This information is intended to assist educational audiologists as they consider increasing online practices. As resources and materials for remote learning are rapidly evolving it is important to monitor new developments and technologies.

Terminology:

Remote Learning (also referred to as distance learning) - allows learners to access online educational opportunities from an instructor.

Teleaudiology - the use of electronic information and telecommunications technologies to support remote audiological services which may include the full scope of audiological practice.

GENERAL CONSIDERATIONS[1]

- When using Teleaudiology and Remote Learning
  - Make sure your environment is appropriate and private
  - Minimize background clutter; if necessary, hang a curtain or other backdrop
  - Lighting should illuminate the face and minimize shadows; remove backlighting sources
  - Look into the camera, not the monitor
  - Sit in a forward leaning position
  - Avoid wearing clothes that are bright colored or distracting
  - Limit distracting movement, side conversation, background noise, fidgeting

- Software Considerations
  - Video interface capabilities, to exchange video between devices (allowing transmission of video between equipment)
  - Screen sharing capabilities
  - Secure and encrypted software
  - HIPAA & FERPA compliance
  - Most software platforms will be provided by your educational institution. Also check with state board of education guidelines on software platform requirements.

- Audiologist needs
  - State license
  - A device with a camera and microphone: Laptop, desktop, tablet.
  - HIPPA and local agency compliant communication and learning environment
  - Ability to email or text a link for consent, appointment link, instructions, an after-visit summary, follow-up needs and technology interface for troubleshooting. Be sure to be aware of guidelines/rules for privacy and emailing in your state.

- Student and Parent Needs for Direct Access
  - A device with a camera and microphone: Laptop, desktop, tablet
  - Reliable connection to the Internet with sufficient bandwidth to support services
  - "Pad" with plain background for placing technology
  - Appropriate lighting for speakers
  - Hearing devices with suitable technology
  - Earphone jack splitter if more than one person needs to hear the information when headphones or remote microphone systems are used

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[1]These general considerations are summarized from various sources.

- When Using Remote Learning
  - o Teacher needs to
    - ♦ Utilize a good quality headphone with microphone
    - ♦ Make sure lighting is in front of you
    - ♦ Face the camera
    - ♦ Keep objects/hands away from facial area
    - ♦ Speak at a slightly slower pace, enunciating clearly
    - ♦ Repeat key words or phrases
    - ♦ Check comprehension of the student
    - ♦ Utilize many of the same techniques that you would consider if the child was on-site in the classroom setting
    - ♦ Be able to screen-share

      NOTE: Be certain that captioning is available on teacher, comments from other students, and supplementary resources

  - o Student needs to
    - ♦ Utilize remote microphone hearing assistance technology as warranted
    - ♦ Utilize captioning if appropriate (resources provided below)
    - ♦ Be located in a quiet setting without visual distractions
    - ♦ Use visual aids to supplement lessons
    - ♦ Have access to an interpreter or cued speech transliterator if warranted, or speech to text technology (note: some remote learning situations may decrease visual access to faces which are necessary for speechreading; these students may require visual access via sign language or cued speech)

RESOURCES

- _AAA_
  - o **Current Practices in Tele-audiology**
    https://www.audiology.org/practice_management/resources/current-practices-tele-audiology

  - o **The ABCs of Establishing a Remote Clinic**
    https://www.audiology.org/practice_management/resources/abcs-establishing-remote-clinic

- _ASHA_
  - o **5 Steps to Get Started in Telepractice**
    https://blog.asha.org/2020/03/18/5-few-steps-to-get-started-in-telepractice/

  - o **Considerations Regarding COVID-19 for Schools and Students with Disabilities**
    https://www.asha.org/Advocacy/Considerations-Regarding-COVID-19-for-Schools-and-Students-with-Disabilities/

  - o **COVID-19: Tracking of State Laws and Regulations for Telepractice And Temporary Practice**
    https://www.asha.org/uploadedFiles/State-Telepractice-Policy-COVID-Tracking.pdf

  - o **Telepractice**
    https://www.asha.org/practice-portal/professional-issues/telepractice/

  - o **Tracking of State Laws and Regulations for School-Based Telepractice**
    https://www.asha.org/uploadedFiles/State-Laws-and-Regulations-for-School-Based-Telepractice.pdf

  - o **ASHA Telepractice Checklist for School-Based Professionals**
    https://www.asha.org/uploadedFiles/ASHA-Telepractice-Checklist-for-School-Based-Professionals.pdf

- **ASSISTIVE TECHNOLOGY AND CONNECTIONS**
  - o **Assistive Technology and Connections**
    https://connect-hear.com/article-categories/assistive-technology-connections/

- ***CAPTIONING & TRANSCRIPTIONS***
  Captioning and transcriptions are generally provided "live" through Communication Access Realtime Translation (CART) services. The captioning service provider can may be in-person or remote. Captioning can also be added post-production (i.e., added after a recording or video is made). These CART options provide the most accurate transcription. Speech-to-text programs and applications provide automated immediate captioning for live voice. However, the accuracy of these applications varies due to factors such as speaker clarity, accents, and background noise. When used, look for programs that add punctuation and self-correct grammar as well as other formatting options that render the transcripts more readable. The readiness of the user to benefit from captioning (e.g., reading level, processing time, attention) must also be considered.

  - **Captioning options for Videoconferencing and Learning Management Systems**
    https://tinachildress.wordpress.com/2020/03/13/captioning-options-for-videoconferencing-and-learning-management-systems/

  - **Closed Captioning with Streamer**
    https://www.youtube.com/watch?v=MIE9Aqe6_tk&feature=youtu.be

  - **Connect Hear: Adding Captions to Media**
    https://connect-hear.com/article-categories/adding-captions-to-media/

  - **Connect Hear: Captioning Apps for Mobile Phone Calls**
    https://connect-hear.com/article-categories/smartphone-call-captioning/

  - **Connect Hear: Live Captioning and Automated Captioning**
    https://connect-hear.com/article-categories/captioning/

  - **Open Captioning with Streamer**
    https://www.youtube.com/watch?v=EIRz5xYV_9w&feature=youtu.be

  - **Speech-to-Text Readiness Checklist**
    https://successforkidswithhearingloss.com/wp-content/uploads/2012/09/Speech-to-Text-Readiness-Checklist2.pdf

- ***EARLY INTERVENTION***
  - **NCHAM: A Practical Guide to the Use of Tele-Intervention in Providing Early Intervention Services to Infants and Toddlers Who Are Deaf or Hard of Hearing**
    http://www.infanthearing.org/ti-guide/index.html

  - **Timely Diagnosis: A Resource Guide Supporting TeleAudiology**
    http://www.infanthearing.org/teleaudiology/index.html

- ***FERPA***
  - **FERPA and Virtual Learning During Covid-19 (Webinar Recording)**
    https://studentprivacy.ed.gov/training/ferpa-and-virtual-learning-during-covid-19-webinar-recording

  - **Joint Guidance on the Application of FERPA and HIPAA to Student Health Records**
    https://studentprivacy.ed.gov/resources/joint-guidance-application-ferpa-and-hipaa-student-health-records

  - **STUDENT PRIVACY POLICY OFFICE FERPA & Coronavirus Disease 2019 (COVID-19) Frequently Asked Questions (FAQs) March 2020**
    https://studentprivacy.ed.gov/sites/default/files/resource_document/file/FERPA%20and%20Coronavirus%20Frequently%20Asked%20Questions_0.pdf

- ***GOVERNMENT AND SCHOOLS***
  - **Impact of COVID-19 on Assessments and Accountability under the Elementary and Secondary Education Act: Department of Education**
    https://oese.ed.gov/files/2020/03/COVID-19-OESE-FINAL-3.12.20.pdf

- Office of Civil Rights (OCR) Short Webinar on Online Education and Website Accessibility. The Office for Civil Rights (OCR) presents this short webinar on online education and website accessibility.
  https://www.youtube.com/watch?v=DCMLk4cES6A

- Office of Civil Rights (OCR) Coronavirus Statement
  https://content.govdelivery.com/accounts/USED/bulletins/27f5130

- Questions and Answers on Providing Services to Children with Disabilities During the Coronavirus Disease 2019 Outbreak
  https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/qa-covid-19-03-12-2020.pdf

- Supplemental Fact Sheet: Addressing the Risk of COVID-19 in Preschool, Elementary and Secondary Schools While Serving Children with Disabilities
  https://www2.ed.gov/about/offices/list/ocr/frontpage/faq/rr/policyguidance/Supple%20Fact%20Sheet%203.21.20%20FINAL.pdf

- Telehealth Start-Up and Resource Guide Version 1.1: HealthIT.gov. October 2014
  https://www.healthit.gov/sites/default/files/telehealthguide_final_0.pdf

- Telemedicine and Telehealth: HealthIT.gov
  https://www.healthit.gov/topic/health-it-initiatives/telemedicine-and-telehealth

- *HIPAA*
  - Health Information Privacy: HHS.gov
    https://www.hhs.gov/hipaa/index.html

  - Joint Guidance on the Application of FERPA and HIPAA to Student Health Records
    https://studentprivacy.ed.gov/resources/joint-guidance-application-ferpa-and-hipaa-student-health-records

  - Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency
    https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html

  - The list below includes some vendors that represent that they provide HIPAA-compliant video communication products and that they will enter into a HIPAA BAA
    - Skype for Business / Microsoft Teams
    - Updox
    - VSee
    - Zoom for Healthcare
    - Doxy.me
    - Google G Suite Hangouts Meet
    - Cisco Webex Meetings / Webex Teams
    - Amazon Chime
    - GoToMeeting
    - Spruce Health Care Messenger

- *INFECTION CONTROL*
  - Covid-19 Guidance Document: Cleaning of Oticon Remote Microphones
    https://wdh02.azureedge.net/-/media/oticon-us/main/practice-support/oticon_remote_microphonecleaningguidelines.pdf?la=en&rev=1ABD&hash=B2BFD6A14A39F1F1A9ADA507CA1698D9

  - COVID-19 and Cleaning your Cochlear™ Sound Processor - Information for Recipients and Carers
    https://www.cochlear.com/a0ef0ba2-1717-4d02-8a46-918a480b4cc7/D1731077_Fact_SheetDisinfecting_Cochlear_Sound_Processors_APAC_Final_003.pdf?MOD=AJPERES&CONVERTTO=url&CACHEID=ROOTWORKSPACE-a0ef0ba2-1717-4d02-8a46-918a480b4cc7-n4UVeuV

- o **Guideline - (Covid-19) Sanitization of Roger products in classrooms**
  https://www.phonakpro.com/content/dam/phonakpro/gc_us/en/marketing/documents/covid-19/GuidelineSanitization-Roger-products-classrooms-covid-19.pdf

- **OTICON**
  - o **COVID-19 Practice Support and Assistance**
    https://www.oticon.com/practice-support

  - o **Oticon Hearing Aid and Connectivity Overview**
    https://wdh02.azureedge.net/-/media/oticon-us/main/download-center---myoticon---product-literaturepediatrics-support-material/15555-0673---pediatric-home-connectivity-guide.pdf?la=en&rev=484C&hash21EEF3ADB3A4D72051EE157692C56F8A

  - o **Oticon Remote Care**
    https://www.oticon.com/professionals/tools-and-support/remote-care?utm_medium=email&utmsource=ClickDimensions&utm_campaign=RemoteCare&utm_content=46650_remotecare&_cldee=dG1jmFtYXJhQGGVpdS5lZHU%3d&recipientid=contact-3660371055e6de118028001321b3540c-90ba1e809aa45059d31a0d0c7a50299&esid=a32a0772-4f7e-ea11-9432-00155d203207

  - o **First Fit with Oticon RemoteCare**
    https://www.oticon.com/-/media/oticon-us/main/professionals/tools-and-support/remotecare/20-44708--15555-0674---rm---remotecare---first-fit-quick-guide---2.pdf?la=en&hash=90F4C8ACC63D21B5C5739EF458C78EE&_cldee=dG1jbmFtYXJhQGGVpdS5lZHU%3d&recipientid=contact3660371055e6de118028001321b3540c-90ba1e809a8a45059d31a0d0c7a50299&esid=a32a0772-4f7eea11-9432-00155d203207

- **PHONAK**
  - o **Support for Remote Support**
    https://www.phonakpro.com/us/en/support/other-support/esolutions-support/remote-support/overviewremote-support.html?utm_source=crm&utm_medium=email&utm_content=trial_email&utmcampaign=digital_service_delivery

- **REMOTE LEARNING**
  - o **Connect Hear: Videoconferencing**
    https://connect-hear.com/article-categories/videoconferencing/

  - o **Dell Chromebook audio settings for FM/DM transmitter - enabling internal mic**
    https://www.youtube.com/watch?v=drtxVQYyjqE&feature=youtu.be

  - o **Using Google Meet with Students who are D/HOH**
    https://www.youtube.com/watch?v=AcxOKz2jo6k&feature=youtu.be

  - o **E-Learning with Hearing Loss**
    https://listenwithlindsay.com/wp-content/uploads/2020/04/elearning-with-hearing-loss-handout-bylistenwithlindsay.pdf

  - o **Screen Capture Procedures**
    https://alltogethernownh.files.wordpress.com/2020/04/screen-capture-procedures-dhh.pdf

  - o **Online Learning Tips for Parents**
    https://alltogethernownh.files.wordpress.com/2020/04/online-learning-dhh-delivery-tips-for-parents.pdf

  - o **Online Learning Tips for Teachers**
    https://alltogethernownh.files.wordpress.com/2020/04/online-learning-dhh-delivery-tips-for-teachers.pdf

  - o **Connecting Hearing Technologies to Electronic Devices: Directions for Home Use**
    https://alltogethernownh.files.wordpress.com/2020/04/connecting-hearing-technologies-to-electronicdevices.docx-2-1.pdf

- o **Tech Talk: Hearing Loss and Recorded/Transmitted Speech**
  https://alltogethernownh.files.wordpress.com/2020/04/hearing-loss-and-recorded_transmitted-speech.pdf

- • *TRAINING FOR TELEPRACTICE*
  - o **American Academy of Audiology**
    https://www.audiology.org/news/free-online-education%E2%80%A6tailored-content-just-you
    - ♦ Purpose and Benefits of TeleAudiology (0.15 CEUs) Presented by Suzanne Younker, AuD
    - ♦ Telepractice in Audiology: Globalization of Hearing Care (0.1 CEUs) Presented by Bopanna B. Ballachanda, PhD
    - ♦ Pediatric Audiology Telehealth (0.1 CEUs) Presented by Wendy Steuerwald, AuD, and Michael Scott, AuD

  - o **eAudiology Lecture Series - An Introduction to Tele-Audiology**
    https://www.phonakpro.com/content/dam/phonakpro/gc_hq/en/resources/counseling_tools/documentseAudiologypublications/eAudiology_Webinar_Introduction-To-eAudiology_Glista.pdf

  - o **Learning LSL Through Telepractice**
    https://learn.hearingfirst.org/telepractice

- • *TRAINING FOR EI PROFESSIONALS*
  - o **Clinician's Guide to Video Platforms: Telehealth Tecchnology.org**
    http://telehealthtechnology.org/toolkit/clinicians-guide-to-video-platforms/

  - o **Colorado Office of Early Childhood**
    http://coloradoofficeofearlychildhood.force.com/eicolorado/EI_Professionals?p=Professionals&s=TrainingEI&lang=en

  - o **Video Series: Use of Technology with Evidence Based Early Intervention**
    https://ddc.ohio.gov/video-ei-series

  - o **ECI Telehealth**
    https://littleliveseci.com/telehealth/