

Friday, May 13th, 2022

## 21st century speech-language therapy: Digital technologies to help school-aged children grow as communicators

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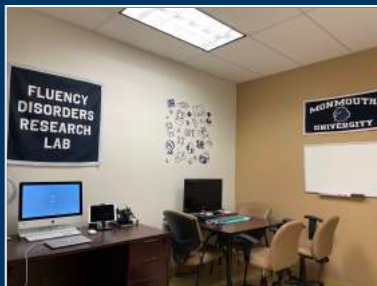
## Disclosures:

- Financial Disclosure
  - Receiving honorarium
- Non-Financial Disclosure
  - None to report.

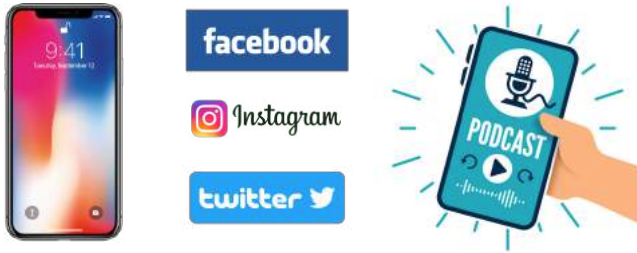


In addition to being a practicing clinician, I'm also a researcher...

I love technology!



## Strong focus in digital experiences



## Some of my published work...

- A healthy number of people who stutter do happily take part in **mobile device-driven experiences** (e.g., numerous social networking and Internet-driven activities) on their **iPhones and iPads** (Dignazio et al., 2020; Raj, 2021; Raj, 2022; Raj & Daniels, 2017; Trichon & Raj, 2018).



- Raj, E. X. (2022). Laughter in stuttering therapy: Using humor-based apps to begin meaningful discussions. In H. Sønsterud & K. Węsierska (Eds.), *Dialogue without barriers: Stuttering management for children and adults*. (pp. 583-603). Poland: Agere Aude Foundation for Knowledge and Social Dialogue.
- Raj, E. X. (2021). Silencing the doubt and accepting invitations. In Aurora Corialis Publishing. *Becoming an exceptional SLP leader: 14 speech-language pathologists do much more than talk*. (pp. 49-61). Phoenix, AZ: Mai Ling Chan, LLC.
- Dignazio, L. E., Kenny, M. M., Raj, E. X., & Pelkey, K. D. (2020). Stuttering-related podcasts: Audio-based self-help for people who stutter. *Perspectives of the ASHA Special Interest Groups*, 5(5), 1131-1138.
- Trichon, M. & Raj, E. X. (2018). Peer support for people who stutter: History, benefits, and accessibility. In B. J. Amster & E. R. Klein (Eds.), *More than fluency: The social, emotional, and cognitive dimensions of stuttering*. (pp. 187-214). San Diego, CA: Plural Publishing.
- Raj, E. X., & Daniels, D. E. (2017). Psychosocial support for adults who stutter: Exploring the role of online communities. *Speech, Language and Hearing*, 20(3), 144-153.

## What does it mean to be a 21st century clinician?

- Being **aware** of digital technology
- **Understanding** trends
- Giving it a **try**



**AWARE, UNDERSTAND, TRY**

## You are...

- Adaptive
- Lifelong learner
- Curious about tech
- Collaborative
- Forward thinking



<https://www.thoughtco.com/characteristics-of-a-21st-century-teacher-2081448>

## So this is what I'm obsessing over...



### The question:

How might we be able to use **digital technology** in a manner that benefits individuals on our caseload?

Today, we're going to explore the internet...

DISCOVER

REPUROSE

INDIVIDUALIZE

ASHA smiles when we do the whole  
“emerging technology” thing:



“As technology and science advance,”  
we, as SLPs, are expected to be aware of  
and utilize “**emerging technologies**” for  
“assessment and intervention related to  
communication and swallowing disorders”  
(*American Speech-Language-Hearing  
Association, 2016*).



<https://www.asha.org/policy/sp2016-00343/>

FIVES criteria described by Sean  
Sweeney (Davis & Sweeney, 2015)

- Free/fairly priced
- Interactive
- Visual
- Educationally relevant
- Speechie



<https://pubs.asha.org/doi/abs/10.1044/aac24.1.19>



## What does it mean to be a digital citizen?

- 21st century clinician ✓
- Digital citizen?
  - What is it?
  - How does it connect to people on our caseload?



## What does it mean to be a digital citizen?

### digital citizen

[ dij-ĭ-lī sit-uh-zuhn, -suhn ] [SHOW IPA](#)  

<https://www.dictionary.com/browse/digital-citizen>

 High School Level

*noun*

- <sup>1</sup> a person who develops the skills and knowledge to effectively use the internet and other digital technology, especially in order to participate responsibly in social and civic activities:

*We're teaching students how to become good digital citizens.*

## Communication is happening physical spaces and digital spaces:

Just a few...



And many more!

<https://www.commonsense.org/>

- **Common Sense** is the leading nonprofit organization dedicated to helping all kids thrive in a world of media and technology.
- Common Sense tiene recursos en español.
  - Ver el programa Latino. <https://www.commonsensemedia.org/es/latino>



<https://www.commonsense.org/>

#### Media

Find age-based ratings, reviews, and guidance for everything families want to watch, read, play, and learn.



#### Education

We support pre-K–12 schools with lesson plans, edtech reviews, family resources, and everything else students need to thrive in a connected world.



#### Advocacy

See how we advocate for media and technology that is safer, healthier, and more equitable for kids, families, schools, and communities everywhere.



<https://www.commonsense.org/education/digital-citizenship/curriculum>



# Digital Citizen Curriculum

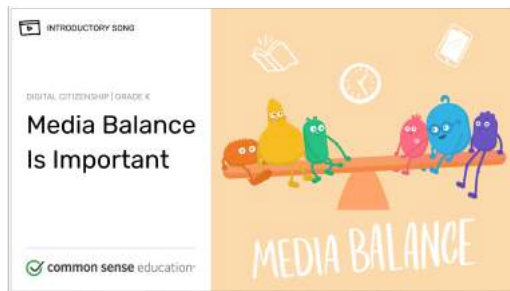
- It goes from Kindergarten through 12th grade.
- We will do three together.
  - **(Kindergarten,** 2nd grade, 7th grade)



## Media Balance is Important (Kindergarten)

- **Learning Objectives:**
  - Know when and why to take breaks from device time.
  - Consider the feelings of people around them, even when engaged in fun online activities.
- Key Vocabulary: balance, device

## First we would play a song...



## Direct links:

- <https://www.commonsense.org/education/digital-citizenship/lesson/media-balance-is-important>
- <https://youtu.be/ikzY4NQeR1U>

## Media Balance slides:



## Media Balance slides:





Media Balance slides:

 KEY VOCABULARY

# Device

An electronic piece of equipment like a phone, tablet, or laptop





Media Balance slides:

 KEY VOCABULARY

# Balance

Having equal weight or importance of something





Media Balance slides:

 WATCH

# BALANCE IS IMPORTANT



To watch this video on the Common Sense Education site, click here.



## Media Balance slides:

PAIR-SHARE

Why should you take a break from your device when a friend says "hi"?



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## Media Balance slides:

PAIR-SHARE

Why should you invite your friend to play when they are all alone?



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## Media Balance slides:

PAIR-SHARE

Why is it a good idea to turn off your device before going to bed?

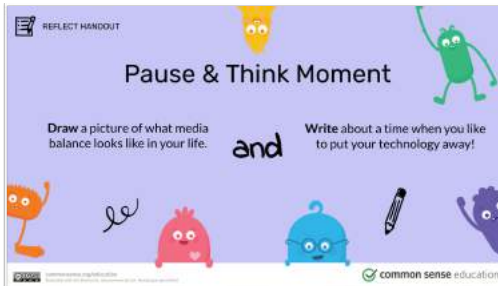


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## Media Balance slides:



## Media Balance slides:




## So many FREE resources!

- Lesson Slides
- Video: Media Balance Is Important
- Download song: Original, Instrumental
- Sheet Music
- Pause & Think Moment Handout
- Coloring Book
- Poster: Song Lyrics
- Poster: The Digital Citizens
- And more!



# Digital Citizen Curriculum

- It goes from Kindergarten through 12th grade.
- We will do three together.
  - (Kindergarten,  **2nd grade**, 7th grade)



## We the Digital Citizens (2nd grade)

- **Learning Objectives:**
  - Understand that being a good digital citizen means being safe and responsible online.
  - Take a pledge to be a good digital citizen.
- Key Vocabulary: **digital citizen**, **pledge**

## First we would play a song...



## Direct links:

- <https://www.commonsense.org/education/digital-citizenship/lesson/we-the-digital-citizens>
- <https://youtu.be/-N7lRYMmbXU>

## We the Digital Citizens slides:



## We the Digital Citizens slides:



## We the Digital Citizens slides:



## We the Digital Citizens slides:



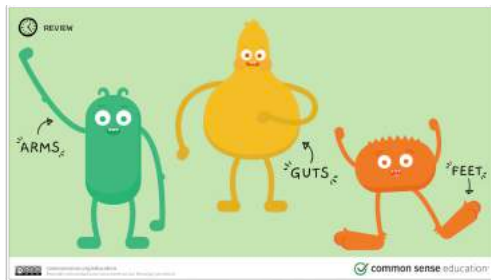
## We the Digital Citizens slides:



## We the Digital Citizens slides:



## We the Digital Citizens slides:



## We the Digital Citizens slides:



## We the Digital Citizens slides:

PAIR-SHARE

Why shouldn't you share your username and password with other people?



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## We the Digital Citizens slides:

PAIR-SHARE

Why should you only talk to people you know online?



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## We the Digital Citizens slides:

REFLECT HANDOUT

Pause & Think Moment

Draw a picture to show how you will be a good digital citizen. **and** Write about what you will do to be a good digital citizen.



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# Digital Citizen Curriculum

- It goes from Kindergarten through 12th grade.
- We will do three together.
  - (Kindergarten, 2nd grade, 7th grade)★



## The Power of Digital Footprints (7th grade)

- **Learning Objectives:**
  - Define the term "digital footprint" and explain how it can affect their online privacy.
  - Analyze how different parts of their digital footprint can lead others to draw conclusions -- both positive and negative -- about who they are.
- Key Vocabulary: digital footprint, invisible audience, persistent

## First we would play a song...



## Direct links:

- <https://www.common sense.org/education/digital-citizenship/lesson/the-power-of-digital-footprints>
- <https://youtu.be/eg3gSNgaBm0>

## Digital Footprints slides:

### Essential Question

How might our digital footprints shape our future?

COMMON SENSE EDUCATION

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## Digital Footprints slides:

### Learning Objectives

- 1 Define the term "digital footprint" and explain how it can affect our online privacy.
- 2 Analyze how different parts of our digital footprint can lead others to draw conclusions -- both positive and negative -- about who we are.
- 3 Use the Take a Stand thinking routine to examine a dilemma about digital footprints.

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## Digital Footprints slides:

WATCH + DISCUSS



Discuss:

- What images are used in the video?
- What do they represent?

To watch this video at the Common Sense Education site click here.

COMMON SENSE EDUCATION

## Digital Footprints slides:

KEY VOCABULARY

**Digital footprint**

All the information online about a person posted either by that person or by others, intentionally or unintentionally

**Persistent**

Lasting a long time

COMMON SENSE EDUCATION

## Digital Footprints slides:

KEY VOCABULARY

**Invisible audience**

Unknown or unanticipated people who can see information about you posted online.

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Digital Footprints slides:

GROUP ACTIVITY

Take a Stand

Chat App

Document No. 6: Private Chat

Description: Private chat between Ilana and anonymous friend

Search/notes: Received by anonymous reader

Hey I saw your blog. I thought you hated cooking! 🙄

Oh yeh I don't LOVE it...I made it because the Truth Be Told application wanted people to have a blog or something to show you have an audience online

Isn't that like cheating tho?...

No, why would it be? I'm just doing it for the job application, if I'm hired they don't need to know I can barely make toast! who cares!

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Digital Footprints slides:

GROUP ACTIVITY

Take a Stand

On your own	<b>TAKE A STAND</b> What do you think? Explain your perspective.
As a group	<b>STAND BACK</b> Where do your classmates stand? Listen to their perspectives.
On your own	<b>LOOK AGAIN</b> Look again at your original response. What had you <u>not</u> considered that other people brought up? (Maybe you changed your mind, maybe you didn't... that's OK! Either way, you heard other views. How has your thinking shifted after hearing your classmates' perspectives, even if you haven't changed your mind?)
As a group	<b>LOOK BEYOND</b> Look beyond this specific case. How does this dilemma remind you of other situations we've explored in class or that you've seen, heard about, or experienced?

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Digital Footprints slides:

APPLY: MY DIGITAL FOOTPRINT

Ways to Shape Your Footprint

1. [Capture student responses here.]

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## Digital Footprints slides:



## Another resource to explore...



[https://beinternetawesome.withgoogle.com/en\\_us/](https://beinternetawesome.withgoogle.com/en_us/)

## 2 other links to explore:

- <https://resiliencyinitiative.org/resources/be-a-good-digital-citizen/>
  - Here are some key components of good digital citizenship.



#1

## 2 other links to explore:

- <https://safesitter.org/digital-citizenship/>
  - Download a helpful infographic PDF file to further the conversation about digital citizenship.



#2

## What's the internet without images?

# Let's play with photos!

<https://www.photofunny.net/>

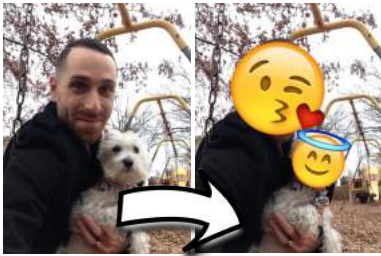


## The finished product:

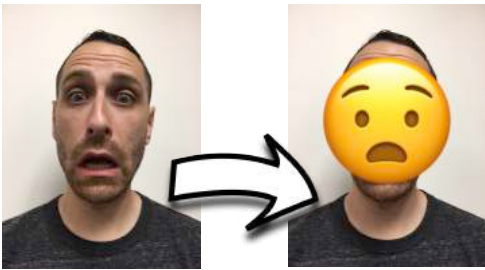
- Lots and lots of possibilities!
- **EMOJI FUN!**
- Super fast.
- Get creative.
- Open up some great conversations.
- Trigger some laughter.



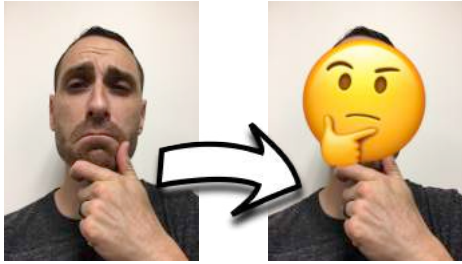
## “What does this mean?”



## Facial Expressions



## Facial Expressions



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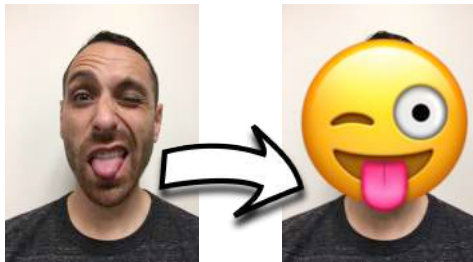
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## Facial Expressions



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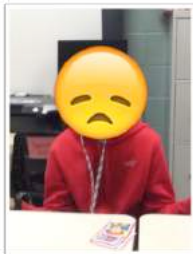
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**“What’s an emoji that describes you as a communicator?”**

- Use the prompt to see better understand thoughts and feelings.



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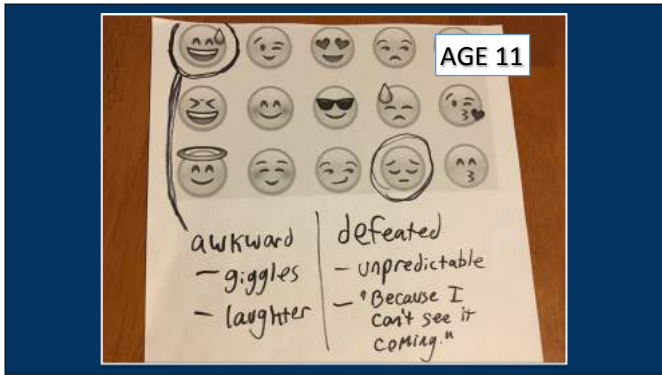
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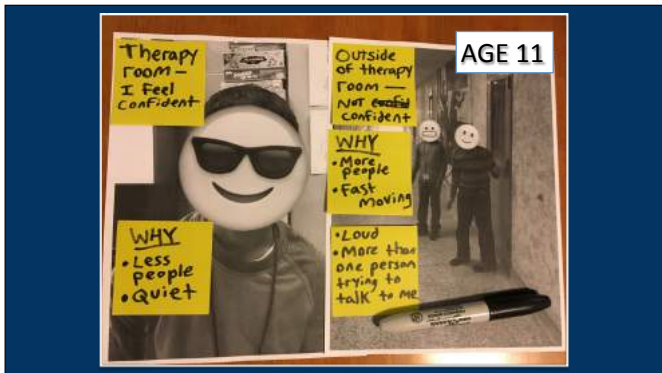
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## More ideas...



## More ideas...

**"Smart like a  
contestant on  
Jeopardy!"**



## More ideas...



**"Rich because  
knowledge is  
wealth!"**

And you can get REALLY wacky...

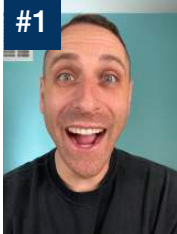


WHOA!!!



10 wacky examples...

#1



What do  
you  
think  
the  
webs  
feel  
like?

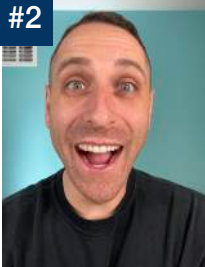


<https://www.photofunny.net/cat-funny-photo-effects/spiderman-photomontage-comic-cobweb>

10 wacky examples...

What would  
you and  
Spiderman do  
together if you  
were friends?

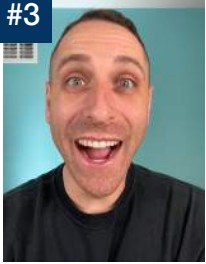
#2



<https://www.photofunny.net/cat-stickers/spiderman-wall-sticker-hooked>

## 10 wacky examples...

#3



How would  
your life be  
different if you  
were  
Spiderman?

[https://  
www.photofunny.net/  
cat-stickers/mask-  
photo-effect-  
spiderman-sticker](https://www.photofunny.net/cat-stickers/mask-photo-effect-spiderman-sticker)

## 10 wacky examples...

#4



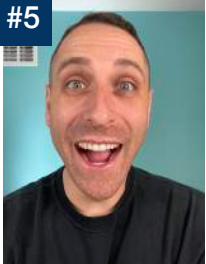
How are  
Buzz  
and  
Woody  
the  
same /  
different  
?



<https://www.photofunny.net/cat-filmstv/frame-toy-story-dolls-woody-buzz>

## 10 wacky examples...

#5



How does  
Darth Vader  
sound?

[https://  
www.photofunny.net/  
cat-stickers/  
sticker-darth-vader-  
helmet-mask-photo](https://www.photofunny.net/cat-stickers/sticker-darth-vader-helmet-mask-photo)

## 10 wacky examples...

#6



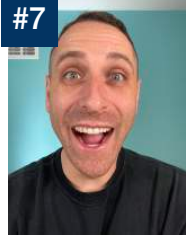
Describe  
your dream  
cake -  
flavors,  
toppings, etc.



<https://www.photofunny.net/cat-e-cards/photomontage-birthday-cake-wine-celebration>

## 10 wacky examples...

#7



Write a  
song  
about  
space.  
Use  
some  
rhyming  
words!



<https://www.photofunny.net/cat-funny-photo-effects/photomontage-astronaut-guitar-space>

## 10 wacky examples...

#8



What if your  
BFF was a  
monkey?  
What would  
you get him  
for his  
birthday?

<https://www.photofunny.net/cat-e-cards/cumpleanos-mono-funny-party-cards>

## 10 wacky examples...

#9



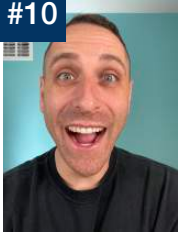
**Congrats!  
You just  
broke a  
world  
record! Tell  
us about it.  
Use your  
sound...**



<https://www.photofunny.net/cat-funny-photo-effects/photo-effect-news-tv-breaking-news>

## 10 wacky examples...

#10



**Would you  
rather be a  
flower in  
the spring  
or in the  
winter?  
Why?**

<https://www.photofunny.net/cat-funny-photo-effects/sunflower>

<https://perchance.org/emoji>

### Random Emoji Generator

Randomly selects one or more emojis for your enjoyment :)



randomize

1

☐ unique?

<https://perchance.org/emoji>



Or maybe we can combine?



**Random Emoji Generator**

Randomly selects one or more emojis for your enjoyment :)



randomize  ☐ unique?

Example 1 of 2

Or maybe we can combine?

**Random Emoji Generator**

Randomly selects one or more emojis for your enjoyment :)



BACK

randomize  ☐ unique?



Example 2 of 2

## 4 other emoji links to explore:

- <https://emojipedia.org/>
  - The emoji search engine. A fast emoji search experience with options to browse every emoji by name, category, or platform.



#1

## 4 other emoji links to explore:

- <https://emojipedia.org/emoji-wrap/>
  - A monthly email and covering all the latest emoji-related topics.



#2

## 4 other emoji links to explore:

- <https://podcast.emojiwrap.com/>
  - The world's number one emoji podcast. News and commentary on emojis.



#3



## 4 other emoji links to explore:

- <https://www.emojidick.com/>
  - A translation of Herman Melville's Moby Dick into emojis.



#4

## What about memes?

**meme** [ meem ] [SHOW IPA](#)  

See synonyms for *meme* on [Thesaurus.com](https://www.thesaurus.com)

<https://www.dictionary.com/browse/meme>

 Middle School Level

*noun*

- a cultural item that is transmitted by repetition and replication in a manner analogous to the biological transmission of genes.
  - a cultural item in the form of an image, video, phrase, etc., that is spread via the internet and often altered in a creative or humorous way.





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### But before I show you how easy it is...

- Let's look at four SLP-related memes that might make you giggle!
- <https://tinyurl.com/slp-memes>



#1

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### But before I show you how easy it is...

- Let's look at four SLP-related memes that might make you giggle!
- <https://tinyurl.com/slp-memes>

#2



### But before I show you how easy it is...

- Let's look at four SLP-related memes that might make you giggle!
- <https://tinyurl.com/slp-memes>

#3



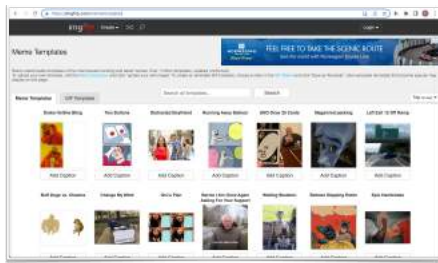
### But before I show you how easy it is...

- Let's look at four SLP-related memes that might make you giggle!
- <https://tinyurl.com/slp-memes>

#4



<https://imgflip.com/memetemplates>



**“Draw a picture of your stuttering.”**

- Use the prompt to better understand thoughts and feelings.



**“Make a meme about your stuttering.”**

- Use the prompt to better understand thoughts and feelings.





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## 10 other examples...

#1

What are some  
R sentences  
that are about  
Gru?

Gru saw a rat.  
Gru ate some rice.



<https://imgflip.com/memegenerator/Grus-Plan>

## 10 other examples...

#2



Describe your  
dream vacation.  
Provide as  
much detail as  
possible.

<https://imgflip.com/meme/Left-Exit-12-Off-Ramp>

## 10 other examples...

#3

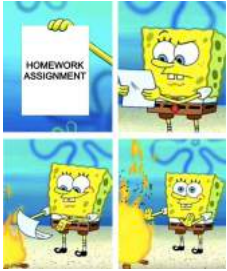
Finish this meme.  
I did it, I finally...  
what?



<https://imgflip.com/meme/Success-Kid>

## 10 other examples...

#4



What was the worst homework assignment you ever received. Why was it so bad?

<https://imgflip.com/meme/139971723/Spongebob-Burning-Paper>

## 10 other examples...

#5

What other S sentences can you come up with?

<https://imgflip.com/meme/But-Thats-None-Of-My-Business>



## 10 other examples...

#6



What if this was your new speech pathologist? How might things be different?

<https://imgflip.com/meme/313581692/Gentlemen-it-is-with-great-pleasure-to-inform-you-that>



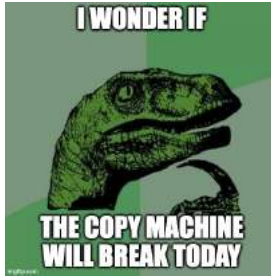
## 10 other examples...

#7

Why is this silly?  
What are some  
other silly words  
you could use?

Example: I wonder  
if my iPhone is fully  
charged...

<https://imgflip.com/meme/Philosoraptor>



## 10 other examples...

#8

Why is this silly?  
What are some  
other silly words  
you could use?

Example: Mario is  
the best video  
game...

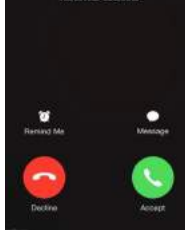


<https://imgflip.com/meme/126165195/Sonic-Says>

## 10 other examples...

#9

INSERT ANY CELEBRITY  
NAME HERE



What if (CELEBRITY  
NAME) was calling  
you? Would you pick  
up? If so, what  
would you both talk  
about?

<https://imgflip.com/meme/141033994/Incoming-call>

## 10 other examples...

#10

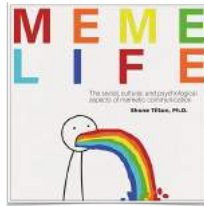
What would  
your life be  
like if you lived  
in this town?

<https://imgflip.com/meme/85934123/Futuristic-Utopia>



And just in case you love meme stuff,  
check out this book...

- <https://tinyurl.com/meme-life>
  - Meme Life - The social, cultural, and psychological aspects of memetic communication.
  - Shane Tilton, Ph.D., Associate Professor of Multimedia Journalism at Ohio Northern University



## Video games and children...





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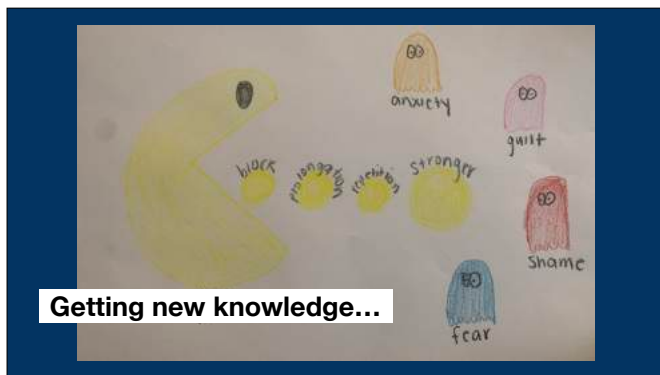
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### Healthy competition between you and your clients...

Keeping track of scores seems to be a motivator for some clients.

Track speech data and track video game scores... this highlights growth!



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An important question to ask your clients...

How have you grown? How have you evolved?

But maybe before you ask your clients how THEY have grown and evolved, you can show them something like this...

Mario over time...



1981  
Donkey Kong



1983  
Mario Bros.



1985  
Super Mario Bros.



1988  
Super Mario Bros. 2 (US)

<https://tinyurl.com/mariovertime>

## Mario over time...



1990  
Super Mario Bros. 3



1991  
Super Mario World



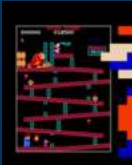
1996  
Super Mario 64



2002-NOW  
Super Mario Sunshine - Now

<https://tinyurl.com/mariovertime>

## Mario over time...



**Carpenter**  
Donkey Kong  
ARCADE



**Plumber**  
Mario Bros.  
ARCADE

<https://tinyurl.com/mariovertime>

## Mario over time...



**Official**  
Tennis  
NES



**Referee**  
Mike Tyson's Punch-Out!!  
NES

<https://tinyurl.com/mariovertime>

Mario over time...



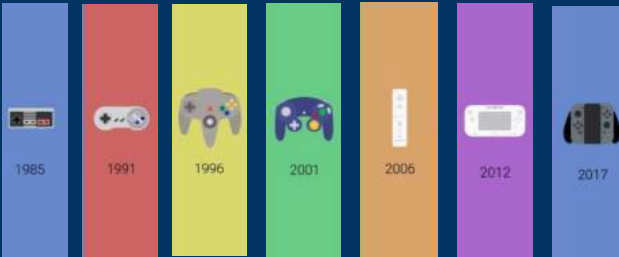
<https://tinyurl.com/mariovertime>

Others over time...



<https://tinyurl.com/othersovertime>

Controllers over time...

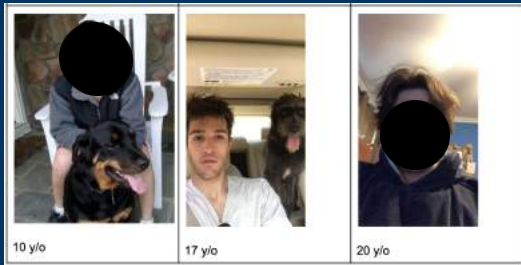


<https://tinyurl.com/controllersvertime>

It all comes back to this question...

How have you grown? How have you evolved?

Your client over time...

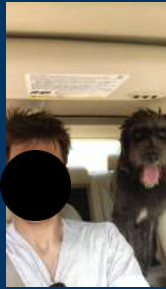


10 y/o



"Truest Stutter - It didn't really affect me at all, I didn't do anything to try to hide or stop my stutter. I didn't try to avoid any situations where speaking was involved."

17 y/o



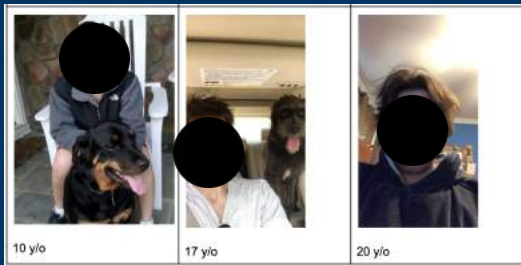
"Avoidance Phase - (1) I would physically try to avoid certain situations and (2) I would try to avoid certain words or add in blocks in place of repetitions because I didn't want to show the stuttering. Blocks were silent therefore that was "better" than the stuttering."

20 y/o



"Improvement Phase - One important part of it is that I started back with speech therapy. I sought it out. This was something I didn't do in the past. Another important part is, I think overall I am trying to become more comfortable with my stutter. Trying not to avoid it. Trying to be more comfortable with it happening."

The visuals help...



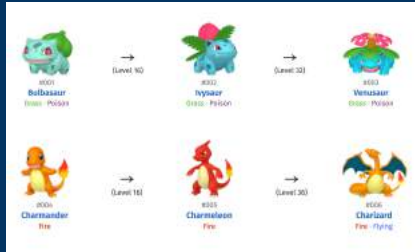
10 y/o

17 y/o

20 y/o



### Other visuals that could help...



<https://pokedex.net/evolution>

### This could help some...



### It all comes back to this question...

**How have you grown? How have you evolved?**

Now more than ever, we should have these conversations... (COVID-19)

<https://2020game.io/>



## In closing...

- The internet and digital technology is here to stay, so let's start to intentionally welcome different bits of them into our therapy experiences.
- Lots of this stuff are fun and functional tools that are ideal for the work we do.
- They serve as valid talking points.
- They can be adapted to fit any goal/objective.

## Thank you!

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