Using Technology to Support Early Intervention

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Learning Outcomes

- Participants will be able to identify different ways to use technology for different distance learning purposes.
- An understanding of funding and system supports needed to develop an effective means of delivering intervention to families living in rural areas.
- An understanding of the pros and cons, as well as the limitations of each technology shared.
Challenges

- Lack of qualified, experienced professionals in a region
- Fewer options for families
- Community capacity
- Funding
- Lack of professional development opportunities
Using Technology to Support Services In Rural Areas

- Tele-health: A way to support professional teaming and/or direct service to children & families
- Tele-education: A way to support learning and training of providers in rural areas
- Technology options:
  - Video Conference equipment: A means to connect multiple individuals and/or multiple sites
  - Web-cams and Skype: A means to support the delivery of individual early intervention services in rural areas and for individual professional connectivity
Video-conference Technology

- Video conferencing equipment necessary for more than one-to-one communication
  - $5000-10,000 on each end
- Technology support from conference bridge
- Ability to support multiple simultaneous sites
- High speed connectivity
- Can be used for multiple purposes in schools or communities
Challenges of Tele-health Services

- Access to equipment
- Need for tech support
- Scheduling
- Technology delay
- Planning sessions
- Team organization and communication
Tele-Health at the Marion Downs Hearing Center (MDHC)

- **Goal 1**: To effectively and efficiently serve families in remote, less populated, difficult to access regions of Colorado
- **Goal 2**: To partner with other agencies to support professionals providing services to families
- Initial funding from Education grant (equipment) & MCH grant (staff and travel)
- Ongoing support from Dept of Ed, Dept of Health (EHDI) and LEND Audiology Training Grant
MDHC Keys to Success

- Initial personal contact is necessary in order to effectively establish and individualize the experience. (Length of this contact may vary depending on team and individuals.)
  - Teaming and collaboration
  - Desire by both parties to grow from the experience
  - Flexibility
  - Access to equipment
Strengths of Tele-health Services

- Provides access to services and resources in remote areas
- Enhances teamwork
- Allows for consistent and ongoing support
- Creates a platform for brainstorming and problem solving
- Provides support in areas of auditory skill development and cochlear implant rehabilitation
Topics covered in sessions:

- Identifying effective activities and strategies to enhance listening and learning
- Promoting early literacy
- Exploring speech perception vs. speech production
- Carryover of auditory skill development into the classroom
- Facilitating self advocacy
- Creating and maintaining high expectations
- Equipment management
- Use of music and singing
- Eliciting verbal responses
- Brainstorming opportunities for success
- Expanding vocabulary throughout all activities
Possible Funding Sources-Collaboration

- School Districts
- Department of Education
- School for the Deaf and Blind
- Cochlear Implant Centers
- Federal and local grant funding
- PTA
- Community Resources
- Fundraising Efforts
- Other
Use With Parents To Provide Early Intervention

- Provide consistent support to parents when personal contact from an experienced professional is inconsistent due to distance and weather conditions
  - Guiding parents through use of strategies to enhance vocal play and attach meaning to sound.
  - Encourages parent participation in each session.
  - Provides training for local interested professionals
Brian’s Story: Tele-Health in Action
Sally Ziegler, Hayden Colorado

“It is an amazing experience that has brought our team together.”
The Key: Collaboration

- Effectively serving these children and families requires effective teaming across typical “territorial” lines:
  - Teaming across agencies
    - Colorado School for the Deaf and the Blind
    - Colorado Dept of Education
    - Marion Downs Hearing Center
    - University Hospital
    - Listen Foundation
    - LEA
    - Bill Daniels Center for Hearing at The Children's Hospital of Denver
    - Colorado Dept of Health
  - Partnering among funding sources
  - Teaming among professionals
Technology the “low-tech” way!

- Required:
  - Highspeed internet access
  - A Skype compatible computer
  - Web cam and microphone
A Model for using Skype to Support Intervention

- Establish rapport with the family
  - First few months of early intervention service were conducted in the home
  - After initiation of distance services using Skype, continued visits with the family one time each month
Preparing for the Skype session

- Review notes of previous session
- Determine focus of session with family
- Ask family to have specific toys or props available to support the intervention focus
- If using a curriculum or other print resources, have your copy ready for quick reference.
Tips for Success

- Establish rapport with family and other providers
- Limit session to 30 – 40 mins. Be sensitive to child and parent’s fatigue.
- Take notes and e-mail follow-up notes to family after session.
- If family has laptop, move sessions from one room to another in the house.
- Have duplicate props to demonstrate
- Use a doll or large puppet to demonstrate skills
- Provide time for parent to update you
Advantages of this Technology

- Very cost-effective
  - Saves mileage and time for the provider
  - Relatively easy to find financial support for family to purchase newer computer if needed
  - Start-up equipment is relatively inexpensive and easily attained
- Family-friendly
- Flexible
- Family is very involved – early interventionist is forced into the role of coach!