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PROFESSIONAL COMPETENCIES FOR E-HELPERS: A TELEPRACTICE RESOURCE

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PROFESSIONAL COMPETENCIES FOR E-HELPERS: A TELEPRACTICE RESOURCE

THESIS

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in the College of Health Sciences at the University of Kentucky

By

Hannah M. Schlaak

Lexington, Kentucky

Director: Dr. Joneen Lowman, Professor of Communication Sciences and Disorders

Lexington, Kentucky

2018

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ABSTRACT OF THESIS

PROFESSIONAL COMPETENCIES FOR E-HELPERS: A TELEPRACTICE RESOURCE

The primary purpose of this study was to craft and validate a set of core competencies necessary for an e-Helper to possess. A review of the literature guided the creation of the initial competencies. Following expert review, the competencies were revised and formatted into an online survey which was sent to respondents in four target groups: (a) school administrators who had adopted telepractice as a service delivery model; (b) SLPs experienced in telepractice within a school setting; (c) current e-Helpers, and (d) scholars experienced in telepractice. Sixty percent (21 out of 35) of the competencies were rated as "important" by 76-100% of respondents. The remaining competencies could be more or less important dependent on workplace requirements.

KEYWORDS: Telepractice, Telehealth, Training, Facilitator, e-Helper, Schools

Hannah Schlaak
April 14, 2018

PROFESSIONAL COMPETENCIES FOR E-HELPERS: A TELEPRACTICE RESOURCE

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Chapter One: Introduction

During the 2014-2015 school year, the primary disability of "speech-language impaired" was the second most prevalent disability among students receiving services under the Individuals with Disabilities Education Act, accounting for 17.3% of the total exceptional student education population (IDEA, 2004). Speech-language pathologists (SLPs) are the experts charged with addressing the communication needs of said population. However, personnel shortages have plagued the school setting for more than two decades ([American Speech-Language-Hearing Association (ASHA) Schools Survey Report: SLP Workforce and Word Conditions, 2016a; ASHA Schools Survey Report: SLP Workforce and Word Conditions Trends, 1995 – 2014]. Telehealth, or health care delivered at a distance, is being embraced by public school administrators as a mechanism for ensuring students have access to speech-language services. In this model, the SLP and child connect through a computer and the Internet. The child is monitored by an adult who assists with the technology, manipulation of materials, and behavior management as directed by the SLP. In the school setting, this person is commonly referred to as an e-Helper. Currently, no standards exists regarding the minimum competencies required of the e-Helper, yet it is the responsibility of the SLP to ensure the e-Helper is competent (American Speech Language Hearing Association [ASHA], n.d.). The purpose of the project was to address the deficit in training resources by validating a set of core competencies for e-Helpers.

Telepractice

The American Speech Language Hearing Association (ASHA) prefers the term telepractice rather than telehealth to delineate that services may or may not be provided in a healthcare setting. ASHA defines telepractice as "the application of telecommunications technology to the delivery of speech language pathology and audiology professional services at a distance by linking clinician to client/patient or clinician to clinician for assessment, intervention, and/or consultation" (n.d.). There are two main mechanisms for delivering telepractice: synchronous and asynchronous. Synchronous telepractice occurs when the clinician and patient interact in real time via video and/or audio, and may be conducted one-on-one or in a group. Asynchronous telepractice, also known as "store and forward," occurs when data such as videos, pictures, or audio files are recorded and then sent between the clinician and client. Hybrid applications may be used when in-person interaction is supplemented with either synchronous or asynchronous telepractice, or synchronous and asynchronous methods are used in combination (ASHA, n.d.).

Telepractice has been proven to be a valid service delivery model for the assessment and treatment of a wide range of speech, language, and hearing disorders (ASHA, n.d.). Disorders shown to have been effectively treated using telepractice include: aphasia (Macoir, Martel Sauvageau, Boissy, Tousignant, & Tousignant 2017), articulation disorders (Crutchley, Dudley, & Campbell, 2010; Grogan-Johnson, Schmidt, Schenker, Alvares, Rowan, & Taylor, 2013), autism (Higgins, Luczynski, Carroll, Fisher, & Mudford, 2017; Iacono, Dissanayake, Trembath, Hurdy, Erickson, & Spong, 2016; Parmanto, Pulantara, Schutte, Saptono, & McCue, 2013), dysarthria (Hill et al., 2006), dysphagia (Cassel, 2016; Malandraki, McCullough, He, McWeeny, & Perlman, 2011;

Perlman & Witthawaskul, 2002), fluency disorders (Carey, O'Brian, Lowe, & Onslow, 2014; Carey, O'Brian, Onslow, Packman, & Menzies, 2012; Lewis, Packman, Onslow, Simpson, & Jones, 2008), language and cognitive disorders (Brennan, Georgeadis, Baron, & Barker, 2004; Sutherland, Hodge, Trembath, Drevensek, & Roberts, 2016; Waite, Theodoros, Russell, & Cahill, 2010), neurodevelopmental disabilities (Simacek, Dimian, & McComas, 2017), and voice disorders (Halpern et al., 2012; Mashima & Brown, 2011; Theodoros et al., 2006; Tindall, Huebner, Stemple, & Kleinert, 2008; Towey, 2012).

Settings for telepractice. Similar to the wide range of settings SLPs may choose to work in, settings for telepractice are diverse. However, the school system accounts for the majority of SLPs utilizing telepractice, according to a survey conducted by the Special Interest Group (SIG) 18, Telepractice of ASHA (2014). Responses indicated the largest percent of clinicians treated clients located in: elementary schools (52% of SLPs); secondary schools (~40% of SLPs); and in the client's home (50% of SLPs). Other settings included but were not limited to: preschools, residential schools, college/universities, general medical hospitals, rehabilitation hospitals, pediatric hospitals, skilled nursing facilities, private physician offices, and speech and hearing centers/clinics. The largest percentage of SLPs using telepractice were self-employed or independent contractors (~44% of SLPs), which was succeeded by government employees (~16% of SLPs) and public or private nonprofit employees (~16% of SLPs).

Populations for telepractice. According to ASHA's SIG 18 survey, the majority of respondents indicated that they regularly serve pediatric populations through telepractice. Thirty percent indicated they serve children ages 3-5, 68 percent indicated that they serve children ages 6-11 years, and 63 percent indicated they serve children ages 12-

17 years. In contrast, only 41 percent of clinicians indicated they serve populations 18-64 years of age, 22 percent indicated they serve ages 65-74, and 15 percent indicated they serve ages 75 and older (ASHA, 2014). The largest percentages of clinicians treated the following disorders through telepractice: articulation/phonological disorders (~60% of SLPs); autism spectrum disorders (~38% of SLPs), cognitive communication disorders (~32% of SLPs); fluency disorders (~44% of SLPs); language disorders (~62% of SLPs); and motor speech disorders/apraxia (~39% of SLPs) (ASHA 2014). Though the scope and setting of telepractice in speech-language pathology is broad, speech-language pathology in the school setting is the scope of this thesis.

Telepractice Staffing Needs

Attending an appointment using telepractice mirrors an in-person visit, except the healthcare provider and the client are interacting using technology. Typical supports such as appointment scheduling, vital statistics, and initial intake are still necessary and may be provided by the remote staff who are physically present with the client. However, the use of technology requires additional support staff to service areas such as technological malfunction, program management, and service coordination. In large medical organizations, a team of support personnel may be available to assist the client and provider.

Support staff could include: a program manager, a site or service coordinator, a patient presenter, and a technical specialist (CTRC Telehealth Program Developer Kit, p. 180). The program manager oversees the telemedicine team and is in charge of managing all aspects of the telehealth department (CTRC Telehealth Program Developer Kit, p. 181). The site or service coordinator oversees day to day operations and is responsible for

creating or augmenting clinical telehealth applications (CTRC Telehealth Program Developer Kit, p. 182). The patient presenter is essentially the "extended eyes and ears" of the remote clinician (CTRC Telehealth Program Developer Kit, p. 183). The technical specialist sets up and maintains all telemedicine equipment, is responsible for addressing or resolving telecommunications and networking issues, and should be available during live sessions if difficulties arise (CTRC Telehealth Program Developer Kit, p. 180). See Table 1 for descriptions of typical responsibilities associated with each job title.

Table 1: Suggested Telehealth Program Staffing & Responsibilities

Job Title	Sample Duties
Program Manager	Reviewing and establishing departmental policies, procedures, and plans Designing methods and procedures for efficiency, productivity, and control of operations Supervising the administration of telehealth-related grant funds
Site/Service Coordinator	 Assisting clinicians with the telehealth applications Training rural partner site nurses, physicians, and care extenders Serving as the primary liaison with primary care physicians
Patient Presenter	 Completing required patient charting Collecting data during the encounter Operating/troubleshooting the tele-equipment
Technical Specialist	 Hardware/software installation configuration and maintenance Systems analysis, administration, and development User support: Assist user and other team members in diagnosis and correction of problems encountered during and after implementation of systems or projects.

Unfortunately, in many settings the previously described diverse support staff is not feasible. In these cases, it is not uncommon for one person to assume multiple roles.

For instance, when patients are seen in their own homes, the caregivers or the patients themselves will troubleshoot technical issues or assist with data collection, therefore taking the place of both technical specialist and patient presenter, respectively. In the school setting, the person responsible for assisting the child and healthcare provider is referred to as the "e-Helper." In most instances, the e-Helper is appointed by school administration and may or may not hold a postsecondary degree (Alvares, 2013; Grogan-Johnson 2014; J. Tucker, personal communication April 10, 2017). Because of the lack of additional support staff such as technical specialists or coordinators, e-Helpers must take on many more responsibilities than the typical patient presenter. The scope of an e-Helper's responsibilities generally includes: technical support and troubleshooting technical difficulties, assisting the clinician with cues or models, managing client paperwork, scheduling non-treatment meetings, and contacting the client's family (Alvares, 2013).

Training for Patient Presenters

As with any skilled job or profession, training for patient presenters is indicated to ensure client/patient safety, privacy, and satisfaction with the encounter. Despite the necessity for training, there is a dearth of research to support minimum knowledge and skills a competent tele-presenter should possess. A review of the telehealth literature by Edirippulige and Armfield (2017) yielded scant research on education and training practices in comparison to other aspects of telehealth (e.g. feasibility, clinical effectiveness, economics etc.). Similarly, Ross et al (2016) in a systematic review of 44 systematic reviews found the lack of "high quality, well-funded, and easily available training" for all telepractice staff to be a barrier to the uptake and acceptance of telehealth (p. 8).

The emergence of degree and certificate programs in telehealth make it evident that the need for training is being recognized. As shown in Table 2, considerable variation exists amongst current training programs in: title, degree type, and length and delivery of training. A review of the training programs' websites and direct contact with program directors yielded little information regarding student learning outcomes specific to each certificate program. Thus, it is unclear as to the exact competencies program graduates exit the program having acquired.

Industry standards for knowledge and skills required to be a "telehealth facilitator" have been developed by the American Telemedicine Association, however, the standards are medically focused and adult oriented (Leenknecht, Winters, & Antoniotti, n.d.). To date, no guidelines have been developed for tele-presenters assisting rehabilitation therapists treating pediatric clients across settings, much less in an educational setting.

Table 2: Programs Offering Certification

Institution	Title	Degree Type	Length and Delivery of Training
Thomas Jefferson University	Telehealth Facilitator	Certificate	5 weeks, online
National School of Applied Telehealth	Certified TeleMedicine Clinical Presenter Certification (CTCP)	Certificate	Online, approx. 3-5 hours. Self- paced. Must be completed within 30 days.
Bluegrass Community Technical College - Hazard	Telehealth Technician Associate	Dual Certificate in Nurse Aide and Telehealth Technician Associate	One-semester program. College credit hours: 16

Barriers to universal training competencies. The broad application of telehealth to a variety of patient populations (age and disorder) delivered by different medical and rehabilitation professionals in diverse settings confounds the ability to standardize pertinent personnel, and therefore their required competencies. The splintering of nomenclature associated with telehealth is reflective of this issue. Virtually every discipline has their own variation on the terms used for their delivery of service using tele-technology. Examples include: "Telestroke," "Telemental Health," "Teleburn Care," "Teledermatology," "Telepathology," and "TeleICU," to name a few (American Telemedicine Association, 2016). Specific to speech-language pathology, the term "telepractice" was adopted over terms such as "telemedicine" or "telehealth" in order to clarify that services may be delivered in non-medical settings (ASHA, n.d.). ASHA recognizes that other terms such as "teleaudiology," "telespeech," and "speech teletherapy" are also used in addition to the more general term "telerehabilitation" (n.d.).

In addition to the variety of terms used when referring to telepractice, there is similar discord over what to call the person assisting the patient, which has resulted in inconsistency regarding necessary training. In the school setting, the e-Helper (Alvares, 2013) assumes multiple responsibilities. In medical settings, terms such as "patient presenter" (California Telehealth Resource Center, 2014); "telepresenter" (Great Plains Telehealth Resource & Assistance Center, 2012); "telehealth facilitator" (Thomas Jefferson University, 2016); and "telemedicine clinical presenter" (National School of Applied Telehealth, n.d.) are more readily recognized. Inconsistent and varied position titles fail to clearly articulate roles and responsibilities and thus credentials required to

possess the designated title. For clarity, when referring to patient presenters within the school setting, the terms "e-Helper" or "facilitator" will be used interchangeably.

Current Training for e-Helpers

Per ASHA recommendations the SLP is responsible for providing training to e-Helpers (n.d.). Despite this responsibility, only 23% of SLPs responding to the ASHA SIG 18 survey felt they were "very prepared" to identify and train facilitators at the outset of their telepractice career, compared to those who responded, "not at all prepared" (23%), and "somewhat prepared" (54%) (2016). Similarly, Tucker (2012) conducted qualitative interviews with five SLPs experienced in telepractice, and found that untrained e-Helpers resulted in major barriers to treatment delivery ("could not set up the equipment properly; did not get the students to therapy on time; could not effectively manage student behavior; and did not have therapy materials ready") (p. 51).

The lack of definitive competencies further confounds the SLP's ability to properly train an e-Helper. The University of Maine has created a list of e-Helper competencies, however, these should be viewed as recommendations due to the lack of any formal validation (Perkins Walker, 2015). Other published guidelines describe minimum competencies required of a tele-presenter working within a medical setting and or interacting with an adult population (Great Plains Telehealth Resource & Assistance Center, 2012; Leenknecht, Winters, & Antoniotti n.d.; Meyer, Clarke, Troke, & Friedman, 2012; California Telehealth Resource Center, 2014). For example, Houwelingen, Moerman, Ettema, Kort, and Cate (2016) examined competencies required for telehealth activities specific to the field of nursing. Similarly, Leenknecht, Winters, and Antoniotti (n.d.) under the American Telemedicine Association developed guidelines for training tele-

presenters, with the majority of the writing committee (17 out of 25) having backgrounds in nursing or medicine. Treating pediatrics within a school setting requires competencies not addressed in these resources such as knowledge of Individual Education Plans (IEP's), the Family Educational Rights and Privacy Act (FERPA), and behavior management. While the need for training resources is clearly being recognized, there continues to be a deficit in core competencies specific to the pediatric population in speech language pathology.

Summary

Telehealth is being embraced across health care professions as a mechanism for delivering care to patients across the life span located in both medical and nonmedical facilities. Patient presenters are critical to the implementation of a successful telehealth program, as these individuals are the in-person link between the speech-language pathologist and the child. A variety of agencies providing medical care to adult populations have drafted competencies required of a tele-presenter. However, minimal attention has been given to the competencies required of tele-presenters assisting pediatric populations within an education settings. Yet school districts across the nation are turning to telehealth as a mechanism for complying with federal legislation due to a shortage of SLPs (American Speech-Language-Hearing Association (ASHA) Schools Survey Report: SLP Workforce and Word Conditions, 2016a; ASHA Schools Survey Report: SLP Workforce and Word Conditions Trends, 1995 – 2014]). Therefore a need exists to identify a set of competencies that all educationally-based tele-presenters must possess in order to ensure children receive high quality services via telehealth. The purpose of this project was to develop a set of core

competencies for e-Helpers working in an educational setting. Specifically, the project sought to:

- 1. Identify a set of competencies gleaned from peer reviewed publications, telespecific websites and organizations.
- 2. Validate a set of core competencies reflecting minimum skills required of all e-Helpers assisting with telepractice within the school setting by four user groups (school administration, SLPs experienced in telepractice, current e-Helpers, and academics with expertise in telepractice)

Chapter Two: Method

The aim of this thesis was to identify and validate a set of core competencies specific to patient presenters in the school setting (e-Helpers). The competency checklist was developed through a five staged process as outlined in Figure 1. In Phase I, competencies were identified through a systematic process. In Phase II, initial competencies were revised for consistent verbiage. Phase III consisted of review by content experts which was followed by Phase IV to implement expert revisions. Finally, Phase V consisted of consumer review.



Figure 1. Phases of Development for Competency Checklist.

Phase I: Identification of Competencies. In Phase I, competencies were identified in a seven step systematic process as outlined in Figure 2.

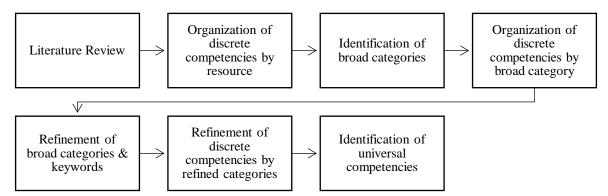


Figure 2. Process for Creation of Core Competencies.

Literature review and organization of discrete competencies. Databases for peer reviewed articles and general search of internet resources yielded search results varying from 0 to 460 articles retrieved. Specific databases searched and search terms

used are listed in Table 3. Article titles were read, and 23 articles or resources were selected as being relevant and will henceforth collectively be referred to as "sources."

Table 3: Summary of Search

Databases and sites searched	Search Terms	Limits used
- EBSCOhost		
- PubMed		
- Cochrane Library		
- Academic Search Complete	- Telepractice	
- AgeLine	- Telehealth	
- CINAHL	- Telemedicine	
- Dentistry & Oral Sciences	- Telecare	
Source	- e-Helper	
- ERIC	- Training	- Published in
- MEDLINE	- Facilitator Training	English
- Psychology and Behavioral	- Telepresenter	
Sciences Collection	- Remote Site Coordinator	
- PsycINFO	- Telehealth Program	
- Google	Manager	
- ProQuest Science,	- Telemedicine Helper	
Technology and Medical		
Combined Search		
- Abstracts in New		
Technology & Engineering		

Inclusion/Exclusion Criteria. Sources were included if they addressed any aspect of skills or training required of the patient presenter or e-Helper. Peer-reviewed articles and web-resources were excluded if training guidelines were limited to a specific technology or software, were not relevant to a patient presenter, or did not specify discrete skills or skill areas. No limits were placed on year of publication to ensure all available evidence, but the search was restricted to articles published in English. Fourteen of the 23 sources failed to meet the inclusion/exclusion criteria, resulting in 9 remaining sources. See Table 4 for a summary of the inclusion and exclusion criteria.

Table 4: Inclusion/Exclusion Criteria Used for Literature Selection

Inclusion Criteria	Exclusion Criteria
- Studies published in English	- Resources whose training was
- Experimental/Quasi-Experimental,	limited to a specific technology or
Correlational/Predictive, or	software
descriptive in nature, systematic	- Resources whose training was not
reviews, meta-analysis	relevant to a patient presenter or
- Commercially available telepractice	similar position
training resources	- Articles or resources that did not
- Expert consensus	specify discrete skills or skill areas

The nine sources chosen based on the inclusion/exclusion criteria are detailed in Table 5. Four of the sources were applicable to an educational or school setting. Five of the sources were medically or clinically geared, with two being specific to nursing. Discrete competencies were gleaned from the nine sources and entered into an Excel spread sheet organized by source. Each column was labeled according to the title of the source and individual rows housed the discrete competencies, one competency per row. See Appendix A for example.

Table 5, Resources Selected for Review

Title	Target Setting	Type of Publication	Author(s), Year
Working with Facilitators to Provide School-Based Speech and Language Intervention via Telepractice.	Educational (school)	Peer Reviewed Journal	Alvares, R. (2013)
The CTRC Telehealth Program Developer Kit.	Clinical (nonspecific)	Industry Website	California Telehealth Resource Center. (2014)
Telepresenter Competency Check List – (RN)	Medical (nursing)	Industry Website	Great Plains Telehealth Resource & Assistance Center. (2012)
Teletherapy: Serving School-Age Children	Educational (school)	Book	Grogan-Johnson, S. (2014) in K. T. Houston (Author), Telepractice in speechlanguage pathology
Competencies required for nursing telehealth activities: A Delphi-study	Medical (nursing)	Peer Reviewed Journal	Houwelingen, C. T., Moerman, A. H., Ettema, R. G., Kort, H. S., & Cate, O. T. (2016).
Expert Consensus Recommendations for Videoconferencing-Based Telepresenting	Clinical (nonspecific)	Industry Website	Leenknecht, C. K., Winters, J. M., & Antoniotti, N. (n.d.)

Table 5 contd.

Title	Target Setting	Type of Publication	Author(s), Year
Essential Telemedicine Elements (Tele- Ments) for Connecting the Academic Health Center and Remote Community Providers to Enhance Patient Care	Medical (nonspecific)	Peer Reviewed Journal	Meyer, B. C., Clarke, C. A., Troke, T. M., & Friedman, L. S. (2012).
Perspectives of Speech-Language Pathologists on the Use of Telepractice in Schools: The Qualitative View	Educational (school)	Peer Reviewed Journal	Tucker, J. K. (2012)
e-Helper Competencies	Variable (school-homework)	University Website	Perkins Walker, Judy (2015)

Identification of broad categories and organization by category. After organizing the competencies by source, the PI identified broad categories by examining the entire spreadsheet for keywords that occurred across all sources (See Table 6). Eleven different categories were identified and competencies were then color coded by category. See Appendix A for example.

Table 6: List of Initial Keywords Used to Identify Broad Categories

Keywords		
AdministrativeFunctions/DocumentationScheduling/Preparation/Planning	 General/Background Knowledge or Advocacy of Telehealth Communication Skills 	
- Privacy/Security	- Patient Education/Interaction	
- Procedure/Policy	- Exam/Session/Physical Duties	
- Preparing/Operating Technology	- Interaction with Clinicians	
- Troubleshooting		

A new Excel sheet was created to reorganize the competencies thematically by the identified categories. Source title remained as the column header and rows contained the competencies organized by category. The competencies were transferred from the initial spreadsheet and organized by resource and category. Competencies with a medical focus, such as operating a stethoscope or taking vital signs, fall outside of the scope of practice of a SLP and e-Helper and thus were eliminated for consideration. See Appendix B for example. Once the spreadsheet was completed, the co-PI (Dr. Lowman) independently reviewed the organization of competencies by categories. Disagreements in coding were discussed between the PI and co-PI until an agreement was reached.

Refinement of categories, keywords, and competencies. The 11 broad categories were refined for the purpose of providing specificity while avoiding redundancy regarding the coding of competencies. Refinement of categories was accomplished by generating a

list of key words used to "define" each category. To complete this step, the PI and co-PI independently generated a list of keywords. The individual lists were compared and disagreements discussed until consensus was reached. Some categories were eliminated along with redundant competencies. Competencies specific to a piece of hardware, software, peripheral device or work setting were eliminated. For example, "turn off video equipment as necessary before moving" and "change lens as needed" were omitted from this version for purpose of conciseness. Once the competencies were finalized, the PI and co-PI individually organized discrete competencies by category. Agreement of competencies by category was reached through consensus. A new Excel spreadsheet was created. The first column was category and remaining columns the individual sources. The rows contained competencies organized by category and source. Table 7 provides the final list of identified categories and associated keywords used to categorize competencies by category. See Appendix B for full spreadsheet.

Table 7: Refined Categories and Keywords

Category	Keyword(s)	Example Discrete Competencies
Administrative	Consent formRecord keepingData collectionPolicy	 Adhere to universal precautions Faxes or enters electronically patient information as needed
Scheduling	Scheduling resourcesScheduling appointments	 Schedule any follow-up appointments or additional testing as needed Identify and schedule resources required for a successful tele-encounter, including local personnel, local facility space, remote provider, remote evaluating provider, remote evaluating provider's facility, equipment, conductivity, and/or any combination thereof
Privacy/Security	RegulationsConfidentiality	 Understand and adhere to HIPAA regulations Laws and regulations concerning the protection and exchange of medical data
Technology	ConnectivityOperation of software/equipment	 Assist students with equipment and software Can establish the video and audio connection for the telepractice session on the local computer

Table 7 contd.

Category	Keyword(s)	Example Discrete Competencies
Troubleshooting	 Alternate plan Contact I.T. Basic troubleshooting	 Maintain a list of contact information for key personnel at the remote connecting end, including technical support Troubleshoot basic audio and video difficulties.
Patient Relations	EducationCounseling	 Able to enhance the confidence of the patient in the deployed technology Allay student fears with informal talk
Session Duties	 Preparation Discharge & follow up Facilitation	 Establish proper seating for the patient, allowing access to the computer and appropriate lighting for adequate video transmission. Help patient access web-based therapy tools (e.g., highlighter, pointer text tools).
General/Miscellaneous	• N/A	 Evaluate and articulate outcomes and make suggestions for improving future tele-encounters Exercise good time management skills

Identification of universal competencies. The purpose of the current study was to create a list of universal competencies that all school based e-Helpers should possess. Not all discrete competencies were noted across every source. Therefore, the refined spreadsheet was examined across all sources to identify competencies appearing across multiple sources, thus being "universal" in nature. For instance, seven of the nine sources listed a competency related to maintaining patient confidentiality. The Likert scale shown in Table 8 was used to rank the recurrence of competencies across sources and thus their relevance and importance to the role of an e-Helper. Competencies cited in five or more resources were selected for inclusion in the draft competencies.

Table 8: Initial Competency Rating Scale

Rating	Qualifying Criteria
Very high importance	Competency was cited in eight to nine sources. (88%-100%)
High importance	Competency was cited in six to seven sources. (66%-77%)
Important	Competency was cited in five sources. (55%)
Low importance	Competency was cited in three to four sources. (33%-44%)
Very low importance	Competency was cited in one to two sources. (11%-22%)

Phase II: revision of initial competencies.

Each source had a slight wording variation in the description of the individual competencies. Thus, competencies rated as important, highly important, or very highly important were edited to incorporate qualities described across sources. The revised competency descriptions were reviewed by the co-PI and Dr. Covert. If competencies

identified as important were not specific to the school setting, they were rewritten to reflect the specific environment, if necessary. For example, competencies referencing privacy and confidentiality were rewritten and standardized to specifically address FERPA (see Table 9 for examples of edited competencies.) A total of 34 competencies identified as important, high importance, and very high importance were organized in a word document identified as Competencies 1 (see Appendix C).

Table 9: Original Competencies and their Revised Versions

Competencies	Selected	for	Inclusion
Competences	Boiletta	101	Inclusion

- Assisting with scheduling student therapy times
- Set up a schedule that provides an optimal and consistent time for patient to offer best responses.
- Schedule follow-up appointments, treatments, etc., as ordered
- Schedules any follow-up appointments or additional testing as needed
- Maintains confidentiality, video and audio privacy during a telemedicine consult.
- Promote privacy and confidentiality in videoconferencing
- Student confidentiality (FERPA)
- Assure privacy and confidentiality of the patient
- Knowing how to operate cameras, computer games, shared windows, student settings, and how to reboot, re-enter the system, log on, and optimize home computer settings
- Basic ICT skills, such as the use of the Internet and a personal computer
- Be knowledgeable about how to turn on video equipment, initiate a call, and resources available for obtaining technical assistance

Edited Competencies

- Assists with scheduling therapy sessions and make-up sessions as required
- Schedules meetings between the SLP and families, teachers, and or additional professionals as warranted
- Adheres to school district policy specific to privacy and confidentiality within telepractice (e.g., video and audio privacy during telesession)
- Demonstrates ability to manage accounts, personal settings, and privacy controls in online telepractice application
- Can access email and Internet to locate the links and online connections for the telepractice session.
- Can establish the video and audio connection for the telepractice session

Phase III: content expert review.

Content experts were established using an iterative process according to the procedures for expert review modeled after Grant and Davis (1997).

Selection of content experts. Content experts were selected based on one or more of the following criteria:

- Relevant training, experience, and qualifications in telehealth
- A history of publications in refereed journals, national presentations, and research on telehealth
- Expertise related to the conceptual framework of personnel development

Four content experts, as detailed in Table 10, were recruited to review Competencies 1.

Table 10: Content Experts

Content Expert	Relevant Experience
Lyn Covert	 Staff Speech-Language Pathologist, Department of Veterans Affairs Medical Center Elected Coordinator of ASHA Special Interest Group (SIG) 18, Telepractice (2014-2016) Appointed liaison from VHA Telehealth Speech Pathology Task Force to ATA Telerehabilitaion Special Interest Group Member of task force to write VA Telespeech Operations Manual Published 4 book chapters in the field of telerehabilitation/telepractice
Robert Sprang	 Director of Kentucky TeleCare Drafted legislation for statewide telehealth initiative, reimbursement by Medicaid & insurance companies for telehealth encounters (2000) Finalized development of the "Telehealth Associate" certificate program in the Kentucky Community College system to train a new generation of telehealth workforce in rural Kentucky Launched telehealth in the state Department of Corrections
Janice Tucker	 Supervisor of Special Education: Speech-Language Support Programs, Lincoln Intermediate Unit #12 Initiated new program in school-based telepractice, Lincoln Intermediate Unit #12 Initiated and Chaired Telepractice Task Force (2012 – 2015) Published 3 articles in peer-reviewed journals in the field of tele-rehabilitation
Jana Cason	 Professor in the Occupational Therapy Department at Spalding University Past chair of the American Telemedicine Association's Telerehabilitation Special Interest Group (2014-2016) Senior associate editor of the International Journal of Telerehabilitation Authored numerous refereed articles, book chapters, and standards and guidelines documents related to telehealth

Information provided to content experts. In order for content experts to have a clear understanding of what was being measured and why, they were provided with an explanation of the conceptual basis of this project and any necessary conceptual definitions, such as the definition of an e-Helper. Because scoring criteria was being developed at the time the competency checklist was sent out for review, experts had the option of contributing their opinion on scoring. The following paragraph details the elements that the content experts were asked to consider with regard to each competency and the competency checklist as a whole.

Content experts were asked to judge each competency on a scale of one to ten (with one being least important and ten being most important) in terms of how representative the competency was of the targeted content domain (i.e. the skills and knowledge required to be an e-Helper). Experts were asked for revisions in cases where competencies were thought to be inconsistent with conceptual definitions or non-representative of the content. Content experts were asked to judge each competency in terms of the clarity and specificity of language used. Experts had the option of suggesting revisions. Content experts were asked to judge the competency checklist as a whole for the degree to which it is representative of the entirety of the content domain. Experts were asked to indicate competencies that needed to be added or deleted to better represent the content domain.

Analysis. An average score was calculated for each competency across all content experts. Competencies that had an average score of greater than five were included in the survey. No competencies had an average rating of less than five. Ninety one percent of competencies (31 out of 34) were rated with average scores being greater than or equal to eight. See Table 11 for full expert results.

Table 11: Content Expert Ratings

Thematic Area	Competency	L. Covert	R. Sprang	J. Tucker	J. Cason	Average Rating
Administrative	Copies, sends, and collects paperwork specific to the IEP process (e.g. consent to evaluate, annual IEP meetings)	10	8	7	8	8.25
	Assists with scheduling therapy sessions and make-up sessions as required	10	7	5	10	8
Policies and	Schedules meetings between the SLP and families, teachers, and or additional professionals as warranted	10	6	3	5	6
Procedures	Follows school's general operating policies and procedures (e.g., fire drill, dismissal, lunch etc.)	9	7	10	10	9
	Adheres to school district policy regarding student confidentiality (e.g., paperwork, electronic records, protected information in public spaces)	10	7	10	10	9.25
	Follows school's infection control policies	10	8	10	10	9.5

Table 11 contd.

Thematic Area	Competency	L. Covert	R. Sprang	J. Tucker	J. Cason	Average Rating
Policies and Procedures	Adheres to school district policy specific to privacy and confidentiality within telepractice (e.g., video and audio privacy during tele-session)	10	7	10	10	9.25
	Adheres to school district policy and procedures regarding telepractice (e.g., scheduling, roles and responsibilities of eHelper)	10	8	10	10	9.5
Telepractice Session						
Bession	Verifies that all necessary technology is available for use during a telepractice session.	9	9	10	10	9.5
	Positions technology in relation to the student to maximize audio and video quality.	9	8	10	10	9.25
	Ensures lighting and noise levels are appropriate and will not interfere with audio and video quality.	9	8	10	10	9.25

Table 11 contd.

Thematic Area	Competency	L. Covert	R. Sprang	J. Tucker	J. Cason	Average Rating
	Prepares, organizes and maintains therapeutic materials for use during the session (as directed by the SLP).	10	8	10	10	9.5
	Escorts the student to and from class if necessary.	8	6	10	10	8.5
Telepractice Session	Assists student in accessing or using web based therapy tools (e.g., highlighter, pointer text tools).	10	8	10	10	9.5
	Administers prompts, scaffolding and reinforcement as directed by the SLP.	8	8	10	10	9
	Uses behavior management strategies effectively.	9	7	10	10	9
	Clarifies student's response if necessary.	9	7	10	10	9
	Reviews/reminds student and/or parents of homework.	7	7	7	10	7.75
	Cleans equipment between students.	10	8	10	10	9.5

Table 11 contd.

_	Thematic Area	Competency	L. Covert	R. Sprang	J. Tucker	J. Cason	Average Rating
	Technology						
		Can access email and Internet to locate the links and online connections for the telepractice session.	10	9	10	10	9.75
		Can establish the video and audio connection for the telepractice session.	10	9	10	10	9.75
30		Can use annotation features of video- conferencing software (e.g., highlighter, arrow, text boxes, chat feature).	9	8	10	10	9.25
		Demonstrates ability to manage accounts, personal settings, and privacy controls in online telepractice application	9	8	10	10	9.25
		Solves audio and video problems on local computer	10	8	10	10	9.5
_		Solves problems with software (e.g., loss of mouse, program not responding) on local computer	10	8	10	10	9.5

Table 11, contd.

Thematic Area	Competency	L. Covert	R. Sprang	J. Tucker	J. Cason	Average Rating
Technology	Solves problems with peripheral devices on local computer (e.g. printer, document camera).	10	8	9	10	9.25
	Uses an alternative connection (e.g. telephone, email) with SLP to troubleshoot connection problems or to reschedule a session.	9	7	10	10	9
	Maintains a list of contact information for key personnel at the school and district level who can assist with troubleshooting technical problems.	10	9	10	8	9.25
	Follows-up with technical support immediately following a therapy session, if any problems occur.	9	8	9	10	9
	Maintains a log of technical difficulties encountered and requests assistance with recurring problems	10	8	9	10	9.25

Table 11 contd.

Thematic Area	Competency	L. Covert	R. Sprang	J. Tucker	J. Cason	Average Rating
Interpersonal						
	Interacts with students in a developmentally appropriate manner.	10	9	10	10	9.75
	Accurately transmits information between the SLP and students, teachers, parents, administrators, and or other professionals.	10	9	10	10	9.75
	Accurately describes telepractice to students, teachers, parents, administrators and or other professionals	8	9	10	10	9.25

Phase IV: revision.

Following content expert review, Competencies 1 was edited to reflect expert opinion in terminology, scoring, and clarification. Any expert revisions were incorporated into Competencies 2. The term e-Helper was defined at the beginning of Competencies 1 as the person physically present with the student receiving speech-language services. It was suggested that the term "facilitator" be used in place of "e-Helper" in order to reflect that the individual may have other job titles such as special education teacher or school principal. It was also suggested that consistent terminology be used with regards to referenced technology. For example, in Competencies 1, several items addressed use of the local computer. The term "local electronic device" was suggested instead in order to be more encompassing. One competency was added to technology regarding use of the chat feature, for a total of 35 competencies. The PI created the original checklist with a 10 point Likert scale; however, several experts suggested a 5 point Likert scale. The resulting Likert scale was based on importance relative to the roles and responsibilities of a facilitator ("not at all important, slightly important, moderately important, very important, extremely important).

Phase V: consumer review.

Following expert revisions, Competencies 2 was formatted into a secure online survey tool (Qualtrics) and disseminated to four consumer groups. The survey was organized into 4 sections: consent and survey directions, initial qualifying questions, competency rating scales, and participant demographics. The initial page of the survey was the university IRB approved consent letter, to which participants were required to answer either "Yes, I consent to taking part in this study" or "No, I do not consent to taking part in

this study." If they selected "no," the survey was conditioned to end. If they selected "yes," the survey continued and participants were taken to another page with survey directions explaining how to rate each competency relative to the roles and responsibilities of a facilitator on a 5 point scale of importance from "not at all important" to "extremely important." Directions indicated how to make comments regarding questions and suggestions about the competencies, wording, and additional competencies within the provided comment boxes. The terms "facilitator," "SLP," "Telepractice," and "Student" were defined. See Appendix D for a copy of the survey.

Participants were first asked to identify the title that most closely reflected their current position (SLP, facilitator, SLP assistant, university or clinical faculty, and school administrator). Based on how participants responded to their current position, the survey branched to questions regarding their current or previous experience with telepractice. If participants responded they had never had experience with telepractice, the survey was conditioned to end. As an additional requirement, SLP participants must have had experience with telepractice in a brick and mortar school building.

The 35 competencies were organized into five thematic areas and presented in the following order:

- 1. Telepractice Session (12 competencies)
- 2. Technology Specific Knowledge (12 competencies)
- 3. Interpersonal Skills (3 competencies)
- 4. Policies and Procedures (5 competencies)
- 5. Administrative Knowledge and Skills (3 competencies)

Each survey page began with a carrier sentence including the number of competencies listed on the page and the thematic area highlighted in various colors for visibility. For example, the survey page for "Telepractice Session" had the following carrier phrase: "The following 5 competencies address knowledge and skills that a facilitator should possess specific to the telepractice session." The words "telepractice session" were bolded and highlighted in green. Competencies were displayed in a matrix table with competencies appearing in the left column and the rating scale to the right. No more than 5 competencies were presented per page. At the end of each thematic area, participants were given the option to make comments in a free text box.

Participant demographics. Demographic questions varied based on the participants' selected job position. Questions were aimed at understanding duration of experience with telepractice, settings, purposes, experience with training facilitators, and formal training in telepractice itself. See Appendix D for full demographic questions.

Consumer groups and dissemination. Because a range of expertise and experience is valuable to content analysis, key users were selected from four consumer groups: (a) school administrators who had adopted telepractice as a service delivery model; (b) SLPs experienced in telepractice within a school setting; (c) current e-Helpers, and (d) scholars experienced in telepractice. School administrators are responsible for identifying the roles and responsibilities of e-Helpers, for hiring e-Helpers, and for funding telepractice within the school setting (Alvares, 2013; Grogan-Johnson 2014; J. Tucker, personal communication April 10, 2017). SLPs experienced in telepractice, along with e-Helpers, have intimate knowledge of the skills that facilitate and hinder e-Helpers in the implementation of telepractice. It was anticipated that SLPs and e-Helpers would identify

knowledge and skills critical to a successful telepractice program that were not on Competencies 2. Finally, scholars in the field of telepractice were included because they are well versed in learning pedagogy and privy to cutting edge trends in telehealth, which could influence pertinent competencies.

The PI recruited consumers by conducting a search of the Internet for individuals in each consumer group (SLPs, educators, scholars, and e-Helpers) and private practice companies or school districts that advertised the use of telepractice as a service delivery model. Companies, schools, or individuals were sent a university IRB approved e-mail invitation to participate in the survey by the PI. The co-PI posted an abbreviated version of the IRB approved invitation on ASHA's SIG 18 telepractice community board. In addition, the co-PI printed the abbreviated IRB approved invitation and distributed the flyers by hand during the 2017 ASHA convention in Los Angeles, California. The flyers included a link to the survey and a Quick Response (QR) code linking to the survey. Three reminders to complete the survey were sent via e-mail or posted to the community board. Each reminder was sent 2 weeks apart. Recruitment occurred for 2 months between November 10th, 2017 and January 10th, 2018. Participants were asked to disseminate the anonymous survey link to anyone else in the four user groups they felt met the inclusion criteria.

Analysis. Descriptive statistics in the form of percentages were used to analyze the survey responses. Survey comments were examined for recurring keywords and themes.

Chapter Three: Results

Demographics

Four consumer groups were surveyed. For the purpose of conciseness, the following abbreviations will be used henceforth with regard to survey respondents:

- SLPs as a whole will be referred to as "SLPs."
- SLPs who are currently using telepractice will be referred to as "SLP-C."
- SLPs who used telepractice in the past but are not currently using telepractice within a school environment will be referred to as "SLP-P."
- Facilitators will be referred to as "Tele-F."
- School administrators will be referred to as "SA."
- University faculty/staff will be referred to as "UF."

A total of 21 SLPs completed the survey in its entirety; of those, 16 were currently using telepractice and five had used telepractice in an educational setting previously. The average experience amongst SLP-C was 3.25 years (1 month – 9.25 years) and average caseload size was 33 children (2-65) served via telepractice. SLP-P had more years of tele-experience in an educational setting with average experience being 5.9 years (1 year-9 years). Caseload size was not reported by all respondents in SLP-P. A total of three Tele-F completed the survey, and indicated they are currently assisting with telepractice in an educational setting with average experience being 10.6 months (2 months-1.5 years). The lone SA indicated that the school district has contracted for telepractice services for 4 years. Seven UF completed the survey. Questions about years of experience and caseload size

were not relevant to UF due to the domain of expertise being in research and other indirect telepractice services.

Settings. Ninety percent of SLPs and Tele-F use or have used telepractice with students in elementary and high school. Less respondents across all SLPs and Tele-F indicated they served children in preschool and other environments. See Table 12 for full results.

Table 12: Demographic Settings

Settings	SLP-C n = 16	SLP-P n = 5	Tele-F $n = 3$	SA $n = 1$	Total $n = 25$
Preschool	3	4	2	0	9
Elementary	14	5	2	1	22
Secondary school (middle/high school)	11	5	2	0	18
Special day/residential school	0	0	0	0	0
College/university	0	0	N/a	N/a	0
Home	2	4	N/a	N/a	6
Other	0	0	0	0	0

Purpose of telepractice. Across consumer groups telepractice is or was used for assessment, treatment and regulation compliance. Most SLPs reported using telepractice for assessment, treatment, IEP related activities, professional consultation, and parent conferences. Few SLPs use telepractice for follow-up and/or progress monitoring. Two out of three Tele-F indicated assisting with assessment and professional consultation while all three Tele-F indicated assisting with treatment. One Tele-F indicated assisting with IEP related activities, and no Tele-F indicated assisting with parent conferences. The SA, too, reported the use of telepractice for assessment, treatment, and conducting IEP related

activities. See Table 13 for full results. Unlike school-based personnel, most UF conduct research in telepractice and/or supervise a graduate-level telepractice clinical experience. Five UF also reported using telepractice for professional consultation. See Table 14 for full results.

Table 13: Purposes for SLPs, Tele-F, and SA

Dumaca	SLP-C	SLP-P	Tele-F	SA	Total
Purpose	n = 16	n = 5	n = 3	n = 1	n = 25
Assessment	10	5	2	1	18
Treatment	16	5	3	1	25
Follow- up/monitoring	6	3	N/a	N/a	9
Professional consultation (i.e., with teachers, administrators, other related services)	11	5	2	N/a	23
To conduct Individualized Education Plan (IEP) related activities	13	5	1	1	20
Parent conferences	11	4	0	0	15
Other	2	0	0	0	2

Table 14: Purposes for UF

Purpose	UF n=7
Deliver fee for services	3
Conduct research in the area of telepractice	7
Supervise a graduate-level telepractice clinical experience delivered via telepractice	6
Professional consultation (i.e., with teachers, administrators, other related services)	5
Other	0

Areas of practice. Questions relating to areas of practice were asked of SLP respondents only in order to capture a picture of school based services rather than clinic or university settings. It was hypothesized that Tele-F and SA would not be knowledgeable of practice areas. Ninety percent of SLPs indicated using telepractice for assessing or treating articulation and/or phonological disorders and language disorders. Sixty-two percent indicated using telepractice for assessing/treating fluency disorders. Assessment/treatment of students with autism spectrum disorder and motor speech disorders/apraxia occurred in 48% and 43% of SLPs respectively. The least common areas of assessment and treatment were myofunctional disorders, dysphagia, literacy, and auditory processing disorders. Proportionately more SLP-Ps than SLP-Cs delivered services in the areas of developmental disabilities and motor speech disorders/apraxia. See Table 15 for details.

Table 15: Areas of Practice for SLPs

Area of Practice	SLP-C	SLP-P	SLPs
Theu of Fluctice	n=16	n=5	n=21
Articulation/phonological disorders	15	4	19
Auditory processing disorders	3	2	5
Augmentative/alternative communication and/or Nonverbal	5	3	8
Autism spectrum disorders	6	4	10
Dysphagia	0	0	0
Fluency disorders	9	4	13
Hearing loss	2	3	5
Language disorders	14	5	19
Learning disabilities	6	3	9
Literacy (Reading and Writing)	2	3	5
Developmental disabilities	4	4	8
Motor speech disorders/apraxia	4	5	9
Myofunctional disorders	0	0	0

Training for SLPs, UFs, and SA. All consumer groups were asked questions pertaining to the type of training they have received regarding telepractice. For clarity, Tele-F responses regarding type of training will be addressed in a later section labeled "Facilitator training." When asked how the respondent received training in telepractice, 88% of SLP-Cs indicated having received informal training through peer-to-peer mentoring or an employer, followed by self-guided learning (50%) and continuing education (44%). When asked the same question, 100% of SLP-Ps indicated self-guided learning, followed by continuing education (60%) and informal training through peer-to-peer mentoring or an employer (40%). Three SLPs selected an alternate form of training

but did not specify type or form of training. Regarding UF training, 86% indicated informal training through peer-to-peer mentoring or an employer, followed by self-guided learning (71%) and continuing education (71%). Only one respondent, an SLP-C, had completed university coursework. The SA indicated no training in telepractice.

Facilitator identification. Sixty-seven percent of SLPs and the lone SA responded that the Director of Special Education was responsible for identifying the facilitator. Four SLP-Cs selected "other" response option, noting the SLP, Board of Education, or telecompany identified the Tele-F. The three Tele-Fs reported having been identified by a school administrator. UF were not asked this question due to the indirect nature of their services, as previously described in the introductory paragraph.

Formal telepractice policy. When asked if the respondent's school district had formal telepractice policies, 72% of respondents across the groups SLPs, Tele-F, and SA, indicated "no" or "unsure."

Facilitator training. Sixty-six percent of SLPs reported being responsible for training a facilitator. However, no Tele-F indicated receiving training by a SLP. Instead, all three reported being self-taught, while one also received informal training from a peer. The SA indicated training of facilitators was conducted by "other" but did not elaborate. Seventy-one percent of UF indicated responsibility for training facilitators.

If a respondent indicated having ever been responsible for training a facilitator, the survey branched to a question regarding strategies used to train facilitators. Ninety-three percent of SLPs indicated training facilitators through online video-conferencing, while 64% indicated informal training simultaneously with delivery of services. Forty-three percent of SLPs indicated training in-person. Seventy-one percent of UF indicated informal

training simultaneously with delivery of services, while 43% indicated formal training via video-conferencing.

All Tele-F (100%) indicated receiving training by self-guided learning and/or informal peer-to-peer mentoring, with training occurring through written materials and inperson. No Tele-F indicated having had any formal training.

Competencies

The primary purpose of the current project was to identify a set of competencies that, at minimum, all facilitators within a school setting should be able to demonstrate. As described in Methods, Phase V: consumer review, the competency rating scales were divided by thematic area. While the survey originally used a five point scale of importance, the rating scale was collapsed to a three point scale (not important, neutral, important) due to the small sample size across groups. To ascertain the importance of the individual competencies across consumer groups, individual competencies were clustered as follows:

- Cluster 1, Most Important: competencies rated as important by 76 100% of respondents.
- Cluster 2, Moderately Important: competencies rated as important by 51-75% of respondents.
- Cluster 3, Slightly Important: competencies rated as important by 26-50% of respondents.
- Cluster 4, Least Important: competencies rated as important by 0-25% of respondents.

For clarity, the results within the clusters will be described by thematic area. See Table 16 for condensed results. For full results, see Appendix E.

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Table 16: Condensed Competency Results

Thematic Area	Competency		SLPs	Tele- F	UF	SA	Total
Telepractice	e Session Competencies (12)						
	77 'C' 4 4 11 4 1 1 1 1 1 1 C	Not Important	0	0	0	0	0
	Verifies that all necessary technology is available for use	Neutral	0	0	0	0	0
	during a telepractice session.	Important	24	3	7	1	35
		Total	24	3	7	1	35
		Not Important	0	0	0	0	0
	Positions technology in relation to the student to maximize	Neutral	1	0	0	0	1
	audio and video quality.	Important	23	3	7	1	34
		Total	24	3	7	1	35
		Not Important	1	0	0	0	1
	Ensures lighting and noise levels are appropriate and will	Neutral	1	0	0	0	1
	not interfere with audio and video quality.	Important	22	3	7	1	33
		Total	24	3	7	1	35
		Not Important	2	0	0	1	3
	Prepares, organizes and maintains therapeutic materials for	Neutral	4	0	2	0	6
	use during the session (as directed by the SLP).	Important	18	3	5	0	26
		Total	24	3	7	1	35
		Not Important	3	0	1	0	4
	Cleans equipment between students.	Neutral	10	1	1	1	13
		Important	11	2	5	0	18
		Total	24	3	7	1	35

Table 16 contd.

Thematic Area	Competency		SLPs	Tele- F	UF	SA	Total
Telepractice Session C	Competencies continued						
		Not Important	0	0	0	0	0
Escoi	rts the student to and from class if necessary	Neutral	2	0	2	1	5
		Important	22	3	5	0	30
		Total	24	3	7	1	35
Assists s	tudent in accessing or using web based therapy	Not Important	2	0	0	0	2
	necessary (e.g., highlighter, pointer, text tools,	Neutral	1	0	0	0	1
	websites).	Important	21	3	7	1	32
	,	Total	24	3	7	1	35
		Not Important	9	0	1	0	10
(Clarifies student's response if necessary.	Neutral	4	0	2	0	6
	1	Important	11	3	4	1	19
		Total	24	3	7	1	35
		Not Important	12	0	4	0	16
Ren	ninds student and/or parents of homework.	Neutral	6	2	3	1	12
	1	Important	6	1	0	0	7
		Total	24	3	7	1	35
	66.11	Not Important	5	0	1	0	6
Adminis	sters prompts, scaffolding and reinforcement as	Neutral	5	0	3	0	8
	directed by the SLP.	Important	13	3	2	1	19
		Total	23	3	6	1	33

Thematic Area	Competency		SLPs	Tele- F	UF	SA	Total
Telepractice Session C	ompetencies continued						
Hees beh	navior management strategies as directed by the	Not Important	0	0	1	0	1
USCS UCI	SLP.	Neutral	5	0	1	0	6
	SLI.	Important	18	3	6	1	28
		Total	23	3	6	1	33
Ensures	SLP receives verbal or written confirmation of	Not Important	4	0	2	0	6
completed	homework and communicates follow through of	Neutral	10	1	3	1	15
-	homework back to the SLP	Important	9	2	1	0	12
		Total	23	3	6	1	33
Technology Specific C	Competencies (12)						
Company	a small and Intermet to leasts the links and online	Not Important	0	0	0	0	0
Can access email and Internet to locate the links and online	Neutral	1	0	0	0	1	
	connections for the telepractice session.	Important	22	3	7	1	33
		Total	23	3	7	1	34
Communication	and the said of the said of the same of the same of the said of th	Not Important	0	0	0	0	0
Can es	tablish the video and audio connection for the	Neutral	1	0	0	0	1
	telepractice session	Important	23	3	7	1	34
		Total	23	3	7	1	34
C		Not Important	5	0	0	0	5
Can use an	anotation features of video-conferencing software	Neutral	4	0	4	1	9
	(e.g., highlighter, arrow, text boxes)	Important	14	3	3	0	20
		Total	23	3	7	1	34

Table 16 contd.

Thematic Area Competency		SLPs	Tele- F	UF	SA	Total
Technology Specific Competencies continued						
Con use shot feeture of video conferencing software to	Not Important	2	0	2	0	4
Can use chat feature of video-conferencing software to communicate with SLP	Neutral	3	1	3	1	8
communicate with SEF	Important	18	2 3	2 7	0	22
	Total	23	3	7	1	34
	Not Important	1	0	1	0	2
Solves audio and video problems on local electronic device	Neutral	3	0	0	0	3
(computer, tablet, etc.)	Important	19	3	6	1	29
	Total	23	3	7	1	34
	Not Important	1	0	1	0	2
Solves problems with software on local computer/tablet	Neutral	3	1	1	0	5
(e.g., loss of mouse, program not responding)	Important	19	2	5	1	27
	Total	23	3	7	1	34
Solves problems with peripheral devices on local	Not Important	4	0	1	0	5
	Neutral	7	1	3	0	11
camera)	Important	12	2	3	1	18
	Total	23	3	7	1	34
Uses an alternative method to communicate with the SLP	Not Important	0	0	0	0	0
Uses an alternative method to communicate with the SLP	Neutral	0	1	0	1	2
when video connection fails (e.g., telephone, email)	Important	23	2 3	7	0	32
	Total	23	3	7	1	34

Table 16 contd.

Thematic Area	Competency		SLPs	Tele- F	UF	SA	Total
Technology Specif	ic Competencies continued						
	Maintains a list of resources for assisting with	Not Important	0	0	0	0	0
troubl	leshooting technical problems (e.g. school personnel,	Neutral	3	2	0	0	5
V	rideo-conferencing platform, web resources etc.)	Important	20	1	7	1	29
		Total	23	3	7	1	34
		Not Important	0	0	0	0	0
Follov	vs-up with technical support immediately following a	Neutral	3	0	0	0	3
	therapy session, if any problems occur	Important	20	2	7	1	30
		Total	23	2	7	1	33
		Not Important	3	0	1	0	4
Mair	<u> </u>	Neutral	5	1	2	0	8
	requests assistance with recurring problems	Important	15	1	4	1	21
		Total	23	2	7	1	33
_		Not Important	2	0	1	0	3
		Neutral	3	1	1	0	5
and	i privacy controls in online telepractice application	Important	18	1	5	1	25
		Total	23	2	7	1	33
Demo	ntains a log of technical difficulties encountered and requests assistance with recurring problems Instrates ability to manage accounts, personal settings, I privacy controls in online telepractice application	Total Not Important Neutral Important Total Not Important Neutral Important	23 3 5 15 23 2 3 18	2 0 1 1 2 0 1 1	7 1 2 4 7 1 1 5	1 0 0 1 1 1 0 0	

Thematic Area Competency		SLPs	Tele- F	UF	SA	Total
Policy and Procedure Competencies (5)						
Follows school's general operating policies and procedures	Not Important	0	0	0	0	0
(e.g., fire drill, emergency procedures, dismissal, lunch etc.)	Neutral	1	1	0	0	2
	Important	21	2	7	1	31
	Total	22	3	7	1	33
Adheres to school district policy regarding student	Not Important	0	0	0	0	Λ
confidentiality (e.g., paperwork, electronic records,	Not Important Neutral	$0 \\ 0$	0 0	0	$0 \\ 0$	0
protected information in public spaces)		-		_	U	
protected information in paone spaces)	Important	22	3	7	1	33
	Total	22	3	7	1	33
	Not Important	0	0	0	0	0
Follows school's infection control policies	Neutral	1	0	1	0	2
•	Important	21	3	6	1	31
	Total	22	3	7	1	33
Adheres to school district policy and procedures regarding	Not Important	0	0	0	0	0
telepractice (e.g., scheduling, roles and responsibilities of a	Neutral	0	0	0	0	0
facilitator)	Important	22	3	7	1	33
	Total	22	3	7	1	33
Adheres to school district policy specific to privacy and	Not Important	0	0	0	0	0
confidentiality within telepractice (e.g., video and audio	Neutral	0	0	0	0	0
privacy during tele-session)	Important	22	3	7	1	33
	Total	22	3	7	1	33

Table 16 contd.

Thematic Area Competency		SLPs	Tele- F	UF	SA	Total
Administrative Competencies (3)						
Copies, sends, and collects paperwork specific to the	Not Important	1	0	3	0	4
Individualized Education Plan (IEP) process (e.g. consent to	Neutral	2	0	2	1	5
evaluate, annual IEP meetings)	Important	19	3	2	0	24
	Total	22	3	7	1	33
	Not Important	3	0	1	1	5
Assists with scheduling therapy sessions and make-up	Neutral	5	1	2	0	8
sessions as required	Important	14	2	4	0	20
	Total	22	3	7	1	33
	Not Important	6	0	3	1	10
Schedules meetings between the SLP and families, teachers.	Neutral	8	1	2	0	11
and or additional professionals as warranted	Important	8	2	2	0	12
	Total	22	3	7	1	33

Table 16 contd.

Thematic Are	a Competency		SLPs	Tele- F	UF	SA	Total
Interpersonal	Competencies (3)						
		Not Important	0	0	0	0	0
	Interacts with students in a developmentally appropriate	Neutral	0	0	2	0	2
	manner.	Important	22	3	5	1	31
		Total	22	3	7	1	33
	A connected to the connection between the CLD and	Not Important	0	0	0	0	0
	Accurately transmits information between the SLP and students, teachers, parents, administrators, and or other	Neutral	0	1	1	1	3
	professionals.	Important	22	2	6	0	30
	professionars.	Total	22	3	7	1	33
		Not Important	1	0	2	1	4
	Accurately describes telepractice to students, teachers,	Neutral	4	1	2	0	7
	parents, administrators and or other professionals	Important	17	2	3	0	22
	•	Total	22	3	7	1	33

Cluster 1, most important. Of the 35 competencies, a total of 21 (60%) were rated as important by 76-100% of respondents. Of the thematic areas, "technology specific" had eight competencies in Cluster 1, the highest of all the thematic areas. In the remaining thematic areas, "telepractice session" had six competencies, "policy and procedure" had five competencies, "interpersonal" had two competencies, and "administrative" did not have any competencies in Cluster 1. See Table 17 for details.

Cluster 2, moderately important. Of the 35 competencies, a total of 11 (31%) were rated as important by 51-75% of respondents. Of the thematic areas, "telepractice session" and "technology specific" had four competencies each in Cluster 2, the highest of the thematic areas. In the remaining thematic areas, "interpersonal" had one competency, "administrative" had two competencies, and "policy and procedure" did not have any competencies in Cluster 2. See Table 18 for details.

Cluster 3, slightly important. Of the 35 competencies, a total of two (6%) were rated as important by 26-50% of respondents. One of the two competencies was in the thematic area of "telepractice session," and was related to the facilitator's responsibilities regarding communicating with the SLP and student about homework. The remaining competency was in the thematic area of "administrative," and was related to the facilitator scheduling meetings between the SLP and others. See Table 19 for details.

Cluster 4, least important. Of the 35 competencies, a total of 1 (3%) was rated as important by 0-25% of respondents. The sole competency was in the thematic area of "telepractice session," and was related to the facilitator's responsibility of reminding students of assigned homework. See Table 19 for details.

Table 17: Cluster 1, Most Important

Thematic Area	Competency	% of respondents rating "important"
Telepractice Session		
	Verifies that all necessary technology is available for use during a telepractice session.	100
	Positions technology in relation to the student to maximize audio and video quality.	97
	Ensures lighting and noise levels are appropriate and will not interfere with audio and video quality.	94
	Assists student in accessing or using web based therapy tools if necessary (e.g., highlighter, pointer, text tools, websites).	91
	Escorts the student to and from class if necessary	86
	Uses behavior management strategies as directed by the SLP.	79
Technology Specific		
	Can access email and Internet to locate the links and online connections for the telepractice session.	97
	Can establish the video and audio connection for the telepractice session	97
	Uses an alternative method to communicate with the SLP when video connection fails (e.g., telephone, email)	94
	Follows-up with technical support immediately following a therapy session, if any problems occur	91

Table 17 contd.

Thematic Area	Competency	% of respondents rating "important"
Technology Specific	Solves audio and video problems on local electronic device (computer, tablet, etc.)	85
	Maintains a list of resources for assisting with troubleshooting technical problems (e.g. school personnel, video-conferencing platform, web resources etc.)	85
	Solves problems with software on local computer/tablet (e.g., loss of mouse, program not responding)	79
	Demonstrates ability to manage accounts, personal settings, and privacy controls in online telepractice application	76
Interpersonal		
	Interacts with students in a developmentally appropriate manner.	94
	Accurately transmits information between the SLP and students, teachers, parents, administrators, and or other professionals.	91
Policy and Procedure		
	Adheres to school district policy and procedures regarding telepractice (e.g., scheduling, roles and responsibilities of a facilitator)	100
	Adheres to school district policy regarding student confidentiality (e.g., paperwork, electronic records, protected information in public spaces)	100
	Adheres to school district policy specific to privacy and confidentiality within telepractice (e.g., video and audio privacy during tele-session)	100
	Follows school's general operating policies and procedures (e.g., fire drill, emergency procedures, dismissal, lunch etc.)	94
	Follows school's infection control policies	94

Table 18: Cluster 2, Moderately Important

Thematic Area	Competency	% of respondents rating "important"
Telepractice Session		
	Prepares, organizes and maintains therapeutic materials for use during the session (as directed by the SLP).	74
	Administers prompts, scaffolding and reinforcement as directed by the SLP.	58
	Clarifies student's response if necessary.	54
	Cleans equipment between students.	51
Technology Specific		
y specific	Can use chat feature of video-conferencing software to communicate with SLP	65
	Maintains a log of technical difficulties encountered and requests assistance with recurring problems	64
	Can use annotation features of video-conferencing software (e.g., highlighter, arrow, text boxes)	59
	Solves problems with peripheral devices on local computer/tablet (e.g. external camera, printer, document camera)	53
Interpersonal	, 1	
-	Accurately describes telepractice to students, teachers, parents, administrators and or other professionals	67
Administrative	•	
	Copies, sends, and collects paperwork specific to the Individualized Education Plan (IEP) process (e.g. consent to evaluate, annual IEP	73
	meetings) Assists with scheduling therapy sessions and make-up sessions as required	61

Table 19: Clusters 3 and 4, Slightly Important and Least Important

Thematic Area	Competency	% of respondents rating "important"
Telepractice Session		
	Ensures SLP receives verbal or written confirmation of completed homework and communicates follow through of homework back to the SLP.	36
Administrative		
	Schedules meetings between the SLP and families, teachers, and or additional professionals as warranted	36
Telepractice Session		
	Reminds student and/or parents of homework	20

Comments. Respondents were given the option to make comments on any of the competencies at the end of each thematic area. A total of 17 comments were made throughout the survey. Several respondents indicated that responsibilities such as maintaining homework, prompting during a therapy session, and scheduling meetings are not required and/or permitted of the facilitators in their work setting. Additionally, respondents stated that some of the aforementioned responsibilities, particularly scheduling, would be more appropriate for the SLP to assume. Conversely, one respondent indicated that delegating the scheduling of meetings and "paperwork flow" to the facilitator allowed for more students to be seen. A total of three respondents made comments relating to the importance of confidentiality. One respondent indicated that the SLP should "provide a list of confidentiality expectations and how they should be handled" due to additional considerations in comparison to the average on-site position. These comments underlining the importance of confidentiality is consistent with survey results, with 100% of respondents rating competencies regarding confidentiality as "important."

With regard to the facilitator's responsibility to answer clinical questions and describe telepractice accurately, one respondent indicated that the facilitator should be careful to refer any clinical questions regarding student progress or outcomes to the SLP; while another respondent indicated that facilitators should not be responsible for describing telepractice due to inaccurate descriptions. Finally, one respondent indicated that identification of a facilitator has been a "huge roadblock" in the success of some schools participating in telepractice and schools with designated facilitators are "significantly more successful." Further, the same respondent indicated that there must be "complete buy-in" from the facilitator in order for the position to be successful.

Chapter Four: Discussion

Advances in telecommunications are allowing health care providers to reach underserved patient populations. The public school sector has greatly benefited from this technology driven service delivery model, termed telehealth, as they are able to match service providers to students requiring their specialized skill sets. Despite the growth in telehealth adoption, research shows that education and training are areas that need more study and development in order for tele-users, both the clinician and tele-support personnel, to provide effective services to clients (Edirippulige & Armfield 2017; Ross et al, 2016). Several organizations have recognized the need for training, particularly for tele-support personnel, and have created programs and/or competencies specific to the role and responsibilities of said personnel within their respective settings. However, identified competencies tend to be more medically and adult oriented in nature and fail to articulate the unique skills needed of tele-support personnel in an educational setting. The purpose of this thesis was to identify a set of competencies necessary for tele-support personnel (i.e., facilitators/e-Helpers) within the school setting.

Thirty-five distinct competencies were identified through an iterative review process and clustered into five thematic areas: telepractice session, technology specific, interpersonal skills, policies and procedures, and administrative knowledge and skills. Four consumer groups (SLPs, facilitators, school administrators, and university faculty) rated the competencies through an online survey format. Results showed that 76% or more of the respondents agreed that 60% of the 35 competencies were important to the role of the facilitator. Over half of the respondents rated 91% of the competencies as important for facilitators to possess.

Of the five thematic areas, consumers were unanimous as to the importance of competencies related to policy and procedures. Three out of the five competencies were rated as important by 100% of respondents, and the remaining two competencies were each rated as important by 94% of respondents. Consumers were adamant that the facilitator must adhere not only to school setting policies and procedures but also to telepractice procedures with heavy importance placed on confidentiality. While consumers valued the importance of telepractice policies, 71% percent of consumers indicated that no telepractice policies existed or were not aware of such policies in their respective work settings. This is disconcerting, as the lack of telepractice policies and procedures has been identified as a barrier to successful telepractice programming (Tucker, 2012).

All consumers felt skills specific to technology use were important, with all 12 competencies rated as important by more than half of the respondents. Highly rated competencies focused on troubleshooting and problem-solving technological difficulties, using basic features such as email and the internet, and managing accounts and privacy controls. These findings align with previous work citing the inability to troubleshoot technology problems as a primary barrier to the success of telepractice in a school setting (Alvares, 2013; Tucker, 2012). Lower rated competencies such as using annotation features and solving problems on local peripheral devices may be more an artifact of the consumer group than the competencies' importance. Two-thirds or more of the facilitators viewed proficiency in annotation features and peripheral devices as important compared to approximately half of the university faculty and SLPs. Ratings could also be influenced by consumers' lack of awareness and/or use of these features.

The three competencies in the thematic area of interpersonal were rated as important by 60% or more of respondents. Greater than 90% of respondents valued the facilitator's use of developmentally appropriate practices with students and accurate transmittal of information among personnel. A comparatively lower rated competency that should be highlighted is "[facilitator] accurately describes telepractice to students, teachers, parents, administrators and or other professionals." Though 67% of respondents rated the competency as important, the university faculty and administrator were more likely to devalue its importance, when compared to the speech-language pathologists and facilitators. One university faculty respondent indicated that facilitators should never be responsible for describing telepractice to others because "they [often] describe it incorrectly, or indicate it does not work because they are not comfortable with technology." Conversely, one SLP stated "complete buy-in" from the facilitator is necessary in order for the program to be successful.

The responsibility of facilitators to accurately describe telepractice and its efficacy is heavily supported by the literature. Alvares (2013) states that "the e-Helper becomes the face of the telepractice program" (p. 45). As such, it is imperative facilitators receive adequate training to allow for confidence in their professional abilities as well as confidence in telepractice as an efficacious service delivery model. Similarly, Tucker (2012) found that "[a]ttitudes make a difference in the success of the program," with many SLPs encountering negative attitudes from parents and teachers, sometimes before even having engaged in telepractice (p. 53). Furthermore, in a systematic review, Ross et al (2016) found that "champions" and "key stakeholders" were referenced in several studies as being key to the success of telehealth programs by "fostering a sense of ownership,

confidence, acceptance, enjoyment and self-pride towards the e-health system and increasing buy-in" (p. 9). The discrepancy in responses regarding the facilitator's responsibility to describe telepractice could be the result of the difference in use of telepractice. One hundred percent of university faculty reported conducting research in telepractice, while only 47% reported delivering clinical services via telepractice. Because the burden of collecting informed consent as part of the research process often rests on study personnel, university faculty may lack understanding of the importance of the facilitator as a champion for telepractice.

More than half of respondents rated 83% of competencies in the thematic area of telepractice session as important. Respondents agreed that competencies such as manipulation of technology during the session, escorting students to and from therapy, and behavior management are important. There was less agreeance among consumers on competencies such as prompting/scaffolding during the session, clarifying student responses, and cleaning equipment between students. SLPs and university faculty were split with regard to prompting/scaffolding and clarifying student responses, however the school administrator and 100% of facilitators felt these competencies were important. Across groups, respondents did not view activities related to homework as important. Again, these lower rated competencies may be explained by a difference in work settings. For example, some private tele-therapy companies may have protocols that prohibit facilitators from prompting students or assigning homework.

As a whole, the three competencies related to administration were viewed as the least important of all 35 competencies with 36% to 73% of consumers rating them as important. Speech-language pathologists and university faculty did not feel scheduling

meetings with families and/or school personnel fell within the purview of the facilitator; rather, respondents indicated such activities could be completed by the SLP using electronic mediums such as email and telephone. Seventy-three percent of respondents did value the need for a tele-facilitator to copy IEP specific documentation. Groups were mixed on the tele-facilitator scheduling therapy sessions. Differences in work settings could again explain the lower ratings for these competencies. For example, private tele-therapy companies may have a system that eliminates the need for a facilitator to assist with scheduling, paperwork, and other related administrative functions. Many survey comments indicated that scheduling should be completed by the tele-SLP, while one SLP respondent indicated that "the online therapy program is significantly more successful [when the facilitator] is able to [...] assist the online therapist with onsite responsibilities such as coordinating meetings." Similarly, another SLP respondent indicated that "having the facilitator help with scheduling meetings and helping with the flow of paperwork allowed me to see more students."

The current study sought to identify minimum competencies that school-based facilitators should possess for the purpose of ensuring quality telepractice services. The competencies could also serve as the content for SLPs when training facilitators. As part of the study, the PI and co-PI had a cursory level of interest in current training practices for the facilitator. While the sample size is small, 66% of SLPs reported being responsible for training a facilitator, yet no facilitators indicated having received training by a SLP. Further, 64% of SLPs and 71% of UF indicated training occurred informally with the delivery of services. When training occurs informally with the delivery of services, not only is the client receiving an inferior level of services, but the facilitator is not receiving

high quality personnel development which would allow them to feel confident in their role and become "champions" for telepractice.

This lack of formal, systematic training in our small sample aligns with the ASHA SIG 18 survey (2016) which found that of the nine targeted areas of telepractice, identifying and training facilitators was consistently the area of lowest confidence for SLPs. At the start of their telepractice careers, 75% of SLPs indicated feeling "not at all" or "somewhat" prepared to identify and train facilitators. When asked how prepared they felt at the time of the survey, 40% of SLPs still indicated feeling "not at all" or "somewhat" prepared to identify and train facilitators.

This gap in training for facilitators could be a result of the SLP not receiving adequate training in telepractice themselves. In ASHA's SIG 18 survey, the majority of SLPs (58%) report receiving their initial training from an employer/workplace, followed by 39% who received training from networking with colleagues, 35% from ASHA's practice portal on telepractice, and 34% from continuing education of 1-3 hours. Though these resources may be excellent sources of information, they are not synonymous with the more systematic and thorough education that graduate courses or continuing education workshops can provide. Only five percent of SLPs indicated having received any type of graduate level courses in telehealth, while 25% of SLPs indicated attending continuing education workshops lasting one or more days. This inconsistency in telepractice training for the SLPs themselves could be creating a "trickle-down" effect whereby the SLP may not be aware of the importance of training the facilitator and/or lack the skills and confidence to provide adequate training.

Although the majority of the 35 competencies were agreed upon by more than half of respondents, the less agreed upon competencies highlight the need for further training and guidelines specific to telepractice in the school setting, regardless of employer. This project sought to address this deficit by identifying a set of core competencies that could be used as the curriculum for facilitator training.

Limitations

This study was limited by the small sample size across consumer groups. In particular, the facilitators, school administrators, and university faculty groups were significantly smaller than the SLP group. Several reasons may account for the small sample size of facilitators. Many SLPs indicated that their facilitators lacked sufficient time to take the survey due to their multiple responsibilities across the school day. Another factor could be that many facilitators may have other titles as their primary role, and thus did not identify themselves as "facilitators." Other consumer groups, such as school administrators and university faculty, were difficult to identify, and thus disseminate the survey to.

Chapter Five: Conclusion

While the use of telepractice as a service delivery model has increased over the years (ASHA, 2014; ASHA, 2016), a review of the literature indicated a dearth of information and resources available to SLPs regarding facilitator training within the school setting. The facilitator, as the in-person link between the remote SLP and the school community, becomes integral to the success of the program. Literature shows that programs without "telepractice champions" are not as successful as those with champions (Ross et al, 2016). Therefore, it is imperative that facilitators are appropriately trained to allow them to be effective "champions," as well as ensure high quality service delivery to the clients.

This study is the first of its kind to create a set of competencies specific to speech language pathology in the school setting based on available literature and validate said competencies through expert and consumer review; thus addressing ASHA's recommendation that SLPs are responsible for training facilitators. Survey respondents agreed upon the vast majority of competencies, while acknowledging that some competencies should be driven by specific work setting policies and procedures. As such, speech-language pathologists, school administrators, and university training programs can have confidence in the importance and relevance of the 32 competencies identified in the present study as they apply to the roles and responsibilities of the facilitator in a school setting. The identified set of competencies is the first step in providing SLPs with guidelines for the training of facilitator; thereby allowing for better continuity of care by avoiding real-time training as problems occur and increasing the quality of services provided to clients.

Appendix A, Organization by Resource and Identification of Categories

COLOR KEY

Administrative Functions/Documentation
Scheduling/Preparation/Planning
Privacy/Security
Procedure/Policy
Preparing/Operating Technology
Troubleshooting
Communication Skills
Patient Education/Interaction
Exam/Session/Physical Duties
Interaction with Clinicians
General/Background Knowledge or Advocacy of
Telehealth

ATA Expert Consensus (2011)	Alvares: e-Helper Responsibilities	Nursing (gpTRC)	Nursing Competencies (van Houwelingen)	California TRC- Patient Presenter	
Administrative Core Standards	Escorting the clients or students to and from the sessions	States facility's procedure for telemedicine scheduling, room and staffing reservations	Knowledge of:	4 Plus Skills	
1. Scheduling	Allay student's fears with informal talk	Maintains confidentiality, video and audio privacy during a telemedicine consult. Introduces those present at both locations	Procedure: what to do in case of an emergency	Understand the benefits of telehealth program	
Be knowledgeable of scheduling procedures and policies for his/her organization	Reminding teachers to send students	Educates patient on the telemedicine process and obtains informed consent according to facility policy	Policies, procedures and protocols of the organization concerning the deployment of telehealth technologies	Privacy and Security	

ATA Exper	t Consensus (2011)	Alvares: e-Helper Responsibilities	Nursing (gpTRC)	Nursing Competencies (van Houwelingen)	California TRC- Patient Presenter
	identify and schedule resources required for a successful tele- encounter, including local personnel, local facility space, remote provider, remote evaluating provider, remote evaluating provider's facility, equipment, conductivity, and/or any combination thereof		Assists with patient examination	Clinical limitations of telehealth	Practices of Successful Programs
	ensure that the evaluating provider who attends the virtual consultation is the scheduled, legitimate provider for the patient and is credentialed to provide the services being offered	Establishing and troubleshooting the telepractice connection	1. Specialty forms are completed and faxed as needed	How telehealth can be deployed in existing pathways	Telemedicine Applications
2. Preparation		operating and troubleshooting equipment	2. Faxes or enters electronically patient information as needed	How technology can be used in sharing information with colleagues	Telemedicine Specific Clinic Operation Proceedures
	identify the evaluating provider's clinical goals for the encounter, including reviewing requested preconsultation forms and testing	contacting remote site IT staff if necessary	3. Prepares patient for exam	Laws and regulations concerning the protection and echange of medical data, e.g. data protection, informed consent and confidentiality	Scheduling Follow-up
	establish and follow a procedure for contacting patients prior to the consultation to remind them of the appointment, give directions, and provide patient education	identifying and operating alternative teleconferencing setups if available	a. Performs assessment specific to specialty and presenting problem		Telemedicine Specific Referral Procedures

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ATA Experi	ATA Expert Consensus (2011) Alvares: e-Helper Responsibilities		Nursing (gpTRC)		Nursing Competencies (van Houwelingen)	California TRC- Patient Presenter	
	establish a back-up plan and be prepared to enact it if there are technical problems	Setting up Materials	ci p	o. Assesses clothing and has patient put on gown as needed	How to collected health- related data for patient monitoring		Clinical Protocols
	develop and implement patient protocols with the remote provider to ensure that information is available at the beginning of the encounter	Printer, fax, and scanning availability and use	fo ti	a. Positions patient for best viewing of the patient and patient condition	Relevant protocols		Role of the Patient Presenter and How to Work with Presenters
3. Quality and Safet	у	familiarity with therapy materials available at the remote site	e	I. Assists with exam at direction of specialty provider	What to do if the technology does not work		Preforming Telemedicine Consultations
	obtain a telemedicine consent form, if required	Managing Materials	Maintains	medical record	Attitudes		Inform Patients About Telemedicine Proces
	understand and adhere to HIPAA regulations	Manipulating test plates during assessment	а	L. Admits patient according to facility policy	Uses an ethically correct attitude during videocongerencint (honesty, confidentiality, personal and professional integrity)		Using the Telemedicine Equipment
	understand and adhere to state and federal regulations related to telepresenting and transfer of patient information electronically	Indicating a students response if nonverbal (e.g. pointing)	а	2. Documents according to facility policy	Can convey empathy through videoconferencing by facial expression and verbal communication		3 Plus Skills
	understand and adhere to accrediting organization's standards for interactive teleencounters	Refraining from providing cues or feedback to the students on accuracy of responses during assessment	p te p	3. Documents patient seen by elemedicine, provider and those present	Promote privacy and confidentiality in videoconferencing		Managing Medical Record

ATA Expert Consensus (2	expert Consensus (2011) Alvares: e-Helper Responsibilities		Nur	rsing (gpTRC)	Nursing Competencies (van Houwelingen)	California TRC- Patient Presenter	
outcomes a suggestions improving f	evaluate and articulate outcomes and make suggestions for improving future teleencounters		tudents with eir Discharge		Encourages the use of electronic measurement devices for the collection of detailed patient information		Operation of Telemedicine Equipment
data transm interactions tele-encour support and the remote capacity to	ission and during the ter to optimize provider's examine, d develop an	Providing additional models or tactile cues		1. Provides discharge instructions as needed	Has confidence that telehealth technology is not difficult to use		Equipment Types
Technical Core Standar	ds P	Positioning the client at the request of the eSLP		2. Schedules any follow-up appointments or additional testing as needed	Is open minded to innovations in ICT (taking into account the importance of protecting confidentiality)		Impact of Telehealth on Organizational Operations
1. Preparation and Operations		manipulating the camera	evaluatio	n data collection, n and performance aprovement	Able to enhance the confidence of the patient in the deployed technology	:	2 Plus Skills
ensure that equipment tested and o be in safe w	has been	Assisting students with equipment and software		1. Maintains logs as required	General Skills		Managing Organizational Change
establish co with the rer provider wi time to trou any technic may impact encounter	note th sufficient bleshoot al issues that	Remaining with clients during the session		2. Provides patient satisfaction survey	Protects the privacy of self and the patient in the use of telehealth technologies (complicane to ethical, legal and regulatory considerations)		Legal Considerations
ensure that and patient hear each o		May engage in other activities as long as they still monitor the session		3. Reports any patient complaints or adverse outcomes according to the facility's policy	Technological Skills		Reimbursement

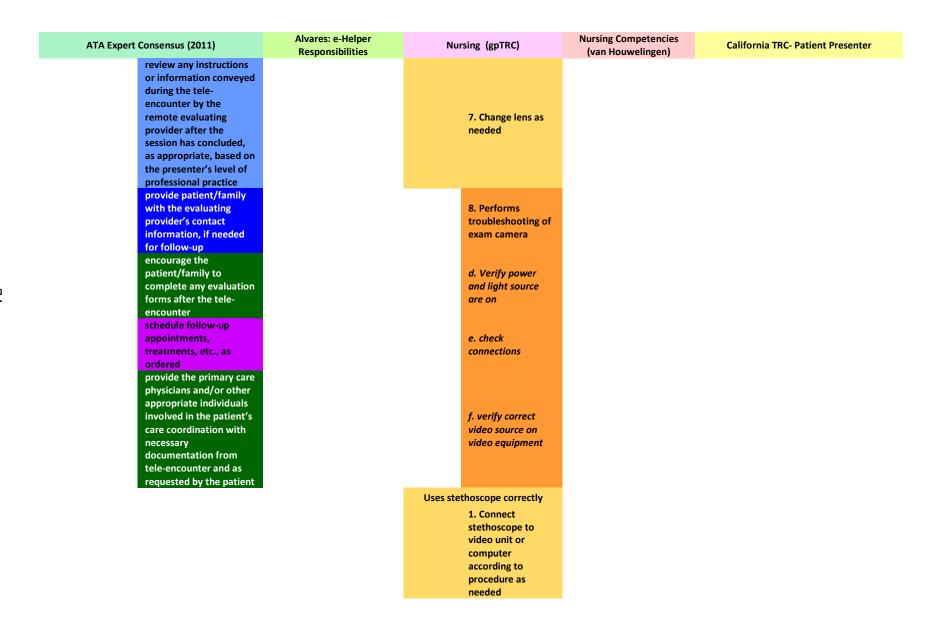
ATA Expert	Consensus (2011)	Alvares: e-Helper Responsibilities	Nu	rsing (gpTRC)	Nursing Competencies (van Houwelingen)	California 1	RC- Patient Presenter
	control any extraneous noises (e.g., fan, telephone, etc.) near the microphone	Assisting with behavior management as needed		and set up equipment ing to procedure	Able to train the patient to use the equipment		Evaluation of Program Operation and Effectivenes
	provide accommodations for appropriate lighting, including back lighting (e.g., windows, lights, etc.)	Only when requested by the eSLP		1. Turn off video equipment as necessary before moving	Basic ICT skills, such as the use of the internet and a personal computer		Telehealth Technologies
	follow connection procedures to initiate and maintain the tele- encounter	Should not be involved in decisions about when to implement behavior management		2. Unplug power and network from source	Able to check equipment for functionality		Equipment Selection
	maintain a list of contact information for key personnel at the remote connecting end, including technical support	If a behavior management system is in place, the helper only dispenses reinforcement at the direction of the eSLP		3. Moves video cart to designated area	Technological skills in the field of new technology		Equipment Troubleshooting
2. Maintenance		Communicating with on-site staff or teachers about scheduling		4. Plugs into appropriate network and power sources	Able to use electronic health records		Telecommunications Fundamentals
	ensure that a service and maintenance plan for all equipment used to support the encounter is established	Serve as an interpreter		5. Position in room for best viewing for and by the patient	Clinical Skills		Telecommunications Operation
	perform routine system tests to ensure that equipment is in safe and working order	"Community" or "Cultural" interpreter		6. Turns video unit on	Able to combine clinical experience effectively with telehealth technology in decision-making		Telecommunications Maintenance
	document and maintain a log of all technical problems or issues	help the eSLP participate in school activities to the extent possible or provide clarification when students refer to school landmarks, traditions,		7. Places microphone near presenting area	Communication Skills		Troubleshoot Telecommunications Connections

ATA Expert Consen	nsus (2011)	Alvares: e-Helper Responsibilities	Nu	rsing (gpTRC)	Nursing Competencies (van Houwelingen)	California 1	RC- Patient Presenter
		activities, events, and personnel					
suppo follow	w up with technical ort immediately wing encounter, if problems occur	Other duties as required		8. Adjusts camera and establishes pre-sets as needed	Empathy: is able to recognize (at a distance) the needs of the patient and care situation		Data Collection
Clinical Core Sta	Clinical Core Standards		Operates video equipment using remote control		Able to communicate clearly in videoconferencing and knows what to do to enhance contact (e.g. use of voice, light, background)		1 Plus Skills
1. Preparation of environme	ent	Managing paperwork		1. Place a video call	Able to put patients at ease when they feel insecure about using technology		Reimbursement
provi availa inforr the pa and p radio etc.),	de the evaluating der with any able and necessary mation regarding atient (e.g., history physical, graphs, lab work, prior to the ncounter	Scheduling IEPs, ETRs		2. Adjust near end camera	Able to create a condifential environment and pleasant atmosphere in video conferencing		Service level Agreements
in pla conne prepa	contingency plans ace for loss of ectivity and be ared to implement e plans	contacts families to schedule		3. Zoom near end camera	Implementation Skills		Telecommunications Installation

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ATA Expert	Consensus (2011)	Alvares: e-Helper Responsibilities	Nu	rsing (gpTRC)	Nursing Competencies (van Houwelingen)	California T	RC- Patient Presenter
	confirm that all necessary equipment (including peripheral devices and supplies for the tele-encounter are accessible in the exam room	Monitors # of contact attempts		4. Adjust display or picture in picture (PIP) as needed	Able to assess whether telehealth technology is convenient for the patient by the use of established criteria (e.g. cognitive ability, technological skill)		Video Standards and Specifications
	remove personal identifiable health information from the area of the encounter that is not specific to the patient	Managing Paperwork		5. Adjust volume	Able to assess the needs and preferences of the patient with respect to telehealth		Equipment Maintenance
	assess and implement an appropriate plan for cultural, language, and/or disability issues	Obtains signatures from families and staff		6. Mute and un- mute	Able to communicate effectively the benefits of telehealth technologies		Equipment Specifications and Standards
2. Patient preparation	2. Patient preparation and support			7. Change video sources	Able to provide advice about reliable health information on the internet, sites, medical care portals and mobile applications		Management Reporting
	always be a patient advocate	Attendance and Billing		8. Establish pre- sets			Strategic Planning and Telehealth Applications
	educate the patient/family as to what to expect during a tele-encounter, including the potential for an audio-video delay	Provide a back up set of records for the eSLP		9. Perform basic trouble shooting of video equipment			Business Model Development and Sustainability
	be knowledgeable and competent in health care needs being addressed			a. Reboot system			Preparing a needs/market Analysis
	provide opportunities for questions and answers			b. Check cables and connection			

ATA Expert Consensus (2011)	Alvares: e-Helper Responsibilities	Nursing (gpTRC)	Nursing Competencies (van Houwelingen)	California TRC- Patient Presenter
be knowledgeable about				
how to turn on video		c. Check volume		
equipment, initiate a		status and		
call, and resources		microphone		
available for obtaining		placement		
technical assistance				
identify microphone and				
camera locations to the		Operate examination camera		
patient				
anticipate exam				
requirements, including				
appropriately		1. Attach (if		
positioning and		necessary) to video		
preparing of the patient		unit according to		
for physical examination		procedure		
(e.g., gowning or				
uncovering body areas)				
adhere to universal		2. Perform white		
precautions		balance		
ensure that the patient				
is aware of and				
introduced to all		3. Adjust zoom		
individuals in their room		5. Aujust 200111		
the remote evaluating				
provider's location				
be alert and sensitive to		4. Freeze frame as		
nonverbal body		4. Freeze frame as needed		
language		needed		
provide any needed		5. Adjust for		
support for the		reflection as		
patient/family		needed.		
ensure the				
patient/family is				
comfortable with the		6. Properly		
tele-encounter and is		position patient for		
aware of their right and		best viewing of		
ability to terminate a		condition		
tele-encounter at any				
time				
Faller		7. Change lens as		
Follow-up		needed		



ATA Expert Consensus (2011)	Alvares: e-Helper Responsibilities	Nui	rsing (gpTRC)	Nursing Competencies (van Houwelingen)	California TRC- Patient Presenter
			2. Properly prepare patient for easy access to area		
			3. Holds chest piece properly to minimize background noise		
			4. Properly positions chest piece to promote appropriate assessment		
			5. Troubleshoot stethoscope		
			a. check connections		
			b. adjust volume		
			nplies with facility on control policy		

Appendix B, Organization of Competencies by Skill Area/Keywords

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
Administrative	CONSENT FORM	Obtain a telemedicine consent form, if required	Obtains signatures from families and staff	Obtains informed consent according to facility policy	х	Fax Completed Informed Consent & Questionnaire for Pre- Requested Evaluations	х	×	х	х	4 sources 4 skills
	RECORD KEEPING	Provide the primary care physicians and/or other appropriate individuals involved in the patient's care coordination with necessary documentation from teleencounter and as requested by the patient	Provide a back up set of records for the eSLP	Faxes or enters electronically patient information as needed	x	Fax Referral Request to UCSD HUB, Fax Preliminary Medical Records to UCSD HUB	x	Managing Medical Record	х	Copying/sendi ng required paperwork	6 sources 11 skills
		х	Keeps materials (i.e. paperwork) together until they are completed and ready to turn in	Maintains medical record*	Able to use electronic health records	File Clinic Note and Patient Instructions in Spoke Medical Record	х	x	х	х	
		х	х	x	X	Document the Evaluation in the Spoke Facility Medical Record	x	X	х	х	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
	DATA COLLECTION	х	х	Assists in data collection, evaluation and performance improvemen t*	Collect health- related data for patient monitoring	Document [Chief Complaint/ Meds/ Allergies/ Vital Signs] in Spoke Medical Record.	х	Data Collection	х	x	4 sources 4 skills
	POLICY	Be knowledgeable of scheduling procedures and policies for his/her organization	х	States facility's procedure for telemedicine scheduling, room and staffing reservations	Policies, procedures and protocols of the organization concerning the deployment of telehealth technologies		General school rules and policies and reg- fire drill, etc.	Telemedicine Specific Clinic Operation Proceedures	х	General school rules and policies- fire drill, etc.	6 sources 12 skills
		adhere to universal precautions	х	Complies with facility infection control policy	х	х	х	Clinical Protocols	х	Х	
		Understand and adhere to accrediting organization's standards for interactive teleencounters	х	х	Procedure: what to do in case of an emergency	Х	х	Telemedicine Specific Referral Procedures	х	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
Scheduling	SCHEDULING RESOURCES	identify and schedule resources required for a successful tele-encounter, including local personnel, local facility space, remote provider, remote evaluating provider, remote evaluating provider's facility, equipment, conductivity, and/or any combination thereof	Communicatin g with on-site staff or teachers about scheduling,	X	X	X	x	x	x	x	3 sources 6 skills
		ensure that a service and maintenance plan for all equipment used to support the encounter is established perform	Printer, fax, and scanning availability and use,	X	X	X	х	x	х	x	
		routine system tests to ensure that equipment is in safe and working order	х	Х	х	х	х	х	х	х	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
		ensure that all equipment has been tested and checked to be in safe working order	х	Х	Х	X	х	x	х	Make sure the equipment is in working order	
	SCHEDULING APPOINTMENTS	schedule follow-up appointments, treatments, etc., as ordered	Scheduling meetings	Schedules any follow- up appointment s or additional testing as needed	x	X	Assisting with scheduling student therapy times	Scheduling Follow- up	Set up a schedule that provides an optimal and consistent time for patient to offer best responses.	Assisting with scheduling student therapy times	7 sources 9 skills
		establish and follow a procedure for contacting patients prior to the consultation to remind them of the appointment, give directions, and provide patient education	Contacts families to schedule (IEP's, ETR's) & monitor # of communicatio n attempts	х	x	x	х	x	х	x	
Privacy/Securi ty		understand and adhere to HIPAA regulations	х	х	х	X	Х	Privacy and Security	Assure privacy and confidentialit y of the patient	х	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
	REGULATIONS	Understand and adhere to state and federal regulations related to telepresenting and transfer of patient information electronically	x	x	Laws and regulations concerning the protection and echange of medical data	x	x	Privacy and Security	X	x	4 SOURCE S 6 SKILLS
		x	x	x	Protects the privacy of self and the patient in the use of telehealth technologies (compliance to ethical, legal and regulatory considerations)	x	x	Privacy and Security	х	x	
		ensure that the evaluating provider who attends the virtual consultation is the scheduled, legitimate provider for the patient and is credentialed to provide the services being offered	x	х	Uses an ethically correct attitude during videoconferenci ng (honesty, confidentiality, personal and professional integrity)	X	X	x	х	X	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
	CONFIDENTIALITY	Remove personal identifiable health information from the area of the encounter that is not specific to the patient	х	Maintains confidentialit y, video and audio privacy during a telemedicine consult.	Promote privacy and confidentiality in videoconferenci ng	X	Student confidentiali ty (FERPA)	Privacy and Security	Assure privacy and confidentialit y of the patient	Student confidentiality (FERPA)	7 SOURCE S 10 SKILLS
Technology		establish connection with the remote provider with sufficient time to troubleshoot any technical issues that may impact the encounter	х	x	x	Test Connectivity to UCSD HUB partner on a daily basis	х	x	Can establish the video and audio connection for the telepractice session on the local computer	x	
	CONNECTIVITY	follow connection procedures to initiate and maintain the tele-encounter	х	х	х	Assist with Initiation of Telemedicine Connection	х	x	х	х	3 Sources 6 skills
		X	Х	х	X	Terminate Telemedicine Connection at End of Evaluation.	х	х	Х	х	
		х	х	Can move and set up equipment according to procedure*	х	X	set up the equipment properly	Х	х	х	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
	OPERATION OF SOFTWARE/ EQUIPMENT	be knowledgeable about how to turn on video equipment, initiate a call, and resources available for obtaining technical assistance	operating and troubleshootin g equipment, Manipulate the camera	Can operate video equipment using remote control, stethoscope, and exam camera*	Basic ICT skills, such as the use of the internet and a personal computer	x	knowing how to operate cameras, computer games, shared windows, student settings, and how to reboot, re- enter the system, log on, and optimize home computer settings	Using/Operating the Telemedicine Equipment	Can access email and Internet to locate the links and online connections for the telepractice session.	Ensuring technology is working during telepractice session	8 SOURCE S 12 SKILLS
		Х	Assist students with equipment and software	Х		Х		Telehealth Technologies			
Troubleshooti ng	ALTERNATE PLAN	establish a back-up plan and be prepared to enact it if there are technical problems	identifying and operating alternative teleconferenci ng set-ups if available	х	What to do if the technology does not work	X	x	x	Х	X	3 SOURCE S 4 SKILLS
		have contingency plans in place for loss of connectivity and be prepared to implement these plans	x	x	x	x	x	x	х	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
	CONTACT IT	maintain a list of contact information for key personnel at the remote connecting end, including technical support	contacting remote site IT staff if necessary	x	х	x	quickly connect with technical support	х	х	x	3 SOURCE S 4 SKILLS
		follow up with technical support immediately following encounter, if any problems occur	х	x	x	x	Х	x	x	x	
	BASIC TROUBLESHOOTI NG	X	Х	Troubleshoot exam camera, video equipment, and stethoscope*	Able to check equipment for functionality	Х	know how to fix things	Equipment/ Connectivity Troubleshooting	Troubleshoot basic audio and video difficulties.	Troubleshoot when technical issues arise	6 sources 6 skills
DELETE CATEGORY (all skills integrated into other categories) Communicatio n Skills		X	х	X	х	X	х	X	х	X	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
Patient Relations	EDUCATION	educate the patient/family as to what to expect during a tele-encounter, including the potential for an audio-video delay	х	Educates patient on the telemedicine process	Able to enhance the confidence of the patient in the deployed technology	x	x	Inform Patients About Telemedicine Proces	х	x	4 SOURCE S 7 SKILLS
		identify microphone and camera locations to the patient	х	х	Able to train the patient to use the equipment	х	х	x	х	х	
		x	х	х	Able to communicate effectively the benefits of telehealth technologies	x	х	х	х	x	
	COUNSELING	provide any needed support for the patient/family	Allay student's fears with informal talk	X	Able to put patients at ease when they feel insecure about using technology	x	x	x	x	X	3 SOURCE S 6 SKILLS
		ensure the patient/family is comfortable with the tele-encounter and is aware of their right and ability to terminate a tele-encounter at any time	х	х	Able to provide advice about reliable health information on the internet, sites, medical care portals and mobile applications	x	х	х	х	х	
		provide opportunities for questions and answers	х	Х		х	х	х	Х	Х	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
Session Duties	PREPARATION	anticipate exam requirements, including appropriately positioning and preparing of the patient for physical examination (e.g., gowning or uncovering body areas)	x	Prepares patient for exam*	Able to create a condifential environment and pleasant atmosphere in video conferencing	x	have therapy materials ready	x	Establish an adequate therapy environment for the patient including positioning for privacy.	x	5 SOURCE S 12 SKILLS
		provide accommodatio ns for appropriate lighting, including back lighting (e.g., windows, lights, etc.)	х	х	x	x	х	x	Establish proper seating for the patient, allowing access to the computer and appropriate lighting for adequate video transmission.	x	
		control any extraneous noises (e.g., fan, telephone, etc.) near the microphone	Х	X	×	x	X	x	X	X	
		confirm that all necessary equipment (including peripheral devices and supplies for the tele-encounter are accessible in the exam room	х	х	x	X	x	x	х	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
		identify the evaluating provider's clinical goals for the encounter, including reviewing requested pre- consultation forms and testing	X	X	х	X	X	X	х	x	
		develop and implement patient protocols with the remote provider to ensure that information is available at the beginning of the encounter	x	x	x	x	x	x	x	x	
		provide the evaluating provider with any available and necessary information regarding the patient (e.g., history and physical, radiographs, lab work, etc.), prior to the teleencounter	x	х	x	Inform Patient That Telemedicine Evaluation is Complete.	x	x	х	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
		Encourage the patient/family to complete any evaluation forms after the tele-encounter	X	Х	Х	Obtain Final Recommendatio ns from HUB Consultant	x	x	X	Х	
	DISCHARGE & FOLLOW UP	provide patient/family with the evaluating provider's contact information, if needed for follow-up	X	Provides discharge instructions as needed	X	Review Recommendatio ns with Clinic Patient at Spoke Facility, Including Any Recommendatio ns for Scheduling a Return Evaluation.	how to do assigned homework	X	Х	Downloading homework for students	5 SOURCE S 9 SKILLS
		review any instructions or information conveyed during the tele-encounter by the remote evaluating provider after the session has concluded, as appropriate, based on the presenter's level of professional practice	Assisting students with placing their articulators, providing additional models or tactile feedback	X	X	x	x	X	Understand therapeutic strategies and provide timely cueing and strategies to help the patient become independent in responding to the teletherapy therapist.	X	
		х	Assisting with behavior management as needed	х	Х	х	how to redirect students and provide behavioral intervention s	х	Follow directions of the therapist.	Monitoring students' behavior, distributing reinforcers	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
		ensure that the provider and patient can see and hear each other clearly	Indicating a students response if nonverbal (e.g. pointing)	x	Able to communicate clearly in videoconferenci ng and knows what to do to enhance contact (e.g. use of voice, light, background)	Assist with UCSD HUB Telemedicine Verification of Chief Complaint	x	X	Provide accurate feedback about the patient response to materials, restate the patient's utterance if needed for clarification and provide statements that will aid in completing tasks.	x	
	FACILITATION	ensure that the patient is aware of and introduced to all individuals in their room the remote evaluating provider's location	Manipulating test plates during assessment	Introduces those present at both locations	X	Assist UCSD HUB Telemedicine Provider with the Telemedicine Evaluation. (assist with performing & reporting elements of the examination that are restricted/ limited due to the telemedicine technique)	X	Performing Telemedicine Consultations	Help patient access web-based therapy tools (e.g., highlighter, pointer text tools).	Managing therapy materials	9 sources 30 skills

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
		evaluate the quality of data transmission and interactions during the tele-encounter to support and optimize the remote provider's capacity to examine, diagnose and develop an appropriate plans of care	Reminding teachers to send students	Assists with exam at direction of specialty provider	x	Assist with UCSD HUB Telemedicine Verification of Meds/ Allergies	х	x	Provide feedback about the quality of items being displayed and make appropriate adjustments to ensure highest quality.	x	
		X	Escort families and other professionals to the room for meetings	Х	Х	Notify SPOKE Bedside Provider that the patient is ready to continue Evaluation	how to follow the schedule to get students to and from therapy sessions		Help patient transition from an existing activity to the next activity	Escorting students to and from classes	
		x	х	х	x	x	х	x	Attend solely to the patient's needs during teletherapy sessions with no other job requirements	x	
		x	X	х	X	х	х	X	Provide feedback and restate expectations for behavior to the patient at appropriate times during the session	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
DELETE CATEGORY (All skills integrated into other categories) Interaction with Clinicians		х	х	x	х	x	х	x	х	x	
General/ MISC		be knowledgeable and competent in health care needs being addressed	Serve as an interpreter- "Community" or "Cultural" interpreter	x	Encourages the use of electronic measurement devices for the collection of detailed patient information	Bill as Appropriate	exercised good time managemen t skills	Impact of Telehealth on Organizational Operations	Utilize email, texting and direct communicati on with other involved personnel, families and caregivers about any pertinent updates before or after treatment sessions.	x	
		Always be a patient advocate	Help the eSLP participate in school activities to the extent possible or provide clarification when students refer to school landmarks, traditions, activities, events, and personnel	X	Clinical limitations of telehealth	X	know the games, practice materials, and target therapy skills	Reimbursement	Become aware of the patient's strengths and needs, acquire a basic understandin g of the patient's communicati on needs, and have knowledge of	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
									the treatment goals.		
		evaluate and articulate outcomes and make suggestions for improving future teleencounters	Refraining from providing cues or feedback to the students on accuracy of responses during assessment	х	How telehealth can be deployed in existing pathways	x	"Fading into the background" - i.e. not prompting students	Practices of Successful Programs	х	"Fading into the background" - i.e. not prompting students	
		be alert and sensitive to nonverbal body language	familiarity with therapy materials available at the remote site	х	How technology can be used in sharing information with colleagues	x	understand the connections, software, and equipment	Telemedicine Applications	х	х	
		document and maintain a log of all technical problems or issues	х	х	Potential benefits of telehealth	х	х	Understand the benefits of telehealth program	х	х	
		assess and implement an appropriate plan for cultural, language, and/or disability issues	х	X	Has confidence that telehealth technology is not difficult to use	x	х	Telecommunicatio ns Fundamentals	Х	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
		х	x	x	Is open minded to innovations in ICT (taking into account the importance of protecting confidentiality)	x	х	Telecommunicatio ns Operation	х	x	
		x	x	x	Able to combine clinical experience effectively with telehealth technology in decision-making	x	х	Telecommunicatio ns Maintenance	х	x	
		х	х	х	Able to assess the needs and preferences of the patient with respect to telehealth	x	х	x	х	х	
		х	x	x	Able to assess whether telehealth technology is convenient for the patient by the use of established criteria (e.g. cognitive ability, technological skill)	x	х	x	х	x	
		х	x	х	Empathy: is able to recognize (at a distance) the needs of the patient and care situation	x	x	x	х	x	

Source		Telepresenters (ATA Expert Consensus)	e-Helper (Alvares)	Nursing (gpTRC)	Nursing (van Houwelingen)	UCSD "Telements" Checklist	Perspectives of School SLP's (Tucker)	Patient Presenter (California TRC)	University of Maine	Houston Book Ch 3 & 5	TOTALS
Skill Area:	KEYWORDS					SPECIFIC SKILLS					
		x	х	x	Can convey empathy through videoconferenci ng by facial expression and verbal communication	x	х	x	х	х	
		х	х	Х	Technological skills in the field of new technology	х	х	х	Х	Х	MISC TOTAL: 39

Appendix C, Facilitator Survey Draft

Professional Competencies for Facilitators Survey (Draft)

Thank you for choosing to complete this survey regarding knowledge and skills needed by facilitators working in a school setting. The survey will take about 20-25 minutes to complete. You are free to skip any question or discontinue at any time. Your response to the survey will be kept confidential to the extent allowed by law.

Please rate the *italicized* competency on a scale of 1 to 10 (with 1 being least important and 10 being most important, as seen in the scale below) based on its importance relative to the roles and responsibilities of a facilitator. Comments about individual competencies can be made in the text box below the individual competencies. Comments about the clustering of competencies by theme may be made in the textbox at the end of each theme. Comments may include, but are not limited to, questions and suggestions about the intent of the competency, wording and terminology used, suggested additional competencies, etc.

Least Imp	ortant							Most	Important
1	2	3	4	5	6	7	8	9	10
0	0	O	O	0	O	0	0	0	0

(A scale will be provided under each competency in the final electronic version of the survey. For brevity it was not included in the draft survey.)

A text box will be provided under each competency in the final electronic version of the survey. For brevity it was not included in the draft survey.

For the purpose of this survey,

<u>Facilitator</u> will be defined as the adult within a school building assigned to assist a speech-language pathologist who is using video-conferencing to deliver services from a distance.

SLP will stand for speech-language pathologist.

<u>Telepractice</u> will be defined as speech-language services delivered from a distance.

<u>Student</u> will be defined as a person enrolled in preschool, elementary, middle school or high school.

Administrative Duties

evaluate, annual IEP meetings)

The following 3 competencies address administrative knowledge and skills that a facilitator should possess.

• Copies, sends, and collects paperwork specific to the IEP process (e.g. consent to

	Importance rating
•	Assists with scheduling therapy sessions and make-up sessions as required Importance rating
•	Schedules meetings between the SLP and families, teachers, and or additional professionals as warranted Importance rating
<u>Policio</u>	es and Procedures
	llowing 5 competencies address knowledge and skills that a facilitator should s as it relates to policies and procedures.
•	Follows school's general operating policies and procedures (e.g., fire drill, dismissal, lunch etc.) Importance rating
•	Adheres to school district policy regarding student confidentiality (e.g., paperwork, electronic records, protected information in public spaces) Importance rating
•	Follows school's infection control policies Importance rating
•	Adheres to school district policy and procedures regarding telepractice (e.g., scheduling, roles and responsibilities of a facilitator) Importance rating
•	Adheres to school district policy specific to privacy and confidentiality within telepractice (e.g., video and audio privacy during tele-session) Importance rating

Telepractice Session

The following 12 competencies address knowledge and skills that a facilitator should possess specific to the telepractice session.

•	Verifies that all necessary technology is available for use during a telepractice session.
	Importance rating
•	Positions technology in relation to the student to maximize audio and video quality. Importance rating
•	Ensures lighting and noise levels are appropriate and will not interfere with audio and video quality. Importance rating
•	Prepares, organizes and maintains therapeutic materials for use during the session (as directed by the SLP). Importance rating
•	Escorts the student to and from class if necessary Importance rating
•	Assists student in accessing or using web based therapy tools (e.g., highlighter, pointer text tools). Importance rating
•	Administers prompts, scaffolding and reinforcement as directed by the SLP. Importance rating
•	Uses behavior management strategies effectively. Importance rating
•	Clarifies student's response if necessary. Importance rating
•	Reviews/reminds student and/or parents of homework. Importance rating

	Cleans equipment between students. Importance rating
Techno	log v
	lowing 11 competencies address technology specific knowledge and skills that a or should possess.
	Can access email and Internet to locate the links and online connections for the telepractice session. Importance rating
	Can establish the video and audio connection for the telepractice session Importance rating
	Can use annotation features of video-conferencing software (e.g., highlighter, arrow, text boxes, chat feature) Importance rating
	Demonstrates ability to manage accounts, personal settings, and privacy controls in online telepractice application Importance rating
	Solves audio and video problems on local computer Importance rating
	Solves problems with software (e.g., loss of mouse, program not responding) on local computer Importance rating
	Solves problems with peripheral devices on local computer (e.g. printer, document camera) Importance rating
	Uses an alternative connection (e.g. telephone, email) with SLP to troubleshoot connection problems or to reschedule a session Importance rating
	Maintains a list of contact information for key personnel at the school and district level who can assist with troubleshooting technical problems Importance rating

 Follows-up with technical support immediately following a therapy session, if any problems occur
Importance rating
• Maintains a log of technical difficulties encountered and requests assistance with recurring problems
Importance rating
<u>Interpersonal</u>
The following 3 competencies address interpersonal skills that a facilitator should possess.
• Interacts with students in a developmentally appropriate manner. Importance rating
 Accurately transmits information between the SLP and students, teachers, parents, administrators, and or other professionals. Importance rating
• Accurately describes telepractice to students, teachers, parents, administrators and or other professionals
Importance rating

Comments and Suggestions

In the text box below please provide additional comments that could assist us as we finalize the competencies.

Thank you for completing this survey! Although you will not receive personal benefit from taking part in this research study, your responses will help us develop a tool that will aid speech-language pathologists in training facilitators. We sincerely appreciate your responses!

Appendix D, Facilitator Competency Survey

Facilitator Competency Survey - Final

Q1.2 Please rate each competency on a scale of importance ("not important at all" to "extremely important") relative to the roles and responsibilities of a facilitator. The 34 competencies are divided into 5 thematic areas of responsibility.

Comments can be made at the end of each thematic area.

Comments may include, but are not limited to, questions and suggestions about the intent of the competency, wording and terminology used, suggested additional competencies, etc. For the purpose of this survey:

<u>Facilitator</u> will be defined as the adult within a school building assigned to be physically present with a student during a tele-therapy session delivered by a speech-language pathologist from a distance. In some settings this person may be referred to as the "e-Helper", "tele-presenter", or tele-facilitator.

SLP will stand for speech-language pathologist.

<u>Telepractice</u> will be defined as speech-language services delivered to students in a brick and mortar school building.

Student will be defined as a person enrolled in preschool, elementary, middle school or high school.

End of Block: Consent and Survey Directions
Start of Block: Initial Demographics
Q2.1 Which title most closely reflects your current position?
O Speech Language Pathologist (1)
Facilitator (2)
O Speech Language Pathology Assistant (3)
O University Faculty/Clinical Faculty (4)
O School Administrator (5)
Display This Question:

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If Which title most closely reflects your current position? = Speech Language Pathologist

Q2.2 Are you currently using telepractice to deliver therapy services to a student(s) physically located in a brick and mortar school?
Yes, I am currently using telepractice in this context. (1)
O No, but I have used telepractice in this context. (2)
No, I have never used telepractice in this context. (3)
Skip To: End of Survey If Are you currently using telepractice to deliver therapy services to a student(s) physically locat = No, I have never used telepractice in this context.
Display This Question:
If Which title most closely reflects your current position? = Facilitator
Or Which title most closely reflects your current position? = Speech Language Pathology Assistant
Q2.3 Are you currently assisting with telepractice?
Yes, I am currently assisting with telepractice (1)
O No, but I have assisted with telepractice in the past (2)
No, I have never assisted with telepractice (3)
Skip To: End of Survey If Are you currently assisting with telepractice? = No, I have never assisted with telepractice
Display This Question:
If Which title most closely reflects your current position? = University Faculty/Clinical Faculty
Q2.4 Do you have experience using telepractice?
Yes, I have experience using telepractice (e.g. research, service delivery) (1)
No, I do not have experience using telepractice (2)
Skip To: End of Survey If Do you have experience using telepractice? = No, I do not have experience using telepractice
, , , , , , , , , , , , , , , , , , ,

Display This Question:

If Which title most closely reflects your current position? = School Administrator

Q2.5 Is your school or school district currently using telepractice to receive speech therapy services?
Yes, my school district is currently using telepractice (1)
O No, but my school district has used telepractice in the past (2)
O No, my school district has never used telepractice (3)
Skip To: End of Survey If Is your school or school district currently using telepractice to receive speech therapy services? = No, my school district has never used telepractice
End of Block: Initial Demographics

Start of Block: Competencies

Q3.1 The following 5 competencies address knowledge and skills that a facilitator should possess specific to the **telepractice session.**

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Verifies that all necessary technology is available for use during a telepractice session. (1)	0	0	0	0	0
Positions technology in relation to the student to maximize audio and video quality. (2)	0	0	0	0	0
Ensures lighting and noise levels are appropriate and will not interfere with audio and video quality. (3)	0	0	0	0	0
Prepares, organizes and maintains therapeutic materials for use during the session (as directed by the SLP). (4)	0	0	0	0	0
Cleans equipment between students. (5)	0	0	0	0	0

Q3.2 The following 4 competencies address knowledge and skills that a facilitator should possess specific to the **telepractice session.**

Escorts the student to and from class if necessary (1) Assists student in accessing or using web based therapy tools if necessary (e.g., highlighter, pointer, text	0	0
in accessing or using web based therapy tools if necessary (e.g., highlighter,		
tools, websites).	0	0
Clarifies student's response if necessary. (3)	0	0
Reminds student and/or parents of homework. (4)	0	0

Page Break -

Q3.3 The following 3 competencies	address knowledge ar	nd skills that a	facilitator should	possess specific
to the telepractice session.				

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Administers prompts, scaffolding and reinforcement as directed by the SLP. (1)	0	0	0	0	0
Uses behavior management strategies as directed by the SLP. (2)	0	0	0	0	0
Ensures SLP receives verbal or written confirmation of completed homework and communicates follow through of homework back to the SLP (3)	0	0	0	0	0
Q84 Text box belowording and termin session.					
Page Break —					

Q3.4 The following 4 competencies address **technology specific knowledge** and skills that a facilitator should possess.

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Can access email and Internet to locate the links and online connections for the telepractice session. (1)	0	0	0	0	0
Can establish the video and audio connection for the telepractice session (2)	0	0	0	0	0
Can use annotation features of video-conferencing software (e.g., highlighter, arrow, text boxes) (3)	0	0	0	0	0
Can use chat feature of video-conferencing software to communicate with SLP (4)	0	0	0	0	0
Page Break —					

Q3.5 The following 4 competencies address technology specific knowledge and skills that a facilitator should possess.

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Solves audio and video problems on local electronic device (computer, tablet, etc.) (1)	0	0	0	0	0
Solves problems with software on local computer/tablet (e.g., loss of mouse, program not responding) (2)	0	0	0	0	0
Solves problems with peripheral devices on local computer/tablet (e.g. external camera, printer, document camera) (3)	0	0	0	0	0
Uses an alternative method to communicate with the SLP when video connection fails (e.g., telephone, email) (4)	0	0	0	0	0

Page Break -

Q3.6 The following 4 competencies address technology specific knowledge and skills that a facilitator should possess.

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Maintains a list of resources for assisting with troubleshooting technical problems (e.g. school personnel, video-conferencing platform, web resources etc.) (1)	0	0	0	0	0
Follows-up with technical support immediately following a therapy session, if any problems occur (2)	0	0	0	0	0
Maintains a log of technical difficulties encountered and requests assistance with recurring problems (3)	0	0	0	0	0
Demonstrates ability to manage accounts, personal settings, and privacy controls in online telepractice application (4)	0	0	0	0	0

Q85 Text box below may be used for additional comments regarding the intent of the competencies, wording and terminology used, and/or suggested additional competencies in the area of technology specific knowledge.

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O3.7 T	he following	3 com	netencies	address	interpersona	l skills	that a	facilitator	should	possess.
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	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Interacts with students in a developmentally appropriate manner. (1)	0	0	0	0	0
Accurately transmits information between the SLP and students, teachers, parents, administrators, and or other professionals. (2)	0	0	0	0	0
Accurately describes telepractice to students, teachers, parents, administrators and or other professionals (3)	0	0	0	0	0
Q86 Text box below wording and termin					
Page Break —					

Q3.8 The following 5 competencies address knowledge and skills that a facilitator should possess as it relates to **policies and procedures.**

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Follows school's general operating policies and procedures (e.g., fire drill, emergency procedures, dismissal, lunch etc.) (1)	0	0	0	0	0
Adheres to school district policy regarding student confidentiality (e.g., paperwork, electronic records, protected information in public spaces) (2)	0	0	0	0	0
Follows school's infection control policies (3)	0	0	0	0	0
Adheres to school district policy and procedures regarding telepractice (e.g., scheduling, roles and responsibilities of a facilitator) (4)	0	0	0	0	0
Adheres to school district policy specific to privacy and confidentiality within telepractice (e.g., video and audio privacy during tele-session) (5)	0	0	0	0	0

Q87 Text box below may be used for additional comments regarding the intent of the competencies, wording and terminology used, and/or suggested additional competencies in the area of policies and procedures.

Q3.9 The following 3 competencies address **administrative knowledge and skills** that a facilitator should possess.

	Not at all important (1)	Slightly important (2)	Moderately important (3)	Very important (4)	Extremely important (5)
Copies, sends, and collects paperwork specific to the IEP process (e.g. consent to evaluate, annual IEP meetings) (1)	0	0	0	0	0
Assists with scheduling therapy sessions and make-up sessions as required (2)	0	0	0	0	0
Schedules meetings between the SLP and families, teachers, and or additional professionals as warranted (3)	0	0	0	0	0

Q88 Text box below may be used for additional comments regarding the intent of the competencies, wording and terminology used, and/or suggested additional competencies in the area of administrative knowledge and skills.

End of Block: Competencies

Appendix E, Participant Demographics

Q4.1 Thank you for rating the facilitator competencies!
The following questions will help us learn more about you and your responses to our survey.
End of Block: Demographics Intro
Start of Block: Past School Admin Demographics
Q5.1 How many total years/months did your school district contract for telepractice services?
O Years (1)
O Months (2)

Q5.2 Why is telepractice no longer being used? (Check all that apply)
Filled vacant position(s) (1)
Reduction in caseload (2)
Unable to integrate telepractice into school culture (3)
Displeased with child outcomes achieved through telepractice (4)
Displeased with telepractice as a service delivery model (5)
Was not reimbursed by Medicaid for speech-language services (6)
Inadequate school district technology (computers, internet) (7)
Other (8)
Page Break

Q5.3 In which setting(s) was telepractice being used? (Check all that apply)
Preschool (1)
Elementary (2)
Secondary school (middle/high school) (3)
Special day/residential school (4)
Other (5)
Q5.4 For what purpose did your school or school district use telepractice? (Check all that apply)
Initial and or re-evaluations (1)
Delivery of speech-language services (2)
To conduct IEP related activities (3)
Parent conferences (4)
Not sure (5)
Other (6)

Q5.5 Was your school or its employees ever reimbursed by a third party payer (Medicaid insurance) for telepractice sessions?
O Yes (1)
O No (2)

Q5.6 Have you ever received education or training in telepractice? (check all that apply)
Yes, University coursework (1)
Yes, Continuing Ed (2)
Yes, Informal training (Peer to peer mentoring) (3)
Yes, Self-Taught (4)
Yes, Other (5)
No (6)
Q5.7 Who was responsible for training the facilitator in your school or school district?
O SLP who is using telepractice (1)
O School district human resources (2)
School district human resources (2)Individual school principal (3)
O Individual school principal (3)
Individual school principal (3)Other facilitator(s) (4)
 Individual school principal (3) Other facilitator(s) (4) Information Technology personnel (5)
 Individual school principal (3) Other facilitator(s) (4) Information Technology personnel (5) No formal training is provided (6)

Q5.8 Did your school or school district have formal protocols or policies for telepractice?
○ Yes (1)
O No (2)
O Not sure (3)
Other (4)
End of Block: Past School Admin Demographics
Start of Block: Current School Admin Demographics
Q6.1 How many total years/months has your school district contracted for telepractice services?
O Years (1)
O Months (2)
Q6.2 Why was telepractice adopted? (Check all that apply)
To fill recurring personnel shortages (1)
To temporarily address large caseloads (2)
To provide specialized services to a specific population (e.g., swallowing, deafblind) (3)
Not sure (4)
Other (5)

Q6.3 In which setting(s) is telepractice being used? (Check all that apply)
Preschool (1)
Elementary (2)
Secondary school (middle/high school) (3)
Special day/residential school (4)
Other (5)
Q6.4 For what purpose does your school or school district use telepractice? (Check all that apply)
Initial and or re-evaluations (1)
Delivery of speech-language services (2)
To conduct IEP related activities (3)
Parent conferences (4)
Not sure (5)
Other (6)
Page Break

Q6.5 Is a third party payer (i.e., Medicaid insurance) reimbursing the school district for telepractice sessions?
O Yes (1)
O No (2)
Q6.6 Have you ever received education or training in telepractice? (check all that apply)
Yes, University coursework (1)
Yes, Continuing Ed (2)
Yes, Informal training (Peer to peer mentoring) (3)
Yes, Self-Taught (4)
Yes, Other (5)
No (6)
Page Break —

Q6.7 Who is responsible for identifying the facilitator in your school or school district?				
O Director of Special Education (1)				
O Individual School Principal (2)				
O Director of Information Technology (3)				
O Human Resources (4)				
Other (5)				
Q6.8 Who is responsible for training the facilitator in your school or school district?				
O SLP who is using telepractice (1)				
O School district human resources (2)				
O Individual school principal (3)				
Other facilitator(s) (4)				
O Information Technology personnel (5)				
O No formal training is provided (6)				
O Not sure (7)				
Other (8)				

Q6.9 Does your school or school district have formal protocols or policies for telepractice?	
O Yes (1)	
O No (2)	
O Not sure (3)	
Other (4)	
End of Block: Current School Admin Demographics	
Start of Block: University Demographics	
Q7.1 How have you received training in telepractice? (Check all that apply.)	
University coursework (1)	
Continuing Ed (2)	
Informal training (Peer to peer mentoring, employer) (3)	
Self-Taught (4)	
Other (5)	

Q7.2 For what reasons do you or have you used telepractice? (Check all that apply.)
Deliver fee for services (1)
Conduct research in the area of telepractice (2)
Supervise a graduate-level telepractice clinical experience delivered via telepractice (3)
Professional consultation (4)
Other (5)
Page Break

Q7.3 Are you currently or have you ever delivered graduate level coursework on the topic of telepractice?
Yes, Standalone course/elective (1)
Yes, Module within a pre-existing course (2)
Yes, Seminar associated with clinical experience (3)
No (4)
Q7.4 Are you currently or have you ever conducted research in the area of telepractice?
O Yes (1)
O No (2)
Q7.5 Are you or have you ever been responsible for training a facilitator?
O Yes (1)

Q7.6 What strategies have you used to train a facilitator? Check all that apply.
Formal training delivered in-person (1)
Formal training delivered via video-conferencing (2)
Informal training occurring simultaneously with delivery of speech-language services (3)
Other (4)
End of Block: University Demographics
Start of Block: Past Facilitators/SLPAs Demographics
Q8.1 Approximately how long did you assist with telepractice (total years/months)?
O Years (1)
O Months (2)
Q8.2 In what setting(s) were the students who received services through telepractice? (Check all that apply) Preschool (1)
Elementary (2)
Secondary school (middle/high school) (3)
Special day/residential school (4)
Other (5)

Q8.3 What activities did you assist the SLP with during telepractice? (Check all that apply)
Testing of children (1)
Speech therapy (2)
Manage the technology so the SLP can speak with teachers, administrators or other school personnel (3)
Manage the technology during IEP meetings (4)
Manage the technology during parent conferences (5)
Unsure (6)
Other (7)
Page Break

Q8.4 Did the school district you were employed by have formal protocols or policies for telepractice?
O Yes (1)
O No (2)
O Unsure (3)
Q8.5 How were you selected for the job of facilitator?
Responded to a job advertisement (1)
O Recruited by school administrator (2)
O Volunteered in response to request by school administrator (3)
O Referred by SLP (4)
Other (5)

Q8.6 From whom did you receive your training to be a facilitator? (Check all that apply)
OSLP (1)
School administrator (2)
Informal training (Peer to peer mentoring) (3)
Self-Taught (4)
Completed an online telepresenter course (5)
Other (6)
Display This Question:
If If From whom did you receive your training to be a facilitator? (Check all that apply)<0:p> q://QID75/SelectedChoicesCount Is Greater Than or Equal to 1
Q8.7 How was training delivered? (Check all that apply)
In-person (1)
On-line through video-conferencing (2)
Written materials (3)
Other (4)
End of Block: Past Facilitators/SLPAs Demographics
Start of Block: Current Facilitators/SLPAs Demographics

Q9.1 Approximately how long have you been assisting with telepractice (total year/months)?
O Years (1)
O Months (2)
Q9.2 In what setting(s) are the students who are receiving services through telepractice? (Check all that apply)
Preschool (1)
Elementary (2)
Secondary school (middle/high school) (3)
Special day/residential school (4)
Other (5)

Q9.3 What activities do you assist the SLP with during telepractice? (Check all that apply)
Testing of children (1)
Speech therapy (2)
Manage the technology so the SLP can speak with teachers, administrators or other school personnel (3)
Manage the technology during IEP meetings (4)
Manage the technology during parent conferences (5)
Unsure (6)
Other (7)
Page Break

Q9.4 Does the school district you are employed by have formal protocols or policies for telepractice?
O Yes (1)
O No (2)
O Unsure (3)
Q9.5 How were you selected for the job of facilitator?
Responded to a job advertisement (1)
Recruited by school administrator (2)
O Volunteered in response to request by school administrator (3)
Referred by SLP (4)
Other (5)

Q9.6 From whom did you receive your training to be a facilitator? (Check all that apply)
OSLP (1)
School administrator (2)
Informal training (Peer to peer mentoring) (3)
Self-Taught (4)
Completed an online telepresenter course (5)
Other (6)
Display This Question:
If If From whom did you receive your training to be a facilitator? (Check all that apply) <o:p></o:p> q://QID64/SelectedChoicesCount Is Greater Than or Equal to 1
Q9.7 How was training delivered? (Check all that apply)
In-person (1)
On-line through video-conferencing (2)
Written materials (3)
Other (4)
End of Block: Current Facilitators/SLPAs Demographics
Start of Block: Current SLP Demographics

Q10.1 Approximately how long have you been using telepractice within a brick and mortar setting (total years/months)?
O Years (1)
O Months (2)
Q10.2 In which setting(s) are the patients/clients you serve through telepractice? (Check all that apply)
Preschool (1)
Elementary (2)
Secondary school (middle/high school) (3)
Special day/residential school (4)
College/university (5)
Home (6)
Other (7)
Page Break

building are on your telepractice caseload?	
O Number of students (1)	

Q10.4 In what area(s) do you provide services to students (preschool – grade 12) physically located in a brick and mortar building through telepractice? (Check all that apply)
Articulation/phonological disorders (1)
Auditory processing disorders (2)
Augmentative/alternative communication and/or Nonverbal (3)
Autism spectrum disorders (4)
Opysphagia (5)
Fluency disorders (6)
Hearing loss (7)
Language disorders (8)
Learning disabilities (9)
Literacy (Reading and Writing) (10)
Developmental disabilities (11)
Motor speech disorders/apraxia (12)
Myofunctional disorders (13)

Q10.5 For what purpose are you currently using telepractice within the context of a brick and mortar school? (Check all that apply)
Assessment (1)
Treatment (2)
Follow-up/monitoring (3)
Professional consultation (i.e., with teachers, administrators, other related services) (4)
To conduct IEP related activities (5)
Parent conferences (6)
Other (7)
Page Break

Q10.6 Are you or your employer currently being reimbursed by a third party payer (Medicaid, insurance) for telepractice sessions?
O Yes (1)
O No (2)
Q10.7 How did you receive your training in telepractice? (Check all that apply)
University coursework (1)
Continuing Education (2)
Informal training (Peer to peer mentoring, employer) (3)
Self-Taught (4)
Other (5)
Q10.8 Who is responsible for identifying the facilitator in your school or school district?
O Director of Special Education (1)
O Individual School Principal (2)
O Director of Information Technology (3)
O Human Resources (4)
Other (5)

Q10.9 Does the school district in which you are using telepractice have formal protocols or policies for telepractice?
O Yes (1)
O No (2)
O Unsure (3)
Skip To: Q10.10 If Does the school district in which you are using telepractice have formal protocols or policies fo = Yes
Skip To: Q10.12 If Does the school district in which you are using telepractice have formal protocols or policies fo = No
Skip To: Q10.12 If Does the school district in which you are using telepractice have formal protocols or policies fo = Unsure
Q10.10 Does the school district have a mechanism for training a facilitator?
O Yes (1)
O No (2)
O Unsure (3)
Skip To: Q10.11 If Does the school district have a mechanism for training a facilitator? = Yes Skip To: End of Survey If Does the school district have a mechanism for training a facilitator? = No
Q10.11 Who is responsible for training the facilitator in the school setting?
O SLP (1)
O School District (2)
Other (3)

Q10.12 Are you or have you ever been responsible for training a facilitator?
O Yes (1)
O No (2)
Skip To: Q10.13 If Are you or have you ever been responsible for training a facilitator? = Yes Skip To: End of Survey If Are you or have you ever been responsible for training a facilitator? = No
Jaip 10. End of Survey if Are you or have you ever been responsible for training a facilitation: - 140
Q10.13 What strategies have you used to train a facilitator? Check all that apply.
Formal training delivered in-person (1)
Formal training delivered via video-conferencing (2)
Informal training occurring simultaneously with delivery of speech-language services (3)
Other (4)
End of Block: Current SLP Demographics
Start of Block: Past SLP Demographics
Q11.1 Approximately how long did you use telepractice within a brick and mortar setting (total years/months)?
O Years (1)
O Months (2)

Q11.2 In which setting(s) were the patients/clients you served through telepractice? (Check all that apply)
Preschool (1)
Elementary (2)
Secondary school (middle/high school) (3)
Special day/residential school (4)
College/university (5)
Home (6)
Other (7)
Page Break

Q11.3 How many preschool – grade 12 students physically located in a brick and mortar building were on your telepractice caseload?	
canding water on your tereprinented editorious.	
Number of students (1)	

Q11.4 In what area(s) did you provide services to students (preschool – grade 12) physically located in a brick and mortar building through telepractice? (Check all that apply)
OArticulation/phonological disorders (1)
Auditory processing disorders (2)
Augmentative/alternative communication and/or Nonverbal (3)
Autism spectrum disorders (4)
Dysphagia (5)
Fluency disorders (6)
Hearing loss (7)
Language disorders (8)
Learning disabilities (9)
Literacy (Reading and Writing) (10)
Developmental disabilities (11)
Motor speech disorders/apraxia (12)
Myofunctional disorders (13)

Q11.5 For what purpose was telepractice used with students? (Check all that apply)
Assessment (1)
Treatment (2)
Follow-up/monitoring (3)
Professional consultation (i.e., with teachers, administrators, other related services) (4)
To conduct IEP related activities (5)
Parent conferences (6)
Other (7)
Page Break ————————————————————————————————————

Q11.6 Were you or your employer ever reimbursed by a third party payer (Medicaid, insurance) for telepractice sessions?
O Yes (1)
O No (2)
Q11.7 How did you receive your training in telepractice? (Check all that apply)
University coursework (1)
Continuing Education (2)
Informal training (Peer to peer mentoring, employer) (3)
Self-Taught (4)
Other (5)
Q11.8 Who was responsible for identifying the facilitator in your school or school district?
O Director of Special Education (1)
O Individual School Principal (2)
O Director of Information Technology (3)
O Human Resources (4)
Other (5)

Q11.9 Did the school district you used telepractice in have formal protocols or policies for telepractice?
O Yes (1)
O No (2)
O Unsure (3)
Skip To: Q11.10 If Did the school district you used telepractice in have formal protocols or policies for telepractice? = Yes
Skip To: Q11.12 If Did the school district you used telepractice in have formal protocols or policies for telepractice? = No
Skip To: Q11.12 If Did the school district you used telepractice in have formal protocols or policies for telepractice? = Unsure
Q11.10 Did the school district have a mechanism for training a facilitator?
O Yes (1)
O No (2)
O Unsure (3)
O Free Text (4)
Skip To: Q11.11 If Did the school district have a mechanism for training a facilitator? = Yes
Skin To: End of Survey If Did the school district have a mechanism for training a facilitator? - No

Q11.11 Who was responsible for training the facilitator in the school setting?
O SLP (1)
O School District (2)
Other (3)
Q11.12 Were you ever responsible for training a facilitator?
O Yes (1)
O No (2)
Skip To: Q11.13 If Were you ever responsible for training a facilitator? = Yes Skip To: End of Survey If Were you ever responsible for training a facilitator? = No
Q11.13 What strategies have you used to train a facilitator? Check all that apply.
Formal training delivered in-person (1)
Formal training delivered via video-conferencing (2)
Informal training occurring simultaneously with delivery of speech-language services (3)
Other (4)
End of Block: Past SLP Demographics

Appendix F, Survey Results

		SLPs	Tele- F	UF	SA	Total
Telepractice Session Competencies (12)	•					
	Not at all important	0	0	0	0	0
Verifies that all necessary technology is available for use during a telepractice session.	Slightly important	0	0	0	0	0
	Moderately important	0	0	0	0	0
	Very important	2	0	3	0	5
	Extremely important	22	3	4	1	30
	Total	24	3	7	1	35
Positions technology in relation to the student to maximize audio and video quality.	Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
	Moderately important	1	0	0	0	1
	Very important	3	1	1	0	5
	Extremely important	20	2	6	1	29
	Total	24	3	7	1	35
	Not at all important	0	0	0	0	0
	Slightly important	1	0	0	0	1
Ensures lighting and noise levels are appropriate and will not interfere with audio and video quality.	Moderately important	1	0	0	0	1
addio and video quanty.	Very important	5	2	3	0	10
	Extremely important	17	1	4	1	23
	Total	24	3	7	1	35

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		SLPs	Tele- F	UF	SA	Total
	Not at all important	1	0	0	0	1
	Slightly important	1	0	0	1	2
Prepares, organizes and maintains therapeutic materials for use during the session (as directed by the SLP).	Moderately important	4	0	2	0	6
session (as directed by the SLP).	Very important	3	2	3	0	8
	Extremely important	15	1	2	0	18
	Total	24	3	7	1	35
	Not at all important	0	0	0	0	0
Cleans equipment between students.	Slightly important	3	0	1	0	4
	Moderately important	10	1	1	1	13
	Very important	7	1	2	0	10
	Extremely important	4	1	3	0	8
	Total	24	3	7	1	35
	Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
	Moderately important	2	0	2	1	5
	Very important	8	1	3	0	12
Escorts the student to and from class if necessary	Extremely important	14	2	2	0	18
	Total	24	3	7	1	35

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		SLPs	Tele- F	UF	SA	Total
	Not at all important	1	0	0	0	1
	Slightly important	1	0	0	0	1
Assists student in accessing or using web based therapy tools if necessary	Moderately important	1	0	0	0	1
(e.g., highlighter, pointer, text tools, websites).	Very important	7	2	2	0	11
	Extremely important	14	1	5	1	21
	Total	24	3	7	1	35
	Not at all important	2	0	0	0	2
Clarifies student's response if necessary.	Slightly important	7	0	1	0	8
	Moderately important	4	0	2	0	6
	Very important	6	1	2	1	10
	Extremely important	5	2	2	0	9
	Total	24	3	7	1	35
	Not at all important	6	0	0	0	6
	Slightly important	6	0	4	0	10
	Moderately important	6	2	3	1	12
	Very important	3	0	0	0	3
Reminds student and/or parents of homework.	Extremely important	3	1	0	0	4
	Total	24	3	7	1	35

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			SLPs	Tele- F	UF	SA	Total
		Not at all important	2	0	0	0	2
		Slightly important	3	0	1	0	4
	Administers prompts, scaffolding and reinforcement as directed by the SLP.	Moderately important	5	0	3	0	8
		Very important	6	2	2	0	10
		Extremely important	7	1	0	1	9
-		Total	23	3	6	1	33
		Not at all important	0	0	0	0	0
	Uses behavior management strategies as directed by the SLP.	Slightly important	0	0	1	0	1
		Moderately important	5	0	1	0	6
		Very important	7	2	3	0	12
		Extremely important	11	1	1	1	14
_		Total	23	3	6	1	33
-		Not at all important	0	0	0	0	0
		Slightly important	4	0	2	0	6
		Moderately important	10	1	3	1	15
	Ensures SLP receives verbal or written confirmation of completed homework	Very important	3	1	0	0	4
	and communicates follow through of homework back to the SLP	Extremely important	6	1	1	0	8
		Total	23	3	6	1	33

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		SLPs	Tele- F	UF	SA	Total
Technology Specific Competencies (12)						
	- Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
Can access email and Internet to locate the links and online connections for the telepractice session.	Moderately important	1	0	0	0	1
the telephactice session.	Very important	2	1	2	0	5
	Extremely important	20	2	5	1	28
	Total	23	3	7	1	34
	Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
Can establish the video and audio connection for the telepractice session	Moderately important	1	0	0	0	1
	Very important	1	1	2	0	4
	Extremely important	21	2	5	1	29
	Total	23	3	7	1	34
	Not at all important	2	0	0	0	2
	Slightly important	3	0	0	0	3
Can use annotation features of video-conferencing software (e.g., highlighter,	Moderately important	4	0	4	1	9
arrow, text boxes)	Very important	6	2	0	0	8
	Extremely important	8	1	3	0	12
	Total	23	3	7	1	34

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		SLPs	Tele- F	UF	SA	Total
	Not at all important	1	0	1	0	2
	Slightly important	1	0	1	0	2
Can use chat feature of video-conferencing software to communicate with SLP	Moderately important	3	1	3	1	8
	Very important	7	1	1	0	9
	Extremely important	11	1	1	0	13
	Total	23	3	7	1	34
Solves audio and video problems on local electronic device (computer, tablet, etc.) Solves problems with software on local computer/tablet (e.g., loss of mouse,	Not at all important	0	0	0	0	0
	Slightly important	1	0	1	0	2
	Moderately important	3	0	0	0	3
	Very important	4	2	1	1	8
	Extremely important	15	1	5	0	21
	Total	23	3	7	1	34
	Not at all important	0	0	0	0	0
	Slightly important	1	0	1	0	2
	Moderately important	3	1	1	0	5
	Very important	6	1	2	1	10
	Extremely important	13	1	3	0	17
program not responding)	Total	23	3	7	1	34

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			SLPs	Tele- F	UF	SA	Total
		Not at all important	0	0	0	0	0
		Slightly important	4	0	1	0	5
	_	Moderately important	7	1	3	0	11
		Very important	4	1	0	1	6
		Extremely important	8	1	3	0	12
		Total	23	3	7	1	34
		Not at all important	0	0	0	0	0
	Uses an alternative method to communicate with the SLP when video connection fails (e.g., telephone, email)	Slightly important	0	0	0	0	0
15		Moderately important	0	1	0	1	2
_		Very important	3	1	1	0	5
		Extremely important	20	1	6	0	27
		Total	23	3	7	1	34
		Not at all important	0	0	0	0	0
		Slightly important	0	0	0	0	0
		Moderately important	3	2	0	0	5
	Maintains a list of resources for assisting with troubleshooting technical	Very important	12	0	3	1	16
	problems (e.g. school personnel, video-conferencing platform, web resources	Extremely important	8	1	4	0	13
	etc.)	Total	23	З	7	1	34

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		SLPs	Tele- F	UF	SA	Total
	Not at all important	0	0	0	0	0
Follows-up with technical support immediately following a therapy session, if	Slightly important	0	0	0	0	0
	Moderately important	3	0	0	0	3
any problems occur	Very important	4	1	3	1	9
	Extremely important	16	1	4	0	21
	Total	23	2	7	1	33
	Not at all important	1	0	0	0	1
	Slightly important	2	0	1	0	3
Maintains a log of technical difficulties encountered and requests assistance with recurring problems	Moderately important	5	1	2	0	8
with recurring problems	Very important	8	0	2	1	11
	Extremely important	7	1	2	0	10
	Total	23	2	7	1	33
	Not at all important	1	0	1	0	2
	Slightly important	1	0	0	0	1
	Moderately important	3	1	1	0	5
Demonstrates skillty to recover accounts account settings and seiven.	Very important	7	0	2	1	10
Demonstrates ability to manage accounts, personal settings, and privacy controls in online telepractice application	Extremely important	11	1	3	0	15
	Total	23	2	7	1	33

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		SLPs	Tele- F	UF	SA	Total
Interpersonal Competencies (3)	•					
	Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
	Moderately important	0	0	2	0	2
	Very important	5	1	1	0	7
	Extremely important	17	2	4	1	24
	Total	22	3	7	1	33
	Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
Accurately transmits information between the SLP and students, teachers, parents, administrators, and or other professionals.	Moderately important	0	1	1	1	3
parents, administrators, and or other professionals.	Very important	4	0	1	0	5
	Extremely important	18	2	5	0	25
	Total	22	3	7	1	33
	Not at all important	0	0	1	0	1
	Slightly important	1	0	1	1	3
	Moderately important	4	1	2	0	7
Accurately describes telepractice to students, teachers, parents,	Very important	2	1	0	0	3
administrators and or other professionals	Extremely important	15	1	3	0	19
	Total	22	3	7	1	33

		SLPs	Tele- F	UF	SA	Total
Policy and Procedure Competencies (5)						
	Not at all important	0	0	0	0	0
Follows school's general operating policies and procedures (e.g., fire drill,	Slightly important Moderately important	0	0	0	0	2
emergency procedures, dismissal, lunch etc.)	Very important	3	1	3	0	7
	Extremely important	18	1	4	1	24
	Total	22	3	7	1	33
	Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
Adheres to school district policy regarding student confidentiality (e.g., paperwork, electronic records, protected information in public spaces)	Moderately important	0	0	0	0	0
paper work, electronic records, protected information in public spaces;	Very important	0	1	0	0	1
	Extremely important	22	2	7	1	32
	Total	22	3	7	1	33
	Not at all important	0	0	0	0	0
	Slightly important	0	0	0	0	0
Follows school's infection control policies	Moderately important	1	0	1	0	2
	Very important	5	2	1	1	9
	Extremely important	16	1	5	0	22
	Total	22	3	7	1	33

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	Moderately
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Adheres to school district policy specific to privacy and confidentiality within telepractice (e.g., video and audio privacy during tele-session)

Adheres to school district policy and procedures regarding telepractice (e.g., scheduling, roles and responsibilities of a facilitator)

	SLPs	Tele- F	UF	SA	Total
Not at all important	0	0	0	0	0
Slightly important	0	0	0	0	0
Moderately important	0	0	0	0	0
Very important	2	2	1	0	5
Extremely important	20	1	6	1	28
Total	22	3	7	1	33
Not at all important	0	0	0	0	0
Slightly important	0	0	0	0	0
Moderately important	0	0	0	0	0
Very important	1	2	0	0	3
Extremely important	21	1	7	1	30
Total	22	3	7	1	33

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		SLPs	Tele- F	UF	SA	Total
Administrative Competencies	3 competencies					
Copies, sends, and collects paperwork specific to the Individualized Education $\frac{N}{N}$	Not at all important	1	0	2	0	3
	Slightly important	0	0	1	0	1
	Moderately important	2	0	2	1	5
Plan (IEP) process (e.g. consent to evaluate, annual IEP meetings)	Very important	8	1	0	0	9
	Extremely important	11	2	2	0	15
	Total	22	3	7	1	33
	Not at all important	2	0	1	0	3
	Slightly important	1	0	0	1	2
	Moderately important	5	1	2	0	8
	Very important	5	1	2	0	8
	Extremely important	9	1	2	0	12
	Total	22	3	7	1	33
	Not at all important	5	0	2	0	7
	Slightly important	1	0	1	1	3
Schedules meetings between the SLP and families, teachers, and or additional professionals as warranted	Moderately important	8	1	2	0	11
	Very important	4	1	1	0	6
	Extremely important	4	1	1	0	6
	Total	22	3	7	1	33

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