Tele-Education: Supporting Deaf and Hard of Hearing Students in the Mainstream Early Intervention and Beyond…

Alex Mestres, BAEd

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Disclosures

- University of Miami Children's Hearing Program
- Academica Charter Schools
- Charter Schools USA
- BridgePrep Charter Schools

Who are you?

- Educational Specialist for the University of Miami
- TOD for various Charter Schools across the state of Florida
  - 20 virtual students (pre-Co-Vid19)

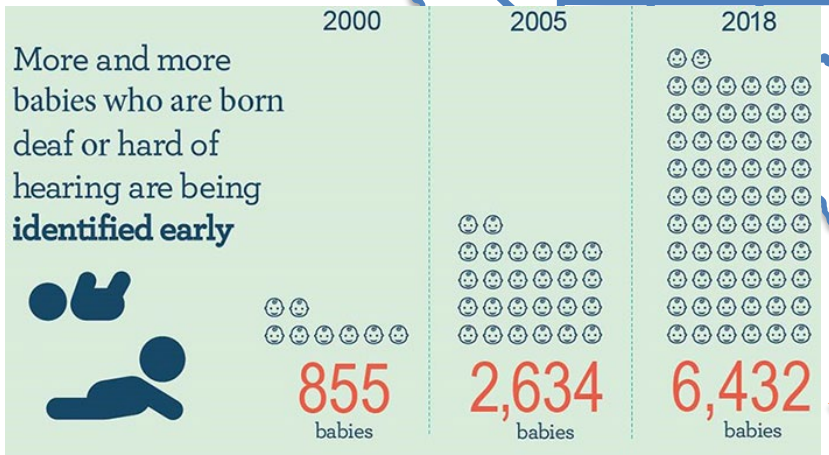
Deaf and Hard of Hearing

What we know…

About 2 to 3 out of every 1,000 children in the United States are born with a detectable level of hearing loss in one or both ears.

15% of children between the ages of 6-19 have a measurable hearing loss in at least one ear

An estimated 1 in 5 American teens experiences some degree of hearing loss.



12.5 percent of kids between the ages of 6 and 19 have hearing loss as a result of listening to loud music, particularly through earbuds at unsafe volumes.

Thank you EHDI!

Even a mild hearing loss can cause a child to miss as much as
50 percent of classroom discussion

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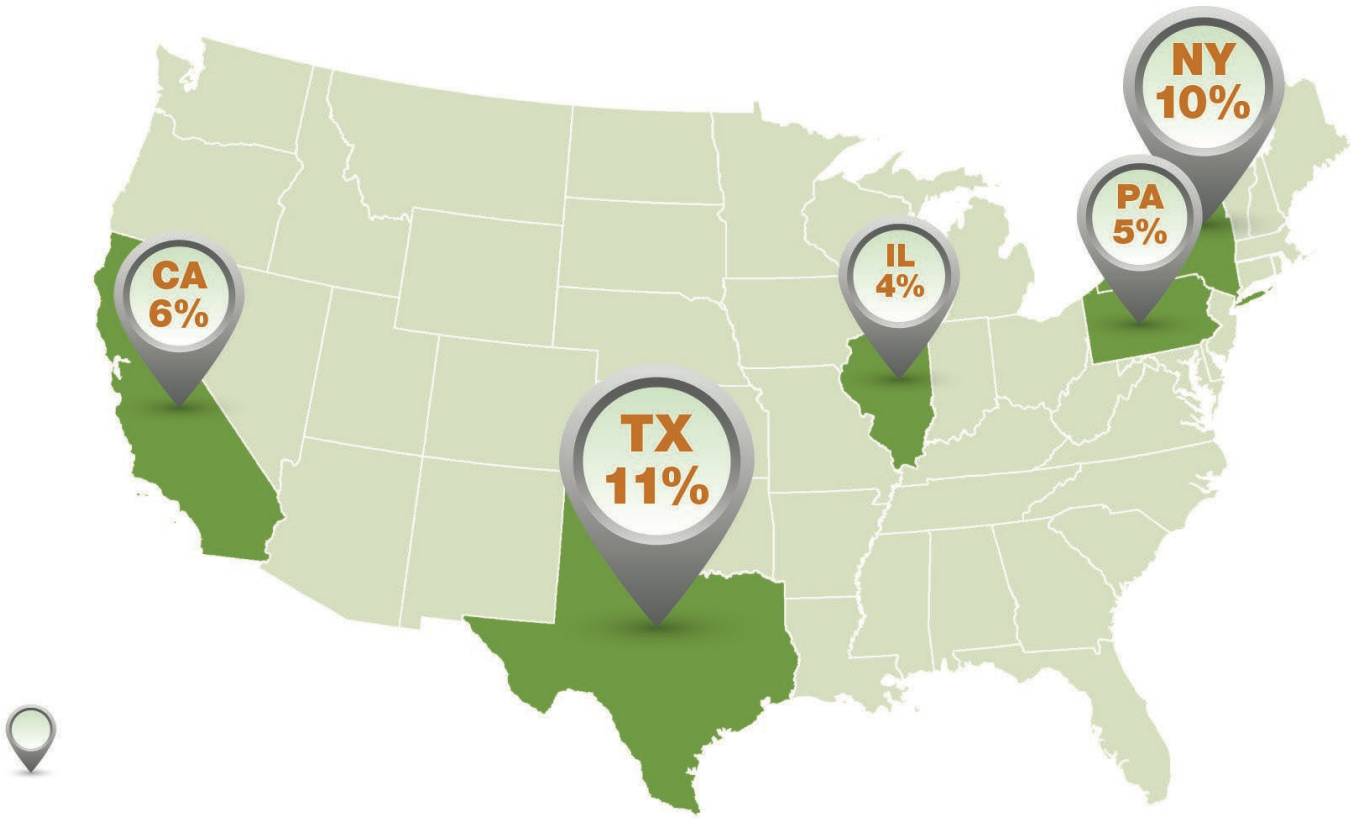
Hearing Loss Association of America
https://www.hearingloss.org/wp-content/uploads/HLAA_HearingLoss_Facts_Statistics.pdf?pdf=FactStats

2 Basic Challenges

Does anyone go into teaching anymore?



U.S. Department of Education, Office of Postsecondary Higher Education Act Title II Reporting System (2016)

The Challenge

- 2007 - 2016 there is a 23% decrease in enrollment in teaching programs
- 9% enroll in programs focusing on Special Education

Elementary Education 21%
Special Education 9%
Math Education 3%
English/Language Arts 3%
English as a Second Language 4%
Early-Childhood Education 8%
Middle School Education 3%
Multilingual & Multicultural Education 2%
Curriculum and Instruction 1%
Social Studies Education 3%
Physical Education 2%
Music Education 2%
Science Education 2%
Art Education 1%
Reading Education 1%
Secondary Education 7%
General Education 3%
Health Education 1%
Noneducation Majors 19%
Other Majors 5%

Will, Madeline (2018). Enrollment Is Down at Teacher Colleges. So They're Trying to Change. Education Week, Volume 38, Issue 1, August 2018

Where does that leave us?

There has been a critical shortage of deaf education teachers nationwide for many years (Johnson, 2004). With the small number of graduates, the closing or suspension of several programs in recent years (Deaf Ed Teacher Preparation Programs, 2009) and the anticipated retirement of many "baby boomer" professionals, it is likely that the critical shortage will continue (Johnson, 2004).

Lenihan, S. (2010). Trends and challenges in teacher preparation in deaf education. The Volta Review, 110(2), 117.

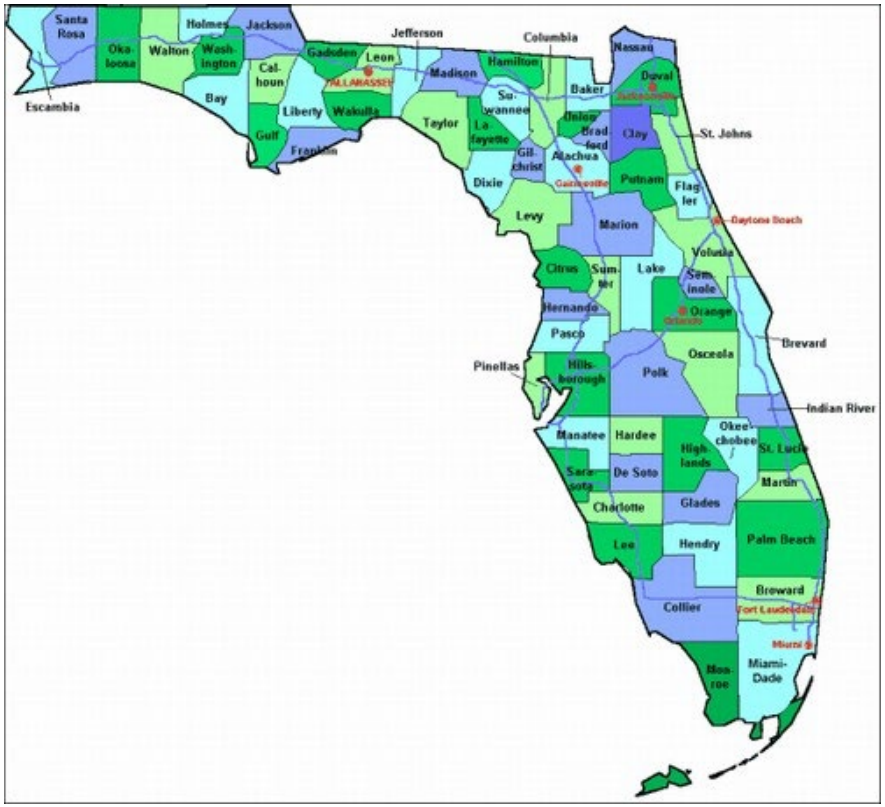
Where does that leave us?

Both deaf schools and mainstream schools are continually looking to fill vacant teaching positions as demonstrated on various job search sites. Studies showed a significant increase in the number of deaf and hard of hearing children and adolescents in the country as the U.S. population grows; however, the number of future **educators being prepared to teach deaf and hard of hearing students has remained stagnant.**

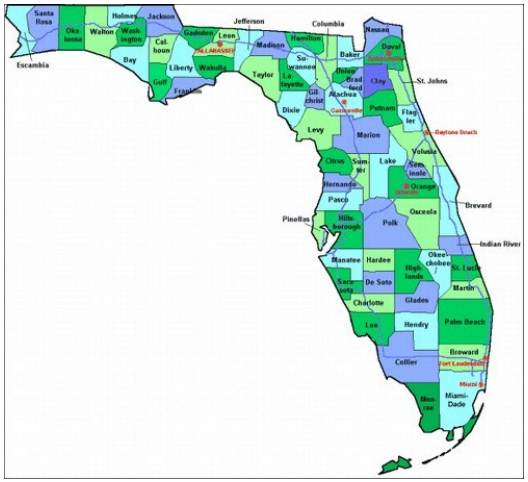
Overcoming Shortage of Teachers of the Deaf and Hard of Hearing, DeafJobWizard.com, January 1, 2019.

Florida for Example

- As of June 24 on indeed.com: 37 openings for Teachers of the Deaf and Hard of Hearing
- 26 of the openings are in major cities such as: Miami, Orlando, Tampa, etc…



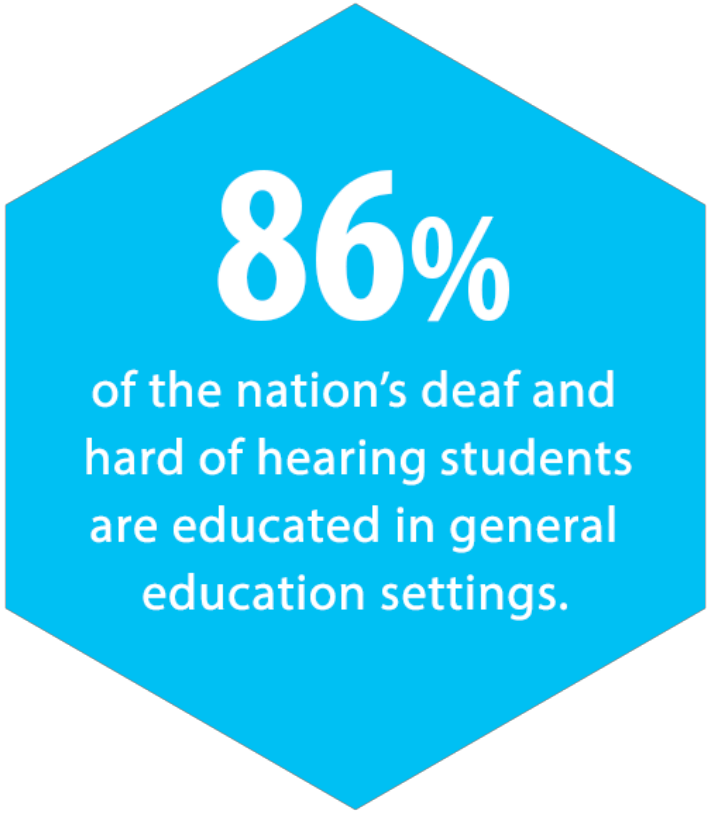
Jefferson County Florida



3 Students needing support from a TOD

1 bi-lateral cochlear implant kindergartener
1 bi-lateral moderate hearing aid 2nd grader
1 bi-lateral mild post lingual 3rd grader
(refusing to wear amplification)

The Other Challenge…

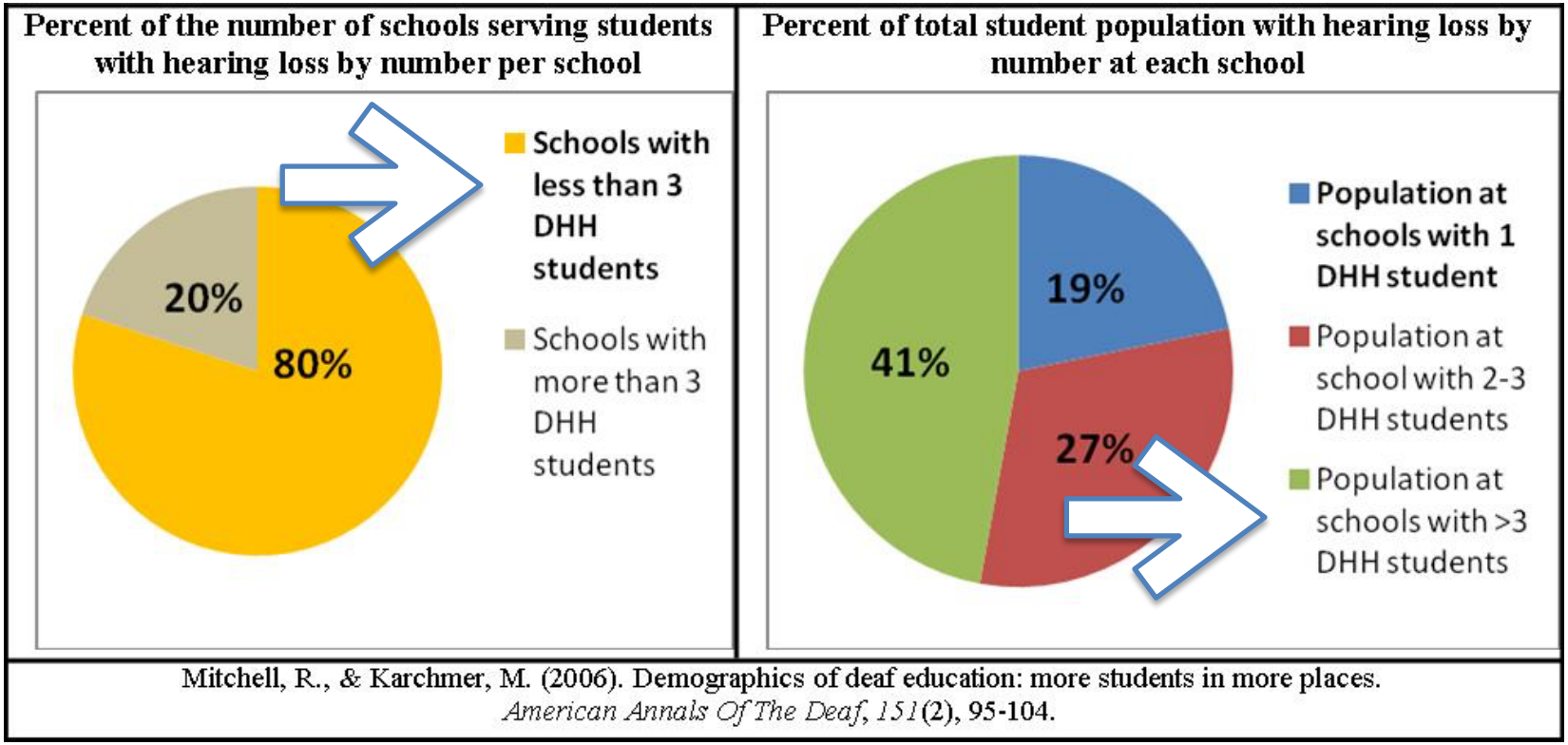


Educating Students Who Are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings
Laurent Clerc National Deaf Education Center and the Texas Education Service Center

Due to many factors:

- Early detection/Early intervention
- Technology advancements
- Policy changes

Where are they?



Mitchell, R., & Karchmer, M. (2006). Demographics of deaf education: more students in more places. *American Annals Of The Deaf, 151*(2), 95-104.

The Model Has Changed

- Teachers with no experience with hearing loss (or in special education).
- Dependent on support services (interventionists, SLPs, OT/PTs, ESE teachers)
- Itinerant TODHH or Early Interventionist providing the majority of support.

Who are you again?

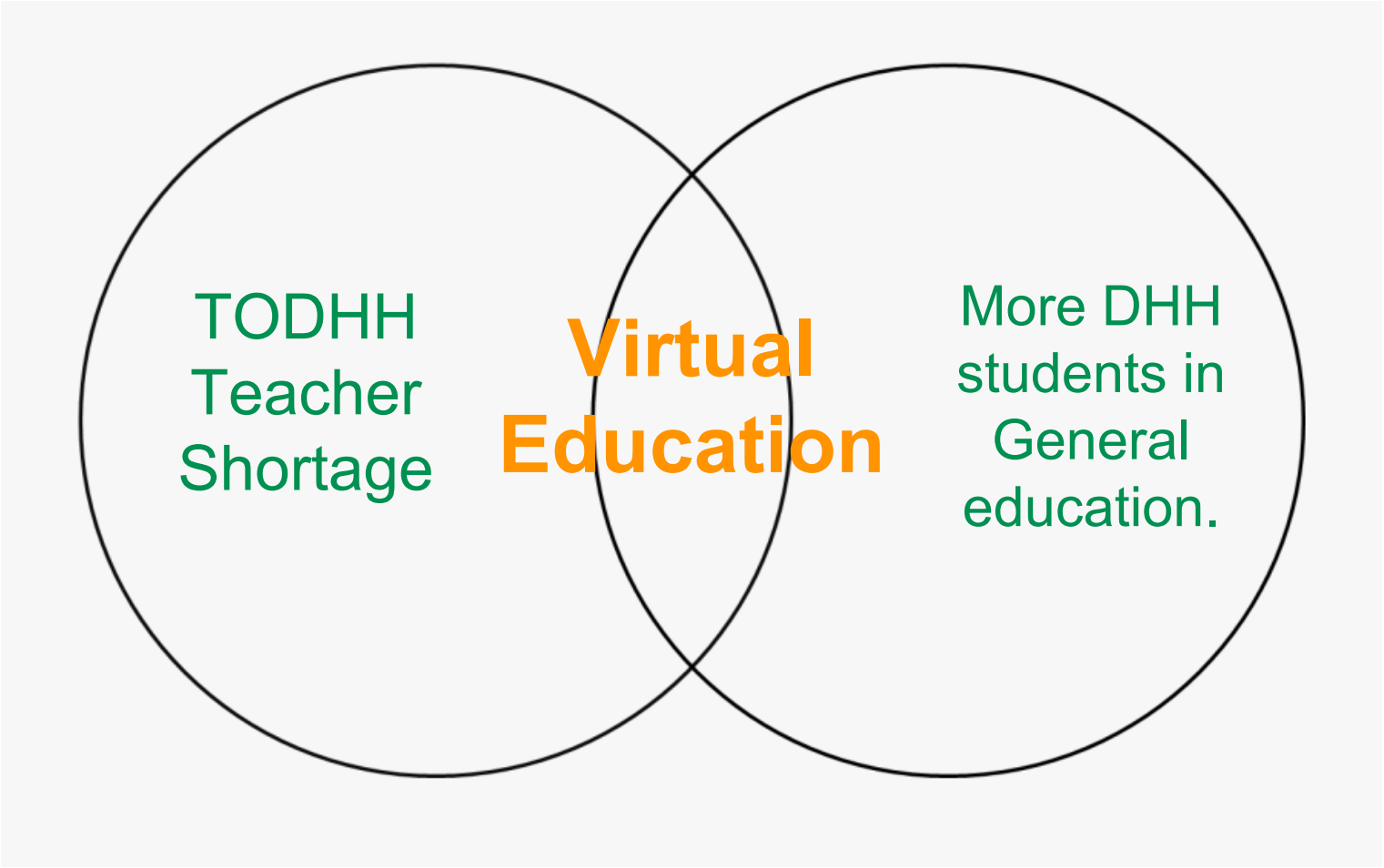
- Teacher of the Deaf and Hard of Hearing
- Auditory trainer
- Counselor
- Audiologist
- IEP watchdog
- Interpreter
- Social Navigator
- LIFE COACH!

The Itinerant Model

- Early Childhood: Helping families navigate their early learning settings.

- School age:Teaching students to navigate their academic environment through their hearing loss.

Finding a Possible Middle Ground

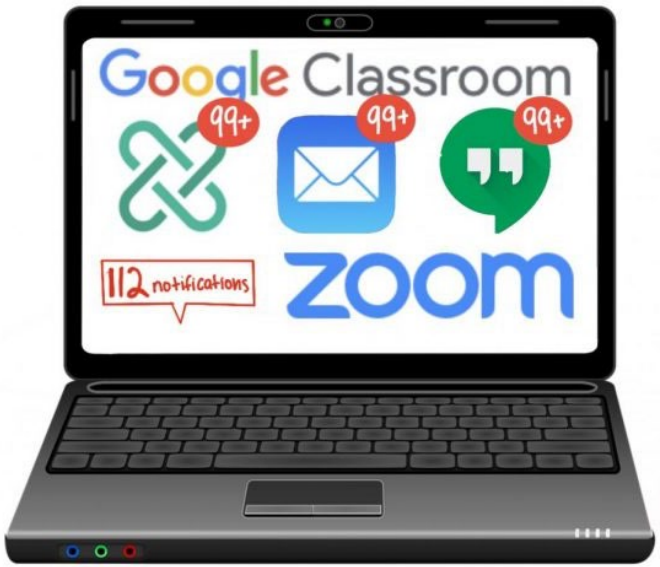


The elephant in the room…

Distance Learning aka…

Virtual Education

Synchronous Learning

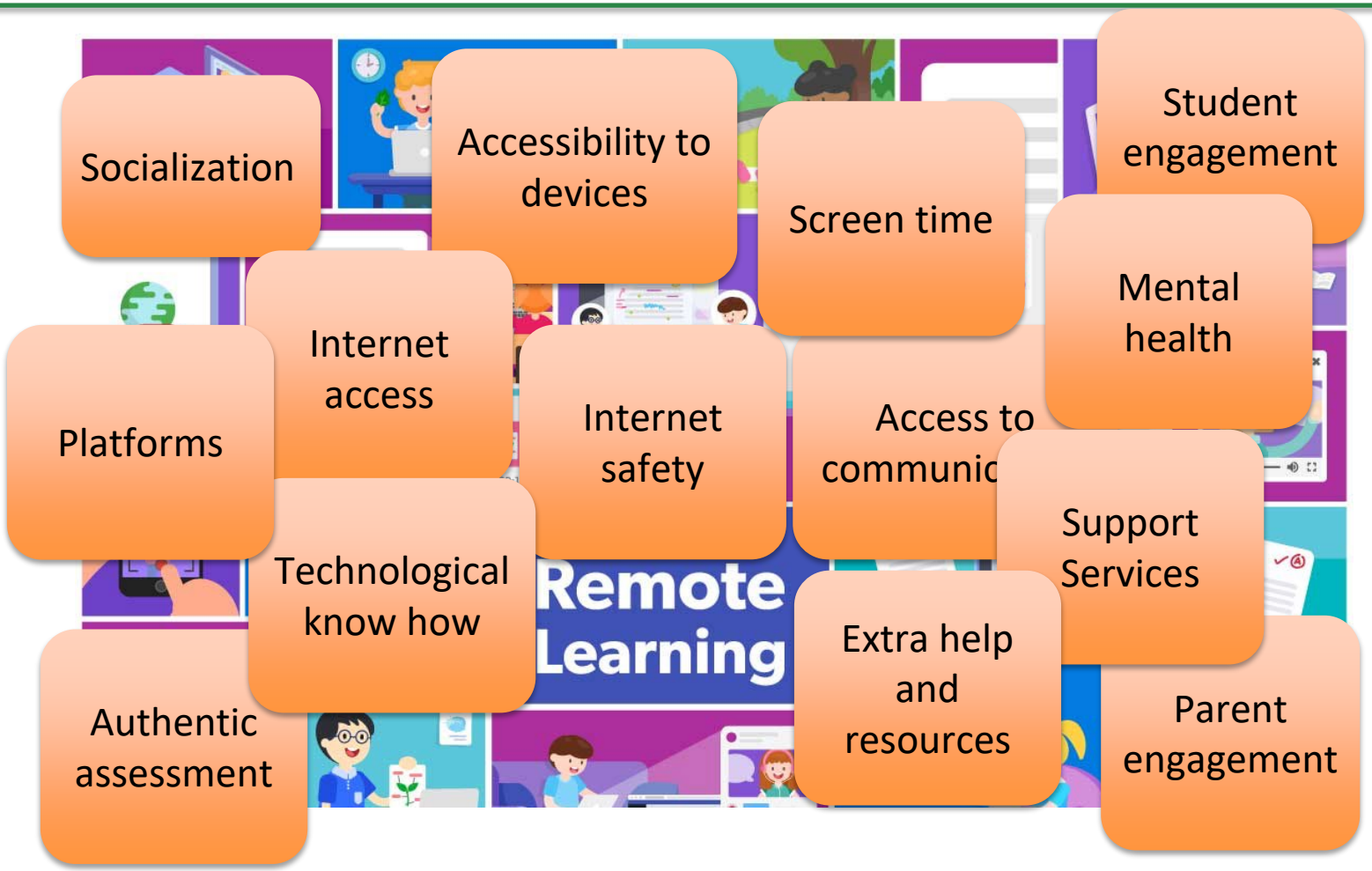


Remote Learning

Mobile Access

Asynchronous Learning

Challenges!


Socialization
Accessibility to devices
Screen time
Student engagement
Mental health
Internet access
Platforms
Internet safety
Access to communic
Support Services
Technological know how
Remote Learning
Extra help and resources
Authentic assessment
Parent engagement

University of Miami Study…

- 48% of students were receiving access to their education through a full virtual format (required to sign on for synchronous instruction for a designated number of hours

- 46.1% of families reported that their children were receiving instruction through a combination model that included independent work as well as a number of hours requiring sign on for virtual instruction

- Families also reported that students were receiving their support services such as Speech and Language therapy, Deaf and Hard of Hearing Itinerant services, Occupational therapy, and Mental Health support virtually for an average of 1 hour per week for each service.

CHILDREN'S HEARING PROGRAM

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Preliminary Conclusions…

- A large portion of parents identified managing their child's virtual schedule as very difficult (27.5%) or somewhat difficult (30.4%)

- Our study suggests that regardless of degree of hearing loss or communication modality, parents are finding it difficult to support their children academically during virtual learning.

CHILDREN'S HEARING PROGRAM

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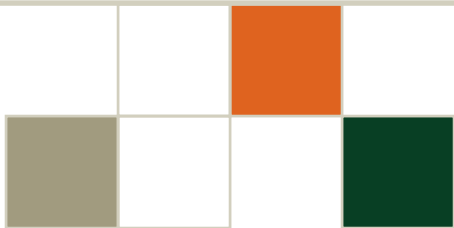


Virtual Education : Distance Learning Overall

- Proactive not reactive.
- Integrated technology.
- Positive outcomes.
- More research.

Virtual Learning: Effective?

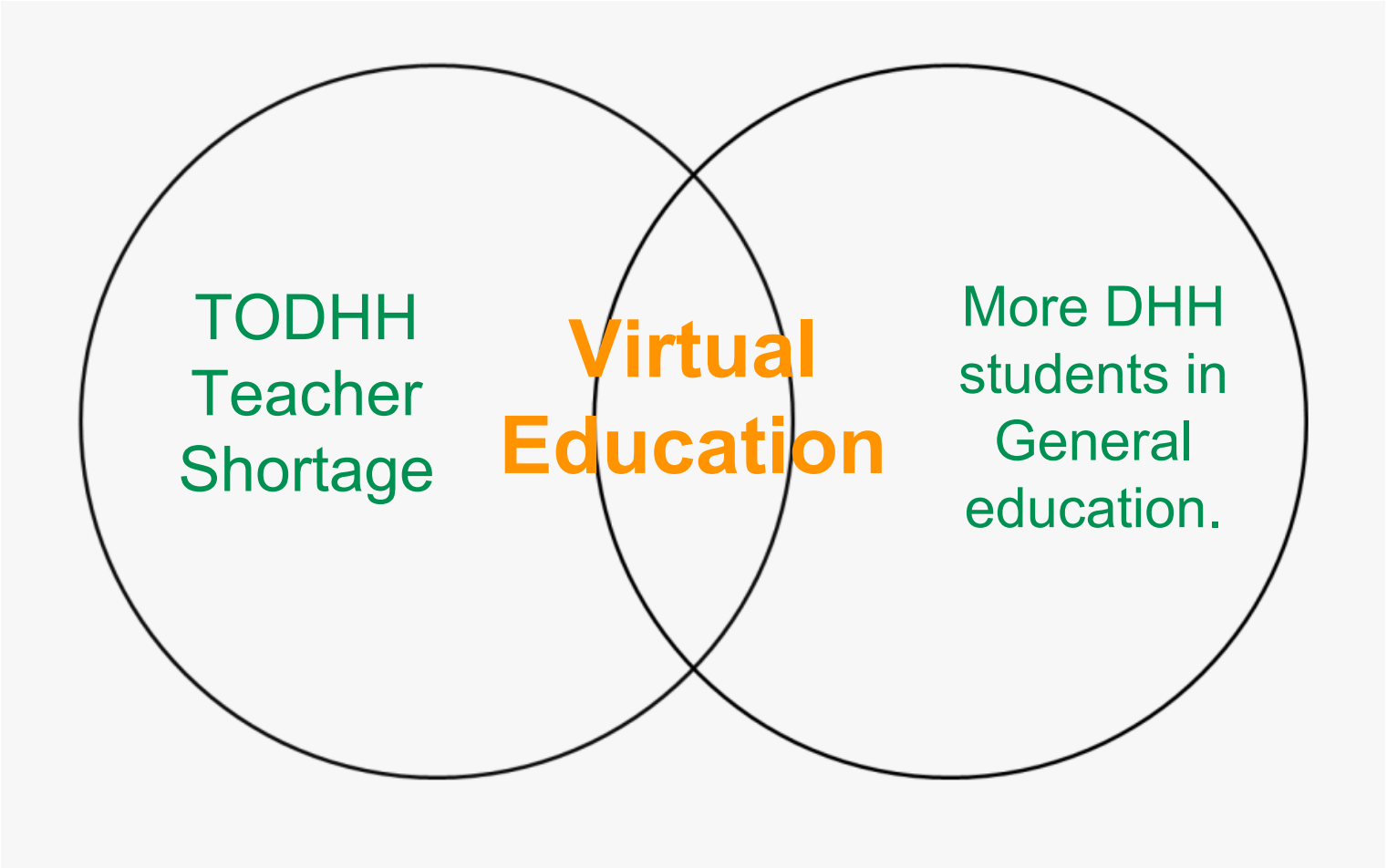
"Technology in and of itself may have no special powers to improve learning, but it has been argued that **distance technologies could offer more powerful learning opportunities than their face-to-face counterparts** when embedded with instruction that addresses the cognitive and social processes of knowledge construction (Kozma, 1991)."

Rice, K.L. (2006). A Comprehensive Look at Distance Education in the K-12 Context. Journal of Research on Technology in Education. 38 (4), pp. 425-448.

There are a large number of studies that find positive statistically significant effects for student learning outcomes in the online or hybrid format compared to the traditional face-to-face format. Some of the positive learning outcomes are improved learning as measured by test scores, student engagement with the class material, improved perception of learning and of the online format, stronger sense of community among students, and reduction in withdrawal or failure.

Nguyen, Tuan. "The effectiveness of online learning: Beyond no significant difference and future horizons." MERLOT Journal of Online Learning and Teaching 11.2 (2015): 309-319.

In the right context could it be the middle ground…

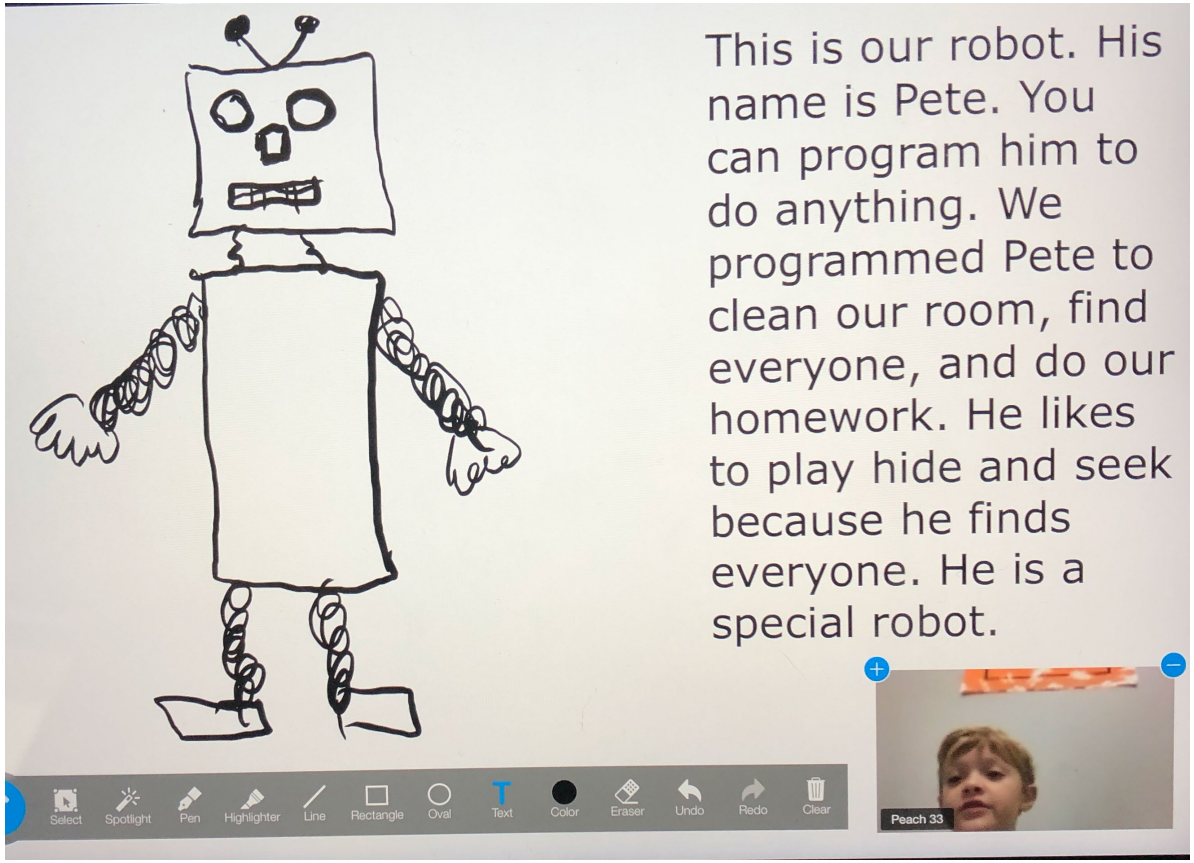


A Closer Look

- Sychronous learning: part of the school day.
- Providing the IEP support service for TODHH
- Gives students access to qualified and certified professionals.
- Provide support for teachers serving those children as well as families.
- Individualized: may not be for everyone.

Meanwhile back in Jefferson…

The Real Question: Can it work?



Looking at this through early intervention…

And what are we looking at…

- Social/Emotional support for families
- Communication Access
- Self advoca… services, school options, etc…

Coaching, coaching and more coaching!

Social-Emotional Support

- Offered various sessions (individual and group) to help parents through their child's journey

- Served families from 5 different counties including rural areas such as: Hendry, Jefferson, and Monroe

Communication Access

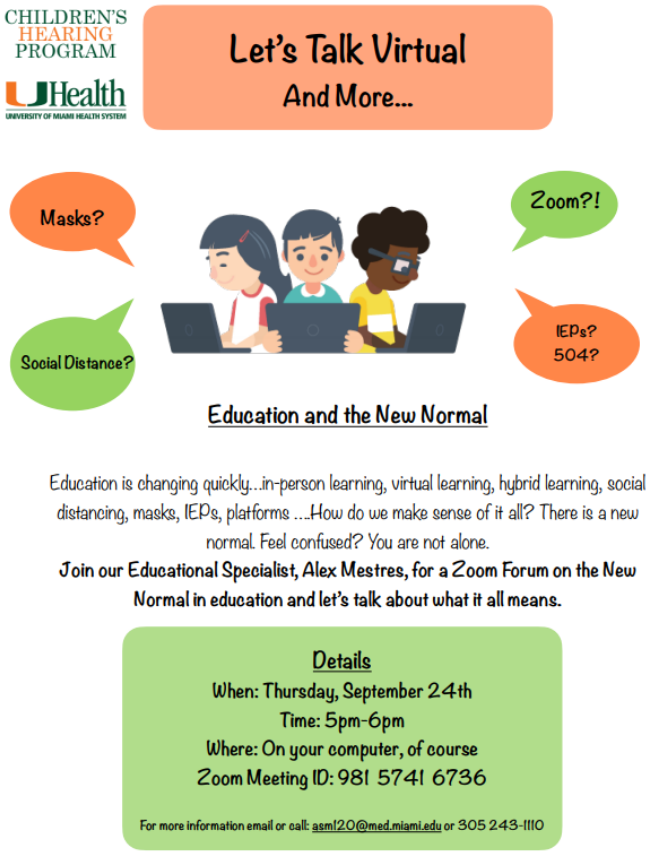
- Offered various forms of communication training through virtual visits and coaching with families

- Served families from 3 different counties including: Miami-Dade, Broward, West-Palm

Family advocacy

- Offered multiple coaching session (individual and group) on the next steps

- Served families from multiple counties including rural counties such as: Monroe, Jefferson, Leon, Bay, and Lee



But, we have to consider

86%

of the nation's deaf and hard of hearing students are educated in general education settings.

Just a small example…

Naaya M.

Pre-K3

Bi-lateral hearing aids

Moderate hearing loss

CHARGE Syndrome

Meet Christian…

- Bi-lateral Cochlear implants (age 2)
- Parents are undocumented and are non-English speakers
- Started in preschool at age 3
- No TOD available in a 4 county area

Providing Support

- Partnership with ITS in the area of need
- Provided training to 76 different preschools
- Provide support for parent educators with The Children's Trust

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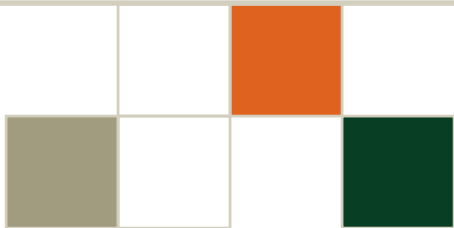


The foundation is early intervention but then what…

What does it look like in school?

- Students are given access to a school computer for sessions.
- ZOOM is preferred platform.

What is being taught?

- Auditory Skills/Communication skills
- Vocabulary/Reading Support
- Self Advocacy
- Transitions
- Device Support

Who is being taught?

- 12 charter school students 3 public school students (pre-CoVid19) 55 students (post CoVid19)
- 5 counties across Florida
- Grades: PreK3-12
- Population included:
  bi-lateral cochlear implant users
  bi-lateral hearing aid uses
  unilateral hearing loss (aided)
  unilateral hearing loss (no device)

Auditory Skills

Mason R.

Kindergarten

Bi-Modal

Vocabulary/Reading Support

Violet O.

2nd Grade

Bi-lateral CI

Self Advocacy

Noe O.

4th Grade

Unilateral

Conductive

BaHA

Transitions

Eveline D.

9th grade

Moderate HL

No amplification

Device Support

Parker P.

Kindergarten

Bilateral CI

The Unexpected Lessons

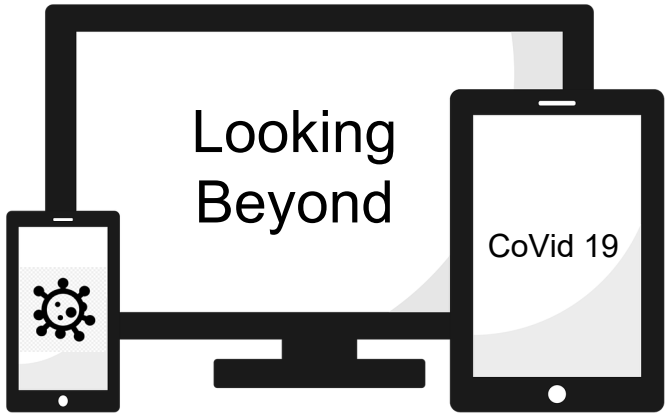
- Great communication with general education teacher.
- Training for staff on having a student with hearing loss.
- Modeling strategies for teachers with DHH students.

Back to Christian…

- 8 years old now
- TODHH 2x per week
- Speech Therapy (private and school) 90 minutes per week
- Support facilitation in all academic areas.

Thinking ahead…

Overall, there is strong evidence to suggest that online learning is at least as effective as the traditional format, but the evidence is, by no means, conclusive. **Online learning is a story that is still being written, and how it progresses will likely depend on those present.**

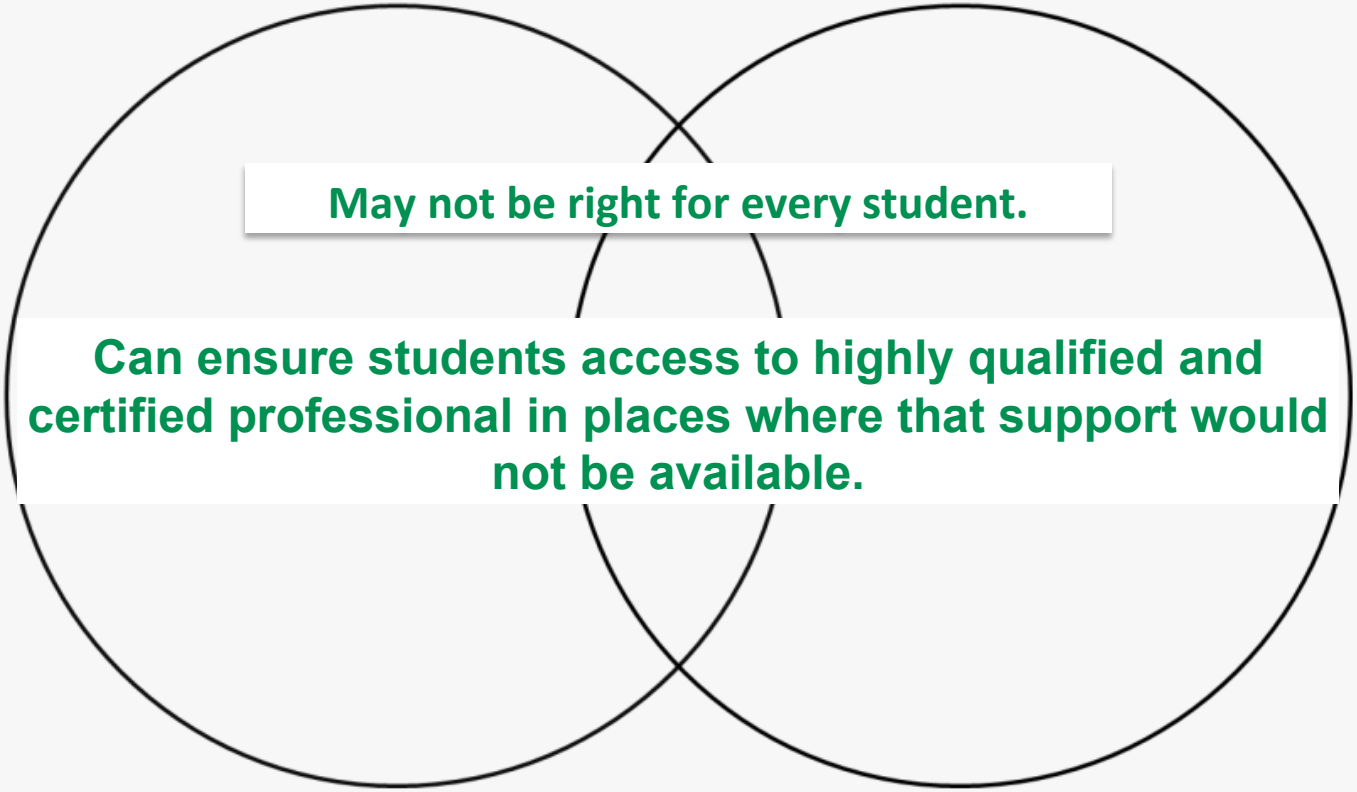


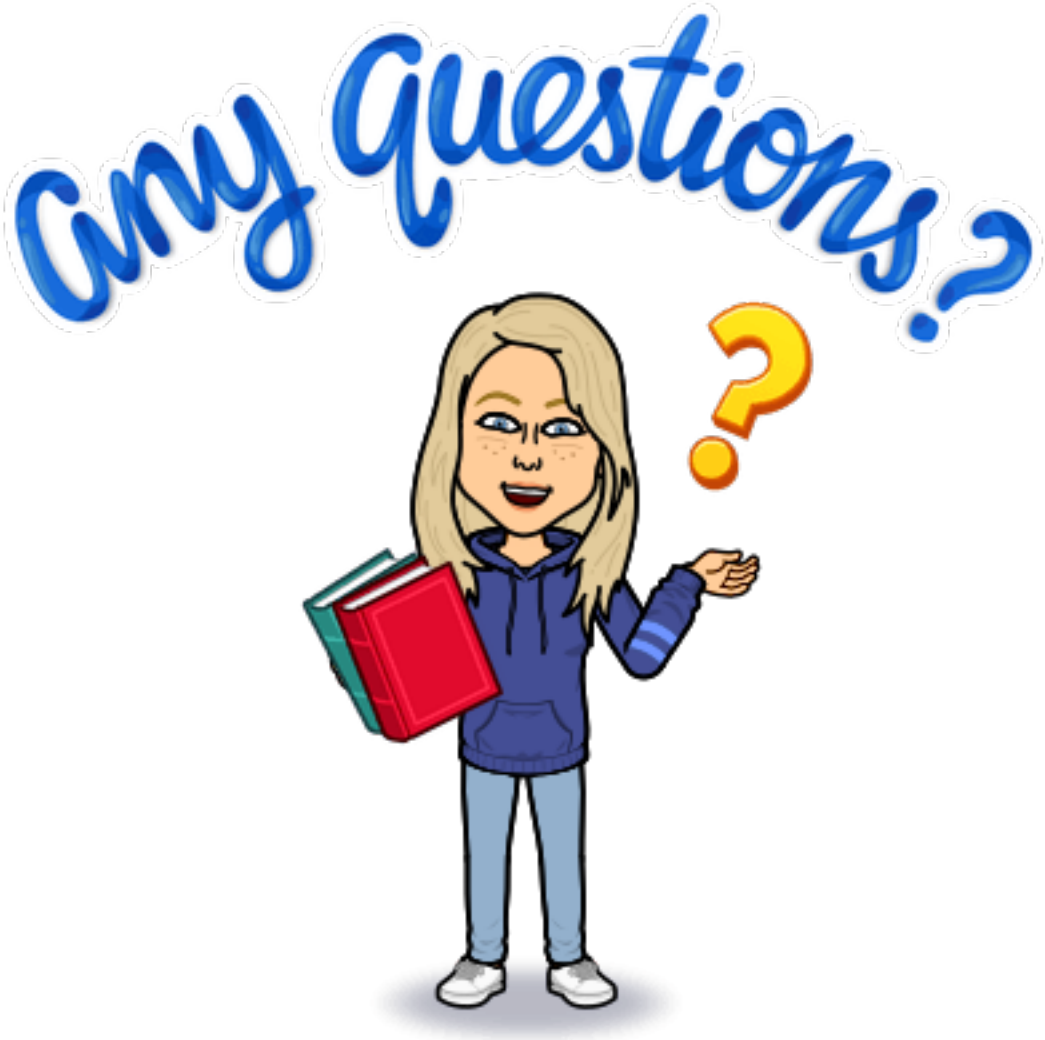
Nguyen, Tuan. "The effectiveness of online learning: Beyond no significant difference and future horizons." MERLOT Journal of Online Learning and Teaching 11.2 (2015): 309-319

Moving Forward

- Best practices model is need.
- Clear communication of expectations between families, providers and schools.
- More research.
- More training for professionals.
- What we learned from CoViD 19 considerations.

The Middle Ground





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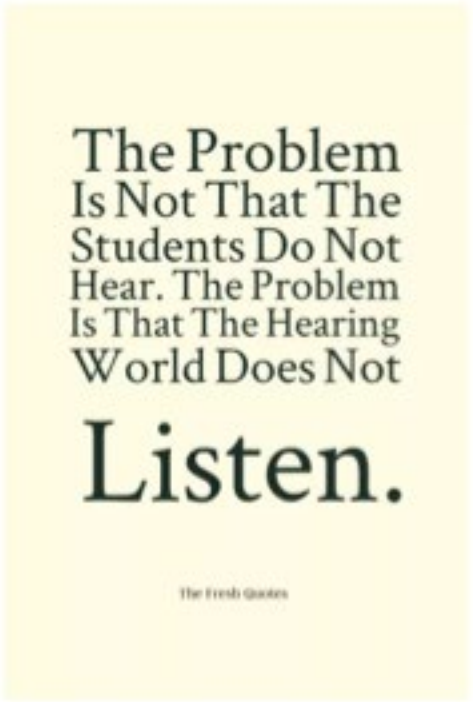

Take time to listen and remember this is their journey not yours.

Thank you.

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