are requested in Parts II and III. Please choose only one answer unless more than one is requested.

* 1. Do you curre	ntly work as	a SLD	in	California?
O Yes				



#### Spectacle Lens Dispenser (SLD) Occupational Analysis Questionnaire

#### Part I - Personal Data

Complete this questionnaire only if you are currently licensed and working as an SLD in California.

This questionnaire contains a broad range of tasks performed by individuals who work in optical settings. Every SLD may not perform all of the tasks or use all of the knowledge contained in this questionnaire. However, your participation is essential, and your contribution will help establish standards for safe and effective spectacle lens dispensing in the State of California.



# Part I - Personal Data 2. How many years have you been licensed and working as an SLD in California? 0-5 years 6-10 years 11-20 years More than 20 years 3. How many hours per week do you work as an SLD? 9 hours or fewer 10-19 hours 20-29 hours 30-39 hours 0 40-49 hours 50 or more hours 4. Which title below most nearly matches your job title? Sole Owner / Principal Manager / Supervisor Optical Technician Optical Lab Technician Sales Associate Spectacle Lens Dispenser Licensed Optician Other (please specify)

ւրբ	oly)
	On-the-job training
	Vocational program
_	Associate Degree
7	Bachelor's Degree
	Master's Degree
	Doctorate
	Other (please specify)
_	
6. I	Do you hold either of the following licenses? (Select all that apply)
	Contact Lens Dispenser (CLD)
	Registered Dispensing Optician (RDO)
'. <b>V</b>	Which choice below better describes the location of your primary work setting?
	Urban (50,000 people or more)
	Rural (fewer than 50,000 people)



## Part I - Personal Data

8.	How would you describe your primary work setting?
0	Big box store (for example, Walmart, Costco, Target)
0	Optical Laboratory
0	Independent optical store
0	Local chain optical store
0	Regional chain optical store
0	National chain optical store
0	Private hospital
O	HMO facility
0	Military/veterans' hospital or clinic
0	Educational facility
0	Federal facility (nonmilitary)
Ó	State facility
0	Other (please specify)
9.	How many registered SLDs work within your primary work setting?
0	0
0	1-3
0	4-6
0	7 or more
	. How many non-registered employees perform work related to spectacle lens pensing within your primary work setting?
0	0
0	1-3
0	4-6
0	7 or more



#### Part I Porconal Data

Alameda	Marin	San Mateo
Alpine	Mariposa	Santa Barbara
Amador	Mendocino	Santa Clara
Butte	Merced	O Santa Cruz
Calaveras	Modoc	Shasta
Colusa	O Mono	Sierra
Contra Costa	Monterey	Siskiyou
Del Norte	O Napa	Solano
El Dorado	Nevada	Sonoma
Fresno	Orange	Stanislaus
Glenn	O Placer	Sutter
Humboldt	O Plumas	Tehama
] Imperial	Riverside	Trinity
) Inyo	Sacramento	Tulare
Kern	San Benito	Tuolumne
Kings	San Bernardino	O Ventura
Lake	San Diego	○ Yolo
Lassen	San Francisco	Yuba
Los Angeles	San Joaquin	
Madera	San Luis Obispo	



Part II - Task Ratings

#### INSTRUCTIONS FOR RATING TASK STATEMENTS

This part of the questionnaire contains 50 task statements. Please rate each task as it relates to effective performance of your current work as an SLD using the **Frequency** and **Importance** scales displayed below.

#### FREQUENCY RATING SCALE

#### HOW FREQUENTLY do you perform this task in your current work?

- 0 DOES NOT APPLY. I do not perform this task in my current work.
- 1 RARELY. I perform this task the least often in my current work relative to other tasks I perform.
- 2 SELDOM. I perform this task less often than most other tasks I perform in my current work
- 3 SOMETIMES. I perform this task as often as other tasks I perform in my current work.
- **4 OFTEN.** I perform this task more often than most other tasks I perform in my current work.
- 5 VERY OFTEN. This task is one of the tasks I perform most often in my current work relative to other tasks I perform.

#### IMPORTANCE RATING SCALE

#### HOW IMPORTANT is this task for effective performance in your current work?

- 0 DOES NOT APPLY. This task is not required for effective performance in my current work.
- 1 NOT IMPORTANT. This task is not important for effective performance in my current work.
- 2 FAIRLY IMPORTANT. This task is somewhat important for effective performance in my current work.
- 3 IMPORTANT. This task is important for effective performance in my current work.
- 4 VERY IMPORTANT. This task is very important for effective performance in my current work.
- 5 CRITICALLY IMPORTANT. This task is extremely important for effective performance in my current work.



#### Part II - Task Ratings

Your **Frequency** and **Importance** ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is **NOT** part of your current work, rate the task "0" (zero) **Frequency** and "0" (zero) **Importance**.

The boxes for rating the **Frequency** and **Importance** of each task have drop-down lists. Click on the "down" arrow in each box to see the rating, and then select the value based on your current work.



## Part II - Task Ratings

12. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance in your current work (Importance).

#### **Vision Pretest**

	Frequency	Importance
T01. Obtain patient medical and vision history.	<b>÷</b>	\$
T02. Neutralize current eyewear to determine baseline prescription.	•	*
T03. Perform tonometry to determine intraocular pressure.	*	*
T04. Perform autorefraction to determine baseline for new prescription.	*	<b>‡</b>
T05. Assess patient visual acuity using Snellen chart.	+	*
T06. Assess patient for color blindness using Ishihara test.	*	*
T07. Assess patient depth perception using stereopsis test.	<b>\$</b>	*)
T08. Assess patient peripheral vision using visual field analyzer.	•	\$
T09. Perform retinal photography to monitor the condition of the retina.	*	*



## Part II - Task Ratings

13. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance in your current work (Importance).

#### **Prescription Assessment**

	Frequency	Importance
T10. Review spectacle lens prescriptions provided by patients to ensure they are valid and current.	4	*
T11. Refer patients to optometrists or ophthalmologists to obtain current prescriptions.	*	*
T12. Obtain patient authorization to contact optometrists or ophthalmologists for patient prescriptions.		•
T13. Verify insurance eligibility to determine eyewear coverage.		*
T14. Interpret spectacle lens prescriptions to understand vision corrections.		*
T15. Refer patients to medical professional to address possible medical conditions.	*	*



#### Part II - Task Ratings

14. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance in your current work (Importance).

#### **Eyewear Selection and Ordering** Frequency Importance T16. Determine spectacle frame design by evaluating # \$ patient prescription and needs. T17. Determine types of spectacle lens materials (for example, glass, CR-39, polycarbonate, trivex, high-÷ \$ index) by evaluating patient prescription and needs. T18. Determine spectacle lens type and design (for example, single vision, multifocal) by evaluating patient \* prescription and needs. T19. Determine secondary lens options (for example, occupational, low vision, sports vision, blue light \$ protection) and sun protection by evaluating patient prescription and needs. T20. Convert spectacle lens prescriptions to \$ \$ intermediate or reading lenses. T21. Assess base curve and material of current \$ \$ spectacle lenses. T22. Determine out-of-pocket costs to assist patient # \$ with spectacle selection. T23. Pre-adjust spectacle frame using four point \* \$ alignment. T24. Pre-adjust spectacle frame on patient to ensure \$ optimal fit. T25. Fit and adjust frame on patient to ensure accurate \$ measurement. T26. Measure vertical fitting heights to determine \$ vertical position of the lens. T27. Measure horizontal pupillary distance to determine optical center. T28. Verify prescribed prism and determine specialty \$ \$ lenses (for example, slab-off).



## Part II - Task Ratings

15. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance in your current work (Importance).

#### Manufacturing

	Frequency	Importance
T29. Determine base curve based on prescription information.	<b>\$</b>	<b>‡</b>
T30. Determine frame measurements for manufacturing.	<b>\$</b>	<b>‡</b>
T31. Calculate horizontal and vertical decentration.	\$	•
T32. Identify optical center of lens using a lensometer.	<b>\$</b>	\$
T33. Finish lenses to prepare for insertion into frame.	•	



## Part II - Task Ratings

16. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance in your current work (Importance).

## **Quality Control**

	Frequency	Importance
T34. Verify spectacles received from laboratory match doctors' prescriptions.	<b>\$</b>	<b>‡</b>
T35. Verify spectacles received from laboratory match order specifications.	<b>\$</b>	<b>‡</b>
T36. Identify defects (for example, crazing, distortion) in spectacle lenses.	<b>\$</b> ]	<b>\$</b>
T37. Verify spectacles received from laboratory meet ANSI standards (for example, lens thickness, prescription, prism tolerance).	<b>\$</b>	
T38. Adjust spectacle frame using four point alignment.	\$	



Copy of page: Part II - Task Ratings

17. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance in your current work (Importance).

#### Dispensing

	Frequency	Importance
T39. Adjust spectacle frame on patient to ensure optimal fit.	<b>*</b>	\$
T40. Educate patients on use of multifocal lenses.	<b>‡</b>	*
T41. Train patients on methods for cleaning and maintaining spectacle lenses.	<b>\$</b>	*
T42. Educate patients on the adaptation period for spectacle lenses.	•	\$
T43. Assess patient comfort and vision clarity with new spectacles. $\begin{tabular}{ll} \hline \end{tabular}$	<b>\$</b>	*
T44. Address patient concerns with spectacles.	<b>\$</b>	\$
T45. Refer patients to medical professionals to address prescription problems.	•	•
T46. Provide patients with eyewear warranty information.	•	\$
T47. Perform common eyewear repairs to extend life of spectacles. $\begin{tabular}{ll} \hline \end{tabular}$	*	*



Copy of page: Part II - Task Ratings

18. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance in your current work (Importance).

#### **Laws and Regulations**

	Frequency	importance
T48. Provide copies of spectacle lens prescriptions to patients after eye exams.	<b>\$</b>	<b>‡</b>
T49. Advertise spectacle lens dispenser services in accordance with laws and regulations.	<b>\$</b>	<b>*</b>
T50. Supervise spectacle lens dispenser trainees in accordance with laws and regulations.	<b>\$</b>	<b>‡</b>



Part III - Knowledge Ratings

#### INSTRUCTIONS FOR RATING KNOWLEDGE STATEMENTS

This part of the questionnaire contains 80 knowledge statements. Please rate each knowledge statement based on how **important** you believe the knowledge is for effective performance of your current work as an SLD.

If the knowledge is **NOT** required for effective performance of your current work, rate the statement as "**DOES NOT APPLY**."

Please use the following scale to make your ratings:

#### IMPORTANCE RATING SCALE

HOW IMPORTANT is this knowledge for effective performance of tasks in your current work?

- **0 DOES NOT APPLY.** This knowledge is not required for effective performance of tasks in my current work.
- **1- NOT IMPORTANT.** This knowledge is not important for effective performance of tasks in my current work.
- 2 FAIRLY IMPORTANT. This knowledge is somewhat important for effective performance of tasks in my current work.
- 3 IMPORTANT. This knowledge is important for effective performance of tasks in my current work.
- **4 VERY IMPORTANT.** This knowledge is very important for effective performance of tasks in my current work.
- 5 CRITICALLY IMPORTANT. This knowledge is extremely important for effective performance of tasks in my current work.

## 19. How important is this knowledge for effective performance of tasks in your current work? **Vision Pretest** 0 Does Not 1 Not 2 Fairly 4 Very 5 Critically Apply Important Important 3 Important Important Important K01. Knowledge of common medical conditions and medications that could affect spectacle use. K02. Knowledge of anatomy and physiology of the eye. K03. Knowledge of methods to obtain patient medical and vision history. K04. Knowledge of methods for identifying refractive errors in patient prescriptions. K05. Knowledge of interpreting lensometer findings. K06. Knowledge of methods and procedures to perform tonometry. K07. Knowledge of signs and symptoms of abnormal intraocular pressure. K08. Knowledge of methods to perform autorefraction. K09. Knowledge of methods to perform visual acuity tests. K10. Knowledge of methods to interpret a Snellen chart. K11. Knowledge of methods for administering Ishihara test to identify color blindness. K12. Knowledge of methods for administering stereopsis test to assess depth perception. K13. Knowledge of methods for using a visual field analyzer to assess peripheral vision. K14. Knowledge of methods for operating a fundus camera.



Part III -	Knowl	edge	Ratings

# 20. How important is this knowledge for effective performance of tasks in your current work?

#### **Prescription Assessment**

	0 Does Not Apply	1 Not	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K15. Knowledge of requirements for patients to have prescriptions before ordering spectacle lenses.	0	0	0	0	0	0
K16. Knowledge of required elements for spectacle lens prescriptions.	0	0	0	0	0	0
K17. Knowledge of spectacle lens prescription expiration dates.	0	0	Ö	0	0	0
K18. Knowledge of patient medical conditions that require referral to a medical professional.	0	Q	0	O	O	0
K19. Knowledge of requirements for patient consent for release of medical records.	0	0	0	0	0	(0)
K20. Knowledge of methods for obtaining eligibility information from patients and third-party vision insurance carriers.	0	0	O	0	0	Q
K21. Knowledge of third-party vision insurance carriers and network coverage.	0	0	Q	0	0	0
K22. Knowledge of how to interpret spectacle lens prescriptions.	Q	0	Q	0	0	0
K23. Knowledge of methods for identifying the quantity and direction of prescribed prism.	0	0	0	0	0	0
K24. Knowledge of types of specialty and occupational lenses.	0	0	0	0	0	0



Part III - Knowledge Ratings

# Spectacle Lens Dispenser (SLD) Occupational Analysis Questionnaire

21. How important is this knowledge for effective performance of tasks in your
current work?

Everyone Colontine and Ordentes						
Eyewear Selection and Ordering	0 Does Not Apply	1 Not	2 Fairly Important	3 Important	4 Very	5 Critically Important
K25. Knowledge of lifestyle factors and hobbies that affect eyewear selection.	0	0	0	0	0	0
K26. Knowledge of advantages and disadvantages of different types of spectacle frame design and materials.	0	0	O	Q	Q	0
K27. Knowledge of different brands and styles of lenses and frames.	0	0	0	0	0	0
K28. Knowledge of different frame materials (for example, titanium, acetate, optyl).	0	0	0	O	0	Q.
K29. Knowledge of current trends in spectacle frames.	0	0	O	0	0	(0)
K30. Knowledge of methods for educating patients about eyewear designs and features.	0	0	0	0	0	Q
K31. Knowledge of methods for matching frames to patients' facial characteristics.	0	0	0	0	0	0
K32. Knowledge of current trends in spectacle lenses.	0	0	Q	0	0	0
K33. Knowledge of different types of lens features and their functions (for example, polarization, photochromic, anti-reflective).	0	0	0	0	0	O
K34. Knowledge of different designs of multifocal lenses (for example, progressive, bifocal, trifocal).	0	0	0	0	0	0
K35. Knowledge of the need for secondary lenses and sun protection,	0	0	.0	0	0	0
K36. Knowledge of methods for modifying spectacle lens prescriptions for	0	0	0	n	N	6

37. Knowledge of methods for calculating theof-pocket eyewear costs.  38. Knowledge of tools used to adjust ectacle frames during pre-fitting.  39. Knowledge of methods for pre- igusting spectacle frames.  40. Knowledge of frame tilt (for example mitoscopic, retroscopic, orthoscopic).  41. Knowledge of the effect of frame tilt on assure vertex distance.  42. Knowledge of instruments used to easure vertex distance.  43. Knowledge of methods for using a pipllary distance ruler.  44. Knowledge of methods for using a piplometer.  46. Knowledge of the effect of bifocal asses on image jump (for example, slab on the slab).						
ectacle frames during pre-fitting.  39. Knowledge of methods for pre- ljusting spectacle frames.  40. Knowledge of frame tilt (for example intoscopic, retroscopic, orthoscopic).  41. Knowledge of the effect of frame tilt on  42. Knowledge of tools used to pre-adjust ectacle frames.  43. Knowledge of instruments used to easure vertex distance.  44. Knowledge of methods for using a pipilometer.  45. Knowledge of the effect of bifocal inses on image jump (for example, slab	0	0	0	0	0	0
ljusting spectacle frames.  10. Knowledge of frame tilt (for example intoscopic, retroscopic, orthoscopic).  11. Knowledge of the effect of frame tilt on  12. Knowledge of tools used to pre-adjust ectacle frames.  13. Knowledge of instruments used to easure vertex distance.  14. Knowledge of methods for using a upillary distance ruler.  15. Knowledge of methods for using a upillometer.  16. Knowledge of the effect of bifocal inses on image jump (for example, slab	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Intoscopic, retroscopic, orthoscopic).  It. Knowledge of the effect of frame tilt on	0	0	$\circ$	0	0	0
12. Knowledge of tools used to pre-adjust ectacle frames.  13. Knowledge of instruments used to easure vertex distance.  14. Knowledge of methods for using a upillary distance ruler.  15. Knowledge of methods for using a upillometer.  16. Knowledge of the effect of bifocal enses on image jump (for example, slab	0	0	$\circ$	0	$\circ$	$\circ$
ectacle frames.  13. Knowledge of instruments used to easure vertex distance.  14. Knowledge of methods for using a upillary distance ruler.  15. Knowledge of methods for using a upillometer.  16. Knowledge of the effect of bifocal enses on image jump (for example, slab	on O	0	0	0	0	0
easure vertex distance.  14. Knowledge of methods for using a upillary distance ruler.  15. Knowledge of methods for using a upillometer.  16. Knowledge of the effect of bifocal large on image jump (for example, slab	0	0	0	$\circ$	$\circ$	$\circ$
apillary distance ruler.  15. Knowledge of methods for using a pillometer.  16. Knowledge of the effect of bifocal mases on image jump (for example, slab	0	0	0	0	0	0
piplometer.  16. Knowledge of the effect of bifocal mases on image jump (for example, slab	$\circ$	0	$\circ$	$\bigcirc$	$\circ$	0
nses on image jump (for example, slab	0	0	0	0	0	0
	0	0	0	0	0	0



## Part III - Knowledge Ratings

# ${\bf 22.}$ How important is this knowledge for effective performance of tasks in your current work?

#### Manufacturing

ranuracturing						
	0 Does Not Apply	1 Not	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K47. Knowledge of methods to identify ideal base curve.	0	0	0	0	0	0
K48. Knowledge of methods to use a lens clock to identify base curve.	0	0	0	0	0	0
K49. Knowledge of frame dimensions (for example, distance between lenses, effective diameter, frame wrap).	0	0	0	0	0	0
K50. Knowledge of methods for calculating horizontal and vertical decentration.	0	Ō	0	a	0	0
K51. Knowledge of methods for interpreting lensometer findings to identify optical center of lens.	0	0	0	0	0	0
K52. Knowledge of methods for identifying and calculating induced prism.	0	0	0	0	0	0
K53. Knowledge of methods for finishing lenses (for example, tracing, blocking, edging, tinting).	0	Ō	0	0	0	0



Spectacle Lens Dispens	er (S	LD) Occu	pational /	Analysis	Questionn	aire
Part III - Knowledge Ratin	ıgs					
23. How important is th current work?	is kno	wledge fo	r effective	performa	nce of tasks	in your
Quality Control	0 Does Not Apply	1 Not Important F	2 airly Importa	3 nt Important	4 Very	5 ritically Important
K54. Knowledge of common transcription errors.	0	0	0	0	0	0
K55. Knowledge of procedures for comparing spectacles received to doctors' prescriptions.	0	0	0	0	0	0
K56. Knowledge of procedures for comparing spectacles received to order specifications.	0	0	0	0	٥	0
K57. Knowledge of methods for interpreting lensometer findings to identify defects during the manufacturing process.	0	0	0	0	0	0
K58. Knowledge of procedures for identifying lens defects.	0	Q.	0	0	0	0
K59. Knowledge of methods for interpreting lensometer findings to verify that lenses received from the lab match current prescription.	0	0	0	0	0	0
K60. Knowledge of methods to measure spectacle lens thickness using calipers.	0	0	0	0	Ó	Ö
K61. Knowledge of ANSI standards for spectacle lenses.	0	0	0	0	0	Ö
K62. Knowledge of instruments used to verify	0	0	0	(128)		

K63. Knowledge of tools used to adjust spectacle frames during manufacturing.  K64. Knowledge of methods for adjusting spectacle frames during manufacturing.  K65. Knowledge of bench alignment techniques (for example, four point alignment).
for adjusting spectacle frames during manufacturing.  K65. Knowledge of bench alignment techniques (for example, four point
alignment techniques (for example, four point



Copy of page: Part III - Knowledge Ratings

ispensing						
	0 Does Not Apply	1 Not Important F	2 airly Importa	3 nt Important	4 Very Important C	5 ritically Importa
K66. Knowledge of tools used to adjust spectacle frames to fit patient.	0	0	0	0	0	0
K67. Knowledge of methods for adjusting spectacle frames to fit patient.	0	0	0	0	$\circ$	0
K68. Knowledge of facial features and anatomy that affect spectacle fit.	0	0	0	0	0	0
K69. Knowledge of side effects during spectacle or lens adaptation period.	$\circ$	0	0	0	0	$\circ$
K70. Knowledge of procedures for cleaning and maintaining spectacle lenses.	0	0	0	0	0	0
K71. Knowledge of methods of assessing visual acuity (for example, Snellen chart, Jaeger card).	0	0	0	0	0	0
K72. Knowledge of methods for troubleshooting common patient concerns.	0	0	0	0	0	0
K73. Knowledge of after- sale services available to patients.	0	$\circ$	0	0	0	0
K74. Knowledge of patient prescription problems that require referral to a medical professional.	0	0	0	0	0	0
K75. Knowledge of eyewear manufacturer warranty policies.	0	$\circ$	0	0	0	$\circ$
K76. Knowledge of parts used in eyewear repairs.	0	0	0	0	0	0
K77. Knowledge of methods for repairing eyewear.	0	0	0	0	0	0



# Optometry Spectacle Lens Dispenser (SLD) Occupational Analysis Questionnaire Copy of page: Part III - Knowledge Ratings 25. How important is this knowledge for effective performance of tasks in your current work? **Laws and Regulations** 0 Does 2 3 4 Very Apply Important Fairly Important Important Important Critically Important K78. Knowledge of laws and regulations related to spectacle lens prescriptions. K79. Knowledge of laws and regulations related to 0 0 advertising spectacle lens dispenser services. K80. Knowledge of laws and regulations related to supervising spectacle lens dispenser trainees.



## Thank you!

Thank you for taking the time to complete this question naire. The California State Board of Optometry values your contribution.