Collaboration between Educational Audiologists and Teachers of the Deaf: Understanding Current Practices and Preparing Future Providers

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Our Team

Samantha Gustafson   Nicole Pilling   Elsa Newsome   Emilee Segura

- Relevant Financial Relationships:
  - Employed at University of Utah (SG, NP)
  - Salary support from US Dept of Ed for collaborative training grant (SG, NP)
  - Tuition/stipend from US Dept of Ed for collaborative training (EN, ES)
- Relevant Non-Financial Relationships
  - Member of Educational Audiology Association Advocacy Committee (SG)
  - Serves as reviewer for several peer-reviewed journals (SG)

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Agenda for Today

- What is the current state of collaboration?
  - Study overview
  - Current collaborative practice
  - Barriers/facilitators
  - Effect on job responsibilities
  - Factors influencing collaboration
- How do we teach collaboration?
  - Project ASSIST at the University of Utah
  - Break-out discussions
- Debrief/summary

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Members of the Educational Support Team

Case Manager

Child (when appropriate)

Educational Audiology

Educational Psychology

Family

General Education Teacher(s)

Medical Team

Occupational Therapy

Physical Therapy

School Social Worker

Speech Language Pathology

Teacher of the DHH

# Collaboration between Team Members

*"Education personnel who work with students who are [DHH] encompass a wide range of knowledge, skills, and abilities to meet the variety of services and supports needed by each child. **Collaboration** among specialized instructional support personnel, families, students and communities is a **key component** to successful provision of services"*

– National Association of State Directors of Special Education (2018)

Previous Research on Collaboration: Audiology and Special Educators

DO YOU HAVE ACCESS TO AN EDUCATIONAL AUDIOLOGIST? (104 SPECIAL EDUCATORS)

Category	Percentage
I'm not sure	20.2%
No	21.1%
Yes, in some schools	19.3%
Yes, in all schools	39.4%
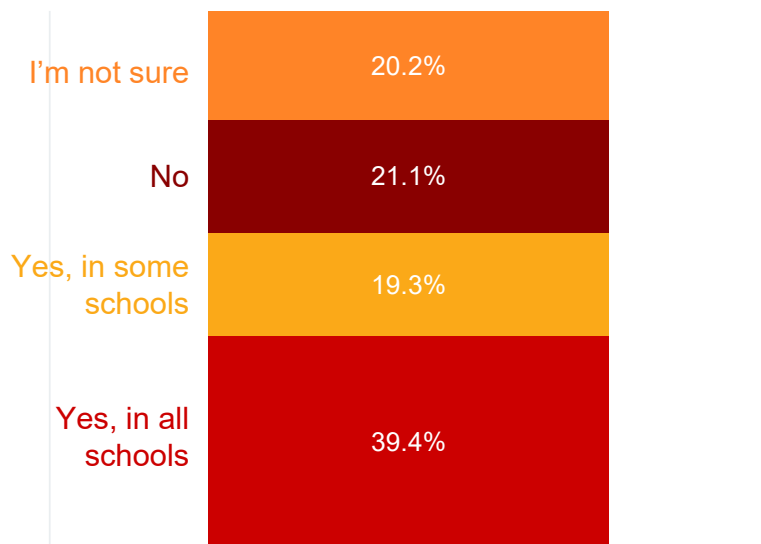
Nearly 80% of special educators felt that they benefited from collaborating with the educational audiologist.

48% rated their collaboration with the audiologist as 'extremely' or 'moderately' good.

Of those without access, 36% felt they had added responsibilities because they did not have access to an audiologist.

Knickelbein & Richburg (2012) – Communication Disorders Quarterly

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Previous Research on Collaboration: Audiologists and TDHH

Nearly 60% of teachers of the deaf/hard of hearing (TDHH, n=105) report communicating with their students' audiologist(s) at least monthly.

Preschool TDHH report having more frequent communication than primary-school TDHH.

No study has directly evaluated collaboration between <u>educational</u> audiologists and TDHH.

Page et al., (2018) - LSHSS

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1. Describe current collaborative practices between educational audiologists (EdAuds) and TDHH.

2. Identify barriers and facilitators of collaboration between EdAuds and TDHH.

3. Determine if limited collaboration leads to job responsibilities falling outside their scope of practice

Methods

AUDIOLOGISTS AND TEACHERS OF DEAF NEEDED!

- Cross-sectional survey
  - Pilot-tested
  - Anonymous
  - REDCap
- Recruitment
  - List-serves
  - Professional networks
  - Social media
- Drawing for three $100 prizes

1. General demographics
2. Current collaborative practices
3. Perceptions of barriers and facilitators to successful collaboration
4. Scope of practice

Data Analysis

- Questions providing quantitative data were coded by two research assistants

- Questions providing qualitative (open-response) data
  - **<100 responses**: Interdisciplinary team of two researchers analyzed data for recurring themes
  - **>100 responses**: Collaborative Qualitative Data Analysis (Richards & Hemphill, 2018)

Survey Respondents (n=752)

What's your profession?
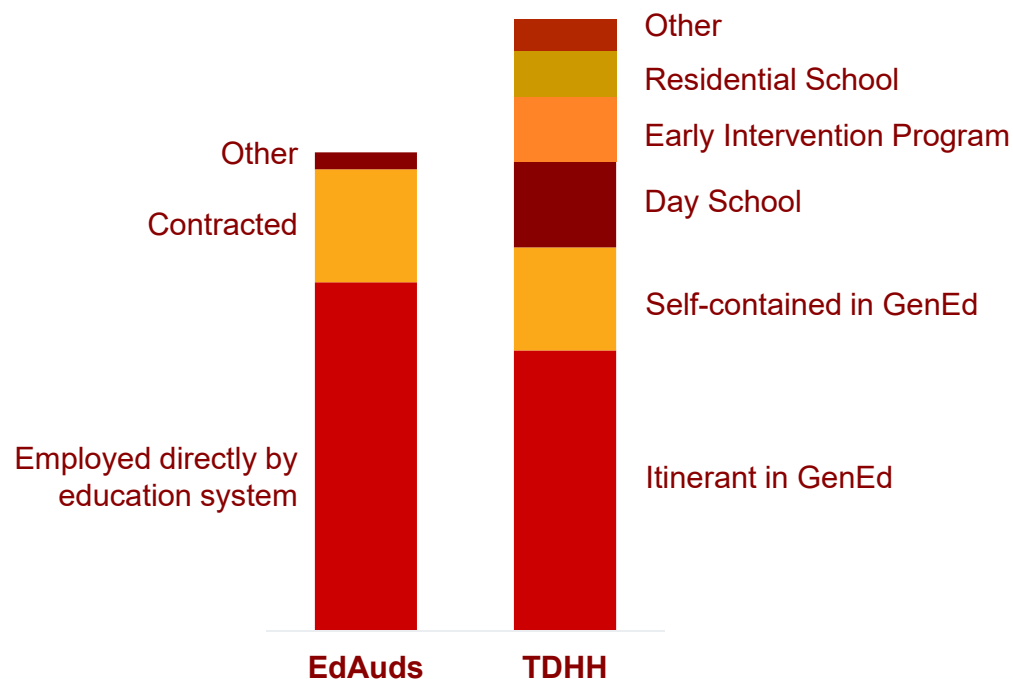- 34.3% Audiologists
- 63.3% TDHH
- 2.4% Audiologists & TDHH

Where do you live?
- United States (91.8%)
- Canada (3.7%)
- United Kingdom (2.5%)
- Other (2%)

How long have you been practicing?
- <1 year (3.2%)
- 1-5 years (18.8%)
- 6-10 years (18.6%)
- 11-19 years (25.8%)
- 20+ years (33.6%)

How/where are you employed?

Current Collaborative Practices

Do you have access?

98.8% of Ed Auds reported having access to a TDHH

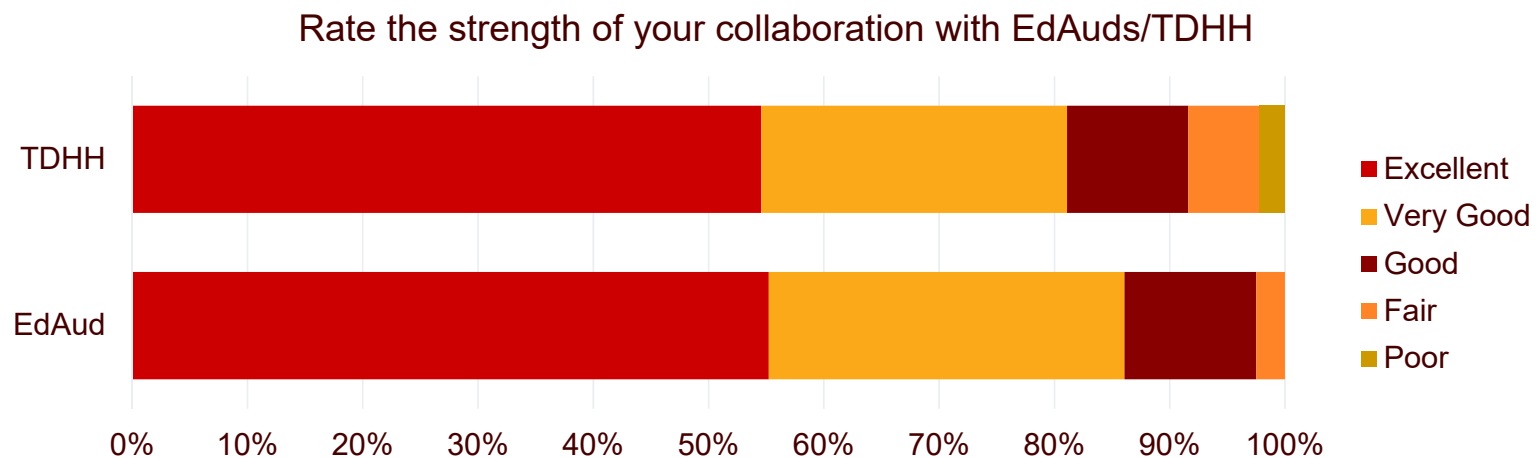80.7% of TDHH reported having access to an Ed Aud
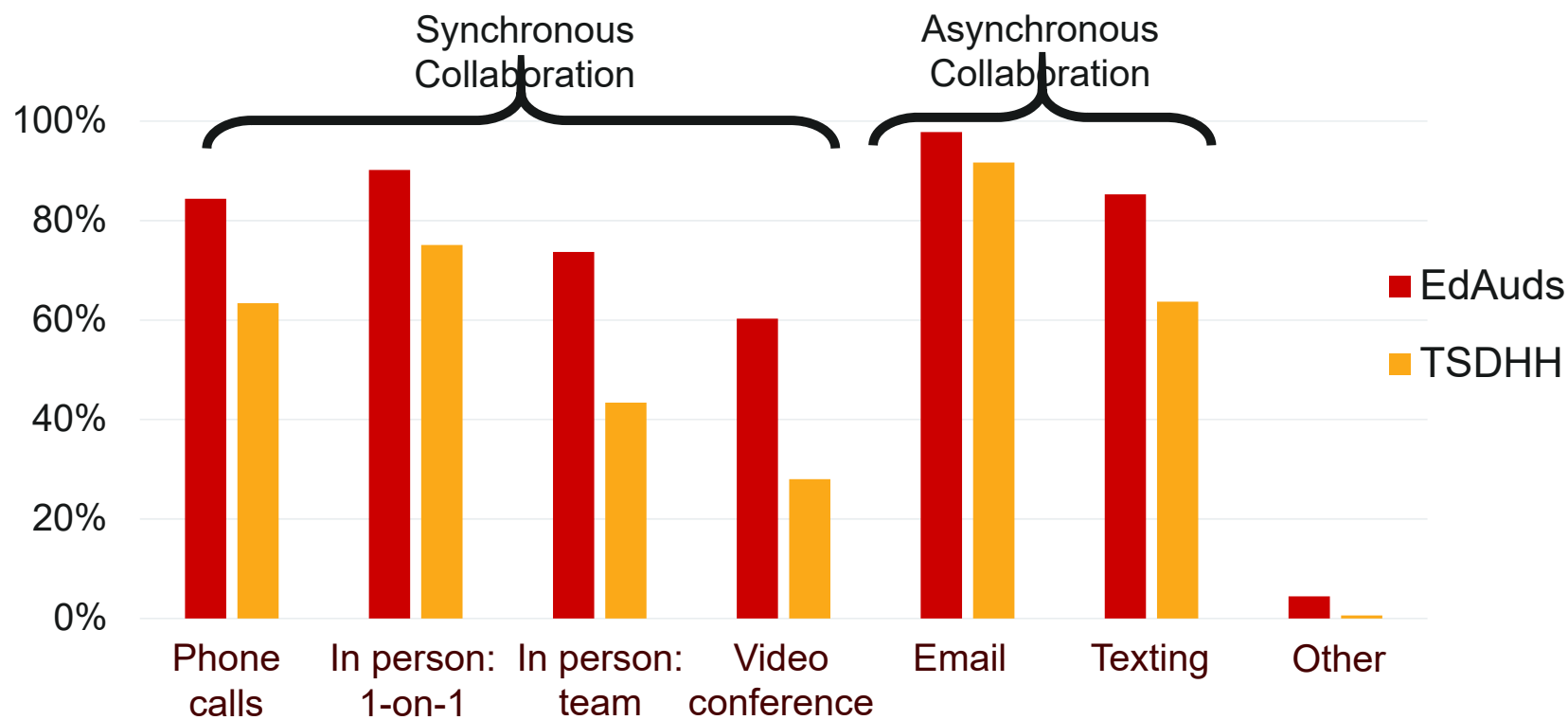

Lack of access due to:

• District does not employ one

• Lack of funding
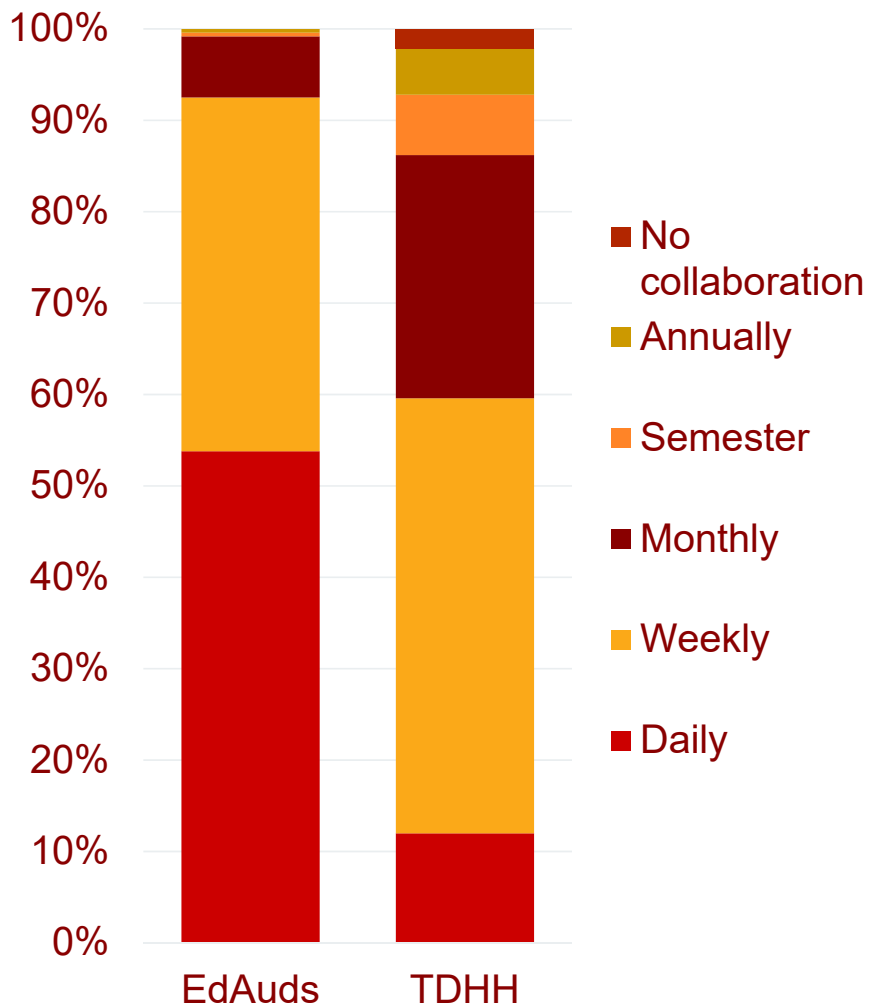
• Vacant position

• Lack of admin support

Do you collaborate?

Of respondents with access to the other professional:
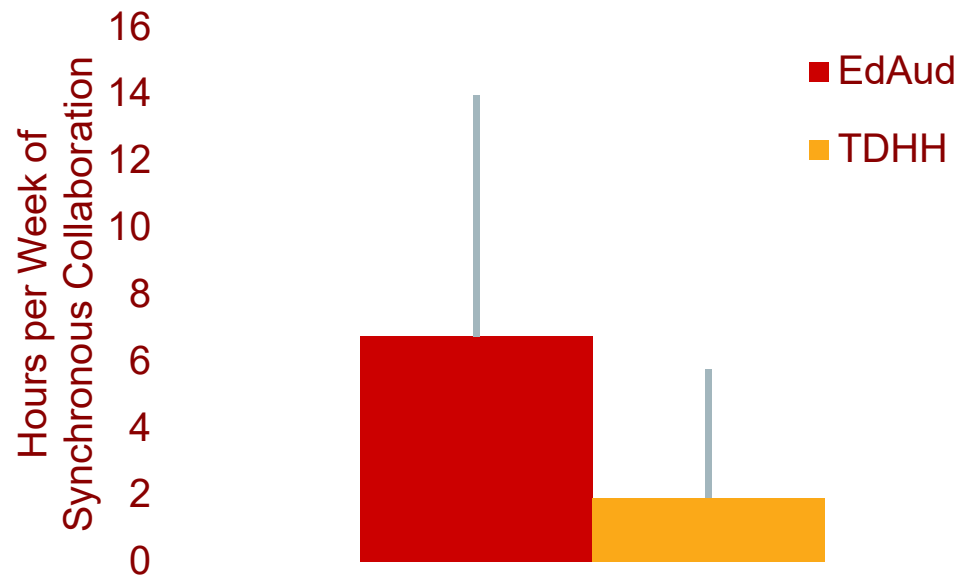98.2% of TDHH and 100% of EdAuds reported collaborating!

Rate the strength of your collaboration with EdAuds/TDHH

Legend:
- Excellent
- Very Good
- Good
- Fair
- Poor

How do you collaborate?

Purpose of Collaboration

Educational Audiologists

- Discuss evaluations and educational/programming accommodations (96%)

- Troubleshooting equipment (90%)

- Address questions/concerns re: student progress (88%)

- IEP/504 development (76%)

- Provide training to TDHH (59%)

- Other (e.g., family support, advocacy, scheduling appointments)

Teachers of the DHH

- Troubleshoot equipment (88%)

- Remote mic system management (59%)

- Educational programming and student accommodations (56%)

- Address questions/concerns re: student progress (49%)

- Coordinate or interpret audiologic testing (47%)

- IEP/504 development (47%)

- Other (e.g., functional listening evaluations, family support, staff training)

What are some facilitators of and barriers to successful collaboration?

What facilitates YOUR collaboration?

Facilitators of Collaboration

	EdAuds	TDHH
Forming and maintaining a relationship of mutual trust and respect	69.7%	77.6%
Seeking out mutual professional growth opportunities and training that address relevant challenges	38.64%	35.3%
Jointly establishing protocols and procedures within your department that clearly delineate roles and responsibilities to ensure student success	36.74%	32.8%
Having established time in your schedule for collaboration	33.71%	33.7%
Other (e.g., frequent communication, shared office space, relationship outside of work)	5.3%	3.7%

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Specific Examples of Facilitators

"I think if there is an agreed upon referral/intake process, whereby each professional has their unique set of assessments that need to be done for a new student, the collaboration is more effective."   - EdAud

"Having a set time to collaborate has always been beneficial, if it is for education, brainstorming, perspectives, relationship building, or whatever, I have always found time with Ed. Audiologists to be extremely beneficial and come away learning something or having an idea or wanting to try something new with a student." – TDHH

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What barriers do YOU face?

	Not at all	Hvwlp dwhg#lp sdfw# ri#Eduulhu		Substantial

0 10 20 30 40 50 60 70 80 90 100

Olp lwhg#wlp h# dqg#uhvrxufhv

Dffhvvlelolw|#ri# HgDxgv2WGKK

Odfn#ri#vxssruw# iurp # rujdql}dwlrq2# dgplqlvwudwlrq

Odfn#ri#vkduhg# sxusrvh#dqg# jrdov

Barriers to Collaboration

- About 1/3 of respondents reported having no barriers (37% EdAuds, 38% of TDHH)
- Limited time/resources was most common barrier
- Lack of support and shared purpose/goals were barriers with largest impact

Specific Examples of Barriers

"Our district is incredibly disorganized at every level and this contributes to difficulties in collaboration between providers (and with school staff)…There is a general lack of understanding about what we (Audiologists) and TODs do within the district and how we support students. There is no training provided to new school admin and staff regarding provider roles/responsibilities. There is not a clear delineation of responsibilities between itinerant TODs and Audiologists…We have a very hard time hiring and retaining quality educators due to high cost of living, inadequate pay, and poor working conditions across the district." – EdAud

"It is very difficult not to step on each others toes! We both need to respect each other professionally but there is a lot of overlap and grey area that can be hard to navigate if you do not already have a well established relationship with your educational audiologist." – TDHH

Does collaboration influence job responsibilities?

Defining job responsibilities (i.e., scope of practice)

Audiologic and Equipment Needs
Audiologic evaluations, diagnosis of APD + management recommendations
Manage auditory access, assess classroom acoustics
Evaluate, fit, manage HAT + listening-check training

Academic Needs
Evaluate academic achievement & functional performance re: IDEA (including literacy)
Team evaluation of student
Implement specialized instruction that promotes optimal access

Language, Communication, Social/Emotional Needs
Speech/language evaluations + functional listening
Re(hab) for auditory skills + specialized instruction
Facilitate self-advocacy and peer connection

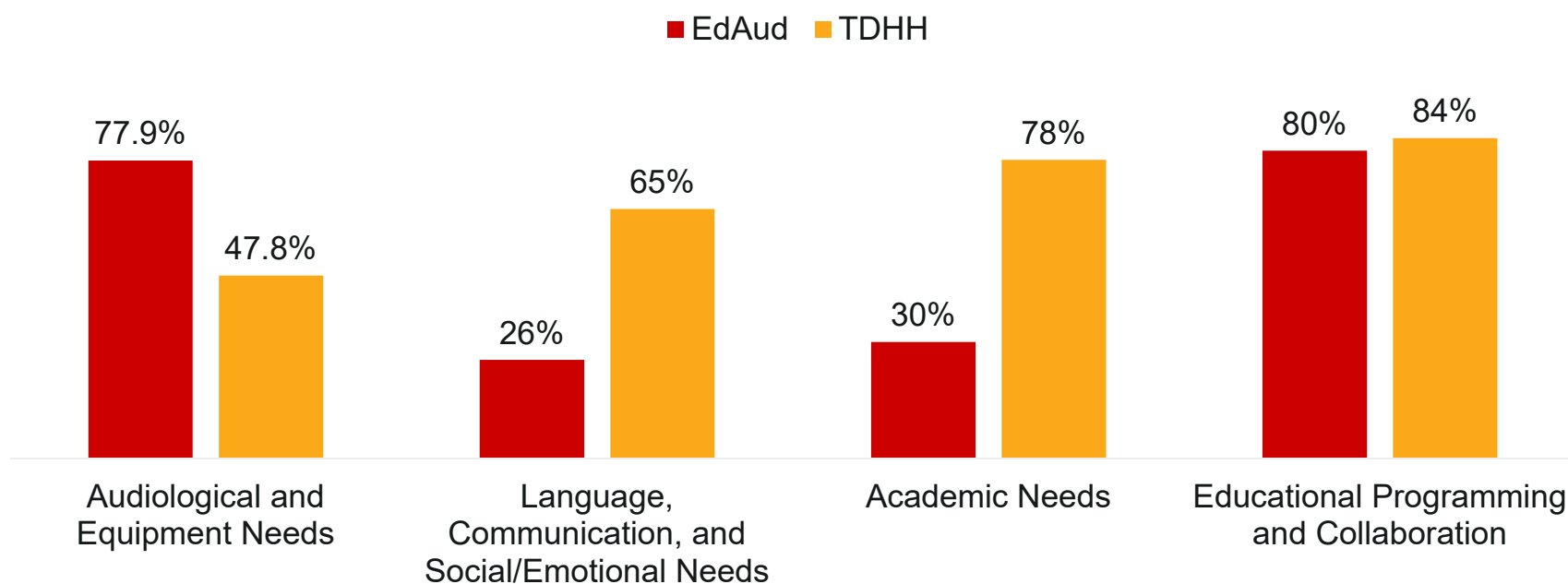| Educational Programming and Collaboration |
| --- |
| Collaborate with others + participate/coordinate IEP and 504 meetings |
| Educate families/students re: options |
| Observe student function + inservice training |

Adapted from EAA Roles/Responsibilities (2018), CEC Knowledge and Skill Set (2018), NASDE Outcomes of DHH (2019)

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Self-reported job responsibilities

■ EdAud ■ TDHH

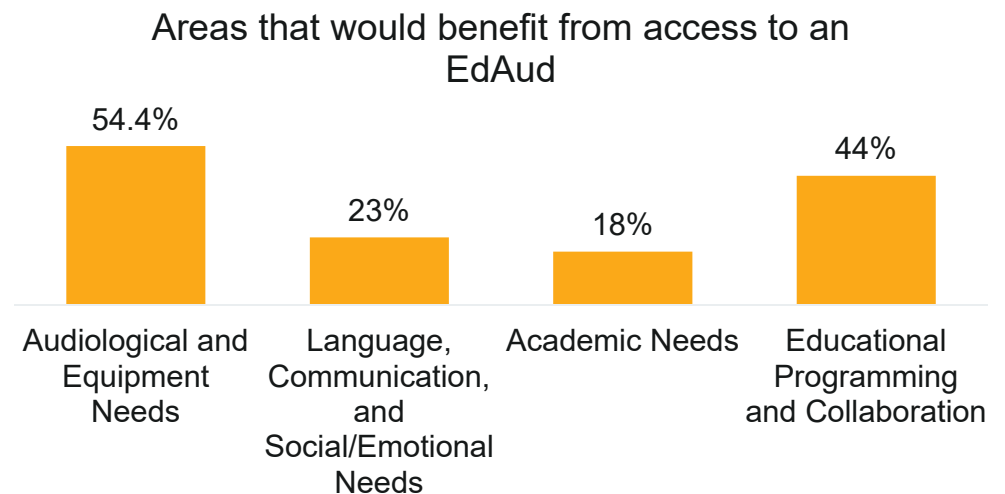| Category	EdAud	TDHH
Audiological and Equipment Needs	77.9%	47.8%
Language, Communication, and Social/Emotional Needs	26%	65%
Academic Needs	30%	78%
Educational Programming and Collaboration	80%	84%

Other responses included hearing screenings, early intervention, admin time, cerumen removal, NIHL education

Working outside your scope of practice

3% of EdAuds and 31% of TDHH reported that their employer requires them to complete tasks that they feel fall outside their scope of practice
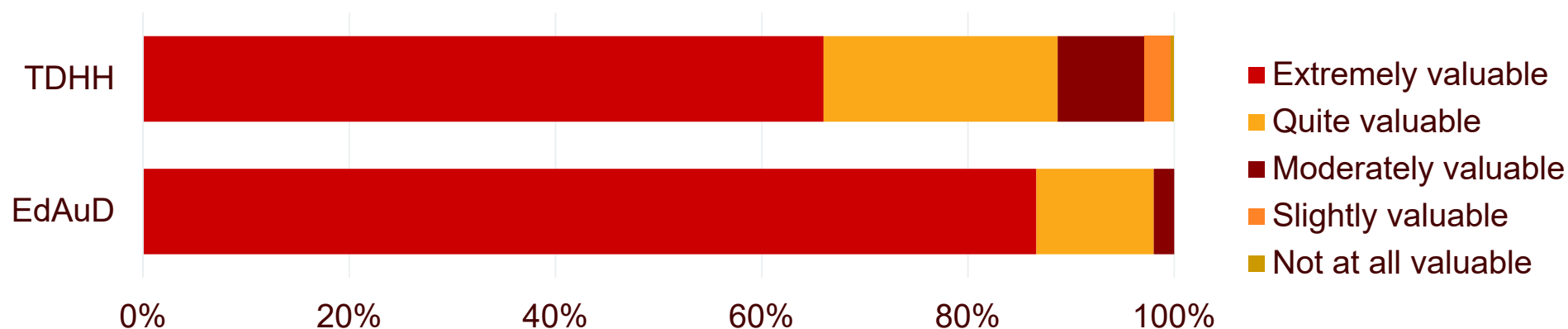
Compared to TDHH with access to an EdAud, TDHH who had no access (or were unsure if they had access) were >3 times more likely to feel they were required to complete tasks outside their scope of practice (14% vs 43%)

Areas that would benefit from access to an EdAud

54.4%	23%	18%	44%
Audiological and Equipment Needs	Language, Communication, and Social/Emotional Needs	Academic Needs	Educational Programming and Collaboration

What factors influence collaboration practices and perceptions?

Perceived value of collaboration

Chart: Perceived value of collaboration

- Extremely valuable
- Quite valuable
- Moderately valuable
- Slightly valuable
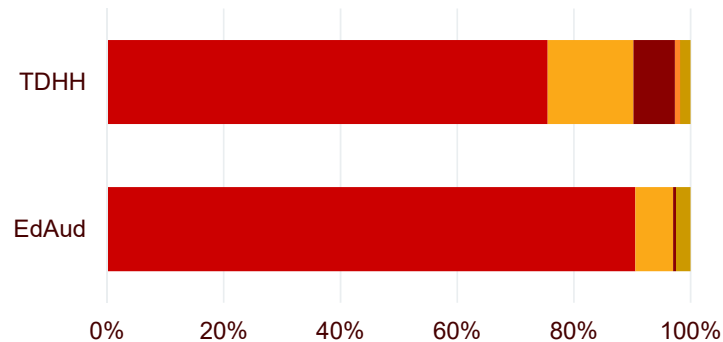- Not at all valuable

TDHH / EdAuD groups shown from 0% to 100%.

"[TDHH] often get to spend more time with the students than I do, so they let me know about equipment or self advocacy issues, and help guide recommendations based on accurate student needs and student reports/concerns." – EdAud

"We have different skills sets and training that are equally beneficial to the student. We need both perspectives to assure the student has the access to everything they need to be successful." – EdAud

"The audiologist and TSDHH collaboration ensures that the student's needs are being met and accommodations are in place to give the student equal access to curriculum as their hearing peers" – TDHH
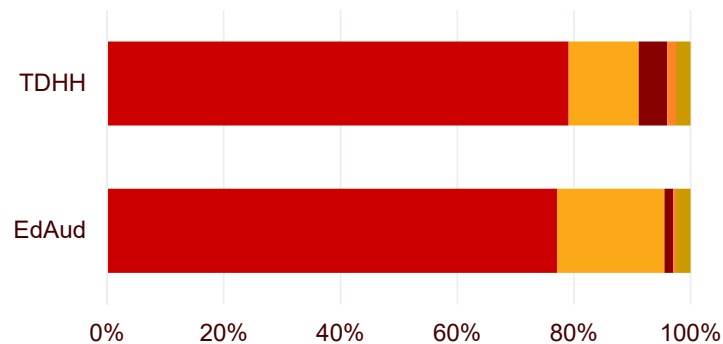
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My students benefit from my collaboration with the EdAud/TDHH

Collaborating with the EdAud/TDHH makes my job easier

Legend:
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
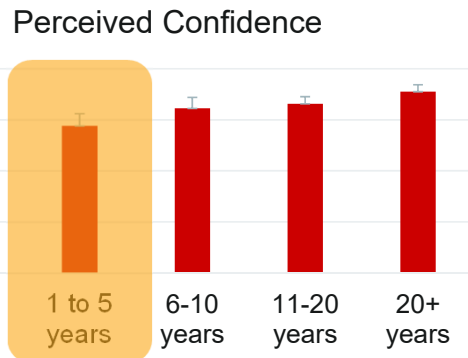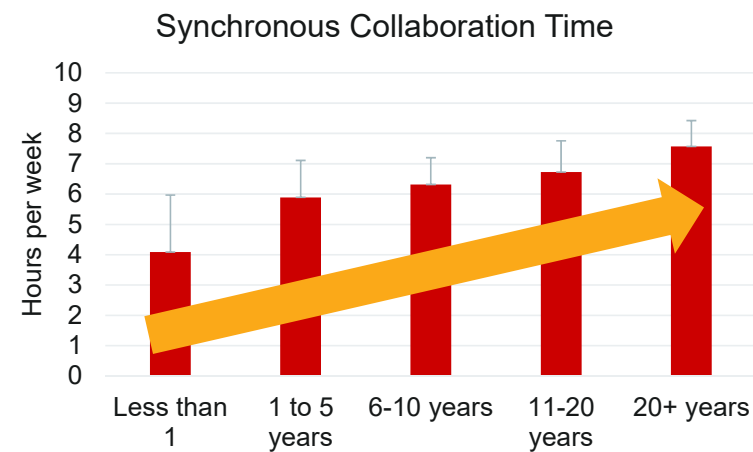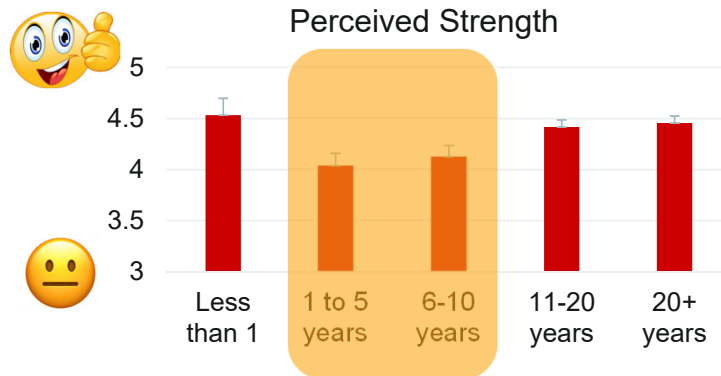- Somewhat disagree
- Strongly disagree
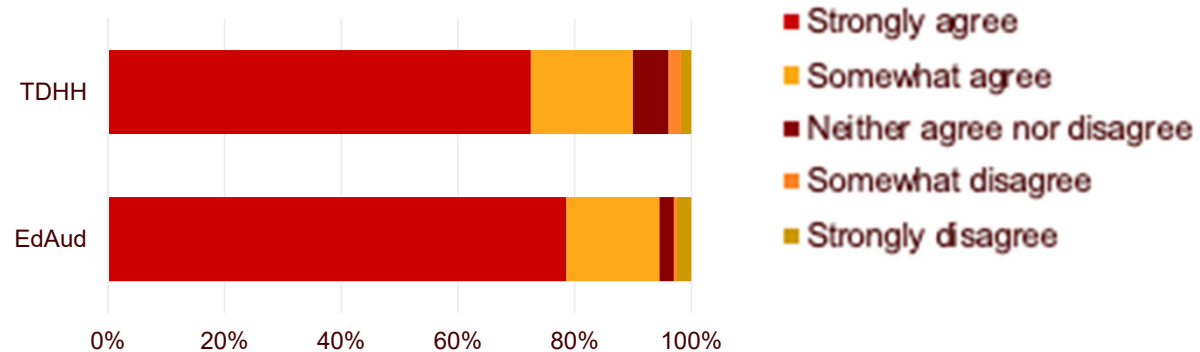
I feel confident in my ability to collaborate with the EdAud/TDHH

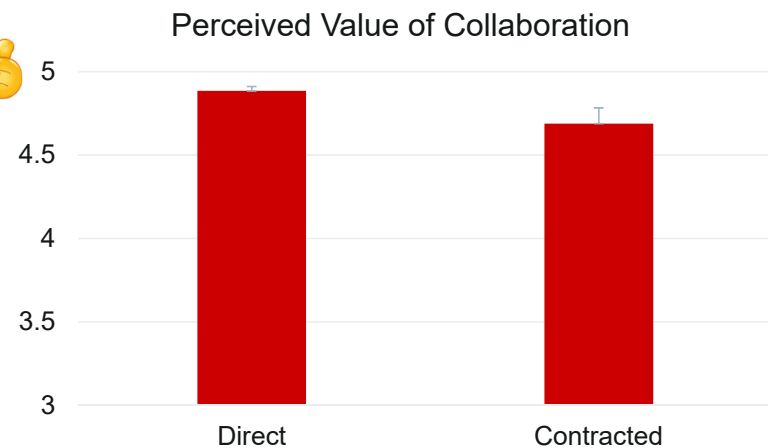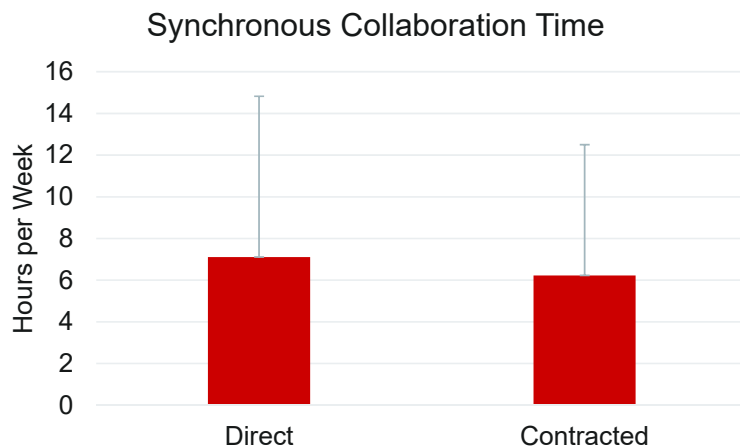Most respondents reported that collaboration benefits students and makes their jobs easier.

Less than 10% of respondents reported lack of confidence in their ability to collaborate.

Influence of Employment Setting: EdAud

Synchronous Collaboration Time

Perceived Value of Collaboration

EdAuds employed directly by the school/district spend more hours/week synchronously collaborating and perceive the value of their collaboration to be higher than those contracted by the school/district

Influence of Employment Setting: TDHH

Perceived Value

Perceived Strength*

Collaboration Makes My Job Easier

Synchronous Collaboration*
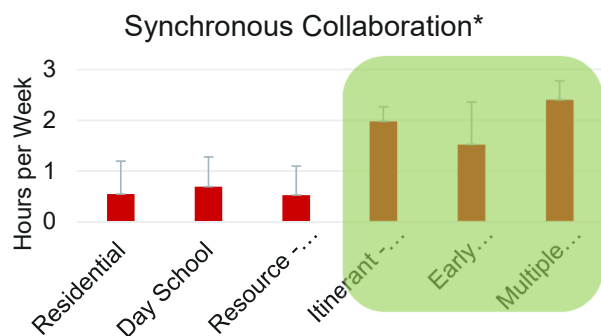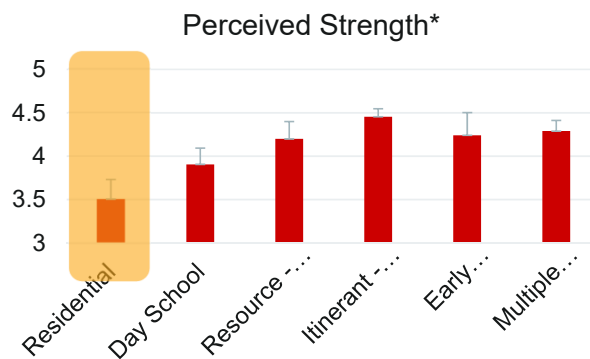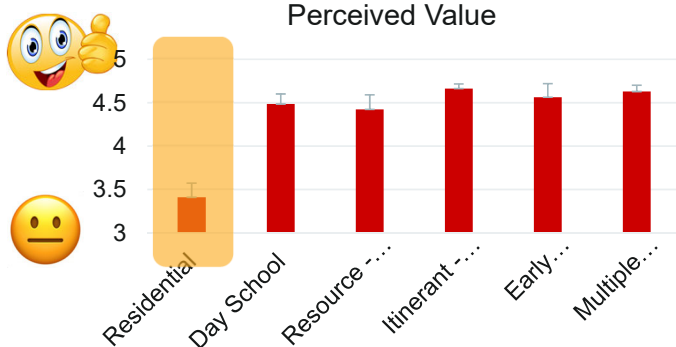
- TDHHs in residential schools perceive the value and strength of collaboration differently than those in other settings.
- TDHHs in itinerant, early intervention, and those working in multiple settings collaborate the most

Full vs Part Time Employment

Full-time EdAuds perceive greater value and student benefit from collaboration and spend more time synchronously collaborating than part-time EdAuds.
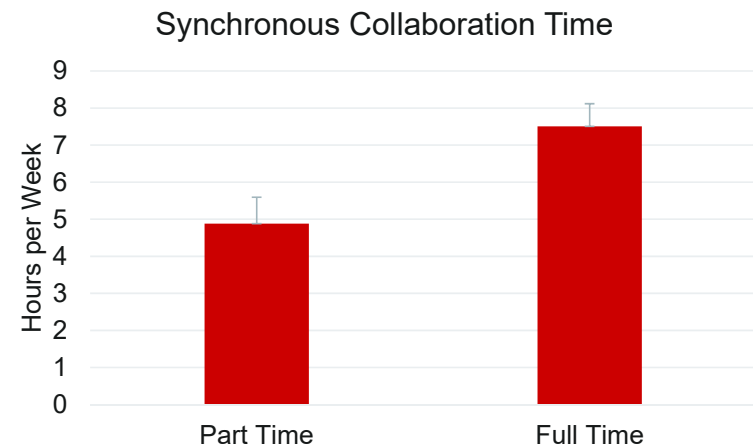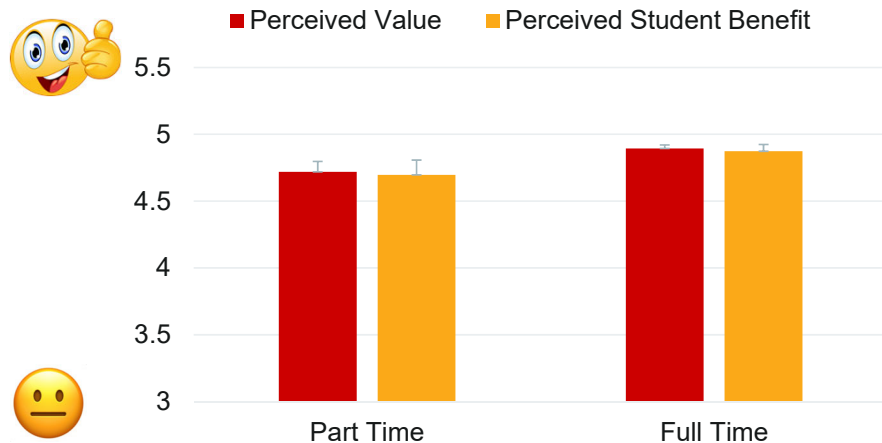
Influence of Collaboration Type

*Those who spend more time collaborating synchronously perceive their
strength in collaborating to be greatest*

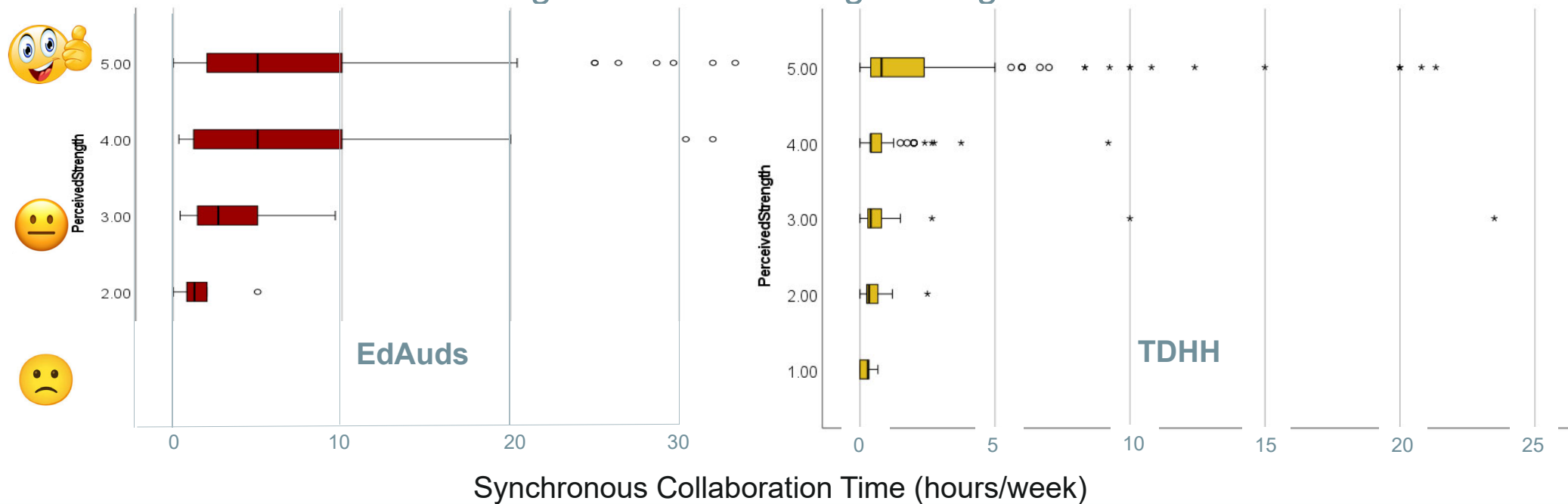# Lessons Learned

- The vast majority of EdAuds and TDHH understand that collaboration is critical
  - >80% felt like they have the ability to collaborate and that it is beneficial
  - Results don't align with previous research and anecdotal reports of weak/lacking collaboration
- Limited time/resources, low support from administration, and lack of access to an EdAud are significant barriers to collaboration amongst professionals
- Forming relationships of mutual trust and respect facilitate collaboration amongst professionals

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More Lessons Learned

- TDHH are 3x more likely to practice outside their scope without access to an EdAud
- Low strength/confidence of collaboration skills in early/mid-career
- EdAuds employed directly, and professionals who work full time spend more time synchronously collaborating
- More synchronous collaboration time predicts greater perceived strength of collaborating, regardless of experience

How should we be preparing future EdAuds and TDHH?

Specialty Training for Current Role

TDHH Receiving Training in Audiology
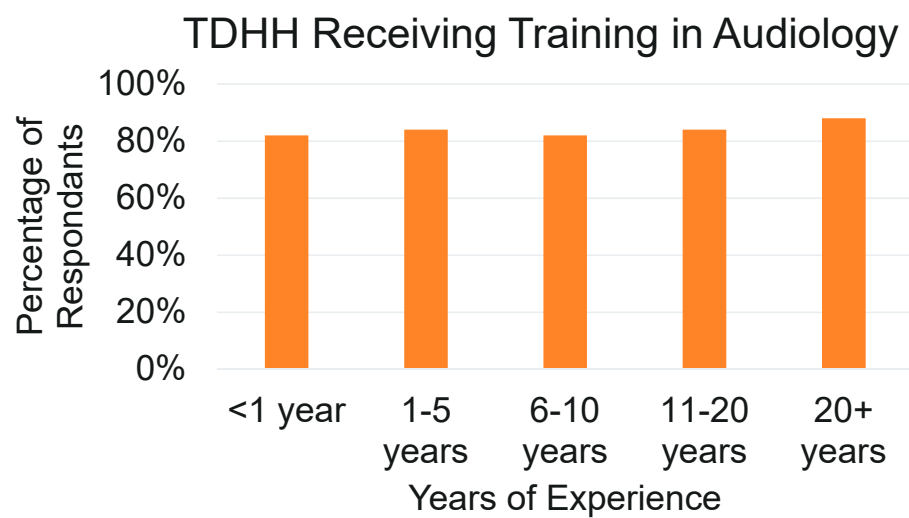
Training in audiology remains consistently high in TDHH programs.

Audiologists Receiving Training in Educational Audiology
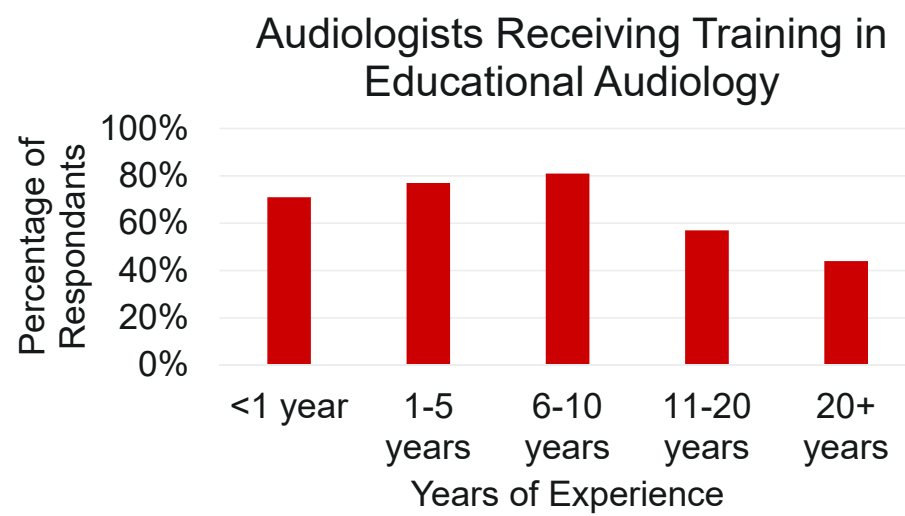
Training in educational audiology has increased in past decade.

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Training in Collaboration

Training in Collaborating with Other Professionals
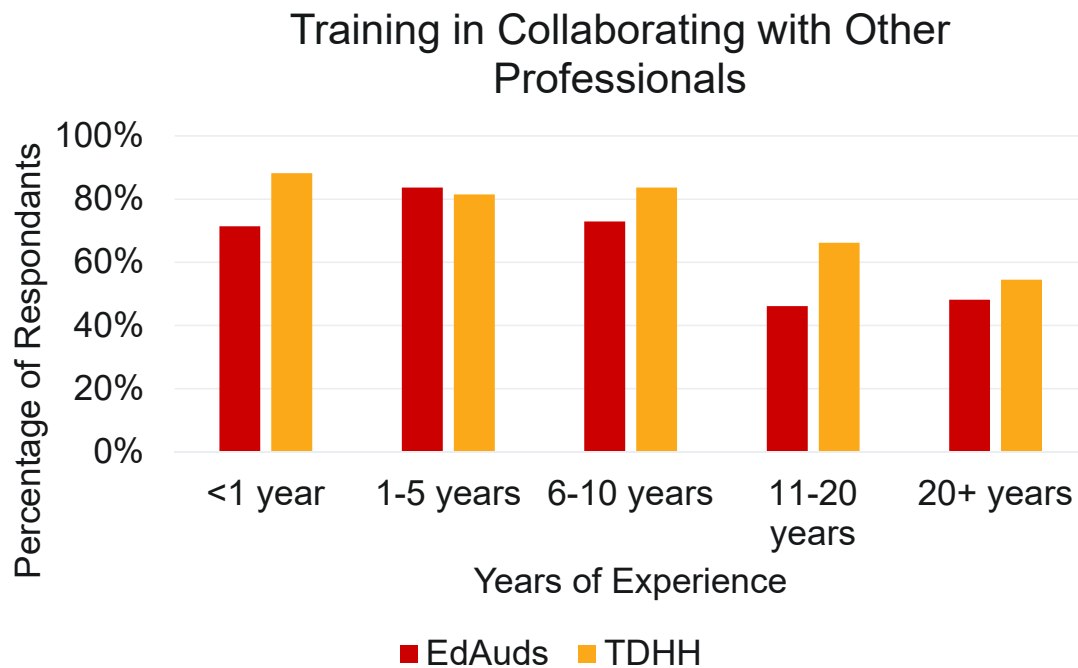
Apparent increase in the proportion of TDHH and Audiology training programs that include training in collaboration

Specialty Training at University of Utah for EdAuds and TDHH

Project ASSIST

Advancing Student Success through Interdisciplinary Scholar Training: Preparation Program for Teachers of the Deaf/Hard of Hearing and Audiologists

5-year interdisciplinary personnel preparation program grant from US Department of Education - Office of Special Education on Programs

Overview of Project ASSIST

- Dept. of Special Education (M.Ed. for TSDHH) and the Dept. of Communication Sciences and Disorders (AuD Program).

- Funding for 29 scholars

- Students engage in interdisciplinary activities over 4 semesters including:
  - Field work
  - Seminar series
  - Community outreach
  - Expanded coursework in educational audiology and educational programming

Project ASSIST Outcomes

- reduce the critical shortage of TSDHH and pediatric/educational audiologists

- provide scholars with additional opportunities to learn through field experiences that will demonstrate the use of best practices.

- Diversify the pool of TSDHH and pediatric/educational audiologists by recruiting and supporting traditionally underrepresented scholars.

- **to prepare highly qualified professionals with the knowledge and skills necessary to facilitate successful collaboration**

What does effective collaborative training look like?

- Joint classroom experiences
- Explicit instruction in critical skills and competencies for successful collaboration
- Modeling how to collaborate through co-teaching
- Explicit instruction and practice in conflict management and perspective taking

Secora & Shahan (2023 – ASHA Perspectives)

Project ASSIST Activities

Interdisciplinary Practicum

- Workshop at Museum of Fine Arts learning Visual Thinking Strategies Training.

- Facilitate relationship building

- Learn observation, communication, and critical thinking skills

- Practice sharing and understanding others' perspectives

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Interdisciplinary Practicum

- Students volunteer in interdisciplinary groups at a multi-day summer camp gaining hands-on experience working with children who are DHH

- Reflection journals and post-camp meeting to share and reflect upon observations and experiences.

Interdisciplinary Collaboration Seminar Series

Series of semester-long seminars, with activities and explicit instruction to address key elements to implementing effective IPE

- Teaming approaches

- Research based practices

- Cultural considerations

- Conflict management

Panels- Diverse Perspectives

Facilitator: Building a shared understanding and collaborating toward shared goals.

Scholars benefit from others' perspectives and experiences

- Related Service Providers

- Families

- Young adults who are DHH

Cross-Teaching

Majority of TSDD and EdAud indicate they provide in-service training and consultation for educators and other school personnel

- AuD scholars- teach handling and troubleshooting of HAT

- DHH scholars- teach key factors related to conducting and interpreting assessments used for IEP development

Community Hearing Screening

Scholars utilize their collaborative competencies to plan and execute a hearing screening for an underserved community

- Effectively communicate

- Express and listen to ideas and concerns

- Accountability for contributions

- Negotiation of responsibilities

Joint Research and Networking Opportunities

Facilitator: Seeking out mutual professional growth opportunities and training that address relevant challenges

Scholars receive funding to attend a national conference

Build relationships and networking skills

Shadowing

Pre-service teachers spend time shadowing a pediatric audiologist and an educational audiologist.

Audiology students spend a day shadowing an itinerant TSDHH.

Project Evaluation

Objective performance data is collected from scholars via two evaluation tools

- Prior to beginning the project
- At the end of the program
- 1 & 2 years after graduation

UWE Interprofessional Questionnaire

1. <u>Communication and Teamwork</u> - Assess own skills

2. <u>Interprofessional Learning</u> - Attitudes towards interprofessional education

3. <u>Interprofessional Interactions</u> - Opinions about interaction between education and healthcare professionals

4. <u>Interprofessional Relationships</u> - Perceptions of their relationships with colleagues from their own and other disciplines

n=4

Communication and Teamwork

■ Pretest ■ Posttest
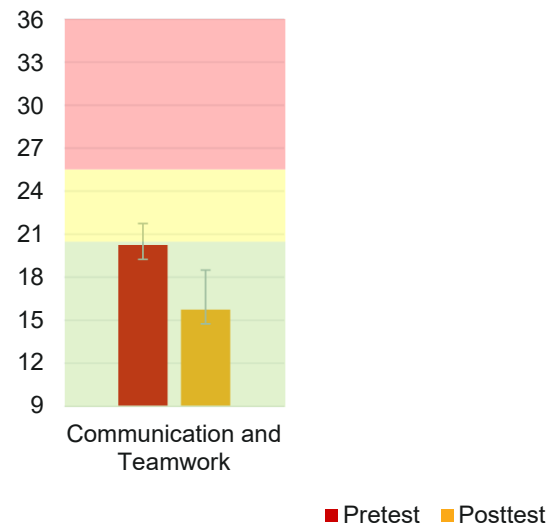
Adapted from Pollard et al., 2004, 2006

Interprofessional Collaborative Competency Attainment Scale (ICCAS)

Self-reported competency for interprofessional collaboration

1. Promote effective communication among members of an interprofessional (IP) team
2. Actively listen to IP team members' ideas and concerns
3. Express my ideas and concerns without being judgmental
4. Provide constructive feedback to IP team members
5. Express my ideas and concerns in a clear, concise manner
6. Seek out IP team members to address issues
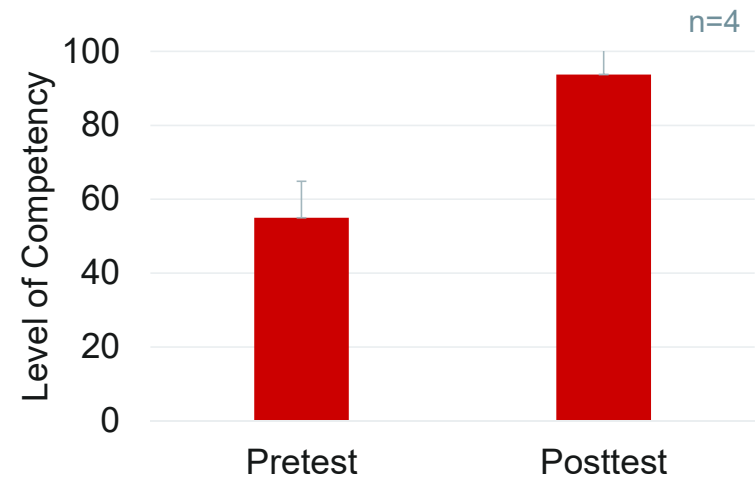
MacDonald et al 2010

We want to hear from you!

• 211 Active OSEP interdisciplinary grants. Most of them are probably working independently.

• Programs could benefit from a collective sharing of training activities and ideas.

The problem?

•We don't have the data yet on what learning experiences are most effective.

•However, we do a powerful resource we can tap into; the feedback that comes from the insight and experience of those already in the field.

Break-out Group Discussions

- Arrange yourselves into groups of 5-7 individuals
- Review your group's assigned activity
- Discuss activities and reflection prompts as a group
- Complete the questionnaire (1 per group)
- Designate a group member who is willing to share one thought or idea from the group when we come back together

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Future Directions

- Further research is needed to better understand how preservice professionals can most effectively learn essential collaboration competencies and employ these skills within educational and professional settings.

THANK YOU

What else would help you serve children who are DHH?

Samantha.Gustafson@Utah.edu

Supporting Students who are Deaf and Hard of Hearing: Shared and Suggested Roles of Educational Audiologists and Clinical Audiologists

Student Name: _____

School & District: _____

Audiologist Name: _____ Ed AuD   or   Clinical AuD

Directions: This document is recomm...
Audiologists to facilitate collaboration...
roles an audiologist can serve to impr...
may vary based on areas of expertise a...

Assessment

1. Complete and monitor hearing s...
comprehensive audiological eval...

2. Interpret educational implication...
results

3. Make referrals for medical attent...

4. Evaluate hearing abilities and au...
to determine hearing function in...
and learning situations (e.g., com...
Evaluation)

Support Services

5. Collaborate with private sector/c...
audiologists and other profession...
educational needs

6. Counsel the student and his/her...
educational impact of reduced h...
options and accommodations...

Supporting Students who are Deaf and Hard of Hearing: Shared and Suggested Roles of Educational Audiologists, Teachers of the Deaf and Hard of Hearing, and Speech-Language Pathologists

(Approved by the Board of Directors of the Educational Audiology Association February 2018)

Educational audiologists, teachers of the deaf and hard of hearing, and speech-language pathologists are critical partners on the school education team. Together, they address the needs of students who are deaf and hard of hearing and promote language and communication access that is essential for participation and learning in today's educational environments. The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act (ADA) all contain regulations pertinent to the services and accommodations contained in this guidance document.

Student Assurances: Audiological and Equipment Needs	Ed Aud	TODHH	SLP	Other
1. Audiological evaluations that include recommendations to enhance communication access and learning.	✓			
2. Diagnosis of auditory processing disorders (APD) with recommendations to manage APD issues provided to school personnel for the classroom and to parents for out of school consideration.	✓			
3. Management of auditory access in all educational environments.				
4. Assessment of classroom acoustics with recommendations made to improve classroom listening environments where necessary.				
5. Evaluation and fitting for personal hearing instruments, classroom, and other hearing assistive technology.	✓			