

UNDERSTANDING AND SUPPORTING RELUCTANT FM USERS

Cheryl DeConde Johnson, Ed.D.

**cheryl@colorado.edu
www.ADEvantage.com**





Bobby

- High School Jr
- Moderate-severe bilateral SN HL
- Previous FM user
- No longer uses FM because:
 - I don't like having to wear it, I don't like others seeing it, I don't like that it makes me look different, I get teased if I use it, I don't like how it sounds, I don't like having to carry the equipment, it doesn't help me hear better
 - Sabotaged use by taking it home and leaving it there
- School solution: classroom sound field system (CADS)

Kathy

- High School sophomore
- Moderate-severe bilateral SN HL
- Current FM user
 - HA with integrated FM
 - Everyday – all classes
 - If not in use, because teachers won't use it
- Comments:
 - “Helps me a lot”
 - “FM systems are great to use”



What is the Problem?

- Student?
- School/Teacher/Staff?
- Technology?
- Support?
- Knowledge?
- Orientation and Training?



BRIDGE THE GAP BETWEEN
CANDIDACY FOR HAT AND
WILLINGNESS TO USE HAT
WITH ASSESSMENT,
CAREFUL PLANNING, &
COUNSELING

TAKE-AWAY

Terminology

- HAT: Hearing Assistive Technology
- CADS: Classroom Audio Distribution System
- IEP: Individual Education Program
- 504: 504 Accommodations Plan to comply with Rehabilitation Act of 1973

SURVEY DATA

Why Do Students with Hearing Impairments Resist Wearing FM Amplification?

- Jennifer Franks
- Eastern Michigan University
- MA Thesis, 2008
- Participants: 68
 - 9 students, ages 8-18
 - 5 parents
 - 15 special educators
 - 11 general educators
 - 7 teachers of speech and language
 - 8 audiologists
 - 12 other personnel working with DHH students



Findings

- No correlation between type of hearing loss (unilateral vs bilateral)
- At least half of participants (53%) believe that a primary reason for non-use is social
- Students, more than any other group, did not see the value of the FM system

Limitations

- Small sample size
- Single survey (students and adults) limited specificity of questions

Sample Comments

Students say:

- **Students ask me “What is that?” I really dislike that.**
- **If students didn’t grow up using the FM units, they don’t feel comfortable with them.**
- **I don’t feel it makes a huge difference because I can just ask my friend if I think I missed something.**
- **I feel bad teachers have to use it.**

General Education Teachers say:

- **Students are self-conscious.**
- **Students don’t want to look different.**
- **Student doesn’t bring it to class, teachers don’t mandate.**
- **Student found it uncomfortable and sometimes it would squelch and it hurt his ears.**

Sample Comments

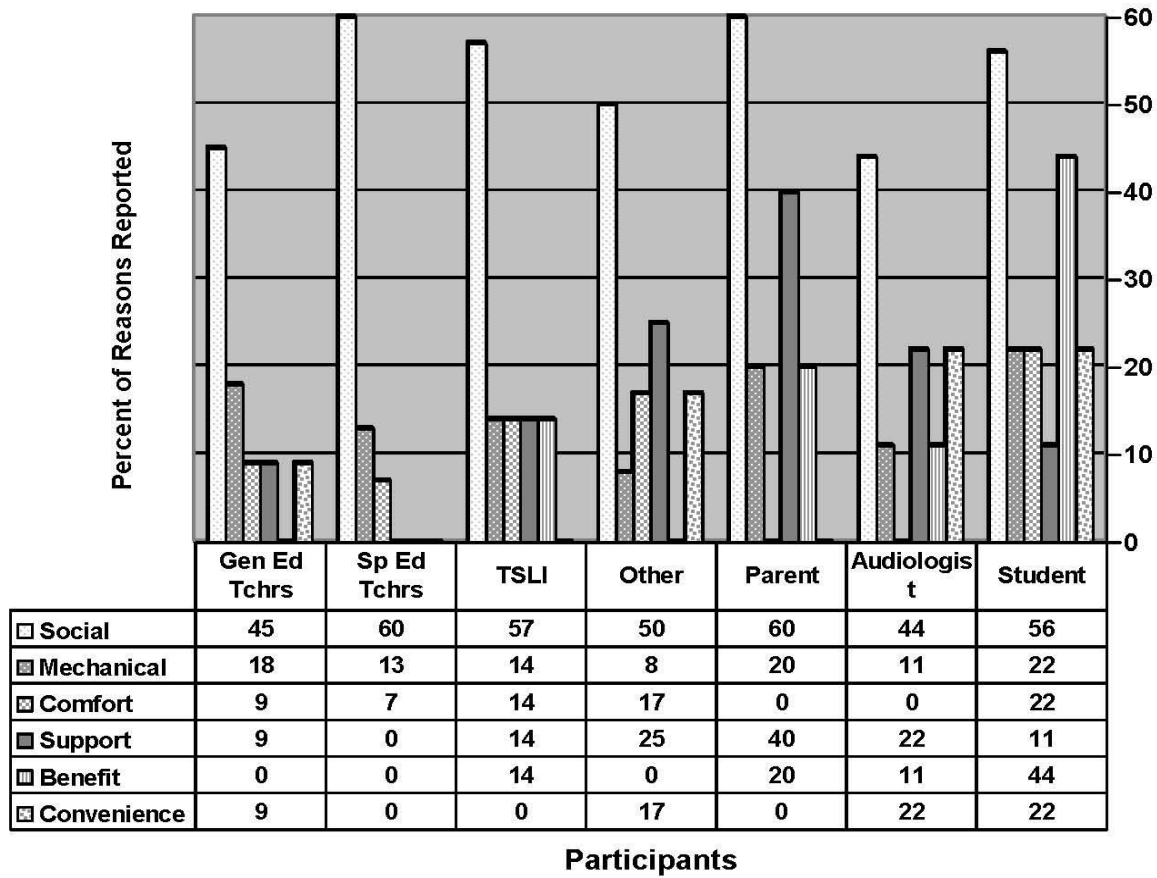
Educational Audiologists say:

- **Students don't want to look different.**
- **In spite of inservicing, often teachers, staff and students misunderstand how the equipment works and why it is needed.**
- **Combination of lack of teacher enforcement and child motivation.**
- **Teachers do not want to wear the transmitter or feel they are loud enough.**
- **Teachers believe it takes too much time to put them on and check that they are working.**

Parents say:

- **Kids don't want to feel different.**
- **Teachers will subtly discourage use by saying, "I speak loudly, it isn't necessary in my class". I've had numerous teachers say this and while they don't refuse outright, they discourage a student who doesn't want to impose upon their teacher.**
- **Poor maintenance.**

Table 1
Opinion: Main Reasons FM System is Not Used Consistently



MDHC Teen Workshop – Oct 2012

Acknowledgements

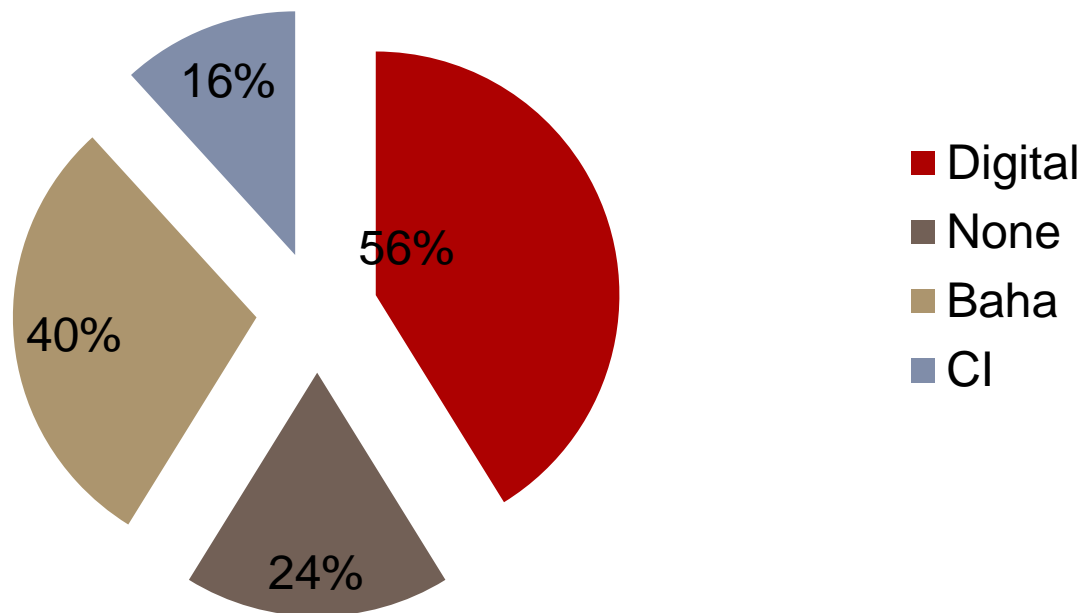
- Sandra Gabbard, Ph.D., Director of Audiology, University of Colorado Hospital
- Zachary LaFratta, LEND AuD. Fellow, University of Colorado Hospital



MDHC Teen Survey (clicker)

- 36 students
- 9-12 grades (mostly 9-10th)
- All degrees of hearing loss, personal hearing instruments, and modes of communication

Hearing Instrument Type

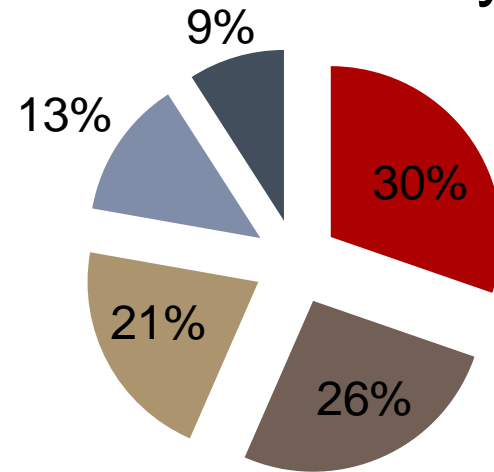


MDHC Teen Survey: FM Use

Written Survey

- 28% use personal FM
- 58% did not know their type of hearing loss,
- 39% did not know degree of HL
- 22% did not know how to describe their general hearing loss

Clicker Survey



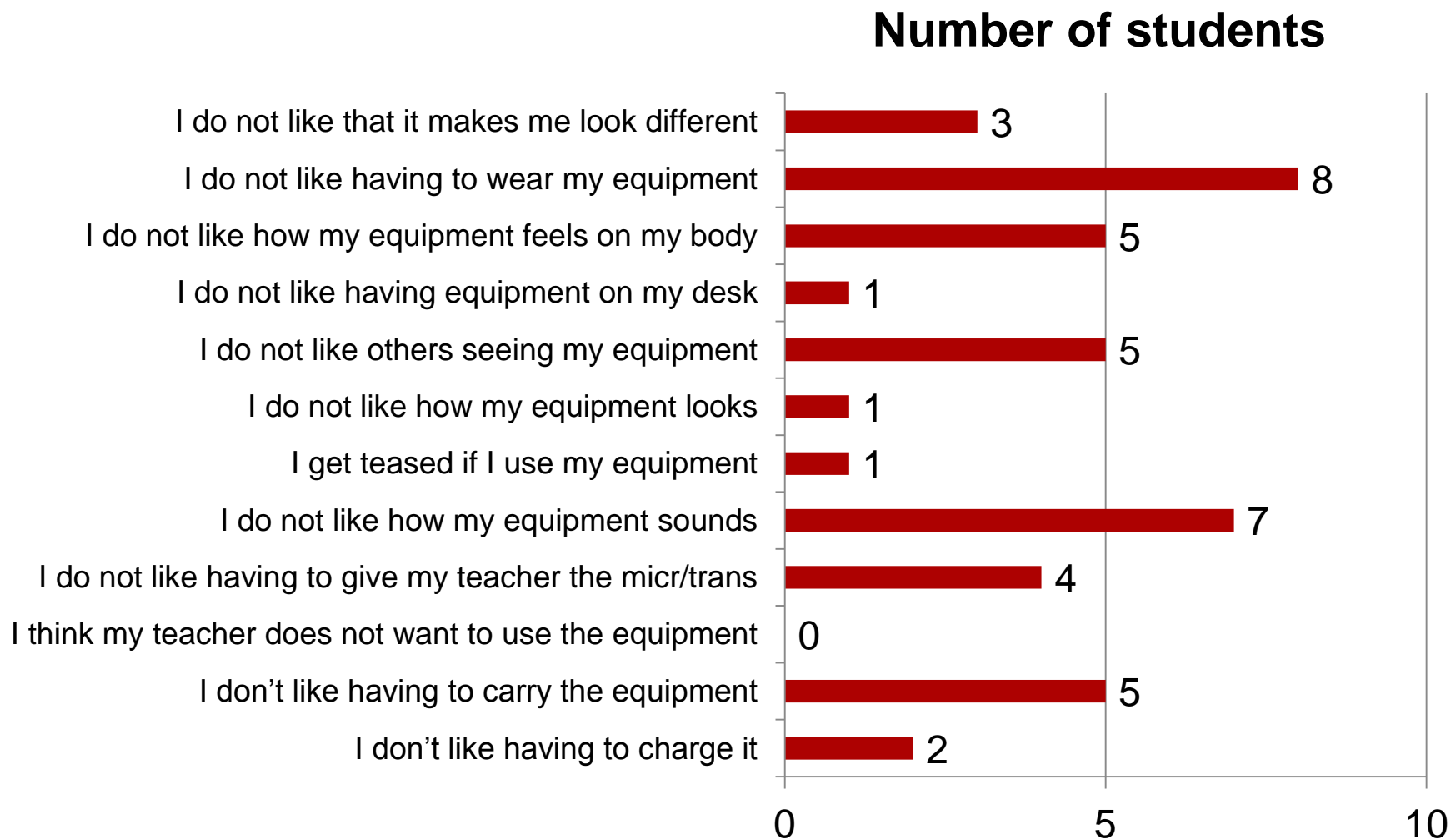
- I haven't like it in the past but I might try something new.
- I wear it because it is in my IEP.
- Never tried it, and I don't want to.
- I haven't used it but tell me more.
- I love my FM

MDHC Teen Survey (clicker): Connectivity

“Connectivity” allows me to...

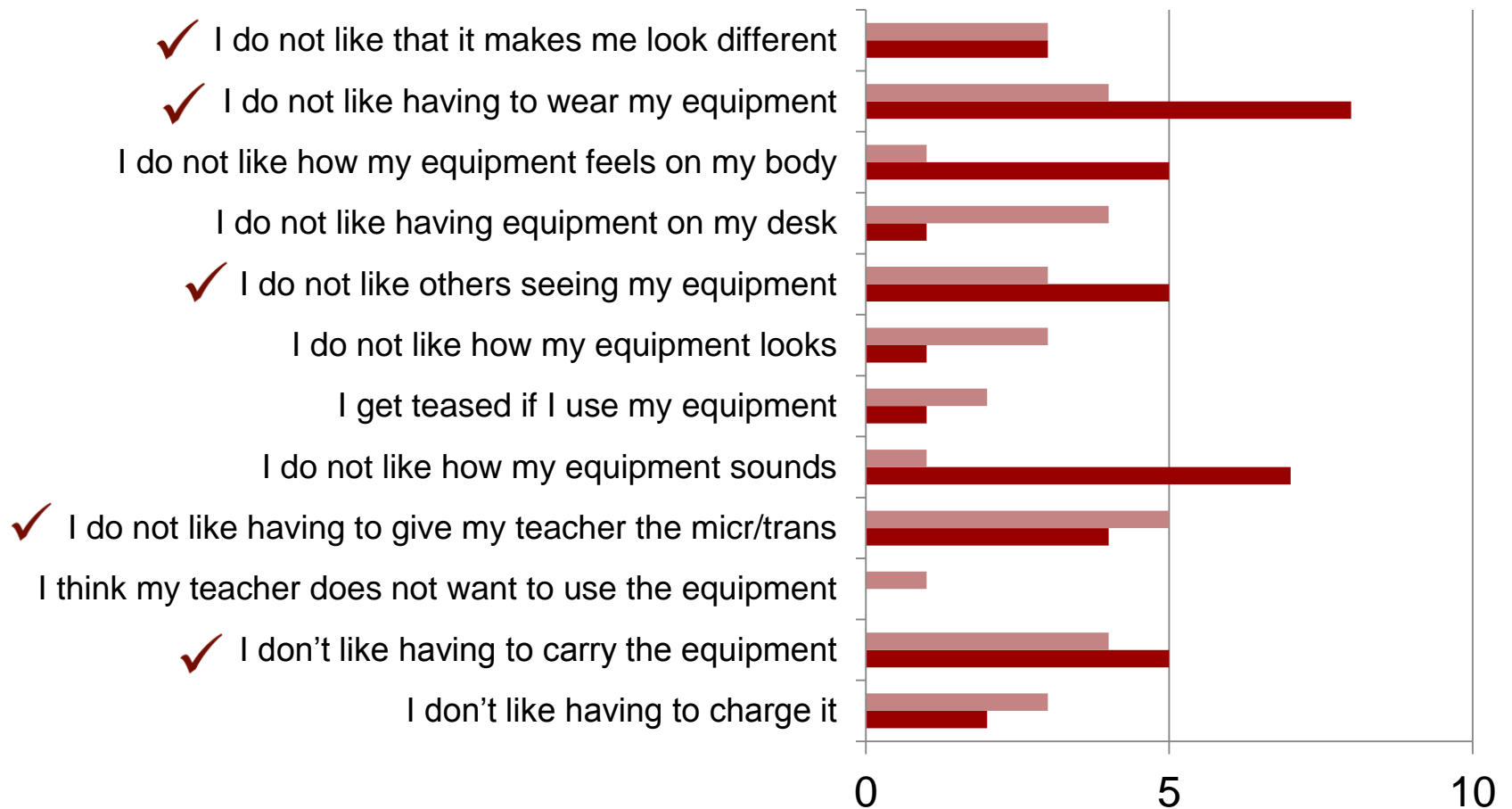
1. Dial up the phone old-school style using a clunky handset	0%
2. Talk “hands-free” on my cell using Bluetooth	8%
3. Listen to my iPod through my hearing aids	29%
4. Listen to the TV and play video games with the best possible audio signal	15%
2-4 – Connectivity Rocks!	52%

MDHC Teen Survey (written): Why FM is not used...



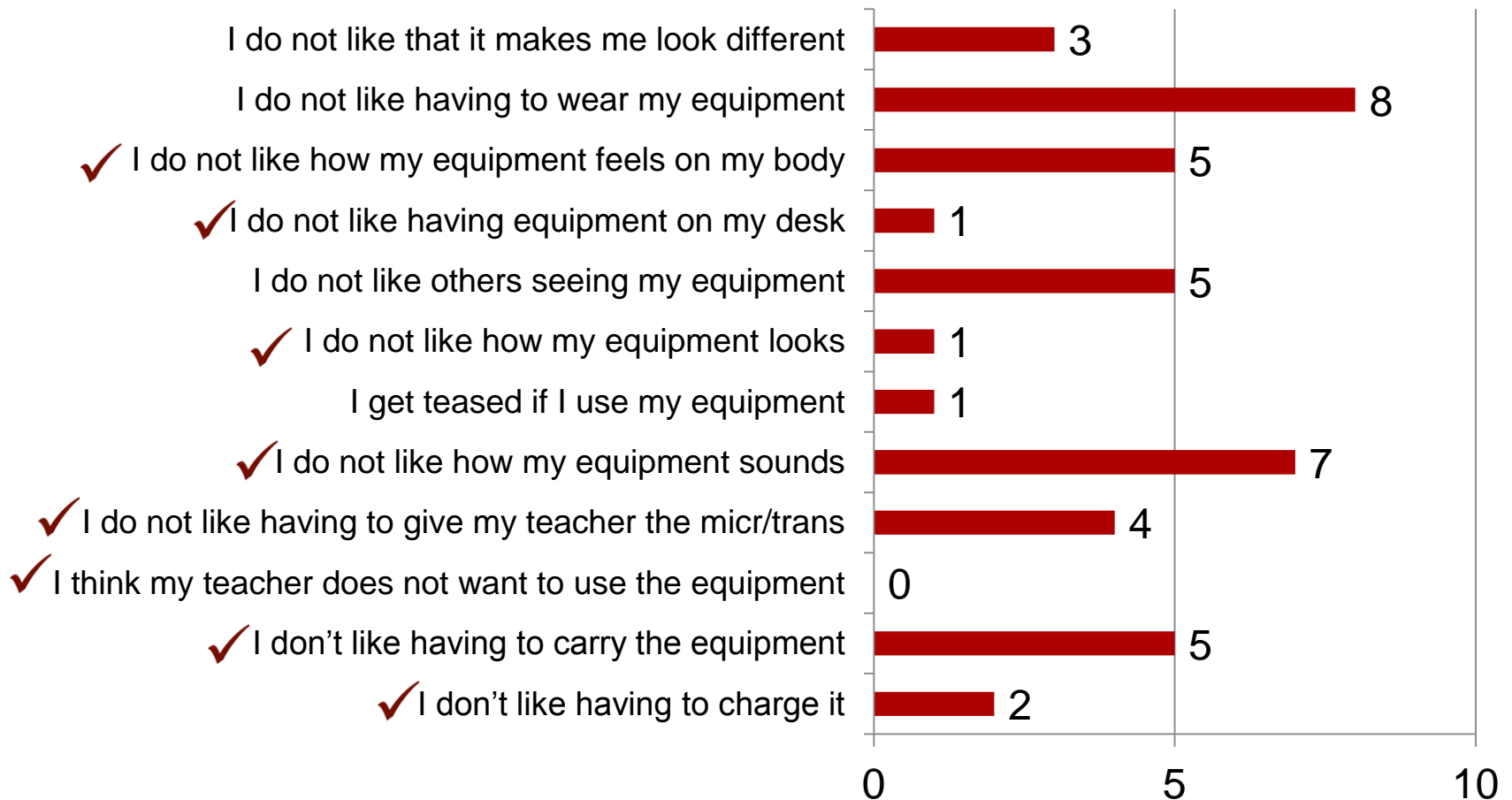
MDHC Teen Survey (written): Why FM is not used...

■ MI Students ■ CO students



MDHC Teen Survey (written) Why FM is not used...

Problems that can audiologists can address



MDHC Teen Survey (written): Other comments for non-FM use

- I think kids with hearing loss are already embarrassed about having the disability, that giving the FM system to a teacher is more embarrassing because kids start asking questions.
- It might annoy the students.
- I think I don't need it.
- I need to hear clear-better with only CI.
- I don't need an FM.
- My hearing is different, more fuzz, not clear.
- I hate it!
- I don't like it.

• CLICKER SURVEY: 66% of the students responded that they had been made fun of or bullied because of their hearing loss; another 6% said they were not sure...

MDHC Teen Survey (written)

Other comments about FM from teens:

- I like it but it makes me stand out which I don't like.
- I need an FM for school in a big classroom.
- FM systems are great.
- There should be a convenient place for it. There should be more thought in making the FMs better for kids.



MDHC: Teacher Technology Seminar (Oct 2012)

- Participants: 9 TODs serving 172 students
- All degrees of HL, communication mode mostly LSL
- Personal Hearing Instruments: 50% (44% HAs, 5% CIs, .6% Bimodal)
- 54% use HAT; of those not using HAT, another 34% would benefit
 - All reported to be consistent daily users
 - 77% of teachers report HAT helps a lot, 22% helps somewhat
- Average age of HAT (in order from most frequent response to least)
 - 1-3 years
 - 3-5 years
 - <1 yr
 - 5-10 yrs

MDHC: Teacher Technology Seminar (Oct 2012) N=96 students

Reported HAT arrangements (most frequent to least frequent)

- CADS with personal hearing instrument
- FM booted to personal hearing instrument
- CADS only
- Telecoil/teleloop
- Hearing aids with integrated FM
- Desktop only
- Desktop with personal hearing instrument

MDHC: Teacher Technology Seminar (Oct 2012)

- Teachers say most common problem for inconsistent or non-use
 - 21%: Student embarrassed, does not want to be different
 - 21%: Student does not understand the value
 - 21%: Responsibility issue (e.g., student or teacher's responsibility to get the mic)
 - 16%: Teacher buy-in
 - Other: feedback, student doesn't like the sound, inconvenient, feedback, training in troubleshooting
- Other comments from teachers:
 - I love them
 - CI students don't like how FM sounds
 - **Students will get used to having “teacher on my shoulder” and not learn to listen in noise and filter through important information.**

SOLUTIONS!

The problems that are solvable with aggressive management

Technology Function

- Provides more flexibility to hear peers
- No bulk or less bulk
- Connectivity options
- Cool technology
- Aggressive troubleshooting is a must!

School/Teacher/Staff

- Hearing loss awareness: hearing vs understanding, audibility vs intelligibility
- Positive attitude
- Classroom support for implementation
- Orientation and training
- Enforcement: If in IEP or 504 Plan - not a choice
 - (Bellingham. MA Public Schools, 69 IDLER 142 OCR 2012)

For Students

Technology Implementation

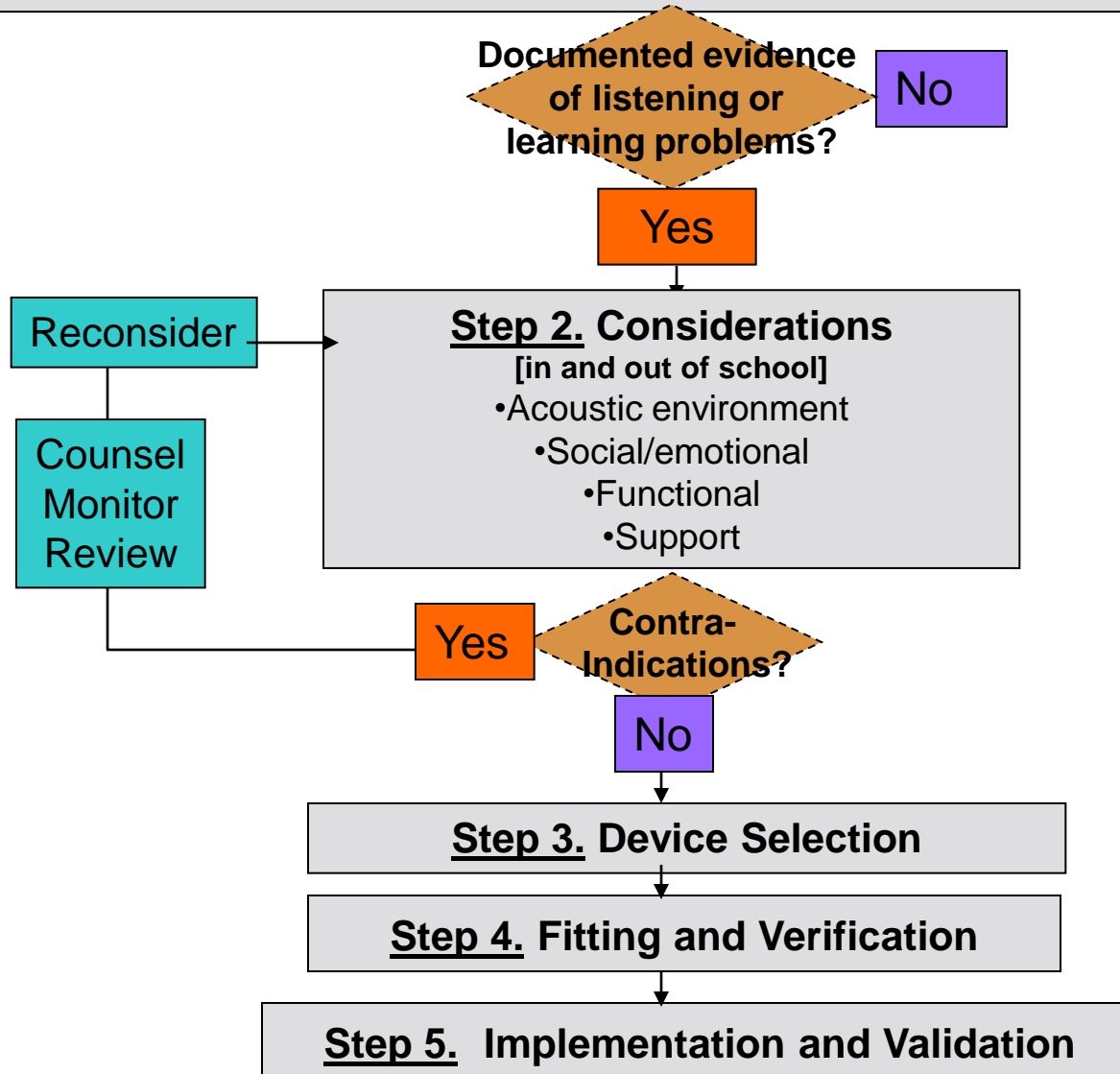
- This is about the person - Give the student a voice and choice
- Orientation and training on all functions – make it “cool” and relate to general telecommunications technology used by others (FBI, sports, television)
- Insure aggressive troubleshooting and back-up FM

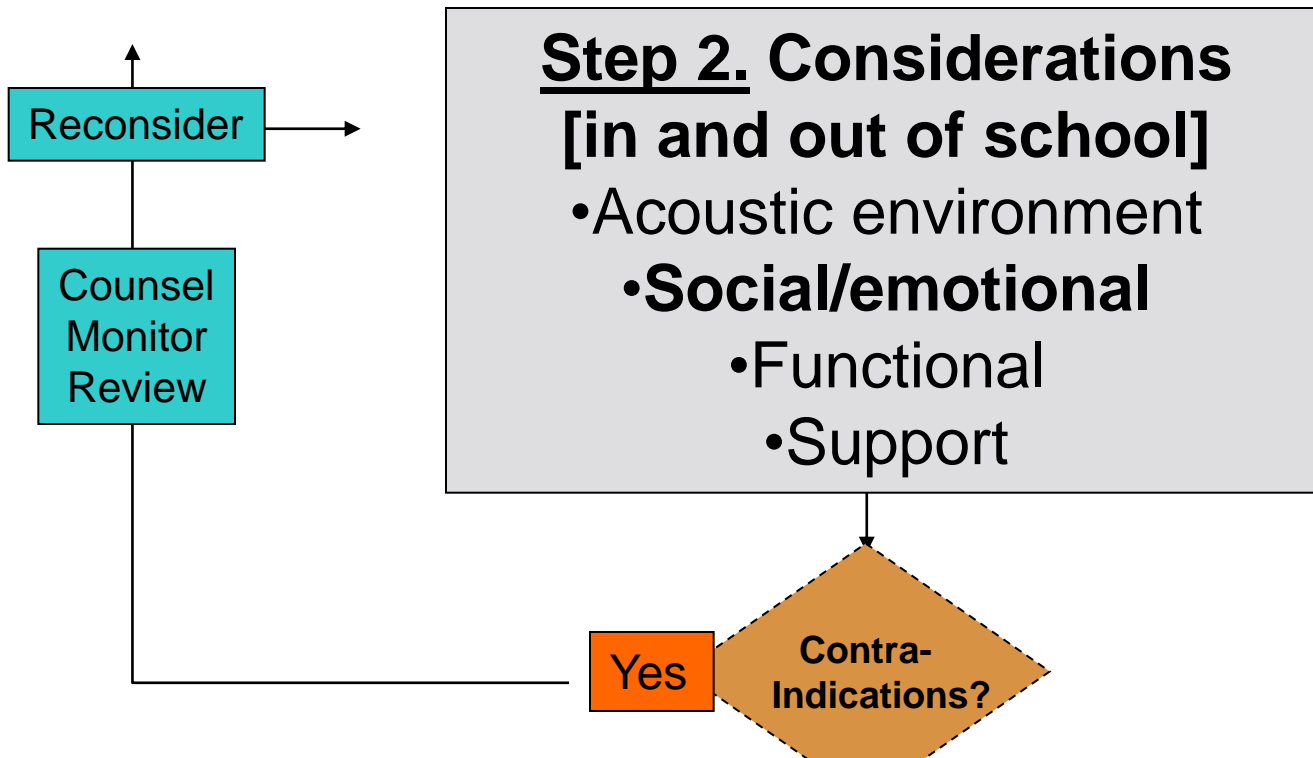
Connect to information sources

- Hearing and hearing loss and its communication implications
- Communication accommodations
- Connectivity options
- Laws and rights
- Peer activities

Step 1. Potential Candidacy for HAT

Hearing Loss | Auditory Processing Deficit | Learning Disability
Auditory Neuropathy/Dys-synchrony
Language Deficit | Attention Deficit | English Language Learner





Motivation: Student & teachers
Child & family
Attention & Fatigue
Self-image

Self-advocacy
Social acceptance
Classroom culture
Family support

Considerations before fitting HAT: **Classroom Listening Assessment**

Classroom Observation

**Acoustic Measurements (Noise, RT,
Critical Distance)**

**Questionnaires: Teacher (CHAPS, LIFE),
Student (Classroom Participation
Questionnaire, Self-Assessment of
Communication-A, Significant Other
Assessment of Communication-A)**

**Functional Behavioral Assessment:
Functional Listening Evaluation (FLE)**

HAT Plan (IEP/504):

Device determination: based on assessment considerations; Proceed with fitting, verification, & validation

Implementation: when to use, training for student and teachers

Management: monitoring device function

Goals: knowledge, path to self-advocacy, peer activities

Other Strategies

- Agreements between student and teacher for accommodations, signals for need for clarification, use of FM
- Negotiate: use grades, acoustical environments, and class learning situations to determine when needed; discuss pros & cons with student for each situation
- Facilitate compliance from teachers & school staff
- Parent acceptance and support
- Determine student responsibility to advocate for needs
- Encourage but never force a student to use FM
- Counseling

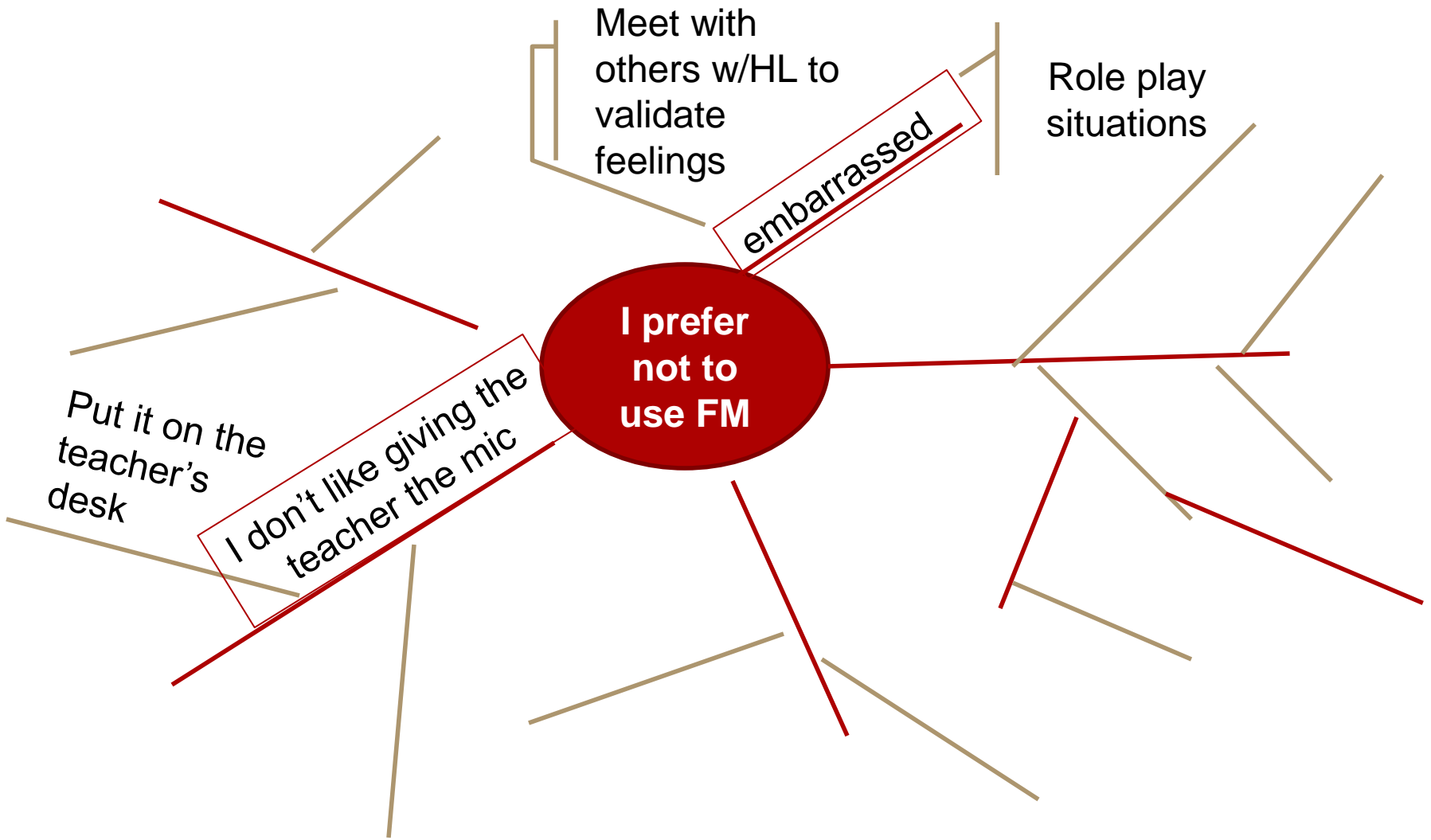
Counseling: The Self-Discovery Process

- Connect to information
- Guide discovery process with opportunities to talk, problem solve, connect with peers, adult role models
- Do, Debrief, Decide
- Involve parents



Peer Support Group Hints

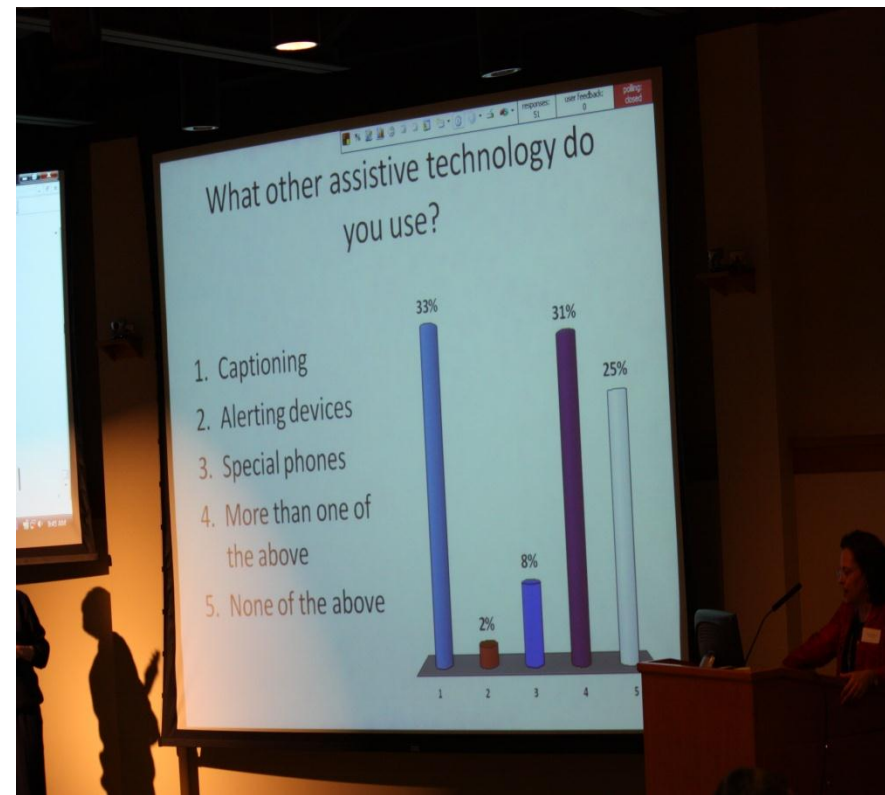
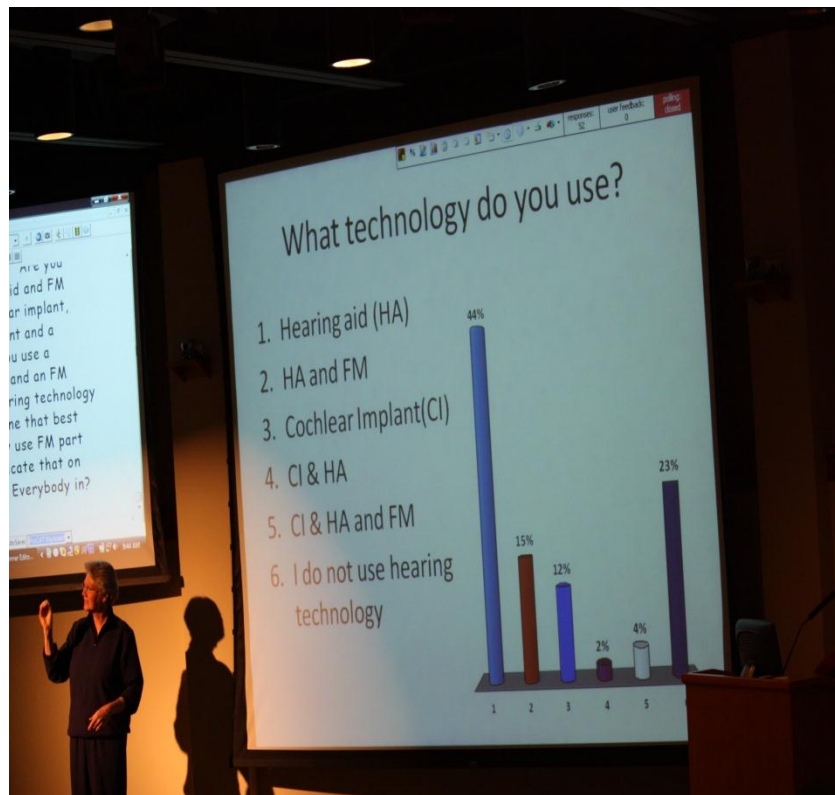
- Let teens be teens first
- Carefully insert topics about communication challenges and accommodations
- Keep it fun and active – let students help design the agenda and invite guests
- Use role models that are young – high school students for elementary and middle school; college students for high school
- Role play common situations (see GAP Scenarios)



Mindmapping

Teen Day

Marion Downs Hearing Center, Denver



GAP: Guide to Access Planning

www.phonakonline.com/MyGap/GapMain.html



The screenshot displays the top navigation area of the GAP website. On the left, the logo consists of the word "PHONAK" in a grey box and "life is on" in a green box. To the right are three green navigation buttons labeled "Teens and Young Adults", "Professionals", and "Parents". Below the logo, the text "You are in: Gap Home" is visible. The main content area features a large image of a smiling young woman with a blue notebook, with other students in the background. A semi-transparent grey box at the bottom of the image contains the text "Welcome to GAP: Guide to Access Planing".

PHONAK life is on

Teens and Young Adults Professionals Parents

You are in: Gap Home

Welcome to GAP: Guide to Access Planing

GAP is...

A Learning Guide:

- ✦ Self-Assessment
- ✦ Rights
- ✦ Self-Advocacy
- ✦ Hearing Access Technology
- ✦ Activities
- ✦ Resources

FOR:

Teens & Young Adults



Teachers & Professionals



Parents

Tools for Practice

- Questionnaires
- AAA HAT Guidelines
- Classroom Listening Assessment
- Guide to Access Planning (GAP)
- Ida Institute
 - My World
 - Living Well
- Self-Advocacy Curricula
 - *Self-Efficacy-Raising the Bar for all Students*, 2nd Ed., Eisenberger et al. Eye on Education Publications, 2005.
 - *Knowledge is Power*, Mississippi Bend Area Education Agency, EAA
 - *Self-Advocacy for Students who are Deaf or Hard of Hearing*, K. English, GAP CD



BRIDGE THE GAP BETWEEN CANDIDACY FOR FM AND WILLINGNESS TO USE FM WITH ASSESSMENT, CAREFUL PLANNING, & COUNSELING

- Listen
- Fill knowledge gaps
- Arrange peer support/role models

References

- American Academy of Audiology. (2008). *Clinical Practice Guidelines: Remote Microphone Hearing Assistance Technologies for Children and Youth from Birth to 21 Years*. Available at <http://www.audiology.org>.
- Franks, J. (2004). Why do students with hearing impairments resist wearing FM amplification? Unpublished Masters Thesis.
- Guide to Access Planning (includes SAC-A/SOAC-A): <http://www.phonakonline.com/MyGap/GapMain.html>
- Johnson, C.D. (2010). Making a Case for Classroom Listening Assessment. *Seminars in Hearing* 31(3),177-187
- Ida Institute www.idainstitute.com

Cheryl@colorado.edu
www.ADEvantage.com

Celebrating Marion's Centennial Year

Save the Date!

**July
2013**



**Frontiers in
Hearing**

Beyond Newborn Hearing Screening

July 10-13, 2013

Vail Mountain Resort and Spa, Vail, CO

***Join the Marion Downs Hearing Center
for the 2013***

**Frontiers in
Hearing**

Beyond Newborn Hearing Screening Symposium

July 10 - 13, 2013

Vail Mountain Resort and Spa, Vail, CO