Telehealth in School-Based Practice: Balancing Opportunity and Ethical Considerations

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Contributing Presenter: Jana Cason, DHSc, OTR/L, FAOTA
My journey...
Telehealth Overview Video
(Jana Cason)

https://www.youtube.com/watch?reload=9&v=cqtbo0QugcM
Definition of telehealth

• “…the application of evaluative, consultative, preventative, and therapeutic services delivered through information and communication technology” (AOTA, 2018)

Areas addressed in AOTA Telehealth Position Paper

- Telehealth Models of Care and Applications
- Technology
- Practitioner Qualifications and Ethical Considerations
- Funding and Reimbursement
Overview of Telehealth Technology

Synchronous “Live”
- Videoconferencing
- Real-time monitoring devices
- Interactive virtual reality devices

Asynchronous “Store-and-forward”
- Recorded video
- Recorded data from monitoring devices
- Digital photographs
- Electronic communication

(AOTA, 2018)
Why use telehealth?

• Increases:
  – Access to OT
  – Educational opportunities
  – Comfort
  – Continuity of Care
  – Support network

• Decreases:
  – Travel
  – Mobility concerns
  – Risks to immune system/Infectious Exposure
Current use of Telehealth

- NASA
- State prison systems
- Hospitals
- Disaster sites
- Remote clinics
- Veteran’s Affairs clinics and hospitals
- Schools
State of the evidence

• Position paper
• AOTA’s practice areas
  – Children and Youth
  – Health & Wellness
  – Productive Aging
  – Mental Health
  – Rehabilitation, Disability, and Participation
  – Work and Industry

• Overall efficacy and satisfaction
  – Systematic review (Kairy, et al., 2009)
  – Systematic review (Agostini et al., 2015)
Videoconferencing Technologies

Note: (1) This list is not all inclusive nor intended to endorse/recommend any specific software; (2) The examples provided should be evaluated further for their intended purposes prior to use; and (3) Consider compatibility with available browsers/devices.

- **Zoom for healthcare** (subscription-based; [https://zoom.us/plan/healthcare](https://zoom.us/plan/healthcare))
- **Adobe Connect** (subscription-based; [https://www.adobe.com/industries/healthcare.html](https://www.adobe.com/industries/healthcare.html))
- **Cisco WebEx** (subscription-based; [http://www.cisco.com/web/strategy/healthcare/webex_for_healthcare.html](http://www.cisco.com/web/strategy/healthcare/webex_for_healthcare.html))
- **Citrix Go-to-Meeting** (subscription-based; [https://www.gotomeeting.com/meeting/hd-video-conferencing-resources/documents-reports/gotomeeting-and-hipaa#.VmNYJbiDFBc](https://www.gotomeeting.com/meeting/hd-video-conferencing-resources/documents-reports/gotomeeting-and-hipaa#.VmNYJbiDFBc))
- **Doxy.me** (FREE limited features/subscription-based; [https://doxy.me/](https://doxy.me/))
- **VSee** (subscription-based; [https://vsee.com/](https://vsee.com/))

Adobe Connect Technology

Fun with OT!!

1. TELL ME ABOUT YOU
2. A LITTLE BIT ABOUT ME
3. LET’S PLAY WITH YOUR FAVORITE OT TOOLS
Links to school-based video demonstrations of OT telehealth on Zoom

• Fine Motor/Tennis Ball: https://youtu.be/7ckA4UhJUpc
• Fine Motor Skills/Coins: https://youtu.be/wa6ix6W8jKI
• Directionality/Right-Left Discrimination: https://youtu.be/wVw4dXM5Qz0
OT EVALUATION VIA TELEHEALTH
Evaluation

- Sensory:
  - Sensory Process Measure (SPM)
  - Sensory Profile 2

- Handwriting:
  - Print Tool; Handwriting Assessment Protocol 2nd ed.; DeCoste Handwriting Protocol/Written Productivity Profile
  - Skilled observation
  - Writing samples

- Fine motor skills
  - Pinch patterns
  - Simple/complex rotation
  - Translation (finger->palm->finger)

- Visual perceptual/visual-motor skills
  - Beery-Buktenica Test of Visual Motor Integration
  - Informal Visual Perception assessments
  - MVPT (general reference, more publishers are digitizing standardized tools)
OT INTERVENTIONS VIA TELEHEALTH
Telehealth with the school-aged population

Areas addressed:

• Motor planning/bilateral coordination
• Upper body strengthening
• Core strengthening
• Visual-perception/visual-motor
• Handwriting
• Fine motor/hand skill development
• Sensory strategies
• Activities of daily living (self-help)

http://www.eyecanlearn.com/
https://www.hwtears.com/hwt/online-tools/digital-teaching-tools

http://www.eyecanlearn.com/
OT Toolkit!
Motor Skill Development
Visual Perceptual Skill Development

**Eye Can Learn**

**Visual Discrimination**

Visual discrimination is the ability to identify differences between objects that are similar. This skill is important for helping children develop their ability to distinguish between different objects. The exercises in this section train children to recognize the differences in objects, even those that are similar. The activities are designed to help children develop their visual discrimination skills.

**Double Trouble:** Choose the picture that is different.

1. Click the image below to go to the visual discrimination exercises.
2. Note that the pictures are different. There are no identical pictures. Pictures are on one part.
3. Click on the image at the bottom of the page. Are you right?
4. Remember: If you make a mistake with the exercises, you have to re-exercise. Continue to work this activity until you are able to identify differences even when they look the same.

<table>
<thead>
<tr>
<th>SLOW NUMBER SACCADIES</th>
<th>MEDIUM NUMBER SACCADIES</th>
<th>FAST NUMBER SACCADIES</th>
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<tbody>
<tr>
<td>Get ready!</td>
<td>2</td>
<td>5</td>
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<td>3</td>
<td>6</td>
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<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>9</td>
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</tbody>
</table>

**Word Match:** Match the shapes to the words.

- **Bagle**
- **Happy**
- **Lamp**
- **Chump**

**Line Twines:** Animal Babies 1

**Bug Jumps with Motor Demand, PART I**
Remember the words in each box:

not  make  is
my  down  one

Find the following word: me

Remember the words in each block:
blue

Identify the word behind the clouds:

little  _____
find  _____

Visual Learning For Life
Handwriting Intervention
Handwriting Programs

First Strokes®
One Hour to Legibility Program

One hour to improved print, plus practice and generalization activities to progress students to notebook paper.

Created by:
Jan McCleskey, MA, OTR

The Handwriting Clinic™/First Strokes® Products
Plano, Texas
Multisensory Keyboarding Intervention

www.thehandwritingclinic.com
Sensory/Emotional Regulation Intervention
Life Skills

**MORNING**
- Shower
- Get dressed
- Breakfast
- Brush teeth
- Make bed
- Double check backpack

**EVENING**
- Make lunch for next day
- Set clothes out
- Brush teeth
- Say prayers

**DAILY CHECKLIST**

<table>
<thead>
<tr>
<th></th>
<th>MON</th>
<th>TUES</th>
<th>WEDS</th>
<th>THURS</th>
<th>FRI</th>
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</thead>
<tbody>
<tr>
<td>morning</td>
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<td>precede</td>
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<td>family</td>
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<td>night</td>
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<tr>
<td>Extras:</td>
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</tbody>
</table>

**Sensory Stories**
- I can press my hand hard against my mouth. This gets my mouth ready for the toothbrush.

**How do I write my name?**

<table>
<thead>
<tr>
<th>Today's Date (M/D/Y)</th>
<th>Name: Last</th>
<th>M/L</th>
<th>First</th>
<th>Maiden</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date: Birth (Day/Month/Year)</th>
<th>Applicant Signature</th>
</tr>
</thead>
</table>

Full name (print) | Date

Full name (print) | Date

Date of birth (day/month/year) | Applicant Signature
Personal Care Series
GROOMING

Writer: Martha C. Reith
Editor: Becky Majewski
& Marcella Hines

A Teaching Resource From

MENU MATH
FOR BEGINNERS

A Teaching Resource From

FILLING OUT FORMS

A Teaching Resource From...

ReMedia Publications for Life Skills
School-Based Interventions
SAMPLE THERAPY SESSION
Catching Up

• How is your day today?

• Did you get a chance to complete your homework activity?
Let’s warm up our body ☻

You pick two – be sure to pick one hard one😊

Animal parade
- Butterfly (figure 8 in air)
- Swimming seal/superman
- Roly poly
- Flamingo stand (eyes closed)

Animal parade
- Elephant
- Snake
- Bear walk
- Crab walk/kick
- Duck walk
- Inch worm
- Frog frolic/frog jumps
## Targeted Movement-based Gross Motor/Primitive Reflex Activities

<table>
<thead>
<tr>
<th>Animal Parade</th>
<th>Adapted from <a href="http://worknotes.com/IL/Chicago/Fit4FunKidsFitness/hf0.htm">http://worknotes.com/IL/Chicago/Fit4FunK idsFitness/hf0.htm</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Mad Cat</strong></td>
<td>Get down on your hands and knees with your back straight and elbows slightly bent. Slowly raise head to lock up and then lower head to look down holding for a count of 5 (Anti-Symmetric Tonic Neck Reflex).</td>
</tr>
<tr>
<td><strong>The Curious Cat</strong></td>
<td>Get down on your hands and knees with your back straight and elbows slightly bent. Slowly (5 seconds) turn head to the right and to the left holding for a count of 5 (Anti-Symmetric Tonic Neck Reflex).</td>
</tr>
<tr>
<td><strong>The Swimming Seal (&quot;Superman&quot;)</strong></td>
<td>Lie down on your stomach with arms stretched out forward, legs together and straight back. Lift arms and legs up at the same time while arching the back. Keep head up and looking forward; legs should be as straight as possible. Hold together with toes pointed (ATNR - prone).</td>
</tr>
<tr>
<td><strong>The Boly Poly</strong></td>
<td>Lie down on your back with arms and legs straight (relaxed). Curl up into a little ball squeezing the knees tightly with the arms. Hold for 10 seconds and repeat (Anti-Tonic Labyrinthine Reflex - supine).</td>
</tr>
<tr>
<td><strong>The Kangaroo Jump</strong></td>
<td>Stand with feet together and back straight. Bend your knees and bend both arms in front of you with hands dropping forward. Jump forward as far as you can go. A variation of this can be jumping to the front, back, left, and right following various sequences.</td>
</tr>
<tr>
<td><strong>Flamingo Stand</strong></td>
<td>Stand with your feet together. Bend one knee up and hold as long as you can. Now do the other leg. Adaptation while skill is developing: stand and hold on to a chair or bring the leg just slightly off the floor.</td>
</tr>
<tr>
<td><strong>Bunny Bounce</strong></td>
<td>Stand with your feet together and knees slightly bent. Hop first on the right foot (specific # of times), then switch and hop on the left foot (specific # of times).</td>
</tr>
<tr>
<td><strong>Snake</strong></td>
<td>&quot;Belly crawl&quot; along the floor keeping yourself low with your belly on the ground.</td>
</tr>
<tr>
<td><strong>Bear walk</strong></td>
<td>Place hands and feet on the floor; both should be about should width apart. Legs should be slightly bent. Walk forward moving hands and feet.</td>
</tr>
<tr>
<td><strong>The Crab Walk</strong></td>
<td>Sit on the floor with knees bent, feet flat on floor, hands flat on the floor and slightly behind the body. Lift hips off the floor and walk backwards. For an advanced skill, walk forward.</td>
</tr>
<tr>
<td><strong>The Crab Kick</strong></td>
<td>Sit on the floor with knees bent, feet flat on floor, hands flat on the floor and slightly behind the body. Lift hips off the floor. Kick the right leg in the air. After you have done this, ten times switch and kick with the left foot.</td>
</tr>
<tr>
<td><strong>The Duck Walk</strong></td>
<td>Place feet slightly apart, bend the knees, and bend the trunk forward in a squat position. Place arms on the inside of and grasp ankles with hands. Walk backwards in the same position. This is an advanced exercise.</td>
</tr>
</tbody>
</table>
Let’s Warm Up Our Fingers 😊

• Choose 2: (You pick😊)
  – Tennis Buddy – cut slit to feed coins
  – Clothespin game
  – Tweezers/Tongs
  – Dice game (practicing math)
  – Miniature cube stacking
  – Bubble wrap finger pops
  – Pipette/water on coin
  – Flip and pick up coins in one hand
  – Balloon activities
Let’s practice handwriting 😊

Be on the lookout for many freebie resources that you can use.

Example on this slide from https://msjordanreads.com/
Let’s work on visual skills 😊
Eye Can Learn (http://www.eyecanlearn.com/)

• Visual tracking
  – Fixation
  – Saccades
  – Central/peripheral integration
  – Pursuits

• Visual perception
  – Discrimination
  – Memory
  – Sequential memory
  – Spatial relations
  – Figure ground
  – Closure
  – Form constancy
Brain Exercises (cont.)

Let’s choose one activity

Online jigsaw puzzles: [http://www.akidsheart.com/gamesdr/jigsaws.html](http://www.akidsheart.com/gamesdr/jigsaws.html)

Brain Exercise! 😊

• Let’s choose one activity (from the next few slides):
  
  http://www.freegames.ws/games/kidsgames/simon/mysimon.htm

  http://akidsheart.com/chela/candyseq.html

  http://www.learn4good.com/games/memory-concentration/matchinggames.htm

• Memory Match Game: http://www.akidsphoto.com/fun/matchan01.html#Vr6Yx_krKUk
Brain Exercise (cont.)


http://www.apples4theteacher.com/holidays/presidents-day/games/
(Includes word searches, trivia, and jigsaw puzzles)

***Let’s try this link: http://www.apples4theteacher.com/mtrpuzz.html
Free choice activity

Pick a free choice activity from the OT menu

FM 15 – Retrieve hidden objects in theraputty; hand exercises with theraputty

FM 1 – Crumpled paper/straw tongs
FM 2 – Assorted tweezers
FM 3 – Caterpillar game
FM 4 – Frog filing game
FM 5 – Dice (targeting in-hand manipulation); can add math component
FM 6 – Cubes/blocks
FM 7 – Popping bubble wrap
FM 8 – Geoboard – can be purchased or made with wood/flat ball heads or muffin tins and rubber bands
FM 9 – Clothespins on coat hanger (using different pinch patterns)
FM 10 – Marbles on golf tees (Cracker Barrel type game) or in Styrofoam
FM 11 – Hand fidgets (balloons filled with rice, beans, or flour)
FM 12 – Tennis ball monster
FM 13 – Thumb tacks in corkboard or theraputty
FM 14 – Cut straw art
Ethically Speaking...

Legislation, challenges, ethical considerations
Ethical Considerations

- Code of Ethics
- Laws & Regulations
  - Licensure
  - Federal Regulations (next slide)
- Technological security concerns
- Competence and expertise
- Clients must be fully informed (next slide)
- Clients must have the right to refuse
- Decisions for client appropriateness should be individualized and determined on a case-by-case
  - Selections based on clinical judgment, client informed choice, and professional standards of care.

Federal Legislation

- Health Insurance Portability and Accountability Act (HIPAA)
- Health Information Technology for Economic and Clinical Health Act (HITECH)
- Family Educational Rights and Privacy Act (FERPA) [Educational setting]

As a practitioner, it is important to select technologies and implement processes that will protect patient privacy and security of protected health information (PHI)
Informed Consent

- Very important
- Allows the client to ask questions
- Informs client about using a telehealth approach vs. in-person
- Important from a legal perspective
Benefits

• Increased/easy access to the therapy providers
• The opportunity to observe the session and learn strategies to use at home
• Student familiarity with the learning environment as services are provided in the natural home environment
• Decreased time needed to travel to a clinic
• Enhanced student attention because of technology
• Decreased costs associated with traveling
• Increased instruction time due to decreased travel time
• Decreased exposure to public environments for individuals with compromised immune systems
Challenges

- Poor broadband coverage/internet speeds in some rural areas
- Higher costs for accessing high-bandwidth/faster internet speeds
- Difficulties with equipment reliability
- Difficulty understanding technology tools
- Initial difficulty developing rapport
  - Poor video connections
  - Absence of therapeutic touch
  - Potential for challenging communication encounters.
- Lack of extensive research in the area of telehealth.
- NOTE: In our survey research, many families reported they did not see any disadvantages to services provided via telehealth
Telehealth = OT Service Delivery Tool!

Telehealth is a DELIVERY MODEL or TOOL for delivering occupational therapy (not a separate service) – the service being provided IS OCCUPATIONAL THERAPY.

As such:
• it fits within existing OT scope of practice
• standards of care (i.e., Code of Ethics) with associated disciplinary mechanisms already exist

• With hippotherapy, the horse is the tool for the delivery of occupational therapy services.
• Similarly with telehealth, technology is the tool for the delivery of occupational therapy services.

Image from http://occupationaltherapyforchildren.over-blog.com/article-hippotherapy-77717004.html
“Occupational therapy may be provided via technology or telecommunication methods, also known as telehealth, however the standard of care shall be the same whether a patient is seen in person, through telehealth, or other method of electronically enabled health care”

(Illinois Occupational Therapy Practice Act, 2013)

AOTA State Affairs Department (2019): Occupational Therapy and Telehealth State Statutes, Regulations, and Regulatory Board Statements


http://telerehab.pitt.edu/ojs/index.php/Telerehab/article/view/6269
Getting Started ...

• Explore existing programming/models
• Identify HIPAA/FERPA compliant technology solutions
• Identify reimbursement structures
  • States with private insurance telehealth parity mandates
  • Advocacy resources
• Start small, gain confidence, expand from there!
  • It’s not an ‘all or nothing’ approach; hybrid model (combination of telehealth and in-person services is also an option!)
Resources to start your journey!

- World Federation of Occupational Therapists (WFOT) Telehealth Position Statement

- American Occupational Therapy Association (AOTA)
  http://www.aota.org/telehealth

- Canadian Association of Occupational Therapists (CAOT) https://www.caot.ca/

- American Telemedicine Association Telerehabilitation Special Interest Group
  http://www.americantelemed.org/main/membership/ata-members/ata-sigs/telerehabilitation-sig

- International Journal of Telerehabilitation (open access, peer-reviewed, PubMed indexed)
  http://telerehab.pitt.edu/ojs/index.php/telerehab

- Telehealth Resource Centers (US-based)
  http://www.telehealthresourcecenter.org/

- Social Media – Facebook (OTinTelehealth)/Twitter (@OTinTelehealth)
Additional Telehealth Resources

American Telemedicine Association (ATA)/Telerehabilitation Special Interest Group (TR SIG)
https://telerehab.pitt.edu/ojs/index.php/Telerehab/article/view/6232/6748

Center for Telehealth and e-Health Law (CTel)
http://ctel.org/

International Journal of Telerehabilitation - Open access peer-reviewed journal published bi-annually
http://telerehab.pitt.edu/ojs/index.php/telerehab

Telehealth Resource Centers
http://www.telehealthresourcecenter.org/

NCHAM Tele-intervention Guide
http://www.infanthearing.org/ti-guide/
Questions...


