SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY AND HEARING AID DISPENSERS BOARD

OCCUPATIONAL ANALYSIS OF THE SPEECH-LANGUAGE PATHOLOGIST PROFESSION



OFFICE OF PROFESSIONAL EXAMINATION SERVICES



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This report was prepared and written by the Office of Professional Examination Services California Department of Consumer Affairs

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EXECUTIVE SUMMARY

The Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis of Speech-Language Pathologist practice in California. The purpose of the occupational analysis is to define practice for Speech-Language Pathologists in terms of actual job tasks that new licensees must be able to perform safely and competently at the time of licensure. The results of this occupational analysis serve as the basis for determining the tasks and knowledge that make up the description of practice for the Speech-Language Pathology profession in California.

OPES test specialists began by researching the profession and conducting telephone interviews with seven Speech-Language Pathologists throughout California. The purpose of these interviews was to identify the tasks performed in Speech-Language Pathology practice, and the knowledge required to perform those tasks in a safe and competent manner. An initial focus group of practitioners and educators was held at OPES in January 2014 to review the results of the interviews, and to identify changes and trends in Speech-Language Pathology practice specific to California. A second focus group was later held with additional Speech-Language Pathology practitioners to review and refine the task and knowledge statements derived from the interviews and initial focus group. Practitioners in these focus groups also performed a preliminary linkage of the task and knowledge statements to ensure that all tasks had a related knowledge and all knowledge statements had a related task. New task and knowledge statements were created as a result of this process, and some statements were eliminated from the final list due to overlap and reconciliation.

Upon completion of the first two focus groups, OPES developed a three-part questionnaire to be completed by Speech-Language Pathologists statewide. Development of the questionnaire included a pilot study which was conducted using a group of six licensees. The participants' feedback was used to refine the questionnaire. The final questionnaire was prepared by OPES for administration in April 2014.

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

OPES developed a stratified random sample of licensees to participate in the occupational analysis. The sample was stratified by years of practice and county of practice, with over-sampling of licensees licensed 0 to 5 years. The Board sent notification letters to the sample of 3,595 Speech-Language Pathologists (out of 11,596 total licensees) inviting them to complete the questionnaire online. Fourteen percent of

the licensed Speech-Language Pathologists in the sample (500) responded by accessing the Web-based survey. The final sample size included in the data analysis was 477, or 13 percent of the population that was invited to complete the questionnaire. This response rate reflects two adjustments, the details of which are described in the Response Rate section of this report. The demographic composition of the respondent sample is representative of the California Speech-Language Pathologist population.

OPES then performed data analyses on the task and knowledge rating responses. OPES combined the task ratings 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 had been analyzed, two additional focus groups were conducted with licensed Speech-Language Pathologists. The purpose of these focus groups was to evaluate the criticality indices and determine whether any task or knowledge statements should be eliminated. The licensees in these groups also established the linkage between job tasks and knowledge statements, organized the task and knowledge statements into content areas, and defined those areas. The licensees then evaluated and confirmed the content area weights.

The content outline for Speech-Language Pathology is structured into five content areas weighted by criticality relative to the other content areas. The content outline specifies the job tasks and knowledge critical to safe and effective Speech-Language Pathology (SLP) practice in California at the time of licensure.

The content outline developed as a result of this occupational analysis serves as a basis for developing an examination for inclusion in the process of granting California Speech-Language Pathology licensure. Similarly, this content outline serves as a basis for evaluating the degree to which the content of any examination under consideration measures content critical to California Speech-Language Pathology practice.

At this time, California licensure as a Speech-Language Pathologist is granted by meeting the requisite education and training requirements and passing the national examination for Speech-Language Pathology (the Praxis). There is no additional requirement to pass a California-specific examination, i.e., an additional examination based on applicable California regulations and California-specific practice requirements.

OVERVIEW OF THE SPEECH-LANGUAGE PATHOLOGY CONTENT OUTLINE

(Content Area	Content Area Description	Percent Weight
I.	General Competencies	This area assesses the candidate's knowledge related to core areas of practice applicable across types of clients, disorders, and treatment settings.	14
II.	Assessment	This area assesses the candidate's ability to identify, evaluate, and assess the development and disorders of speech, voice, language, or swallowing.	32
III.	Diagnosis, Goal Setting, and Treatment Planning	This area assesses the candidate's ability to use assessment information to formulate an accurate diagnosis for developing a treatment plan and interventions.	20
IV.	Treatment Interventions and Procedures	This area assesses the candidate's ability to develop culturally relevant treatment interventions based on assessment and diagnostic information that are measureable, objective, and consistent with the client's readiness and ability to engage in treatment.	25
V.	Treatment Outcomes and Effectiveness	This area assesses the candidate's ability to evaluate client progress in relation to treatment goals and develop plans for continuation, remediation, or termination of treatment as appropriate.	9
	Total		100

TABLE OF CONTENTS

EXECUTIVE SUMMARY	
LIST OF TABLES	
LIST OF FIGURES	vi
LIST OF APPENDICES	vii
CHAPTER 1. INTRODUCTION	1
PURPOSE OF THE OCCUPATIONAL ANALYSIS	1
CONTENT VALIDATION STRATEGY	1
UTILIZATION OF SUBJECT MATTER EXPERTS	1
ADHERENCE TO LEGAL STANDARDS AND GUIDELINES	2
DESCRIPTION OF OCCUPATION	2
CHAPTER 2. OCCUPATIONAL ANALYSIS QUESTIONNAIRE	3
SUBJECT MATTER EXPERT INTERVIEWS	3
TASK AND KNOWLEDGE STATEMENTS	3
QUESTIONNAIRE DEVELOPMENT	3
PILOT STUDY	4
CHAPTER 3. RESPONSE RATE AND DEMOGRAPHICS	5
SAMPLING STRATEGY AND RESPONSE RATE	
DEMOGRAPHIC SUMMARY	5
CHAPTER 4. DATA ANALYSIS AND RESULTS	18
RELIABILITY OF RATINGS	18
TASK CRITICAL VALUES	19
KNOWLEDGE IMPORTANCE VALUES	20
CHAPTER 5. EXAMINATION PLAN	21
CALIFORNIA-SPECIFIC PRACTICE	21
CONTENT AREAS AND WEIGHTS	23
CHAPTER 6. CONCLUSION	36

LIST OF TABLES

TABLE 1	_	NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A SPEECH-	
		LANGUAGE PATHOLOGIST	7
TABLE 2	_	NUMBER OF HOURS WORKED PER WEEK	8
TABLE 3	_	HIGHEST LEVEL OF EDUCATION	9
TABLE 4	_	MAJORITY OF RESPONSIBILITIES AS A SPEECH-LANGUAGE	
		PATHOLOGIST	10
TABLE 5	_	WORK SETTINGS WHERE SERVICES ARE PROVIDED	11
TABLE 6	_	TYPES OF CLIENTS CURRENTLY RECEIVING SERVICES	12
TABLE 7	_	PERCENTAGE OF TIME SPENT ON PRINCIPAL WORK TASKS	13
TABLE 8	_	AREAS OF SPECIALIZATION REPORTED BY RESPONDENTS	14
TABLE 9	_	OTHER CERTIFICATES/CREDENTIALS POSSESSED	16
TABLE 10	_	RESPONDENTS BY REGION	17
TABLE 11	_	TASK SCALE RELIABILITY	18
TABLE 12	_	KNOWLEDGE SCALE RELIABILITY	19
TABLE 13	_	CALIFORNIA-SPECIFIC TASK AND KNOWLEDGE STATEMENTS	22
TABLE 14	-	CONTENT AREA WEIGHTS	23
TABLE 15	_	CONTENT OUTLINE: SPEECH-LANGUAGE PATHOLOGIST	24

LIST OF FIGURES

FIGURE 1 –	NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A SPEECH- LANGUAGE PATHOLOGIST	7
FIGURE 2 –	NUMBER OF HOURS WORKED PER WEEK	8
FIGURE 3 –	HIGHEST LEVEL OF EDUCATION	9
FIGURE 4 –	MAJORITY OF RESPONSIBILITIES AS A SPEECH LANGUAGE PATHOLOGIST	.10
FIGURE 5 –	WORK SETTINGS WHERE SERVICES ARE PROVIDED	.11
FIGURE 6 -	TYPES OF CLIENTS CURRENTLY RECEIVING SERVICES	.12
FIGURE 7 –	PERCENTAGE OF TIME SPENT ON PRINCIPAL WORK TASKS	.13
FIGURE 8 –	AREAS OF PRACTICE SPECIALIZATION REPORTED BY RESPONDENTS	.15
FIGURE 9 -	OTHER CERTIFICATES/CREDENTIALS POSSESSED	.16

LIST OF APPENDICES

APPENDIX A. RESPONDENTS BY REGION	37
APPENDIX B. CRITICALITY INDICES FOR ALL TASKS	40
APPENDIX C. KNOWLEDGE IMPORTANCE RATINGS	46
APPENDIX D. LETTER TO PRACTITIONERS	54
APPENDIX E. QUESTIONNAIRE	56

CHAPTER 1. INTRODUCTION

PURPOSE OF THE OCCUPATIONAL ANALYSIS

The Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis to identify critical job activities performed by licensed Speech-Language Pathologists. This occupational analysis was part of the Board's comprehensive review of Speech-Language Pathology practice in California. The purpose of the occupational analysis is to define practice for Speech-Language Pathologists in terms of actual job tasks that new licensees must be able to perform safely and competently at the time of licensure. The results of this occupational analysis serve as the basis for determining the tasks and knowledge that make up the description of practice for the Speech-Language Pathology profession in California.

CONTENT VALIDATION STRATEGY

OPES used a content validation strategy to ensure that the occupational analysis reflected the actual tasks performed by Speech-Language Pathologists in independent practice. The technical expertise of California-licensed Speech-Language Pathologists was used throughout the occupational analysis process to ensure the identified task and knowledge statements directly reflect requirements for performance in current practice.

UTILIZATION OF EXPERTS

The Board selected Speech-Language Pathologists to participate as subject matter experts (SMEs) during various phases of the occupational analysis. These Speech-Language Pathologists were selected from a broad range of practice settings, geographic locations, and experience backgrounds. The SMEs provided information regarding the different aspects of current Speech-Language Pathology practice during the development phase of the occupational analysis, and participated in focus groups to review the content of task and knowledge statements for technical accuracy prior to administration of the occupational analysis questionnaire. Following administration of the occupational analysis questionnaire, groups of SMEs were convened at OPES to review the results and finalize the description of practice.

ADHERENCE TO LEGAL STANDARDS AND GUIDELINES

Licensing, certification, and registration programs in the State of California adhere strictly to federal and State laws and regulations and professional guidelines and technical standards. For the purpose of occupational analysis, 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 (2003), Society for Industrial and Organizational Psychology (SIOP).
- Standards for Educational and Psychological Testing (1999), 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 job activities required for practice.

DESCRIPTION OF OCCUPATION

The Speech-Language Pathologist occupation is described as follows in the California Business and Professions Code, Section 2530.2:

- (c) A "speech-language pathologist" is a person who practices speech-language pathology.
- (d) The practice of speech-language pathology partnership, corporation, limited liability company, or other organization or combination thereof, except that only individuals can be licensed under this chapter means all of the following:
 - (1) The application of principles, methods, instrumental procedures, and noninstrumental procedures for measurement, testing, screening, evaluation, identification, prediction, and counseling related to the development and disorders of speech, voice, language, or swallowing. (2) The application of principles and methods for preventing, planning, directing, conducting, and supervising programs for habilitating, rehabilitating, ameliorating, managing, or modifying disorders of speech, voice, language, or swallowing in individuals or groups of individuals. (3) Conducting hearing screenings. (4) Performing suctioning in connection with the scope of practice described in paragraphs (1) and (2), after compliance with a medical facility's training protocols on suctioning procedures.

CHAPTER 2. OCCUPATIONAL ANALYSIS QUESTIONNAIRE

SUBJECT MATTER EXPERT INTERVIEWS

The Board provided OPES with a list of California-licensed Speech-Language Pathologists to contact for telephone interviews. During the semi-structured interviews, licensed Speech-Language Pathologists were asked to identify all of the activities performed that are specific to the Speech-Language Pathology profession. The interviews confirmed major content areas of their practice and the job tasks performed in each content area. The licensees were also asked to identify the knowledge necessary to perform each job task safely and competently.

TASK AND KNOWLEDGE STATEMENTS

OPES staff integrated the information gathered during the interviews and from prior studies of the profession and developed task and knowledge statements. The statements were then organized into the major content areas of practice.

In January and February 2014, OPES facilitated two focus groups of Speech-Language Pathologists to evaluate the task and knowledge statements for technical accuracy and comprehensiveness, and to assign each statement to the appropriate content area. The groups verified that the content areas were independent and nonoverlapping, and performed a preliminary linkage of the task and knowledge statements to ensure that every task had a related knowledge and every knowledge statement a related task. Additional task and knowledge statements were created as needed to complete the scope of the content areas.

The finalized lists of task and knowledge statements were developed into an online questionnaire that was eventually completed and evaluated by a sample of Speech-Language Pathologists throughout California.

QUESTIONNAIRE DEVELOPMENT

OPES developed the online occupational analysis survey, a questionnaire soliciting the licensees' ratings of the job task and knowledge statements for analysis. The surveyed Speech-Language Pathologists were instructed to rate each job task in terms of how often they performed the task (FREQUENCY), and how important the task was to the performance of their current practice (IMPORTANCE). In addition, they were instructed to rate each knowledge statement in terms of how important the specific knowledge was to the performance of their current practice (IMPORTANCE). The questionnaire also included a demographic section for purposes of developing an accurate profile of the respondents. The questionnaire can be found in Appendix E.

PILOT STUDY

Prior to developing the final questionnaire, OPES prepared an online pilot survey. The pilot questionnaire was reviewed by the Board and a group of six SMEs for feedback about the technical accuracy of the task and knowledge statements, estimated time for completion, online navigation, and ease of use. OPES used this feedback to develop the final questionnaire.

CHAPTER 3. RESPONSE RATE AND DEMOGRAPHICS

SAMPLING STRATEGY AND RESPONSE RATE

OPES developed a stratified random sample of licensees to participate in the occupational analysis. The sample was stratified by years of practice and county of practice, with over-sampling of licensees licensed 0 to 5 years. The Board sent notification letters to the sample of 3,595 Speech-Language Pathologists (out of 11,596 total licensees) inviting them to complete the questionnaire online. The online format allowed for several enhancements to the survey and data collection process. As part of the survey development, configuration, and analysis process, various criteria were established to ensure the integrity of the data.

Fourteen percent of the licensed Speech-Language Pathologists in the sample (500) responded by accessing the Web-based survey. The final sample size included in the data analysis was 477, or 13 percent of the population that was invited to complete the questionnaire. This response rate (13 percent) reflects two adjustments. First, data from respondents who indicated they were not currently licensed and practicing as Speech-Language Pathologists in California were excluded from analysis. And second, the reconciliation process removed surveys containing incomplete and unresponsive data. The respondent sample was representative of the population of California Speech-Language Pathologists based on the sample's demographic composition.

DEMOGRAPHIC SUMMARY

Of the respondents included in the analysis, 40 percent had been practicing as a Speech-Language Pathologist for 5 years or less, 41 percent had been practicing between 6 and 20 years, and 19 percent had been practicing for more than 20 years.

The respondents were asked to indicate all the settings where they provide services as a Speech-Language Pathologist. Work in public schools settings was reported by 59.3 percent of the sample, private practice by 19.7 percent, preschool and day care settings by 15.5 percent and skilled nursing/long-term care/subacute care settings by 15.5 percent of respondents.

The respondents were also asked to indicate all of the clients for whom they provide services. The respondents reported providing services to the following groups: Children (6-8 years of age) 64.7 percent, Preschool (3-5 years of age) 62.4 percent, and Children (9-11 years of age) 62.2 percent. Services to Toddlers were reported by 26.7 percent of respondents. Approximately 30 percent of respondents reported providing services to the remaining age groups (Young Teens to Older Adults).

When describing the majority of their responsibilities as a Speech-Language Pathologist, 79 percent of respondents selected "Clinical Services Provider" and 11.3 percent selected "Special Education Teacher." Across treatment settings and types of clients, respondents reported working 31 to 40 hours per week (56.5 percent) and 18.8 percent reported working over 40 hours per week.

The respondents reported that, on the average, 49 percent of their time was spent in direct client care (screening, assessment, treatment, etc.), 14.3 percent performing client documentation and reports, and 10.7 percent of their time participating in client case meetings (IDT, IEP, etc.).

The majority of respondents reported having Speech-Language Pathology specialization in the areas of speech sound disorders (64.6 percent), developmental language delays (62.6 percent), autism and related disorders (55.6 percent), phonological disorders (50.8 percent), language-based learning (47.3 percent), early intervention (42.4 percent), and developmental disabilities (41.3 percent).

The demographic information from the respondents can be found in Tables 1 through 10.

TABLE 1 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A SPEECH-LANGUAGE PATHOLOGIST

YEARS	N	PERCENT
0 to 5	186	39.0
6 to 10	99	20.8
11 to 20	91	19.1
21 to 29	45	9.4
30 or more	43	9.0
Missing	13	2.7
Total	477	100%

FIGURE 1 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A SPEECH-LANGUAGE PATHOLOGIST

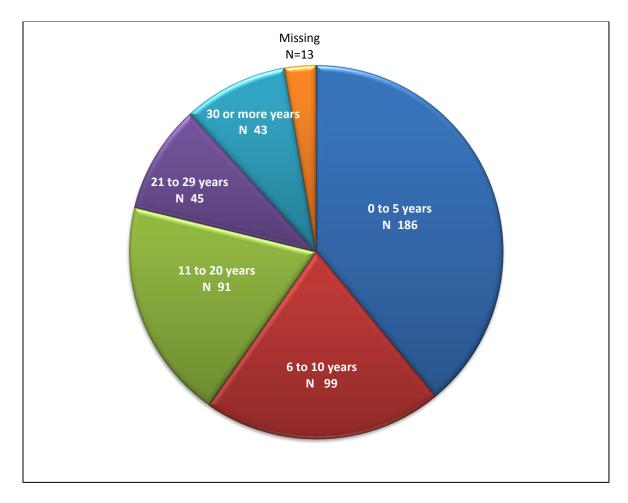


TABLE 2 – NUMBER OF HOURS WORKED PER WEEK

HOURS WORKED	N	PERCENT
10 or less	29	6.1
11 to 20	34	7.1
21 to 30	52	10.9
31 to 40	262	54.9
41 or more	87	18.2
Missing	13	2.7
Total	477	100%

NOTE: Total may not add to 100% due to rounding.

FIGURE 2 – NUMBER OF HOURS WORKED PER WEEK

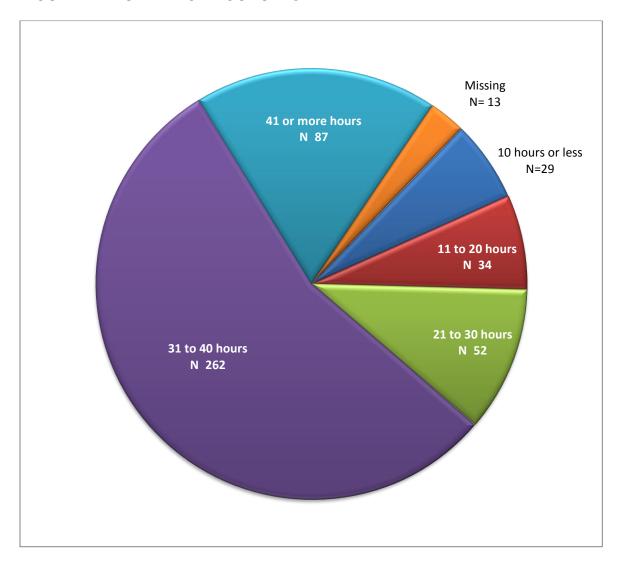


TABLE 3 - HIGHEST LEVEL OF EDUCATION

LEVEL OF EDUCATION	N	PERCENT
Master's degree in speech- language pathology or communication	455	95.4
Other formal education	7	1.5
Doctorate in speech-language pathology or communication	2	.4
Missing	13	2.7
Total	477	100%

FIGURE 3 - HIGHEST LEVEL OF EDUCATION

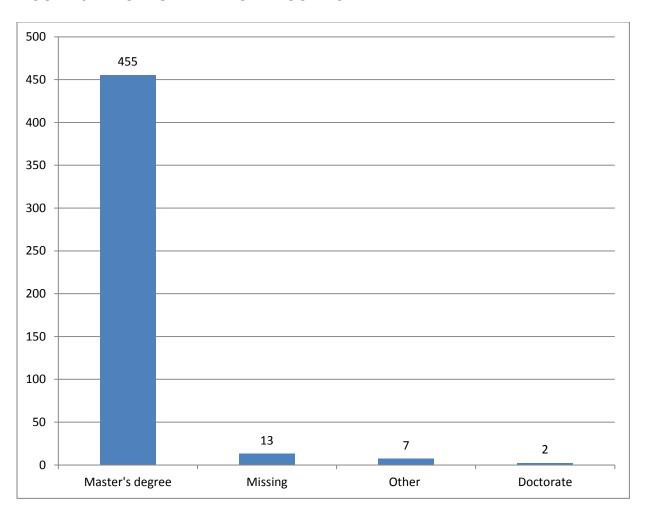


TABLE 4 – MAJORITY OF RESPONSIBILITIES AS A SPEECH LANGUAGE PATHOLOGIST

RESPONSIBILITIES	N	PERCENT
Clinical services provider	377	79
Special Education teacher	54	11.4
Missing	15	3.1
Supervisor of clinicians	11	2.3
Director/supervisor of a clinical program	8	1.7
Consultant	6	1.3
College/University professor/instructor	4	0.8
CEU Provider	2	0.4
Total	477	100%

FIGURE 4 – MAJORITY OF RESPONSIBILITIES AS A SPEECH LANGUAGE PATHOLOGIST

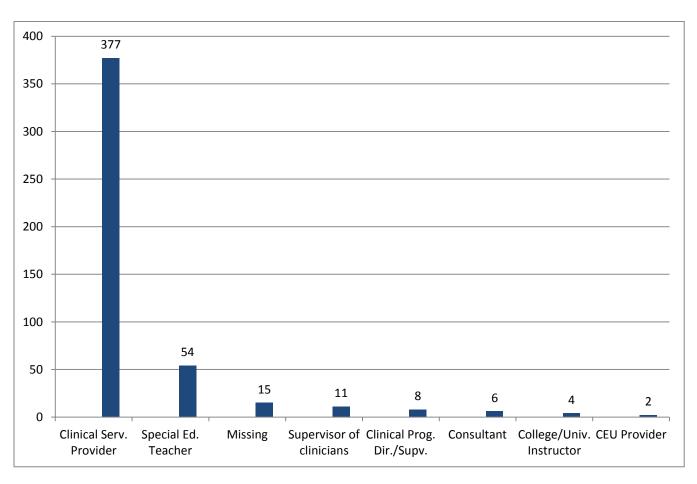


TABLE 5 – WORK SETTINGS WHERE SERVICES ARE PROVIDED

WORK SETTING	N	PERCENT
Public School	271	59.3
Private Practice	90	19.7
Preschool/Day Care	71	15.5
Skilled Nursing/Long-Term Care	71	15.5
Hospital-based	65	14.2
Speech and Language Clinic	43	9.4
Home Health	39	8.5
Regional Center	37	8.1
Non-Public School (NPS)	14	3.1
University/University Clinic	14	3.1
Web-based Treatment/Telepractice	8	1.8
Correctional facility	2	0.4
Group Home/Sheltered Workshop	1	0.2
Other (please specify)	38	8.3

NOTE: Respondents were asked to check "All that Apply."

FIGURE 5 – WORK SETTINGS WHERE SERVICES ARE PROVIDED

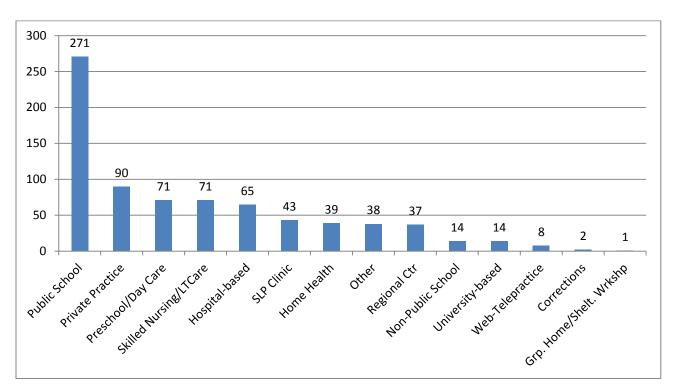


TABLE 6 - TYPES OF CLIENTS CURRENTLY RECEIVING SERVICES

CLIENT	N	PERCENT
Children (6-8 years)	301	64.7
Preschool (3-5 years)	290	62.4
Children (9-11 years)	289	62.2
Young Teens (12-14 years)	182	39.1
Teenagers (15-17 years)	136	29.2
Adults (23-70 years)	135	29.0
Older Adults (71+ years)	128	27.5
Toddlers (1-2 years)	128	27.5
Young Adults (18-22 years)	124	26.7
Infants (0-12 months)	45	9.7

NOTE: Respondents were asked to check "All that Apply."

FIGURE 6 - TYPES OF CLIENTS CURRENTLY RECEIVING SERVICES

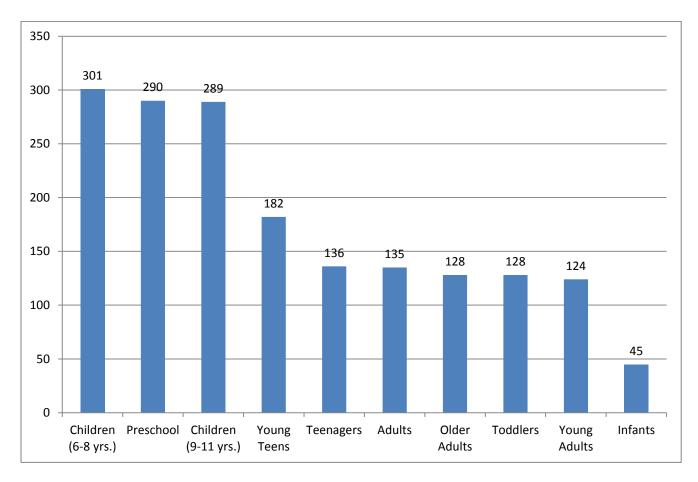


TABLE 7 – PERCENTAGE OF TIME SPENT ON PRINCIPAL WORK TASKS

WORK TASK	N	PERCENT
Direct Client Care (screen, assess, treatment)	451	48.9
Client Documentation/Reports	444	14.3
Client IEP (IDT, case meetings)	363	10.7
Treatment Planning/Preparation	406	7.2
Family/Caregiver Contact/Counseling	368	6.5
Collaborations/Consultation (professional staff, teachers)	354	5.3
Teaching/Training (staff, students, parents)	263	5.0
Case Management (referrals, intake, follow-up)	309	4.6
Administrative (scheduling, staffing, HR, meetings)	312	4.3
Supervision (SLP-related staff, support staff)	275	4.2
Professional Development	315	3.2
Pre-referral Interventions	246	2.2
Research / Grant writing	202	0.3

NOTE: Percentage reported is average across the endorsing respondents.

FIGURE 7 – PERCENTAGE OF TIME SPENT ON PRINCIPAL WORK TASKS

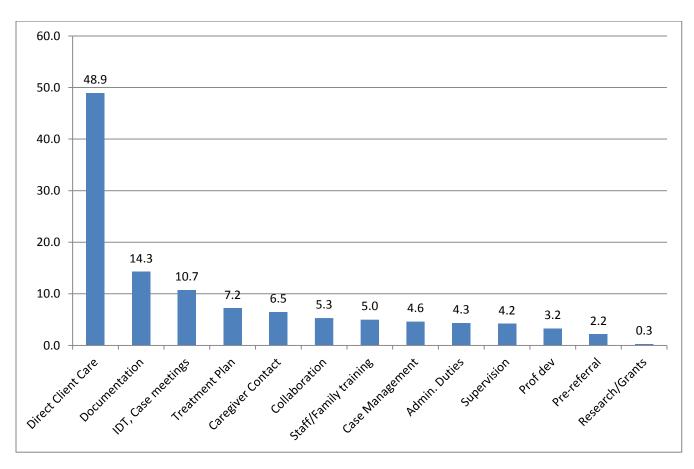


TABLE 8 – AREAS OF PRACTICE SPECIALIZATION REPORTED BY RESPONDENTS

SPECIALIZATION	N	PERCENT
Speech Sound Disorders	294	64.6
Developmental Language Delays	285	62.6
Autism and Related Disorders	253	55.6
Phonological Disorders	231	50.8
Language-based Learning	215	47.3
Early Intervention	193	42.4
Developmental Disabilities	188	41.3
Fluency and Fluency Disorders	131	28.8
Neurophysiological/neurogenic speech and language Disorders	130	28.6
Feeding and swallowing Disorders	127	27.9
Augmentative and Alternative Communication	114	25.1
Voice and Voice Disorders	76	16.7
Gerontology	47	10.3
Hearing and Hearing Disorders	40	8.8
Orofacial Disorders	36	7.9
Aural Rehabilitation	23	5.1
Alaryngeal Speech	7	1.5
Telepractice	6	1.3
Other (please specify)	30	

NOTE: Percentage reported is average across the endorsing respondents.

FIGURE 8 – AREAS OF PRACTICE SPECIALIZATION REPORTED BY RESPONDENTS

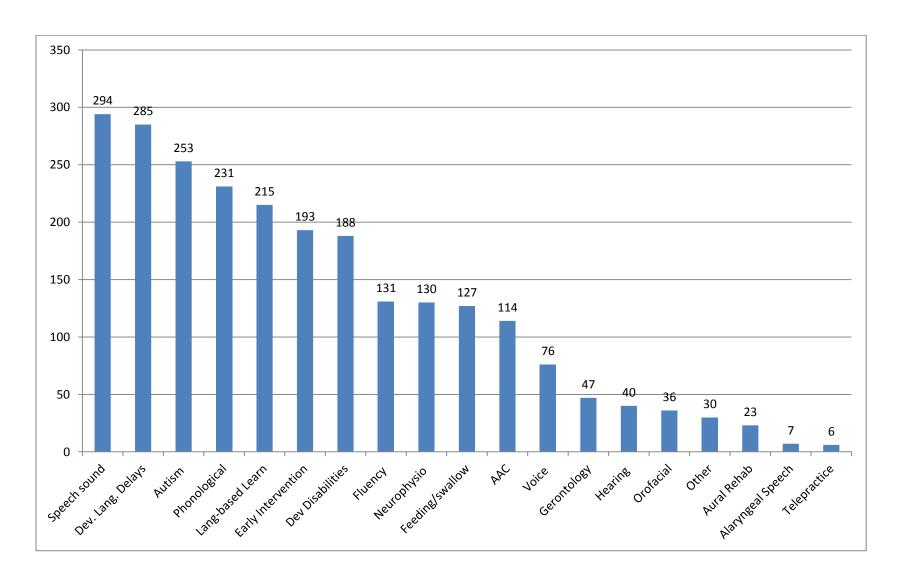


TABLE 9 - OTHER CERTIFICATES/CREDENTIALS POSSESSED

CERTIFICATES	N	PERCENT
None	241	63.6
Teaching Credential	110	29.0
Other	78	20.6
Special Education	32	8.4
Administrative	15	4.0
Applied Behavior Analysis	4	1.1
Resource Specialist	2	0.5

NOTE: Percentage reported is average across endorsing respondents.

FIGURE 9 - OTHER CERTIFICATES/CREDENTIALS POSSESSED

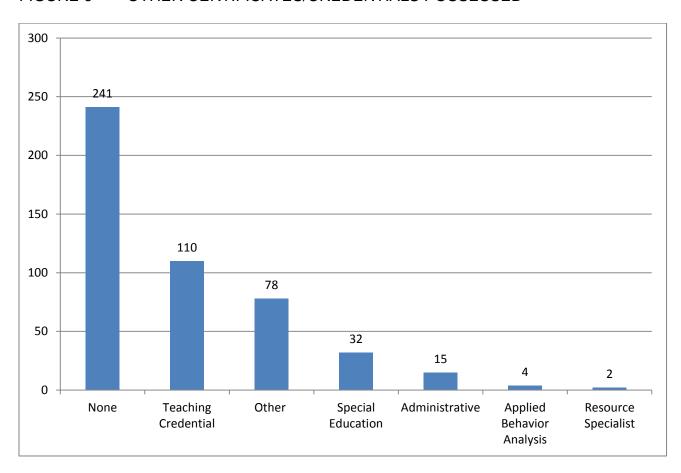


TABLE 10 - RESPONDENTS BY REGION

Region	Region Name	Frequency	Percent
1	Los Angeles and Vicinity	163	34.2
2	San Francisco Bay Area	99	20.8
3	San Joaquin Valley	43	9.0
4	Sacramento Valley	46	9.6
5	San Diego and Vicinity	40	8.4
6	Shasta Cascade	6	1.3
7 Riverside – San Bernardino		32	6.7
8	Sierra Mountain	12	2.5
9	North Coast	5	1.0
10	South/Central Coast	16	3.4
	Missing	15	3.1
	Total	477	100%

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

CHAPTER 4. DATA ANALYSIS AND RESULTS

RELIABILITY OF RATINGS

The job task and knowledge ratings obtained by the questionnaire were evaluated with a standard index of reliability called coefficient alpha (α). Coefficient alpha is an estimate of the internal-consistency of the respondents' ratings of job task and knowledge statements. Coefficients were calculated for all respondent ratings.

Table 11 displays the reliability coefficients for the task rating scales in each content area. The overall ratings of task frequency (α = .96) and task importance (α = .96) across content areas were highly reliable. Table 12 displays the reliability coefficients for the knowledge statements rating scale in each content area. The overall ratings of knowledge importance (α = .98) across content areas were highly reliable. These results indicate that the responding Speech Language Pathologists rated the task and knowledge statements consistently throughout the questionnaire.

TABLE 11 – TASK SCALE RELIABILITY

CONTENT AREA	Number of Tasks	α Frequency	α Importance
I. General Competencies	18	.92	.93
II. Assessment	28	.96	.96
III. Diagnosis, Goal Setting, and Treatment Planning	7	.87	.86
IV. Treatment Interventions and Procedures	22	.94	.94
V. Treatment Outcomes and Effectiveness	7	.88	.89
Total	82	.96	.96

TABLE 12 - KNOWLEDGE SCALE RELIABILITY

I. General Competencies	17	.87
II. Assessment	42	.94
III. Diagnosis, Goal Setting, and Treatment Planning	20	.92
IV. Treatment Interventions and Procedures	26	.93
V. Treatment Outcomes and Effectiveness	6	.86
Total	111	.98

TASK CRITICAL VALUES

Focus groups of licensed Speech-Language Pathologists were convened at OPES in January and February 2014 to review the average frequency and importance ratings, as well as the criticality indices of all task and knowledge statements. The purpose of these workshops was to identify the essential tasks and knowledge required for safe and effective Speech-Language Pathologist practice at the time of licensure. The licensees reviewed the task frequency, importance, and criticality indices for all task statements.

In order to determine the critical values (criticality) of the task statements, the frequency rating (Fi) and the importance rating (Ii) for each task were multiplied for each respondent, and the products averaged across respondents.

The task statements were then ranked according to the tasks' critical values. The task statements and their mean ratings and associated critical values are presented in Appendix B.

The January 2014 focus group of SMEs evaluated the tasks' critical values based on the questionnaire results. OPES staff instructed the SMEs to identify a cutoff value of criticality in order to determine if any tasks did not have a high enough critical value to be retained. The SMEs determined that no cutoff value should be set, based on their view of the relative importance of all tasks to Speech-Language Pathologist practice. The February 2014 focus group of SMEs performed an independent review of the same data, and arrived at the same conclusion, that no cutoff value should be set and that all tasks should be retained.

KNOWLEDGE IMPORTANCE RATINGS

In order to determine the importance of each knowledge, the mean importance (KImp) rating for each knowledge statement was calculated. The knowledge statements were then ranked according to mean importance. The knowledge statements and their importance ratings are presented in Appendix C.

The January 2014 focus group of SMEs that evaluated the task critical values also reviewed the knowledge statement importance values. After reviewing the average importance ratings and considering their relative importance to Speech-Language Pathology practice, they determined that no cutoff value should be established and all knowledge statements were retained. The February 2014 focus group of SMEs independently reviewed the same data, arrived at the same conclusion, that no cutoff value should be set and that all knowledge statements should be retained.

CHAPTER 5. EXAMINATION PLAN

CALIFORNIA-SPECIFIC PRACTICE

The January 2014 focus group reviewed the preliminary assignments of the task and knowledge statements to content areas and verified the linkage between the tasks and knowledge. The content areas were developed so that they were non-overlapping and described major areas of practice. The February 2014 focus group of SMEs reviewed the first group's results, including the task and knowledge linkage, and agreed with the outcome.

The two focus groups of SMEs were also asked to independently identify the tasks and knowledge that best described California-specific practice, i.e., those areas of Speech-Language Pathology practice unique to California.

As part of this process, both groups of SMEs reviewed the Speech-Language Pathology scope of practice and other California state regulations applicable to their practice. In addition, both groups reviewed the ethical standards for the profession promulgated by the national organization, the American Speech-Language-Hearing Association (ASHA), as well as the regulatory requirements for Speech-Language Pathology practice in both educational and hospital (medical) settings.

Both groups of SMEs independently reviewed the tasks in each content area and identified the tasks that were descriptive of California-specific Speech-Language Pathology practice. These tasks were marked. Each group then identified the knowledge related to the tasks marked as California-specific. Both groups were in complete agreement except for one task statement and the one knowledge statement related to it:

<u>Task #17</u>, Advocate for programs, policies, personnel, facilities, equipment, and materials that ensure quality client care; and <u>Knowledge #17</u>, Knowledge of available resources (e.g., self-help groups, support groups, information sources) for client and client's family/care-givers to support client

treatment.

After review and discussion, the second group decided to exclude these two items from the California-specific tasks and knowledge. This decision was based on the group's determination that the knowledge of area-specific resources and their applicability to supporting the client's treatment is relevant and appropriate to Speech-Language pathology practice beyond California and not specific to California practice.

The task and knowledge statements identified by the focus groups as describing California-specific areas of practice are listed in Table 13 on the following page,

TABLE 13 - CALIFORNIA-SPECIFIC TASK AND KNOWLEDGE STATEMENTS

	Task Statement		Knowledge Statement
1	Practice in a manner consistent with	2	Knowledge of State and federal agencies
	professional and ethical standards to		whose regulations impact the Speech-
	provide best plan of care to client		Language Pathologist's practice (e.g.,
2	Maintain client confidentiality and		Centers for Medicare and Medicaid
	security of documentation in		Services, CA Department of Education)
	compliance with relevant federal and	3	Knowledge of standards of ethical conduct
	State regulations	4	Knowledge of laws and practices related to
3	Apply procedures for control of disease		client and worker health and safety,
	and client/worker safety		including universal precautions
7	Supervise Clinical Fellows (CF),	5	Knowledge of State and federal laws
	Speech-Language Pathology		related to clients' rights and legal
	Assistants (SLPA) or Aides, required		protections (e.g., ADA, IDEA, HIPAA)
	professional experience temporary	11	Knowledge of California regulations
	license holders (RPE), and individuals		regarding supervision of Clinical Fellows
	acquiring a Speech-Language		(CF), Speech-Language Pathology
	Pathology Services credential to		Assistants (SLPA) or Aides, required
	ensure appropriate delivery of services		professional experience temporary license
	and quality client care		holders (RPE), and individuals acquiring a
			Speech-Language Pathology Services
		40	credential
		12	Knowledge of methods and procedures for
			mentoring and training CFs, Speech-
			Language Pathology Assistants (SLPA) or
		40	Aides, and RPEs
		13	Knowledge of methods and procedures for
			supervising graduate students engaged in acquiring SLP training and/or pursuing a
			Speech-Language Pathology Services
			credential
			GEGETHA

Tasks 1, 2, and 3 were identified because of their linkage with Knowledge 2, 3, 4, and 5, which pertain to specific California law and regulations (ethical conduct by Speech-Language Pathologists is covered under provisions of the California Business and Professions Code). Similarly, Task 7 was found to be linked to Knowledge 11, 12, and 13, which pertain to specific areas of California law and regulations.

Both groups of SMEs were in agreement that the remaining task and knowledge statements were both representative of the description of Speech-Language Pathology practice in California and of Speech-Language Pathology practice in other states. As such, they were retained as part of the description of Speech-Language Pathology practice in California, but not described as "California-specific."

CONTENT AREAS AND WEIGHTS

In order for the February 2014 group of SMEs to determine the relative weights of the content areas, initial calculations were performed by dividing the sum of the task critical values for a content area by the overall sum of the task critical values for all tasks, as shown below. The content area weights based on the task critical values are presented in Table 14.

<u>Sum of Critical Values for Tasks in Content Area</u> = Percent Weight of Sum of Critical Values for All Tasks Content Area

In reviewing the preliminary weights based solely on the task critical values (TCV Prelim. Wts.), the SMEs determined that these weights did not reflect the relative importance of the content areas to Speech-Language Pathology practice in California. The SMEs were then presented with values based on the knowledge importance (KImp) ratings for each content area (KImp Prelim. Wts.). These values were calculated by dividing the sum of the knowledge importance for a content area by the overall sum of the knowledge importance ratings for all knowledge, as shown below. The content area weights based on the KImp values are presented in Table 14.

<u>Sum of K(Imp) for Knowledge in Content Area</u> = Percent Weight of Sum of K(Imp) for All Knowledge Content Area

In determining the final weighting of the content areas, the February 2014 group of SMEs, looked at the group of tasks and knowledge, the linkage between the tasks and knowledge, and the relative importance of the tasks and knowledge in each content area to Speech-Language Pathology practice in California. The results of their evaluation are depicted in Table 14, below. The content outline for the Speech-Language Pathology content outline is presented in Table 15.

TABLE 14 - CONTENT AREA WEIGHTS

	Content Area	TCV Prelim. Wts.	KImp Prelim. Wts.	Final Weights
I.	General Competencies	26.8	16.6	14
II.	Assessment	32.4	36	32
III.	Diagnosis, Goal Setting, and Treatment Planning	11.2	18.5	20
IV.	Treatment Interventions and Procedures	20.3	22.8	25
V.	Treatment Outcomes and Effectiveness	9.3	6.1	9
	Total	100	100	100

TABLE 15 - CONTENT OUTLINE: SPEECH-LANGUAGE PATHOLOGIST

I. GENERAL COMPETENCIES (14%): This area assesses the candidate's knowledge related to core areas of practice applicable across types of clients, disorders, and treatment settings.

	Task Statements		Knowledge Statements
1	Practice in a manner consistent with professional	1	Knowledge of professional guidelines and standards (i.e., ASHA,
	and ethical standards to provide best plan of care to		CSHA) related to speech-language pathology practice.
	client.	2	Knowledge of State and federal agencies whose regulations
2	Maintain client confidentiality and security of		impact the Speech-Language Pathologist's practice (e.g., Centers
	documentation in compliance with relevant federal		for Medicare and Medicaid Services, Department of Education).
	and State regulations.	3	Knowledge of standards of ethical conduct.
3	Apply procedures for control of disease and	4	Knowledge of laws and practices related to client and worker
	client/worker safety.		health and safety, including universal precautions.
4	Provide culturally and linguistically appropriate	5	Knowledge of State and federal laws related to clients' rights and
	services by integrating the values and beliefs of the		legal protections (e.g., ADA, IDEA, HIPAA).
	client and client's community into assessment and	6	Knowledge of methods for performing client advocacy.
	treatment decisions.	7	Knowledge of procedures for developing collaborative
5	Identify and collaborate with appropriate treatment		relationships with client, client's family/caregivers, and other
	and service providers to provide culturally and		professionals to support client's care and treatment.
	linguistically appropriate services.	8	Knowledge of cultural differences and issues that affect the
6	Determine and make referrals to other professionals		interviewing and counseling process with diverse client
	or agencies based on the Speech-Language		populations and their families/caregivers.
	Pathologist's competency and the client's needs.	9	Knowledge of methods and procedures for communicating
7	Supervise Clinical Fellows (CF), Speech-Language		information regarding client's condition, care, and treatment to
	Pathology Assistants (SLPA) or Aides, required		client, client's family/caregivers, and other professionals.
	professional experience temporary license holders	10	Knowledge of methods and procedures for counseling and
	(RPE), and individuals acquiring a Speech-		educating client, client's family/caregivers, and other professionals
	Language Pathology Services credential to ensure		in client's care and treatment.
	appropriate delivery of services and quality client		
	care.		
8	Ensure that clinical support personnel involved with		
	providing client treatment follow treatment protocols.		

I. GENERAL COMPETENCIES (continued)

	Task Statements		Knowledge Statements
9	Communicate relevant clinical information orally and in writing to client, client's family/relevant others, and	11	Knowledge of California regulations regarding supervision of Clinical Fellows (CF), Speech-Language Pathology Assistants
	other professionals to provide best plan of care to		(SLPA) or Aides, required professional experience temporary
	client.		license holders (RPE), and individuals acquiring a Speech-
10	Educate and train client, client's family, and relevant		Language Pathology Services credential.
	others in techniques and strategies to support	12	Knowledge of methods and procedures for mentoring and training
11	client's treatment plan. Collaborate with other professionals to provide best		CFs, Speech-Language Pathology Assistants (SLPA) or Aides, and RPEs.
' '	plan of care to client.	13	Knowledge of methods and procedures for supervising graduate
12	Review, understand, and integrate diagnostic and		students engaged in acquiring SLP training and/or pursuing a
	treatment reports, treatment plans, and professional		Speech-Language Pathology Services credential.
	correspondence.	14	Knowledge of conventions and professional standards of written
13	Develop diagnostic and treatment reports, treatment		communication for different clinical purposes and settings (e.g.,
	plans, and professional correspondence that clearly communicate the client's needs.	15	medical, governmental, educational). Knowledge of procedures for applying research methodology and
14	Document client care and treatment activities	15	the scientific method to clinical practice.
' '	consistent with institutional and organizational	16	Knowledge of methods and procedures for integrating research
	requirements and professional standards.		outcomes into evidence-based clinical practice.
15	Access, critically review, and apply research	17	Knowledge of available resources (e.g., self-help groups, support
	findings/technical reports to ensure quality client		groups, information sources) for client and client's family/care-
16	care (i.e., evidence-based practice).		givers to support client treatment.
10	Provide information to the public that increases awareness of communication and swallowing		
	disorders.		
17	Advocate for programs, policies, personnel, facilities,		
	equipment, and materials that ensure quality client		
4.0	care.		
18	Incorporate effective methods for working with		
	interpreters and translators for non-English speaking clients.		
	UIGHO.		

II. ASSESSMENT (32%): This area assesses the candidate's ability to identify, evaluate, and assess the development and disorders of speech, voice, language, or swallowing.

	Task Statements		Knowledge Statements
19	Identify individuals and groups at risk for swallowing	18	Knowledge of the effects of cognitive, behavioral, and cultural
	and communication disorders.		factors on communication and feeding/swallowing behavior.
20	Screen for the presence of speech and language	19	Knowledge of screening procedures for social communication
	disorders involving voice, resonance, and fluency.		disorders.
21	Screen for presence of feeding and swallowing disorders.	20	Knowledge of screening procedures for feeding and swallowing disorders.
22	Screen for presence of hearing impairments.	21	Knowledge of screening procedures for hearing impairments.
23	Screen for presence of cognitive-linguistic	22	Knowledge of screening procedures for speech and language
	impairments.		disorders involving voice, resonance, and fluency.
24	Screen for presence of social communication	23	Knowledge of screening procedures for cognitive-linguistic
	deficits.		impairments.
25	Screen for presence of language-based learning	24	Knowledge of screening procedures for language-based learning
	disabilities.		disabilities.
26	Recognize indicators that prompt further assessment	25	Knowledge of typical cognitive, psychological, motor, and sensory
	and/or referral.		development and functioning.
27	Utilize client history to identify potential causal	26	Knowledge of the anatomy, physiology, and neurology of normal
	factors and correlates relating to client's past and	0.7	speech, language, hearing, and functional swallowing.
00	present communication and swallowing status.	27	Knowledge of the physical characteristics of speech, including
28	Determine communication function of client	00	acoustics, aerodynamics, and articulatory movements.
	behaviors and emotions that impact assessment or	28	Knowledge of the phonologic, morphologic, syntactic, semantic,
	treatment (e.g., attention, aggression, self-injury, hyperactivity, withdrawal).		and pragmatic aspects of typical human communication and its development.
29	Select assessment instruments, procedures,	29	Knowledge of social communication development with autism
	settings, and materials appropriate to characteristics		spectrum disorders.
	of client, (e.g. age, primary language background,	30	Knowledge of the effects of communication and swallowing
	cognitive/physical limitations, culture).		impairments on client behavior, emotional adjustment, and health
30	Assess client's voice and resonance.		status, as well as on client academic, vocational, and social
31	Assess client's speech fluency.		success.
32	Assess client's speech production and intelligibility.	31	Knowledge of methods and procedures for obtaining client case history and performing client assessment.

II. ASSESSMENT (continued)

	Task Statements		Knowledge Statements
33	Assess client's language (comprehension and	32	Knowledge of the effects of medical conditions, procedures, and
	expression).		treatments on communication and swallowing.
34	Assess client's cognitive-linguistic functioning.	33	Knowledge of the psychosocial impact of communication and
35	Assess client's feeding and swallowing.		swallowing disorders across the life span.
36	Assess client's social (pragmatic) communication.	34	Knowledge of the epidemiology of communication and swallowing
37	Assess client's language-based learning.		impairments.
38	Assess client's communication skills related to possible hearing loss.	35	Knowledge of the effects of neurotoxins and drugs on communication and swallowing.
39	Assess client's options for communication without a larynx.	36	Knowledge of methods and procedures for conducting an objective assessment.
40	Assess impact of client's communication impairment on academic, social, and vocational functioning.	37	Knowledge of procedures for assessing speech sound production (articulation) including perceptual characteristics,
41	Assess functional communication using standardized		oral/physiological structure, motor planning, and execution.
7 '	and non-standardized assessments (e.g.,	38	Knowledge of procedures for assessing resonance including oral
	observation, sampling, rating scales, dynamic		structure and function, nasal structure, and velopharyngeal
	assessment).		structure and function.
42	Determine appropriateness of behavioral, prosthetic,	39	Knowledge of procedures for assessing voice including
	alternative and augmentative management.		respiratory, supralaryngeal, laryngeal, and pharyngeal structure
43	Conduct instrumentation-based assessment of		and function.
	respiratory, supralaryngeal, laryngeal, and	40	Knowledge of procedures for assessing alaryngeal speech.
	pharyngeal subsystems.	41	Knowledge of procedures for assessing language/communication
44	Determine functional level of primary language in		(comprehension and expression) including phonology,
	individuals who speak a language other than		morphology, syntax, semantics, pragmatics, language aspects of
	English.	4.0	literacy, and prelinguistic communication.
45	Assess English language skills in individuals who	42	Knowledge of procedures for assessing cognition including
	speak a language other than English.		attention, memory, sequencing, problem solving, and executive functioning.
		43	Knowledge of procedures for identifying structural, physiological,
			sensory, or behavior-based oral/pharyngeal/esophageal deficits
			and their effects on client's feeding and swallowing.

II. ASSESSMENT (continued)

	Task Statements		Knowledge Statements
46	Utilize effective interpersonal skills in clearly	44	Knowledge of procedures for assessing auditory processing.
	communicating assessment results to client, client's	45	Knowledge of procedures for assessing client's ability to use and
	family/relevant others, other professionals, and		benefit from alternative and augmentative communication.
	referral sources in order to set a positive tone for	46	Knowledge of procedures for assessing orofacial myofunctional
	collaboration, collaborative problem-solving, and		disorders (including tongue thrust).
	·	47	Knowledge of procedures for performing curriculum-based
	mutual support and agreement.		assessment for school populations.
		48	Knowledge of strategies for managing client's challenging
		40	behaviors during assessment.
		49	Knowledge of motivational strategies for engaging client and
			client's family/relevant others in the assessment process.
		50	Knowledge of typical progression and development of the
			acquisition of a second language during childhood.
		51	Knowledge of sociolinguistic, familial, and cultural influences on
		52	communication.
		53	Knowledge of procedures for interpretation of audiograms. Knowledge of principles and procedures for assessing adequacy
		55	of anatomical and physiological structures using imaging (e.g.,
			radiographic procedures, endoscopic visualization).
		54	Knowledge of principles and procedures for assessing adequacy
		J-	of anatomical and physiological structures using aerodynamic
			analysis (e.g., air volume, air pressure, airflow).
		55	Knowledge of principles and procedures for assessing adequacy
			of anatomical and physiological structures by applying acoustic
			measures, tactile cues, or electromyography (EMG).
		56	Knowledge of principles and procedures for calibration and
			operation of instrumentation.
		57	Knowledge of procedures for assessing fluency including types of
			dysfluency, concomitant behaviors, and cognitive-affective
			features.

II. ASSESSMENT (continued)

Task Statements	Knowledge Statements
	 Knowledge of methods and procedures for performing and interpreting client screening and assessment for clients using AAC (augmentative and alternative communication) and prosthetic communication devices. Knowledge of the potential impacts on the client-family/caregiver relationships arising from the client's communication impairment.

III. DIAGNOSIS, GOAL SETTING, AND TREATMENT PLANNING (20%): This area assesses the candidate's ability to use assessment information to formulate an accurate diagnosis for developing a treatment plan and interventions.

Task Statements			Knowledge Statements	
47	Review assessment results, including considering of	60	Knowledge of the effects of genetic disorders on communication,	
	etiology, to identify and prioritize client's		swallowing and feeding.	
	communication and/or swallowing deficits that	61	Knowledge of the effects of neonatal risk factors on	
	require treatment.		communication and swallowing.	
48	Review assessment results to identify and prioritize	62	Knowledge of interventions and procedures using aided/unaided	
	aspects of client's environment that may require		AAC applications in diagnosis and treatment.	
	modification.	63	Knowledge of conventions and professional standards for	
49	Synthesize and document the results of the		writing/documenting assessment results and treatment	
	evaluation process to develop a comprehensive		recommendations.	
	description of the client's communication strengths	64	Knowledge of methods and techniques for identifying and	
	and weaknesses.		modifying the demands of the linguistic, cognitive, and social	
50	Develop treatment plan that includes goals and		environments to improve client's communication.	
	objectives, interventions, modes of service delivery,	65	Knowledge of the effects of developmental disabilities on	
	and necessary referrals, supports, and resources		communication, swallowing, and feeding.	
	based on client needs.	66	Knowledge of the effects of auditory deficits on client's	
51	Consider evidence-based outcomes in the		communication, academic, social, and vocational skills.	
	formulation of the treatment plan.	67	Knowledge of the effects of oral, pharyngeal, and laryngeal	
52	Determine the appropriateness of specific	00	anomalies on communication, swallowing, and feeding.	
	augmentative and alternative communication	68	Knowledge of the effects of respiratory compromise on	
	systems.	00	communication, swallowing, and feeding.	
53	Utilize effective interpersonal skills in clearly	69	Knowledge of the effects of neurological disease/dysfunction on	
	communicating assessment results and treatment	70	communication, swallowing, and feeding.	
	recommendations to client, family/relevant others,	70	Knowledge of the effects of psychiatric disorders on	
	other professionals, and referral sources in order to	71	communication, swallowing, and feeding.	
	set a positive tone for gaining consensus, support for	71	Knowledge of the effects of gastrointestinal disorders (e.g., reflux,	
	treatment plan, and collaborative problem-solving.	72	food allergy-related) on communication, swallowing, and feeding.	
		12	Knowledge of methods for developing and defining treatment	
			goals, service delivery options, treatment supports, and resources.	

III. DIAGNOSIS, GOAL SETTING, AND TREATMENT PLANNING (continued)

Task Statements	Knowledge Statements
	73 Knowledge of communication techniques for building consensus and support with client and family regarding options for treatment and treatment plan.
	74 Knowledge of the components of a diagnostic assessment report necessary to provide a comprehensive description of client's communication, swallowing, and feeding.
	75 Knowledge of procedures for determining and applying criteria for initiating treatment and prioritizing treatment targets.
	76 Knowledge of methods for determining the optimal treatment setting based on assessment results.
	77 Knowledge of methods and procedures for applying evidence- based outcomes to differential diagnosis.
	78 Knowledge of the effects of sensory processing and behavioral disorders on communication, swallowing, and feeding.
	79 Knowledge of methods for addressing family/caregiver factors that impact client care and treatment (e.g. caregiver fatigue, attachment, family dynamics).

IV. TREATMENT INTERVENTIONS AND PROCEDURES (25%): This area assesses the candidate's ability to develop culturally relevant treatment interventions based on assessment and diagnostic information that are measureable, objective, and consistent with the client's readiness and ability to engage in treatment.

Task Statements			Knowledge Statements		
54	Provide treatment interventions for improving client's	80	Knowledge of interventions and procedures for treating speech		
	speech sound production.		sound disorders, including perceptual characteristics and		
55	Provide treatment interventions for improving client's		physiological structure and function.		
	resonance.	81	Knowledge of interventions and procedures for treating neurogenic		
56	Provide treatment interventions for improving client's		speech disorders.		
	voice.	82	Knowledge of interventions and procedures for treating resonance		
57	Provide treatment interventions for improving client's		impairments, including those related to oral structure and function,		
	fluency.		nasal structure, and velopharyngeal structure and function.		
58	Provide treatment interventions for improving client's	83	Knowledge of interventions and procedures for treating voice		
	language (comprehension and expression).		impairments including those related to respiratory, supralaryngeal,		
59	Provide treatment interventions for addressing		and laryngeal structure and function.		
	client's cognitive-linguistic deficits.	84	Knowledge of interventions and procedures for treating		
60	Provide treatment interventions for improving client's		impairments involving alaryngeal speech.		
	feeding and swallowing.	85	Knowledge of interventions and procedures for treating language		
61	Provide treatment interventions in the area of accent		and communication impairments in the areas of phonology,		
	modification to improve client's speech proficiency.		morphology, syntax, semantics, pragmatics, language aspects of		
62	Provide treatment interventions in the area of care		literacy, and prelinguistic communication.		
	and improvement of the voice for clients involved	86	Knowledge of interventions and procedures for treating cognition in		
	with performance and singing.		the areas of attention, memory, sequencing, problem solving, and		
63	Provide treatment interventions in the area of		executive functioning.		
	transgender voice to improve client's speech and	87	Knowledge of interventions and procedures for treating feeding and		
	communication effectiveness.		swallowing impairments including those related to oral, pharyngeal,		
64	Provide treatment interventions in the area of		laryngeal, and esophageal structure and function.		
	personal/professional communication to improve	88	Knowledge of interventions and procedures for treating feeding and		
	client's language proficiency and communication		swallowing impairments including those related to nutritional		
0.5	effectiveness.	00	status, sensory issues, and behavioral aspects.		
65	Provide treatment interventions for improving client's	89	Knowledge of interventions and procedures for treating clients		
	social (pragmatic) communication.		diagnosed with autism or related social pragmatic disorders.		

IV. TREATMENT INTERVENTIONS AND PROCEDURES (continued)

	Task Statements		Knowledge Statements
66	Provide treatment interventions for improving client's	00	Knowledge Statements Knowledge of interventions and procedures for treating orofacial
00	language-based learning skills.	90	myofunctional impairments including those related to tongue thrust.
67	Provide treatment interventions for improving client's	91	Knowledge of the phonemic repertoire of the English language and
07	communication skills related to hearing	91	its grammatical structure sufficient to discriminate and produce
	loss/deafness.		acoustically correct models for client.
68	Provide treatment interventions that build on client's	02	Knowledge of interventions and procedures using aided/unaided
00	intellectual strengths and physical capabilities.	32	AAC applications in treatment.
69	Provide treatment interventions that consider client's	03	Knowledge of procedures for selecting AAC applications that meet
03	age, primary language background,	33	client's treatment needs.
	cognitive/physical abilities, emotional and behavioral	QЛ	Knowledge of methods and techniques for training family,
	status, and culture.	3-	caregivers, and support personnel in the programming and use of
70	Provide treatment interventions that strengthen		the client's AAC.
'	communication between client and family/caregivers.	95	Knowledge of interventions and procedures for modifying the
71	Provide support to family/caregivers to address		demands of client's linguistic, cognitive, and social environments to
' '	feelings of loss, blame, guilt, and/or grief surrounding		improve client's communication.
	client and client's presenting issues.	96	Knowledge of instructional and learning strategies for improving
72	Provide training to family/caregivers to support		client's learning environment.
	client's treatment (e.g., intervention and	97	Knowledge of motivational strategies for maintaining client
	reinforcement techniques, nonverbal interaction).		involvement in the treatment program.
73	Produce acoustically correct model for targeted	98	Knowledge of strategies for managing client's challenging behavior.
	phonemes, grammatical features, or other aspects of	99	Knowledge of interventions and procedures for modification of
	speech and language that characterize client's		speech, language, and voice in the absence of impairment (e.g.,
	particular problem.		dialect, accent).
74	Provide treatment interventions for alaryngeal	100	Knowledge of group facilitation and management techniques
	speech.	101	Knowledge of interventions and procedures for treating fluency
75	Select and implement alternative and augmentative		impairments, including types of dysfluency, concomitant behaviors,
	communication (AACs) that meet the immediate and		and cognitive-affective features.
	ongoing treatment needs of client.	102	5 5
			psychological and emotional reactions of the client's
			family/caregivers to client's presenting issues.

IV. TREATMENT INTERVENTIONS AND PROCEDURES (continued)

Task Statements	Knowledge Statements
	103 Knowledge of strategies and supports for addressing the
	family/caregiver issues related to parent-child attachment and engagement.
	104 Knowledge of interventions and procedures for treating communication impairments in the area of auditory processing
	105 Knowledge of interventions and procedures for treating impairments related to hearing loss in the areas of specific factors and equipment for aural rehabilitation.

V. TREATMENT OUTCOMES AND EFFECTIVENESS (9%): This area assesses the candidate's ability to evaluate client progress in relation to treatment goals and develop plans for continuing, remediation, or termination as appropriate.

	Task Statements		Knowledge Statements
76	Establish methods for ongoing monitoring of treatment progress and outcomes to evaluate efficacy of treatment plan through	106	Knowledge of methods of data collection and analysis for assessing status, evaluating progress, and/or modifying the treatment plan.
77	discharge/dismissal. Collect treatment outcome data in a routine manner	107	dismissal/discharge from treatment.
70	to measure client's functional gains and the efficacy of targeted environmental modifications.	108	Knowledge of communication techniques for building consensus and support with client and family/caregivers regarding post-
78	Use data to modify assessment and/or treatment as appropriate, including dismissal/discharge from treatment.	109	treatment decisions. Knowledge of methods for evaluating the effectiveness of specific treatment strategies.
79	Follow up on post-treatment and skills maintenance recommendations.	110	Knowledge of components of progress notes and discharge summary necessary to provide a report of client's post-treatment
80	Write progress notes and/or discharge summary to document client's progress and level of functioning as related to focus of treatment.	111	status and recommendations for follow-up. Knowledge of conventions and professional standards of written communication regarding client progress notes and discharge
81	Provide recommendations to client/family at completion of treatment to collaboratively plan options for follow-up as necessary.		summary reports.
82	Collect data to assess treatment outcomes for purposes of quality assurance and program evaluation.		

CHAPTER 6. CONCLUSION

The occupational analysis of the Speech-Language Pathologist profession described in this report provides a comprehensive description of current practice in California. The procedures employed to perform the occupational analysis were based upon a content validation strategy to ensure that the results accurately represent the practice of Speech-Language Pathologists. Results of this occupational analysis provide information regarding current practice that can be used to make job-related decisions regarding professional licensure.

By adopting the Speech-Language Pathologist content 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.

APPENDIX A. RESPONDENTS BY REGION

LOS ANGELES VICINITY

County of Practice	Frequency
Los Angeles	142
Orange	110
TOTAL	252

SAN FRANCISCO AREA

County of Practice	Frequency
Alameda	58
Contra Costa	18
Marin	18
Napa	8
San Francisco	68
San Mateo	19
Santa Clara	45
Santa Cruz	15
Solano	2
TOTAL	251

SAN JOAQUIN VALLEY

County of Practice	Frequency
Fresno	11
Kern	9
Mariposa	1
San Joaquin	9
Stanislaus	3
Tulare	3
TOTAL	36

SACRAMENTO VALLEY

County of Practice	Frequency
Butte	3
Sacramento	62
Yolo	9
Yuba	2
TOTAL	76

SAN DIEGO AND VICINITY

County of Practice	Frequency
San Diego	90
Inyo	1
TOTAL	91

SHASTA/CASCADE

County of Practice	Frequency
Shasta	2
Siskiyou	1
TOTAL	3

RIVERSIDE AND VICINITY

County of Practice	Frequency
Riverside	35
San Bernardino	22
TOTAL	57

SIERRA MOUNTAIN

County of Practice	Frequency
El Dorado	5
Nevada	8
Placer	16
Tuolumne	2
TOTAL	31

NORTH COAST

County of Practice	Frequency
Humboldt	1
Sonoma	17
TOTAL	18

SOUTH/CENTRAL COAST

County of Practice	Frequency
Monterey	17
San Luis Obispo	14
Santa Barbara	17
Ventura	20
TOTAL	68

APPENDIX B. CRITICALITY INDICES FOR ALL TASKS

CA	Task #	Task Statement	Mean TFreq	Mean Tlmpt	Mean TCV
1	1	Practice in a manner consistent with professional and ethical standards to provide best plan of care to client.	4.77	3.81	18.3
1	2	Maintain client confidentiality and security of documentation in compliance with relevant federal and State regulations.	3.72	3.76	14.16
1	3	Apply procedures for control of disease and client/worker safety.	2.50	3.21	8.64
1	4	Provide culturally and linguistically appropriate services by integrating the values and beliefs of the client and client's community into assessment and treatment decisions.	2.92	3.15	9.73
1	5	Identify and collaborate with treatment and service providers that can provide culturally and linguistically appropriate services.	2.25	2.96	7.36
1	6	Determine and make referrals to other professionals or agencies based on the Speech-Language Pathologist's competency and the client's needs.	1.96	2.93	6.31
1	7	Supervise delivery of client services by Clinical Fellows (CF), Speech-Language Pathology Assistants (SLPA) or Aides, required professional experience temporary license holders (RPE), and individuals acquiring a Speech-Language Pathology Services credential to ensure quality client care.	1.15	2.85	3.64
1	8	Ensure that clinical support personnel involved with providing client treatment follow treatment protocols.	1.73	3.18	5.91
1	9	Communicate relevant clinical information orally and in writing to client, client's family/relevant others, and other professionals to provide best plan of care to client.	3.07	3.30	10.68
1	10	Educate and train client, client's family, and relevant others in techniques and strategies to support client's treatment plan.	2.75	3.25	9.64
1	11	Collaborate with other professionals to provide best plan of care to client.	2.76	3.13	9.16
1	12	Review, understand, and integrate diagnostic and treatment reports, treatment plans, and professional correspondence.	2.92	3.19	9.88
1	13	Develop diagnostic and treatment reports, treatment plans, and professional correspondence that clearly communicate the client's needs.	3.32	3.44	11.76
1	14	Document client care and treatment activities consistent with institutional and organizational requirements and professional standards.	3.33	3.33	11.48
1	15	Access, critically review, and apply research findings/technical reports to ensure quality client care (i.e., evidence-based practice).	2.34	2.94	7.48
1	16	Provide information to the public that increases awareness of communication and swallowing disorders.	0.79	2.26	2.07

СА	Task #	Task Statement	Mean TFreq	Mean TImpt	Mean TCV
1	17	Advocate for programs, policies, personnel, facilities, equipment, and materials that ensure quality client care.	1.39	2.53	4.16
1	18	Incorporate effective methods for working with interpreters and translators for non-English speaking clients.	1.55	2.89	4.98
2	19	Identify individuals and groups at risk for swallowing and communication disorders.	1.71	3.04	5.74
2	20	Screen for the presence of speech and language disorders involving voice, resonance, and fluency.	1.65	2.68	5.05
2	21	Screen for presence of feeding and swallowing disorders.	1.04	3.16	3.65
2	22	Screen for presence of hearing impairments.	0.86	2.93	2.77
2	23	Screen for presence of cognitive-linguistic impairments.	1.92	2.98	6.3
2	24	Screen for presence of social communication deficits.	2.19	2.94	7.05
2	25	Screen for presence of language-based learning disabilities.	2.07	3.10	6.92
2	26	Recognize indicators that prompt further assessment and/or referral.	2.80	3.18	9.34
2	27	Utilize client history to identify potential causal factors and correlates relating to client's past and present communication and swallowing status.	2.68	3.10	8.9
2	28	Determine communication function of client behaviors and emotions that impact assessment or treatment (e.g., attention, aggression, self-injury, hyperactivity, withdrawal).	2.78	3.07	9.23
2	29	Select assessment instruments, procedures, settings, and materials matched to client characteristics (e.g., age, primary language background, cognitive/physical limitations, culture).	3.29	3.43	11.73
2	30	Assess client's voice and resonance using standardized and non-standardized assessments.	1.28	2.61	3.77
2	31	Assess client's speech fluency using standardized and non- standardized assessments.	1.52	2.70	4.6
2	32	Assess client's speech production and intelligibility using standardized and informal assessments.	3.13	3.17	10.33
2	33	Assess client's language (comprehension and expression) standardized and non-standardized assessments.	3.45	3.39	11.97
2	34	Assess client's cognitive-linguistic functioning standardized and non-standardized assessments.	2.26	3.11	7.56
2	35	Assess client's feeding and swallowing standardized and non-standardized assessments.	1.18	3.35	4.3
2	36	Assess client's social (pragmatic) communication standardized and non-standardized assessments.	2.59	3.03	8.45
2	37	Assess client's language-based learning standardized and non-standardized assessments.	2.31	3.09	7.64

CA	Task #	Task Statement	Mean TFreq	Mean Tlmpt	Mean TCV
2	38	Assess client's communication skills related to possible hearing loss standardized and non-standardized assessments.	1.07	2.86	3.53
2	39	Assess client's options for communication without a larynx.	0.14	3.19	0.43
2	40	Assess impact of client's communication impairment on academic, social, and vocational functioning.	2.60	3.24	8.97
2	41	Assess functional communication using standardized and non-standardized assessments (e.g., observation, sampling, rating scales, dynamic assessment).	2.75	3.22	9.49
2	42	Determine if behavior management, prosthetics, and/or alternative and augmentative communication is needed to support client's training.	1.60	2.88	5.17
2	43	Conduct instrumentation-based assessment of respiratory, supralaryngeal, laryngeal and pharyngeal subsystems.	0.29	2.84	0.93
2	44	Determine functional level of primary language in individuals who speak a language other than English.	1.65	3.11	5.58
2	45	Assess English language skills in individuals who speak a language other than English.	1.71	2.91	5.49
2	46	Utilize effective interpersonal skills in communicating assessment results to client, client's family/relevant others, other professionals, and referral sources to set a positive tone for collaboration, mutual support, and agreement.	3.46	3.55	12.62
3	47	Review assessment results, including considering of etiology, to identify and prioritize client's communication and/or swallowing deficits that require treatment.	2.83	3.35	9.92
3	48	Review assessment results to identify and prioritize aspects of client's environment that may require modification.	2.29	2.97	7.51
3	49	Synthesize and document the results of the evaluation process to develop a comprehensive description of the client's communication strengths and weaknesses.	3.12	3.26	10.69
3	50	Develop treatment plan that includes goals and objectives, interventions, modes of service delivery, and necessary referrals, supports, and resources based on client needs.	3.53	3.61	13
3	51	Consider evidence-based outcomes in the formulation of the treatment plan.	2.62	2.99	8.47
3	52	Determine the appropriateness of specific augmentative and alternative communication systems.	1.19	2.82	3.81
3	53	Utilize effective interpersonal skills in communicating treatment recommendations to client, family/relevant others, other professionals, and referral sources to set a positive tone for gaining consensus and support for the treatment plan.	3.26	3.36	11.34
4	54	Provide treatment interventions for improving client's speech sound production.	3.06	3.23	10.39

CA	Task #	Task Statement	Mean TFreq	Mean Tlmpt	Mean TCV
4	55	Provide treatment interventions for improving client's resonance.	0.60	2.58	1.83
4	56	Provide treatment interventions for improving client's voice.	0.74	2.65	2.22
4	57	Provide treatment interventions for improving client's fluency.	1.23	2.81	3.89
4	58	Provide treatment interventions for improving client's language (comprehension and expression).	3.38	3.46	12.03
4	59	Provide treatment interventions for addressing client's cognitive-linguistic deficits.	2.30	3.14	7.75
4	60	Provide treatment interventions for improving client's feeding and swallowing.	1.11	3.50	4.18
4	61	Provide treatment interventions in the area of accent modification to improve client's speech proficiency.	0.32	2.71	1.03
4	62	Provide treatment interventions in the area of care and improvement of the voice for clients involved with performance and singing.	0.16	2.72	0.56
4	63	Provide treatment interventions in the area of transgender voice to improve client's speech and communication effectiveness.	0.10	2.62	0.36
4	64	Provide treatment interventions in the area of personal/professional communication to improve client's language proficiency and communication effectiveness.	0.98	2.93	3.24
4	65	Provide treatment interventions for improving client's social (pragmatic) communication.	2.52	3.10	8.51
4	66	Provide treatment interventions for improving client's language-based learning skills.	2.47	3.19	8.38
4	67	Provide treatment interventions for improving client's communication skills related to hearing loss/deafness.	0.84	2.93	2.77
4	68	Provide treatment interventions that build on client's intellectual strengths and physical capabilities.	1.99	2.92	6.46
4	69	Provide treatment interventions that consider client's age, primary language background, cognitive/physical abilities, emotional and behavioral status, and culture.	3.04	3.27	10.49
4	70	Provide treatment interventions that strengthen communication between client and family/caregivers.	2.52	3.13	8.5
4	71	Provide support to family/caregivers to address feelings of loss, blame, guilt, and/or grief surrounding client and client's presenting issues.	1.34	2.82	4.36
4	72	Provide training to family/caregivers to support client's treatment (e.g., intervention and reinforcement techniques, nonverbal interaction).	2.28	3.10	7.69
4	73	Produce acoustically correct model for targeted phonemes, grammatical features, or other aspects of speech and language that characterize client's particular problem.	2.69	3.16	9.08

CA	Task #	Task Statement	Mean TFreq	Mean TImpt	Mean TCV
4	74	Provide treatment interventions for alaryngeal speech.	0.13	3.03	0.45
4	75	Select and implement alternative and augmentative communication (AACs) that meet the immediate and ongoing treatment needs of client.	1.00	2.94	3.28
5	76	Establish methods for ongoing monitoring of treatment progress and outcomes to evaluate efficacy of treatment plan through discharge/dismissal.	2.72	3.15	9.11
5	77	Collect treatment outcome data to measure client's functional gains and the efficacy of targeted environmental modifications.	2.52	3.03	8.24
5	78	Use outcome data in determining need for client reassessment, treatment modification, and dismissal/discharge from treatment.	2.73	3.10	9.03
5	79	Follow up on post-treatment and skills maintenance recommendations.	1.37	2.55	4.11
5	80	Write progress notes and/or discharge summary to document client's progress and level of functioning as related to focus of treatment.	3.12	3.05	10.02
5	81	Provide recommendations to client/family at completion of treatment to collaboratively plan options for follow-up as necessary.	2.27	2.86	7.3
5	82	Collect and analyze treatment outcomes data for purposes of quality assurance and program evaluation.	1.44	3.32	5.72

APPENDIX C. KNOWLEDGE IMPORTANCE RATINGS

CA	K Num	Knowledge Statement	Mean Klmpt
1	1	Knowledge of professional guidelines and standards (i.e., ASHA, CSHA) related to speech-language pathology practice.	4.24
1	2	Knowledge of State and federal agencies whose regulations impact the Speech-Language Pathologist's practice (e.g., Centers for Medicare and Medicaid Services, Department of Education).	3.73
1	3	Knowledge of standards of ethical conduct.	4.46
1	4	Knowledge of laws and practices related to client and worker health and safety, including universal precautions.	3.78
1	5	Knowledge of State and federal laws related to clients' rights and legal protections (e.g., ADA, IDEA, HIPAA).	4.27
1	6	Knowledge of methods for performing client advocacy.	3.15
1	7	Knowledge of procedures for developing collaborative relationships with client, client's family/caregivers, and other professionals to support client's care and treatment.	3.97
1	8	Knowledge of cultural differences and issues that affect the interviewing and counseling process with diverse client populations and their families/caregivers.	3.82
1	9	Knowledge of methods and procedures for communicating information regarding client's condition, care, and treatment to client, client's family/caregivers, and other professionals.	4.02
1	10	Knowledge of methods and procedures for counseling and educating client, client's family/caregivers, and other professionals in client's care and treatment.	3.77
1	11	Knowledge of California regulations regarding supervision of Clinical Fellows (CF), Speech-Language Pathology Assistants (SLPA) or Aides, required professional experience temporary license holders (RPE), and individuals acquiring a Speech-Language Pathology Services credential.	2.77
1	12	Knowledge of methods and procedures for mentoring and training CFs, Speech-Language Pathology Assistants (SLPA) or Aides, and RPEs.	2.62
1	13	Knowledge of methods and procedures for supervising graduate students engaged in acquiring SLP training and/or pursuing a Speech-Language Pathology Services credential.	2.36
1	14	Knowledge of conventions and professional standards of written communication for different clinical purposes and settings (e.g., medical, governmental, educational).	3.02
1	15	Knowledge of procedures for applying research methodology and the scientific method to clinical practice.	2.58
1	16	Knowledge of methods and procedures for integrating research outcomes into evidence-based clinical practice.	3.10
1	17	Knowledge of available resources (e.g., self-help groups, support groups, information sources) for client and client's family/care-givers to support client treatment.	3.11

CA	K Num	Knowledge Statement	Mean Klmpt
2	18	Knowledge of the effects of cognitive, behavioral, and cultural factors on communication and feeding/swallowing behavior.	3.29
2	19	Knowledge of screening procedures for social communication disorders.	3.49
2	20	Knowledge of screening procedures for feeding and swallowing disorders.	2.07
2	21	Knowledge of screening procedures for hearing impairments.	2.30
2	22	Knowledge of screening procedures for speech and language disorders involving voice, resonance, and fluency.	3.25
2	23	Knowledge of screening procedures for cognitive-linguistic impairments.	3.38
2	24	Knowledge of screening procedures for language-based learning disabilities.	3.37
2	25	Knowledge of typical cognitive, psychological, motor, and sensory development and functioning.	3.74
2	26	Knowledge of the anatomy, physiology, and neurology of normal speech, language, hearing, and functional swallowing.	3.95
2	27	Knowledge of the physical characteristics of speech, including acoustics, aerodynamics, and articulatory movements.	3.77
2	28	Knowledge of the phonologic, morphologic, syntactic, semantic, and pragmatic aspects of typical human communication and its development.	4.23
2	29	Knowledge of social communication development with autism spectrum disorders.	3.70
2	30	Knowledge of the effects of communication and swallowing impairments on client behavior, emotional adjustment, and health status, as well as on client academic, vocational, and social success.	3.50
2	31	Knowledge of methods and procedures for obtaining client case history and performing client assessment.	4.19
2	32	Knowledge of the effects of medical conditions, procedures, and treatments on communication and swallowing.	3.63
2	33	Knowledge of the psychosocial impact of communication and swallowing disorders across the life span.	3.04
2	34	Knowledge of the epidemiology of communication and swallowing impairments.	2.97
2	35	Knowledge of the effects of neurotoxins and drugs on communication and swallowing.	2.68
2	36	Knowledge of methods and procedures for conducting an objective assessment.	4.33
2	37	Knowledge of procedures for assessing speech sound production (articulation) including perceptual characteristics, oral/physiological structure, motor planning, and execution.	4.24

CA	K Num	Knowledge Statement	Mean Klmpt
2	38	Knowledge of procedures for assessing resonance including oral structure and function, nasal structure, and velopharyngeal structure and function.	2.93
2	39	Knowledge of procedures for assessing voice including respiratory, supralaryngeal, laryngeal, and pharyngeal structure and function.	2.60
2	40	Knowledge of procedures for assessing alaryngeal speech.	1.06
2	41	Knowledge of procedures for assessing language/communication (comprehension and expression) including phonology, morphology, syntax, semantics, pragmatics, language aspects of literacy, and prelinguistic communication.	4.26
2	42	Knowledge of procedures for assessing cognition including attention, memory, sequencing, problem solving, and executive functioning.	3.72
2	43	Knowledge of procedures for identifying structural, physiological, sensory, or behavior-based oral/pharyngeal/esophageal deficits and their effects on client's feeding and swallowing.	2.25
2	44	Knowledge of procedures for assessing auditory processing.	2.96
2	45	Knowledge of procedures for assessing client's ability to use and benefit from alternative and augmentative communication.	3.15
2	46	Knowledge of procedures for assessing orofacial myofunctional disorders (including tongue thrust).	2.26
2	47	Knowledge of procedures for performing curriculum-based assessment for school populations.	2.66
2	48	Knowledge of strategies for managing client's challenging behaviors during assessment.	3.88
2	49	Knowledge of motivational strategies for engaging client and client's family/relevant others in the assessment process.	3.88
2	50	Knowledge of typical progression and development of the acquisition of a second language during childhood.	3.25
2	51	Knowledge of sociolinguistic, familial, and cultural influences on communication.	3.59
2	52	Knowledge of procedures for interpretation of audiograms.	2.12
2	53	Knowledge of principles and procedures for assessing adequacy of anatomical and physiological structures using imaging (e.g., radiographic procedures, endoscopic visualization).	1.47
2	54	Knowledge of principles and procedures for assessing adequacy of anatomical and physiological structures using aerodynamic analysis (e.g., air volume, air pressure, airflow).	1.10
2	55	Knowledge of principles and procedures for assessing adequacy of anatomical and physiological structures by applying acoustic measures, tactile cues, or electromyography (EMG).	0.90
2	56	Knowledge of principles and procedures for calibration and operation of instrumentation.	0.94

CA	K Num	Knowledge Statement	Mean Klmpt
2	57	Knowledge of procedures for assessing fluency including types of dysfluency, concomitant behaviors, and cognitive-affective features.	3.04
2	58	Knowledge of methods and procedures for performing and interpreting client screening and assessment for clients using AAC (augmentative and alternative communication) and prosthetic communication devices.	2.68
2	59	Knowledge of the potential impacts on the client-family/caregiver relationships arising from the client's communication impairment.	3.58
3	60	Knowledge of the effects of genetic disorders on communication, swallowing and feeding.	2.70
3	61	Knowledge of the effects of neonatal risk factors on communication and swallowing.	2.00
3	62	Knowledge of interventions and procedures using aided/unaided AAC applications in diagnosis and treatment.	2.66
3	63	Knowledge of conventions and professional standards for writing/documenting assessment results and treatment recommendations.	4.22
3	64	Knowledge of methods and techniques for identifying and modifying the demands of the linguistic, cognitive, and social environments to improve client's communication.	3.83
3	65	Knowledge of the effects of developmental disabilities on communication, swallowing, and feeding.	3.34
3	66	Knowledge of the effects of auditory deficits on client's communication, academic, social, and vocational skills.	3.39
3	67	Knowledge of the effects of oral, pharyngeal, and laryngeal anomalies on communication, swallowing, and feeding.	2.95
3	68	Knowledge of the effects of respiratory compromise on communication, swallowing, and feeding.	2.75
3	69	Knowledge of the effects of neurological disease/dysfunction on communication, swallowing, and feeding.	2.99
3	70	Knowledge of the effects of psychiatric disorders on communication, swallowing, and feeding.	2.47
3	71	Knowledge of the effects of gastrointestinal disorders (e.g., reflux, food allergy-related) on communication, swallowing, and feeding.	2.32
3	72	Knowledge of methods for developing and defining treatment goals, service delivery options, treatment supports, and resources.	4.29
3	73	Knowledge of communication techniques for building consensus and support with client and family regarding options for treatment and treatment plan.	3.97
3	74	Knowledge of the components of a diagnostic assessment report necessary to provide a comprehensive description of client's communication, swallowing, and feeding.	3.92
3	75	Knowledge of procedures for determining and applying criteria for initiating treatment and prioritizing treatment targets.	4.23

CA	K Num	Knowledge Statement	Mean Klmpt
3	76	Knowledge of methods for determining the optimal treatment setting based on assessment results.	3.61
3	77	Knowledge of methods and procedures for applying evidence-based outcomes to differential diagnosis.	3.64
3	78	Knowledge of the effects of sensory processing and behavioral disorders on communication, swallowing, and feeding.	3.17
3	79	Knowledge of methods for addressing family/caregiver factors that impact client care and treatment (e.g. caregiver fatigue, attachment, family dynamics).	3.18
4	80	Knowledge of interventions and procedures for treating speech sound disorders, including those related to perceptual characteristics and physiological structure and function.	3.53
4	81	Knowledge of interventions and procedures for treating neurogenic speech disorders.	2.81
4	82	Knowledge of interventions and procedures for treating resonance impairments, including those related to oral structure and function, nasal structure, and velopharyngeal structure and function.	2.28
4	83	Knowledge of interventions and procedures for treating voice impairments including those related to respiratory, supralaryngeal, and laryngeal structure and function.	2.20
4	84	Knowledge of interventions and procedures for treating impairments involving alaryngeal speech.	1.00
4	85	Knowledge of interventions and procedures for treating language and communication impairments in the areas of phonology, morphology, syntax, semantics, pragmatics, language aspects of literacy, and prelinguistic communication.	4.02
4	86	Knowledge of interventions and procedures for treating cognition in the areas of attention, memory, sequencing, problem solving, and executive functioning.	3.60
4	87	Knowledge of interventions and procedures for treating feeding and swallowing impairments including those related to oral, pharyngeal, laryngeal, and esophageal structure and function.	2.08
4	88	Knowledge of interventions and procedures for treating feeding and swallowing impairments including those related to nutritional status, sensory issues, and behavioral aspects.	1.91
4	89	Knowledge of interventions and procedures for treating clients diagnosed with autism or related social pragmatic disorders.	3.66
4	90	Knowledge of interventions and procedures for treating orofacial myofunctional impairments including those related to tongue thrust.	1.99
4	91	Knowledge of the phonemic repertoire of the English language and its grammatical structure sufficient to discriminate and produce acoustically correct models for client.	3.67
4	92	Knowledge of interventions and procedures using aided/unaided AAC applications in treatment.	2.77

CA	K Num	Knowledge Statement	Mean Klmpt
4	93	Knowledge of procedures for selecting AAC applications that meet client's treatment needs.	2.68
4	94	Knowledge of methods and techniques for training family, caregivers, and support personnel in the programming and use of the client's AAC.	2.70
4	95	Knowledge of interventions and procedures for modifying the demands of client's linguistic, cognitive, and social environments to improve client's communication.	3.60
4	96	Knowledge of instructional and learning strategies for improving client's learning environment.	3.50
4	97	Knowledge of motivational strategies for maintaining client involvement in the treatment program.	4.04
4	98	Knowledge of strategies for managing client's challenging behavior.	4.01
4	99	Knowledge of interventions and procedures for modification of speech, language, and voice in the absence of impairment (e.g., dialect, accent).	1.48
4	100	Knowledge of group facilitation and management techniques.	2.99
4	101	Knowledge of interventions and procedures for treating fluency impairments, including types of dysfluency, concomitant behaviors, and cognitive-affective features.	4.24
4	102	Knowledge of strategies and resources for addressing the psychological and emotional reactions of the client's family/caregivers to client's presenting issues.	3.73
4	103	Knowledge of strategies and supports for addressing the family/caregiver issues related to parent-child attachment and engagement.	4.46
4	104	Knowledge of interventions and procedures for treating communication impairments in the area of auditory processing.	3.78
4	105	Knowledge of interventions and procedures for treating impairments related to hearing loss in the areas of specific factors and equipment for aural rehabilitation.	4.27
5	106	Knowledge of methods of data collection and analysis for assessing status, evaluating progress, and/or modifying the treatment plan.	3.15
5	107	Knowledge of methods for developing and applying criteria for dismissal/discharge from treatment.	3.97
5	108	Knowledge of communication techniques for building consensus and support with client and family/caregivers regarding post-treatment decisions.	3.82
5	109	Knowledge of methods for evaluating the effectiveness of specific treatment strategies.	4.02
5	110	Knowledge of components of progress notes and discharge summary necessary to provide a report of client's post-treatment status and recommendations for follow-up.	3.77

CA	K Num	Knowledge Statement	Mean Klmpt
5	111	Knowledge of conventions and professional standards of written communication regarding client progress notes and discharge summary reports.	2.77

APPENDIX D. LETTER TO PRACTITIONERS



SPEECH-LANGUAGE PATHOLOGY & AUDIOLOGY & HEARING AID DISPENSERS BOARD

2005 Evergreen Street, Suite 2100, Sacramento, CA 95815 Telephone: (916) 263-2666 Fax: (916) 263-0505

TDD No. (916) 322-1700 Website: www.speechandhearing.ca.gov



April 21, 2014

FirstName LastName 5D_Code

Address1

City, State Zip

Dear Speech-Language Pathologist,

The Board is inviting you to participate in the 2014 Occupational Analysis (OA) regarding the Speech-Language Pathologist practice and we would like to award you 2 CE hours for helping us out on this very important project!

As you know, the Board is responsible for developing examinations to test applicant's skills for licensure in California. The development of an examination begins with an occupational analysis which is a method for identifying the tasks performed in a profession and the knowledge, skills, and abilities required to perform that job. The OA is only conducted every five to seven years and the results are very important to the development of the written and practical exams.

Several workshops with speech-language pathologists have been held in Sacramento, conducted by the Office of Professional Examination Services (OPES). As a result of their efforts, a survey questionnaire has been developed and we invite you to participate in evaluating the 2014 OA as it relates to the current practice of speech-language pathology in California. Your responses will be combined with responses of other speech-language pathologists to determine the tasks and knowledge needed for independent practice. Your individual responses will be kept confidential.

The survey will be available from <u>April 24 – May 9, 2014</u>, 24 hours a day, 7 days a week. It will take approximately two hours to complete the online survey questionnaire. For your convenience, you may begin the survey questionnaire and exit to return at a later time, as long as it is from the same computer. Certificates for 2 CE hours will be mailed to those participants completing the entire survey.

If you are interested in helping us out with this important project, please:

Record the 5 digits after your name (abo	ve):
Your Password:	clarity (all lower case)
Use the following link to access the surventure: https://www.surveymonkey.com/s/NL9Z6C In place of the #####, please type in the 5 c	S?c=####

Again, we appreciate your dedication to your profession and to our mission of protecting the consumers of California by licensing qualified and competent providers.

Sincerely,

The Speech-Language Pathology & Audiology & Hearing Aid Dispensers Board

APPENDIX E. QUESTIONNAIRE

1. Welcome Speech-Language Pathologists

Dear Licensee:

The Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board (Board) is conducting an occupational analysis of the Speech-Language Pathology profession. The purpose of the occupational analysis is to identify the important tasks performed by Speech-Language Pathologists in current practice and the knowledge required to perform those tasks. Results of the occupational analysis will be used to update the Speech-Language Pathologist description of practice.

The Board requests your assistance in this process. Please take the time to complete the survey questionnaire as it relates to your current practice. Your participation ensures that all aspects of the profession are covered and is essential to the success of this project. **Licensees completing the survey in its entirety will earn 2 CE credits for their participation.**

Your individual responses will be kept confidential. Your responses will be combined with responses of other Speech-Language Pathologists and only group trends will be reported.

In order to progress through this survey, please use the following navigation buttons:

- Click the **Next** button to continue to the next page.
 - Click the **Prev** button to return to the previous page.
 - Click the **Exit this survey** button to exit the survey and return to it at a later time.
 - Click the **Done/Submit** button to submit your survey as completed.

Any questions marked with an asterisk (*) require an answer in order to progress through the survey questionnaire.

Please Note: Once you have started the survey, you can exit at any time and return to it later without losing your responses as long as you are accessing the survey from the same computer. The survey automatically saves fully-completed pages, but will not save responses to questions on pages that were partially completed when the survey was exited. For your convenience, the weblink is available 24 hours a day 7 days a week.

Please submit the completed survey questionnaire by May 16, 2014.

If you have any questions about completing this survey, please contact Tim Yang of the Board at (916) 263-2625. The Board welcomes your participation in this project and thanks you for your time.

INSTRUCTIONS FOR COMPLETING THE DEMOGRAPHIC ITEMS

This part of the questionnaire contains an assortment of demographic items, the responses to which will be used to describe Speech-Language Pathologist practice as represented by the respondents to the questionnaire. Please note the instructions for each item before marking your response as several permit multiple responses.

INSTRUCTIONS FOR RATING TASK AND KNOWLEDGE STATEMENTS

This part of the questionnaire contains a list of tasks and knowledge descriptive of Speech-Language Pathologist practice in a variety of settings. Please note that some of the tasks or knowledge may not apply to your setting.

For each task, you will be asked to answer two questions: how often you perform the task (**Frequency**) and how important the task is in the performance of your current practice (**Importance**). For each knowledge, you will be asked to answer one question: how important the knowledge is in the performance of your current practice (**Importance**).

Please rate each task and knowledge as it relates to your current practice as a licensed Speech-Language Pathologist. Do not respond based on what you believe all Speech-Language Pathologists should be expected to know or be able to do.

2. Intro Page

The information you provide here is voluntary and confidential. It will be treated as personal information subject to the Information Practices Act (Civil Section 1798 et seq.) and will be used soley for analyzing the ratings from this questionnaire.

questionnaire.
*1. Are you <u>currently practicing</u> in California as a licensed Speech-Language
Pathologist?
C YES - I am currently licensed and practicing in California as a Speech-Language Pathologist
O NO - I am currently licensed but not practing in California as a Speech-Language Pathologist

3. Part I - Personal Information

INSTRUCTIONS FOR COMPLETING THE DEMOGRAPHIC ITEMS

des	s part of the questionnaire contains an assortment of demographic items, the responses to which will be used to cribe Speech-Language Pathologist practice as represented by the respondents to the questionnaire. Please note the ructions for each item before marking your response as several permit multiple responses.
yoı	Please provide the board with an email address. An email will be sent to you to confirm ur initiating the survey and to confirm that you completed the survey as required, to eive the CE credits.
	low many years have you been licensed as a Speech-Language Pathologist in
0	0 to 5 Years
0	6 to 10 Years
0	11 to 20 Years
0	21 to 29 Years
0	30 or more Years
4. I	low many hours per week do you work as a licensed Speech-Langauge Pathologist?
0	10 hours or less
0	11 to 20 hours
0	21 to 30 hours
0	31 to 40 hours
0	41 or more hours
5. \	What is the highest level of education you have achieved?
0	Master's degree in speech-language pathology or communication
0	Doctorate in speech-language pathology or communication
0	Other formal education (please specify)

6. F	low would you classify the majority of your respons	sibilities as a licensed Speech-
Lan	guage Pathologist?	
0	Clinical services provider	
0	College/University professor/instructor	
0	Consultant	
0	Director/chair of an education program	
0	Director/supervisor of a clinical program	
0	Special Education Teacher	
0	Supervisor of clinicians	
0	CEU Provider	
7 0	on the average, what percent of your time is spent p	porforming the following activities in
	course of your practice? (the total should add to 1	
	IEP (IDT, Case meetings)	
Client	Documentation / Reports	
Famil	y / Caregiver Contact / counseling	
Direct	Client Care (scr, assess, Treatment)	
Treat	ment Planning / Preparation	
Collai	porations / Consultation (professional staff, teachers)	
Supe	vision (SLP-related staff, support staff)	
Resea	arch / Grant writing	
Teach	ning / training (staff, students, parents)	
Case	Management (Referrals, intake, follow-up)	
Pre-re	eferral interventions	
Admir	nistrative (scheduling, staffing, HR, meetings)	
Profe	ssional development	

hat apply)	
Correctional facility	Public School
Group Home/Sheltered Workshop	Regional Center
☐ Home Health	Skilled Nursing / Long-Term Care / Subacute Care
Hospital-based	☐ Speech and Language Clinic
Non-Public School (NPS)	☐ University/University Clinic
Preschool/Day Care	☐ Web-based Treatment /Telepractice
Private Practice	
Other (please specify)	
. For which of the following clients do	you currently provide services? (check all that
pply)	
Older Adults (71+ years of age)	Children (9-11years of age)
Adults (23-70 years of age)	Children (6-8 years of age)
☐ Young Adults (18-22 years of age)	Preschool (3-5 years of age)
Teenagers (15-17 years of age)	☐ Toddlers (1-2 years of age)
☐ Teenagers (15-17 years of age)☐ Young Teens (12-14 years f age)	☐ Toddlers (1-2 years of age) ☐ Infants (0-12 months of age)
☐ Young Teens (12-14 years f age)	_
☐ Young Teens (12-14 years f age)	☐ Infants (0-12 months of age)
Young Teens (12-14 years f age)0. How would you describe your area	Infants (0-12 months of age)
☐ Young Teens (12-14 years f age)0. How would you describe your area☐ Alaryngeal Speech	☐ Infants (0-12 months of age) I(s) of specialization? (Check all that apply) ☐ Gerontology
 ✓ Young Teens (12-14 years f age) 0. How would you describe your area ✓ Alaryngeal Speech ✓ Augmentative and Alternative Communication 	Infants (0-12 months of age) (s) of specialization? (Check all that apply) Gerontology Hearing and Hearing Disorders Language-based Learning
 Young Teens (12-14 years f age) ● How would you describe your area □ Alaryngeal Speech □ Augmentative and Alternative Communication □ Aural Rehabilitation 	Infants (0-12 months of age) (s) of specialization? (Check all that apply) Gerontology Hearing and Hearing Disorders Language-based Learning
 Young Teens (12-14 years f age) O. How would you describe your area □ Alaryngeal Speech □ Augmentative and Alternative Communication □ Aural Rehabilitation □ Autism and related disorders 	Infants (0-12 months of age) (s) of specialization? (Check all that apply) Gerontology Hearing and Hearing Disorders Language-based Learning Neurophysiological/neurogenic speech and language Disorders
 Young Teens (12-14 years f age) O. How would you describe your area □ Alaryngeal Speech □ Augmentative and Alternative Communication □ Aural Rehabilitation □ Autism and related disorders □ Developmental Disabilities 	Infants (0-12 months of age) (s) of specialization? (Check all that apply) Gerontology Hearing and Hearing Disorders Language-based Learning Neurophysiological/neurogenic speech and language Disorders Orofacial Disorders
 Young Teens (12-14 years f age) O. How would you describe your area □ Alaryngeal Speech □ Augmentative and Alternative Communication □ Aural Rehabilitation □ Autism and related disorders □ Developmental Disabilities □ Developmental Language Delays 	Infants (0-12 months of age) (s) of specialization? (Check all that apply) Gerontology Hearing and Hearing Disorders Language-based Learning Neurophysiological/neurogenic speech and language Disorders Orofacial Disorders Phonological Disorders
 Young Teens (12-14 years f age) O. How would you describe your area □ Alaryngeal Speech □ Augmentative and Alternative Communication □ Aural Rehabilitation □ Autism and related disorders □ Developmental Disabilities □ Developmental Language Delays □ Early Intervention 	Infants (0-12 months of age) (s) of specialization? (Check all that apply) Gerontology Hearing and Hearing Disorders Language-based Learning Neurophysiological/neurogenic speech and language Disorders Orofacial Disorders Phonological Disorders Speech sound disorders

	OA Questionnaire What other state-issued licenses do you hold? (check all that apply)
	None
	Audiologist Liberton Aida Dispanses
	Hearing Aide Dispenser
	Occupational Therapist
	Physical Therapist
Other	(please specify)
40.1	
	What other certificates/credentials do you possess? (check all that apply)
	None
	Special Education
	Administrative
	Applied Behavior Analysis
	Teaching Credential
	Resource Specialist
Other	(please specify)

4. California Counties

O 20 - Madera

Location of Speech-Langauge Pathologist Services

13. In what California county do you perform the majority of your work as a speechlanguage pathologist?

0	01 - Alameda	0	21 - Marin	0	41 - San Mateo
0	02 - Alpine	0	22 - Mariposa	0	42 - Santa Barbara
0	03 - Amador	0	23 - Mendocino	0	43 - Santa Clara
0	04 - Butte	0	24 - Merced	0	44 - Santa Cruz
0	05 - Calaveras	0	25 - Modoc	0	45 - Shasta
0	06 - Colusa	0	26 - Mono	0	46 - Sierra
0	07 - Contra Costa	0	27 - Monterey	0	47 - Siskiyou
0	08 - Del Norte	0	28 - Napa	0	48 - Solano
0	09 - El Dorado	0	29 - Nevada	0	49 - Sonoma
0	10 - Fresno	0	30 - Orange	0	50 - Stanislaus
0	11 - Glenn	0	31 - Placer	0	51 - Sutter
0	12 - Humboldt	0	32 - Plumas	0	52 - Tehama
0	13 - Imperial	0	33 - Riverside	0	53 - Trinity
0	14 - Inyo	0	34 - Sacramento	0	54 - Tulare
0	15 - Kern	0	35 - San Benito	0	55 - Tuolumne
0	16 - Kings	0	36 - San Bernardino	0	56 - Ventura
0	17 - Lake	0	37 - San Diego	0	57 - Yolo
0	18 - Lassen	0	38 - San Francisco	0	58 - Yuba
0	19 - Los Angeles	0	39 - San Joaquin		

O 40 - San Luis Obispo

5. Part II - TASK RATINGS

In this part of the questionnaire, please rate each task as it relates to your current practice as a Speech-Language Pathologist.

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

If the task is **NOT** part of your current practice, 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 for each list to see the ratings and then select the option based on your current job.

FREQUENCY RATING How often are these tasks performed in your current job? Use the following scale to make your rating.

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

IMPORTANCE RATING HOW IMPORTANT are these tasks in the performance of your current practice? Use the following scale to make your ratings.

- 0 NOT IMPORTANT; DOES NOT APPLY TO MY PRACTICE. I do not perform this task in my practice.
 - **1 OF MINOR IMPORTANCE**. This task is of minor importance for effective performance relative to other tasks; it has the lowest priority of all the tasks I perform in my current practice.
 - **2 FAIRLY IMPORTANT**. This task is fairly important for effective performance relative to other tasks; it does not have the priority of most other tasks I perform in my current practice.
 - **3 MODERATELY IMPORTANT**. This task is moderately important for effective performance relative to other tasks; it has average priority of all the tasks I perform in my current job.
 - **4 VERY IMPORTANT**. This task is very important for performance in my practice; it has a higher degree of priority than most other tasks I perform in my current practice.
 - **5 CRITICALLY IMPORTANT**. This task is one of the most critical tasks I perform in practice; it has the highest degree of priority of all the tasks I perform in my current practice.

6. Part II - TASK RATINGS (1 through 25)

14. TASK STATEMENTS FREQUENCY **IMPORTANCE** 1. Practice in a manner consistent with professional and ethical standards to provide best plan of care 3. Apply procedures for control of disease and client/worker safety 4. Provide culturally and linguistically appropriate services by integrating the values and beliefs of the client and client's community into assessment and treatment decisions 5. Identify and collaborate with treatment and service providers that can provide culturally and linguistically appropriate services 6. Determine and make referrals to other professionals or agencies based on the Speech-Language Pathologist's competency and the client's needs 7. Supervise delivery of client services by Clinical Fellows (CF), Speech-Language Pathology Assistants (SLPA) or Aides, required professional experience temporary license holders (RPE), and individuals acquiring a Speech-Language Pathology Services credential to ensure quality client care 8. Ensure that clinical support personnel involved with providing client treatment follow treatment protocols 9. Communicate relevant clinical information orally and in writing to client, client's family/relevant others, and other professionals to provide best plan of care to client 10. Educate and train client, client's family, and relevant others in techniques and strategies to support client's treatment plan 11. Collaborate with other professionals to provide best plan of care to client 12. Review, understand, and integrate diagnostic and treatment reports, treatment plans, and professional correspondence 13. Develop diagnostic and treatment reports, treatment plans, and professional correspondence that clearly communicate the client's needs

SLP OA Questionnaire		
23. Screen for presence of cognitive-linguistic impairments	•	V
24. Screen for presence of social communication deficits	•	
25. Screen for presence of language-based learning disabilities	•	V

7. Part II - TASK RATINGS (26 through 50)

15. TASK STATEMENTS FREQUENCY IMPORTANCE 26. Recognize indicators that prompt further assessment and/or referral 27. Utilize client history to identify potential causal factors and correlates relating to client's past and present communication and swallowing status 28. Determine communication function of client behaviors and emotions that impact • assessment or treatment (e.g., attention, aggression, self-injury, hyperactivity, withdrawal) 29. Select assessment instruments, procedures, settings, and materials matched to client characteristics (e.g., age, primary language background, cognitive/physical 30. Assess client's voice and resonance using standardized and non-standardized 31. Assess client's speech fluency using standardized and non-standardized assessments 32. Assess client's speech production and intelligibility using standardized and informal assessments 33. Assess client's language (comprehension and expression) standardized and non-34. Assess client's cognitive-linguistic functioning standardized and non-standardized 35. Assess client's feeding and swallowing standardized and non-standardized 36. Assess client's social (pragmatic) communication standardized and nonstandardized assessments 37. Assess client's language-based learning standardized and non-standardized assessments 38. Assess client's communication skills related to possible hearing loss standardized and non-standardized assessments 39. Assess client's options for communication without a larynx 40. Assess impact of client's communication impairment on academic, social, and vocational functioning 41. Assess functional communication using standardized and non-standardized assessments (e.g., observation, sampling, rating scales, dynamic assessment) 42. Determine if behavior management, prosthetics, and/or alternative and augmentative communication is needed to support client's training 43. Conduct instrumentation-based assessment of respiratory, supralaryngeal, laryngeal and pharyngeal subsystems 44. Determine functional level of primary language in individuals who speak a language other than English 45. Assess English language skills in individuals who speak a language other than English

SLP OA Questionnaire		
46. Utilize effective interpersonal skills in communicating assessment results to client, client 's family/relevant others, other professionals, and referral sources to set a positive tone for collaboration, mutual support, and agreement	_	_
47. Review assessment results, including considering of etiology, to identify and prioritize client's communication and/or swallowing deficits that require treatment	•	V
48. Review assessment results to identify and prioritize aspects of client's environment that may require modification	Y	_
49. Synthesize and document the results of the evaluation process to develop a comprehensive description of the client's communication strengths and weaknesses	¥	_
50. Develop treatment plan that includes goals and objectives, interventions, modes of service delivery, and necessary referrals, supports, and resources based on client needs	Y	_

8. Part II - TASK RATINGS (51 through 82)

16. TASK STATEMENTS FREQUENCY IMPORTANCE 51. Consider evidence-based outcomes in the formulation of the treatment plan 52. Determine the appropriateness of specific augmentative and alternative communication systems 53. Utilize effective interpersonal skills in communicating treatment recommendations • to client, family/relevant others, other professionals, and referral sources to set a positive tone for gaining consensus and support for the treatment plan 54. Provide treatment interventions for improving client's speech sound production 55. Provide treatment interventions for improving client's resonance 56. Provide treatment interventions for improving client's voice 57. Provide treatment interventions for improving client's fluency 58. Provide treatment interventions for improving client's language (comprehension and expression) 59. Provide treatment interventions for addressing client's cognitive-linguistic deficits 60. Provide treatment interventions for improving client's feeding and swallowing 61. Provide treatment interventions in the area of accent modification to improve client's speech proficiency 62. Provide treatment interventions in the area of care and improvement of the voice for clients involved with performance and singing 63. Provide treatment interventions in the area of transgender voice to improve client's speech and communication effectiveness 64. Provide treatment interventions in the area of personal/professional communication to improve client's language proficiency and communication effectiveness 65. Provide treatment interventions for improving client's social (pragmatic) communication 66. Provide treatment interventions for improving client's language-based learning 67. Provide treatment interventions for improving client's communication skills related to hearing loss/deafness 68. Provide treatment interventions that build on client's intellectual strengths and physical capabilities 69. Provide treatment interventions that consider client's age, primary language background, cognitive/physical abilities, emotional and behavioral status, and culture 70. Provide treatment interventions that strengthens communication between client and family/caregivers 71. Provide support to family/caregivers to address feelings of loss, blame, guilt, and/or grief surrounding client and client's presenting issues 72. Provide training to family/caregivers to support client's treatment (e.g., intervention and reinforcement techniques, nonverbal interaction)

9. Part III - KNOWLEDGE RATINGS

In this part of the questionnaire, rate each of the knowledge statements based on how important the knowledge is to successful performance in your practice. If a knowledge statement is **NOT** part of your job, then rate it "0" (zero) for Importance.

The boxes for rating the Importance of each knowledge statement have a drop-down list. Click on the "down" arrow for the list to see the ratings. Then select the rating based on your current practice.

IMPORTANCE RATING

HOW IMPORTANT is this knowledge in the performance of your current practice?

Use the following scale to make your ratings.

- 0 DOES NOT APPLY TO MY PRACTICE; NOT REQUIRED; this knowledge is not required to perform in my practice.
 - **1 OF MINOR IMPORTANCE**; this knowledge is of minor importance for performance of my practice relative to all other knowledge.
 - **2 FAIRLY IMPORTANT**; this knowledge is fairly important for performance of my practice relative to all other knowledge.
 - **3 MODERATELY IMPORTANT**; this knowledge is moderately important for performance of my practice relative to all other knowledge.
 - **4 VERY IMPORTANT**; this knowledge is very important for performance of my practice relative to all other knowledge.
 - **5 CRITICALLY IMPORTANT**; this knowledge is essential for performance of my practice relative to all other knowledge.

10. Part III - KNOWLEDGE RATINGS (1 through 25)

17. (Part III) Knowledge Statements **IMPORTANCE** 1. Knowledge of professional guidelines and standards (i.e., ASHA, CSHA) related to speechlanguage pathology practice 2. Knowledge of State and federal agencies whose regulations impact the Speech-Language Pathologist's practice (e.g., Centers for Medicare and Medicaid Services, Department of Education) 3. Knowledge of standards of ethical conduct 4. Knowledge of laws and practices related to client and worker health and safety, including universal 5. Knowledge of State and federal laws related to clients' rights and legal protections (e.g., ADA, IDEA, HIPAA) 6. Knowledge of methods for performing client advocacy 7. Knowledge of procedures for developing collaborative relationships with client, client's family/caregivers, and other professionals to support client's care and treatment 8. Knowledge of cultural differences and issues that affect the interviewing and counseling process with diverse client populations and their families/caregivers 9. Knowledge of methods and procedures for communicating information regarding client's condition, care, and treatment to client, client's family/caregivers, and other professionals 10. Knowledge of methods and procedures for counseling and educating client, client's family/caregivers, and other professionals in client's care and treatment 11. Knowledge of California regulations regarding supervision of Clinical Fellows (CF), Speech-Language Pathology Assistants (SLPA) or Aides, required professional experience temporary license holders (RPE), and individuals acquiring a Speech-Language Pathology Services credential 12. Knowledge of methods and procedures for mentoring and training CFs, Speech-Language Pathology Assistants (SLPA) or Aides, and RPEs 13. Knowledge of methods and procedures for supervising graduate students engaged in acquiring SLP training and/or pursuing a Speech-Language Pathology Services credential 14. Knowledge of conventions and professional standards of written communication for different clinical purposes and settings (e.g., medical, governmental, educational) 15. Knowledge of procedures for applying research methodology and the scientific method to clinical 16. Knowledge of methods and procedures for integrating research outcomes into evidence-based 17. Knowledge of available resources (e.g., self-help groups, support groups, information sources) for client and client's family/care-givers to support client treatment 18. Knowledge of the effects of cognitive, behavioral, and cultural factors on communication and feeding/swallowing behavior 19. Knowledge of screening procedures for social communication disorders 20. Knowledge of screening procedures for feeding and swallowing disorders 21. Knowledge of screening procedures for hearing impairments 22. Knowledge of screening procedures for speech and language disorders involving voice, resonance, and fluency

SLP OA Questionnaire	
23. Knowledge of screening procedures for cognitive-linguistic impairments	<u> </u>
24. Knowledge of screening procedures for language-based learning disabilities	V
25. Knowledge of typical cognitive, psychological, motor, and sensory development and functioning	<u> </u>

11. Part III - KNOWLEDGE RATINGS (26 through 50)

18. (Part III) Knowledge Statements **IMPORTANCE** 26. Knowledge of the anatomy, physiology, and neurology of normal speech, language, hearing, and functional swallowing 27. Knowledge of the physical characteristics of speech, including acoustics, aerodynamics, and articulatory movements 28. Knowledge of the phonologic, morphologic, syntactic, semantic, and pragmatic aspects of typical human communication and its development 29. Knowledge of social communication development with autism spectrum disorders 30. Knowledge of the effects of communication and swallowing impairments on client behavior, emotional adjustment, and health status, as well as on client academic, vocational, and social 31. Knowledge of methods and procedures for obtaining client case history and performing client 32. Knowledge of the effects of medical conditions, procedures, and treatments on communication 33. Knowledge of the psychosocial impact of communication and swallowing disorders across the life span 34. Knowledge of the epidemiology of communication and swallowing impairments 35. Knowledge of the effects of neurotoxins and drugs on communication and swallowing 36. Knowledge of methods and procedures for conducting an objective assessment 37. Knowledge of procedures for assessing speech sound production (articulation) including perceptual characteristics, oral/physiological structure, motor planning, and execution 38. Knowledge of procedures for assessing resonance including oral structure and function, nasal structure, and velopharyngeal structure and function 39. Knowledge of procedures for assessing voice including respiratory, supralaryngeal, laryngeal, and pharyngeal structure and function 40. Knowledge of procedures for assessing alaryngeal speech 41. Knowledge of procedures for assessing language/communication (comprehension and expression) including phonology, morphology, syntax, semantics, pragmatics, language aspects of literacy, and prelinguistic communication 42. Knowledge of procedures for assessing cognition including attention, memory, sequencing, problem solving, and executive functioning 43. Knowledge of procedures for identifying structural, physiological, sensory, or behavior-based oral/pharyngeal/esophageal deficits and their effects on client's feeding and swallowing 44. Knowledge of procedures for assessing auditory processing 45. Knowledge of procedures for assessing client's ability to use and benefit from alternative and augmentative communication 46. Knowledge of procedures for assessing orofacial myofunctional disorders (including tongue thrust) 47. Knowledge of procedures for performing curriculum-based assessment for school populations

SLP OA Questionnaire	
48. Knowledge of strategies for managing client's challenging behaviors during assessment	<u> </u>
49. Knowledge of motivational strategies for engaging client and client's family/relevant others in the assessment process	<u>v</u>
50. Knowledge of typical progression and development of the acquisition of a second language during childhood	<u> </u>

12. Part III - KNOWLEDGE RATINGS (51 through 75)

19. (Part III) Knowledge Statements **IMPORTANCE** 51. Knowledge of sociolinguistic, familial, and cultural influences on communication 52. Knowledge of procedures for interpretation of audiograms 53. Knowledge of principles and procedures for assessing adequacy of anatomical and physiological structures using imaging (e.g., radiographic procedures, endoscopic visualization) 54. Knowledge of principles and procedures for assessing adequacy of anatomical and physiological structures using aerodynamic analysis (e.g., air volume, air pressure, airflow) 55. Knowledge of principles and procedures for assessing adequacy of anatomical and physiological structures by applying acoustic measures, tactile cues, or electromyography (EMG) 56. Knowledge of principles and procedures for calibration and operation of instrumentation 57. Knowledge of procedures for assessing fluency including types of dysfluency, concomitant behaviors, and cognitive-affective features 58. Knowledge of methods and procedures for performing and interpreting client screening and assessment for clients using AAC (augmentative and alternative communication) and prosthetic communication devices 59. Knowledge of the potential impacts on the client-family/caregiver relationships arising from the client's communication impairment 60. Knowledge of the effects of genetic disorders on communication, swallowing and feeding 61. Knowledge of the effects of neonatal risk factors on communication and swallowing 62. Knowledge of interventions and procedures using aided/unaided AAC applications in diagnosis 63. Knowledge of conventions and professional standards for writing/documenting assessment results and treatment recommendations 64. Knowledge of methods and techniques for identifying and modifying the demands of the linguistic, cognitive, and social environments to improve client's communication 65. Knowledge of the effects of developmental disabilities on communication, swallowing, and 66. Knowledge of the effects of auditory deficits on client's communication, academic, social, and vocational skills 67. Knowledge of the effects of oral, pharyngeal, and laryngeal anomalies on communication, swallowing, and feeding 68. Knowledge of the effects of respiratory compromise on communication, swallowing, and feeding 69. Knowledge of the effects of neurological disease/dysfunction on communication, swallowing, and feeding 70. Knowledge of the effects of psychiatric disorders on communication, swallowing, and feeding 71. Knowledge of the effects of gastrointestinal disorders (e.g., reflux, food allergy-related) on communication, swallowing, and feeding 72. Knowledge of methods for developing and defining treatment goals, service delivery options, treatment supports, and resources

9	SLP OA Questionnaire	
	73. Knowledge of communication techniques for building consensus and support with client and family regarding options for treatment and treatment plan	_
	74. Knowledge of the components of a diagnostic assessment report necessary to provide a comprehensive description of client's communication, swallowing, and feeding	•
	75. Knowledge of procedures for determining and applying criteria for initiating treatment and prioritizing treatment targets	•

13. Part III - KNOWLEDGE RATINGS (76 through 111)

20. (Part III) Knowledge Statements **IMPORTANCE** 76. Knowledge of methods for determining the optimal treatment setting based on assessment results 77. Knowledge of methods and procedures for applying evidence-based outcomes to differential diagnosis 78. Knowledge of the effects of sensory processing and behavioral disorders on communication, swallowing, and feeding 79. Knowledge of methods for addressing family/caregiver factors that impact client care and treatment (e.g. caregiver fatigue, attachment, family dynamics) 80. Knowledge of interventions and procedures for treating speech sound disorders, including those related to perceptual characteristics and physiological structure and function 81. Knowledge of interventions and procedures for treating neurogenic speech disorders 82. Knowledge of interventions and procedures for treating resonance impairments, including those related to oral structure and function, nasal structure, and velopharyngeal structure and function 83. Knowledge of interventions and procedures for treating voice impairments including those related to respiratory, supralaryngeal, and laryngeal structure and function 84. Knowledge of interventions and procedures for treating impairments involving alaryngeal speech 85. Knowledge of interventions and procedures for treating language and communication impairments in the areas of phonology, morphology, syntax, semantics, pragmatics, language aspects of literacy, and prelinguistic communication 86. Knowledge of interventions and procedures for treating cognition in the areas of attention, memory, sequencing, problem solving, and executive functioning 87. Knowledge of interventions and procedures for treating feeding and swallowing impairments including those related to oral, pharyngeal, laryngeal, and esophageal structure and function 88. Knowledge of interventions and procedures for treating feeding and swallowing impairments including those related to nutritional status, sensory issues, and behavioral aspects 89. Knowledge of interventions and procedures for treating clients diagnosed with autism or related social pragmatic disorders 90. Knowledge of interventions and procedures for treating orofacial myofunctional impairments including those related to tongue thrust 91. Knowledge of the phonemic repertoire of the English language and its grammatical structure sufficient to discriminate and produce acoustically correct models for client 92. Knowledge of interventions and procedures using aided/unaided AAC applications in treatment 93. Knowledge of procedures for selecting AAC applications that meet client's treatment needs 94. Knowledge of methods and techniques for training family, caregivers, and support personnel in the programming and use of the client's AAC 95. Knowledge of interventions and procedures for modifying the demands of client's linguistic, cognitive, and social environments to improve client's communication 96. Knowledge of instructional and learning strategies for improving client's learning environment 97. Knowledge of motivational strategies for maintaining client involvement in the treatment program

SLP OA Questionnaire	
98. Knowledge of strategies for managing client's challenging behavior	
99. Knowledge of interventions and procedures for modification of speech, language, and voice in the absence of impairment (e.g., dialect, accent)	▼
100. Knowledge of group facilitation and management techniques	▼
101. Knowledge of interventions and procedures for treating fluency impairments, including types of dysfluency, concomitant behaviors, and cognitive-affective features	<u> </u>
102. Knowledge of strategies and resources for addressing the psychological and emotional reactions of the client's family/caregivers to client's presenting issues	<u> </u>
103. Knowledge of strategies and supports for addressing the family/caregiver issues related to parent-child attachment and engagement	V
104. Knowledge of interventions and procedures for treating communication impairments in the area of auditory processing	▼
105. Knowledge of interventions and procedures for treating impairments related to hearing loss in the areas of specific factors and equipment for aural rehabilitation	▼
106. Knowledge of methods of data collection and analysis for assessing status, evaluating progress, and/or modifying the treatment plan	▼
107. Knowledge of methods for developing and applying criteria for dismissal/discharge from treatment	v
108. Knowledge of communication techniques for building consensus and support with client and family/caregivers regarding post-treatment decisions	V
109. Knowledge of methods for evaluating the effectiveness of specific treatment strategies	V
110. Knowledge of components of progress notes and discharge summary necessary to provide a report of client's post-treatment status and recommendations for follow-up	V
111. Knowledge of conventions and professional standards of written communication regarding client progress notes and discharge summary reports	<u>*</u>

SLP OA Questionnaire 14. Finished! Thank you for participating in the 2014 Speech-Language Pathologist Occupational Analysis project. Once the completeness of your survey has been verified you will receive a letter from the Board confirming the CE credits for your records. Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board