

*Sensory Impairments:  
Blind and Low Vision  
Deafness and Hard of Hearing  
Deafblindness*

Annette Carey  
Coordinator

# Impact of Disability

## Typical Learning

**Direct:** Hands-on experiences

**Secondary:**  
Listening to a person teach or present information

**Incidental:**  
Occurs automatically without much effort. The way most information is learned.  
(90% of learning is incidental.)

80% of learning is through your vision

95% of all learning is through your vision and hearing

# Typical Learning for children who are Deaf or Blind

**Direct:** Hands-on experiences  
Most of the learning must be directly taught.

**Secondary** Children with sensory loss can access with appropriate accommodations.

**Incidental:** Children with sensory loss have limited or distorted access to incidental learning.

# Blindness and Low Vision

Determined by an optometrist, ophthalmologist or neurologist:

- a. 20/70 in better eye after correction (distance or near)
- b. 20° or less in better eye
- c. Deteriorating eye condition
- d. Loss caused by disturbance of posterior or visual pathway and/or cortex (CVI)

*Ages 3-5:*

*Developmental delay result of vision loss- eligibility shall be under Blindness and Low Vision.*

*EC for SLD:*

*Must give assurance that underachievement is not primarily the result of a visual, hearing or motor disability.*

*What happens if I have a student with a significant visual impairment that does not meet the first prong of eligibility yet the visual impairment adversely impacts his education and the student is in need of special education?*

- Functional Vision Assessment
  - Completed by the teacher of the visually impaired (TVI)
  - Adverse impact
  - Special Education needs
- Submit to Annette Carey: [acarey@access.k12.wv.us](mailto:acarey@access.k12.wv.us)

Rationale:

- IDEA does not have an acuity requirement  
*“.... an impairment in vision that, even with correction, adversely affects a child’s educational performance.”*

# VI Specific Evaluations

- Functional Vision Assessment
  - Completed by the teacher of the visually impaired (TVI)
  - Initial FVA requires parental consent
  - Annual updates to FVAs
- Learning Media Assessment
  - Presumed braille is appropriate for all blind or low vision student unless determined not appropriate
  - Current and future need for braille
  - Not an either or choice
- Orientation & Mobility Evaluation
  - O & M Specialist- not TVI
  - TVI can work on concepts and skills (pre-cane)

# Expanded Core Curriculum

- Recognized as the role and function of the TVI
- Skills students unable to learn incidentally
- OSERS Policy Guidance
  - Special Factors in IEP Development:
    - Instruction in and Use of Braille
    - Orientation and Mobility
    - Technology
  - Additional Factors in IEP Development
    - Compensatory or Functional Academics
    - Social Interaction skills
    - Independent Living Skills
    - Recreation and Leisure Skills
    - Career Education
    - Visual Efficiency Skills
- [West Virginia Expanded Core Curriculum Resource Guide](#)

# Additional Considerations

- Braille everyday
  - We would never presume to introduce print to a child twice a week
- Modifications of Materials-Indirect
  - *...Supplementary aids include any material/curricular resource or assistance, beyond what is normally afforded students without exceptionalities, provided to support a student with an exceptionality's placement, such as large print books, assistive technology devices, auditory trainers, curriculum adaptations and classroom modifications or aids, services and other supports....*
- IEP Minutes: Guidance
  - Severity Rating Scale are available to give a general idea as to the time requirements



# Supporting Students who are Blind or have Low Vision

- Listserv for TVIs is available
- VIT- organization to support TVIs in WV
- Marshall University Graduate College: certification program- tuition free
- Children's Vision Rehabilitation Program
- Instructional Resource Center (IRC)
- AT Grant
  - Districts must purchase first
  - IEP
- WV SenseAbilities
- TGKVF

# West Virginia VI Advisory Committee

- Established in 2007, to coordinate and enhance the educational services to children who are blind or have low vision and their families in West Virginia.
- Collaborative partners include:
  - WVDE
  - Children’s Vision Rehabilitation Project
  - Marshall University Graduate Program
  - West Virginia University Graduate Program
  - West Virginia School for the Blind
  - Instructional Resource Center
  - Itinerate Teacher-Harrison County

- Office of Special Programs
- EXPANDED CORE CURRICULUM
- EARLY CHILDHOOD ▶
- SCHOOL AGE / EDUCATION ▶
- CHILDRENS VISION REHABILITATION PROJECT
- CORTICAL VISUAL IMPAIRMENT ▶
- TEACHER PREPARATION CERTIFICATION PROGRAMS ▶
- INSTRUCTIONAL RESOURCE CENTER
- PARENTS ▶
- SENSEABILITIES
- RESOURCES ▶

## West Virginia VI Resources

Welcome to West Virginia's VI Resources website connecting families and professionals to local, state and national resources. Funded by the Greater Kanawha Valley Foundation, this collaborative website is sponsored by the West Virginia VI Advisory Committee. Its purpose is to provide the most up-to-date information or links to information pertaining to children and youth who are blind or have low vision for the benefit of the families and children we serve.

The WV VI Advisory Committee was established in 2007 in an effort to coordinate and enhance the educational services to children who are blind or have low vision and their families in West Virginia. Collaborative partners include state leaders in the field of visual impairments from the West Virginia Department of Education, Children's Vision Rehabilitation Project, Marshall University, West Virginia University, West Virginia School for the Blind, Instructional Resource Center, and Harrison County Board of Education.



# TYPES AND CAUSES OF HEARING LOSS



# Conductive Loss

Fire truck

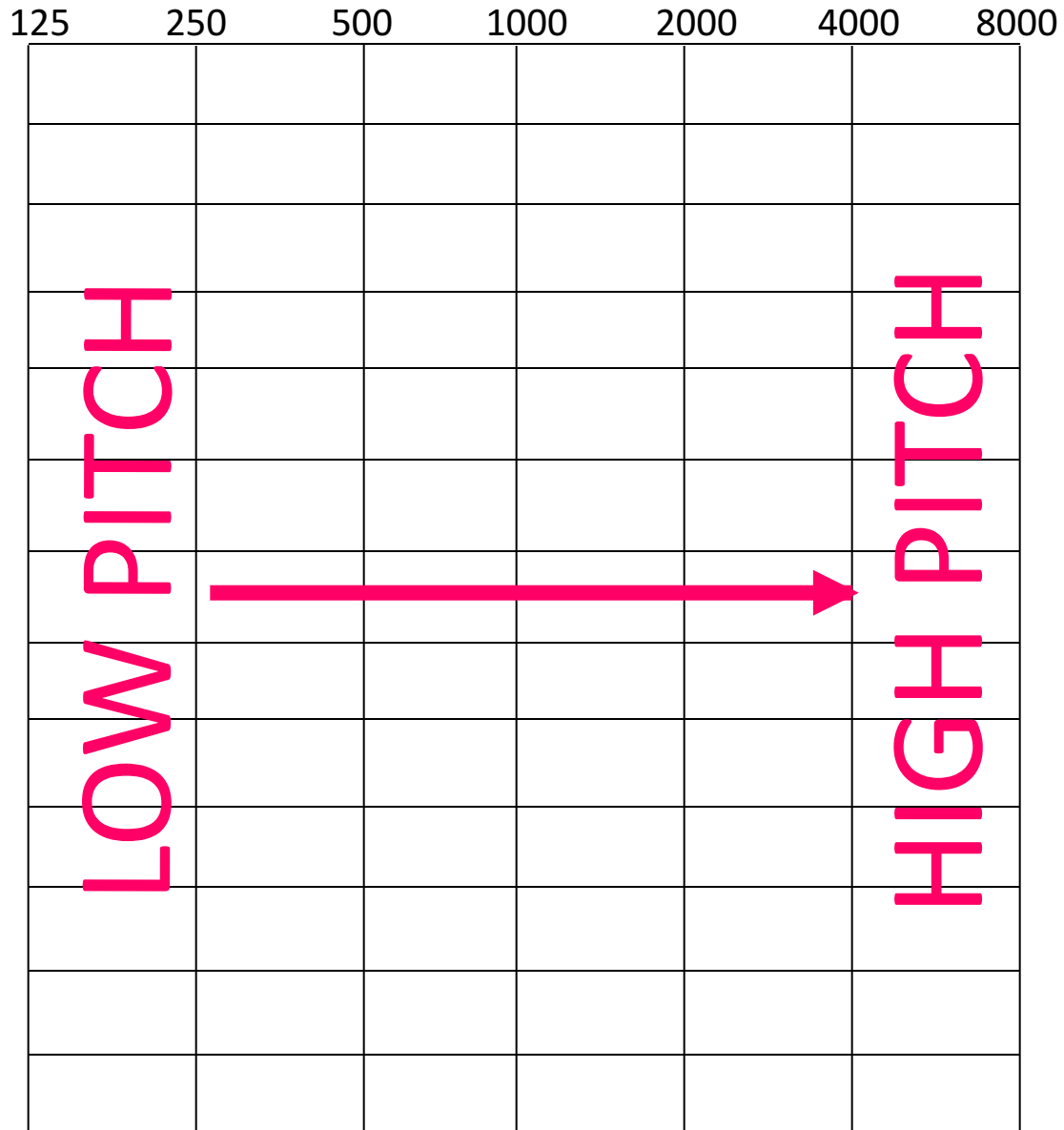
## Fire truck

- Issue is with loudness
- Usually can be corrected with medication/surgery
- Audiogram is relatively flat

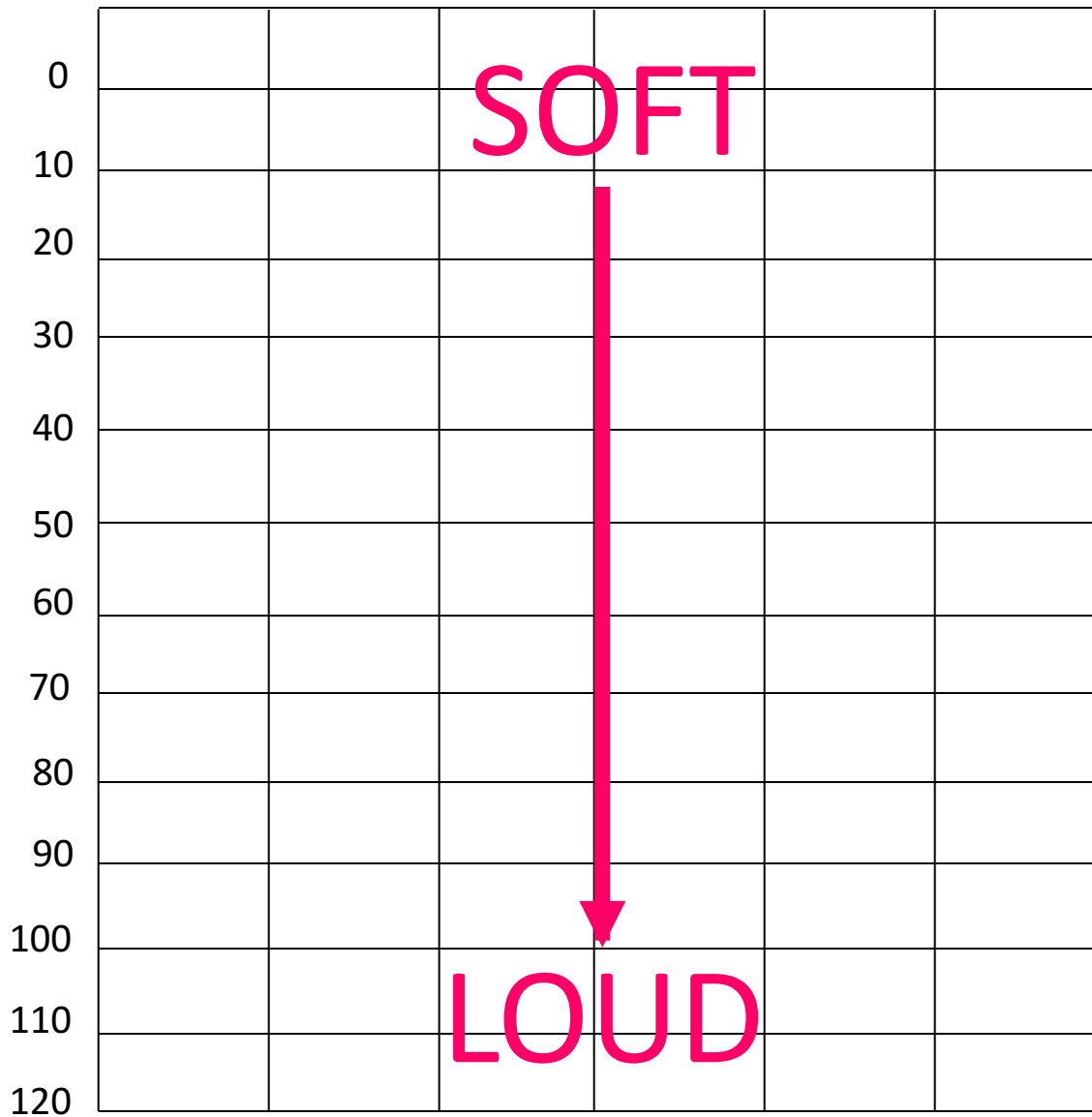
# Sensorineural Loss

WORLDWIDE

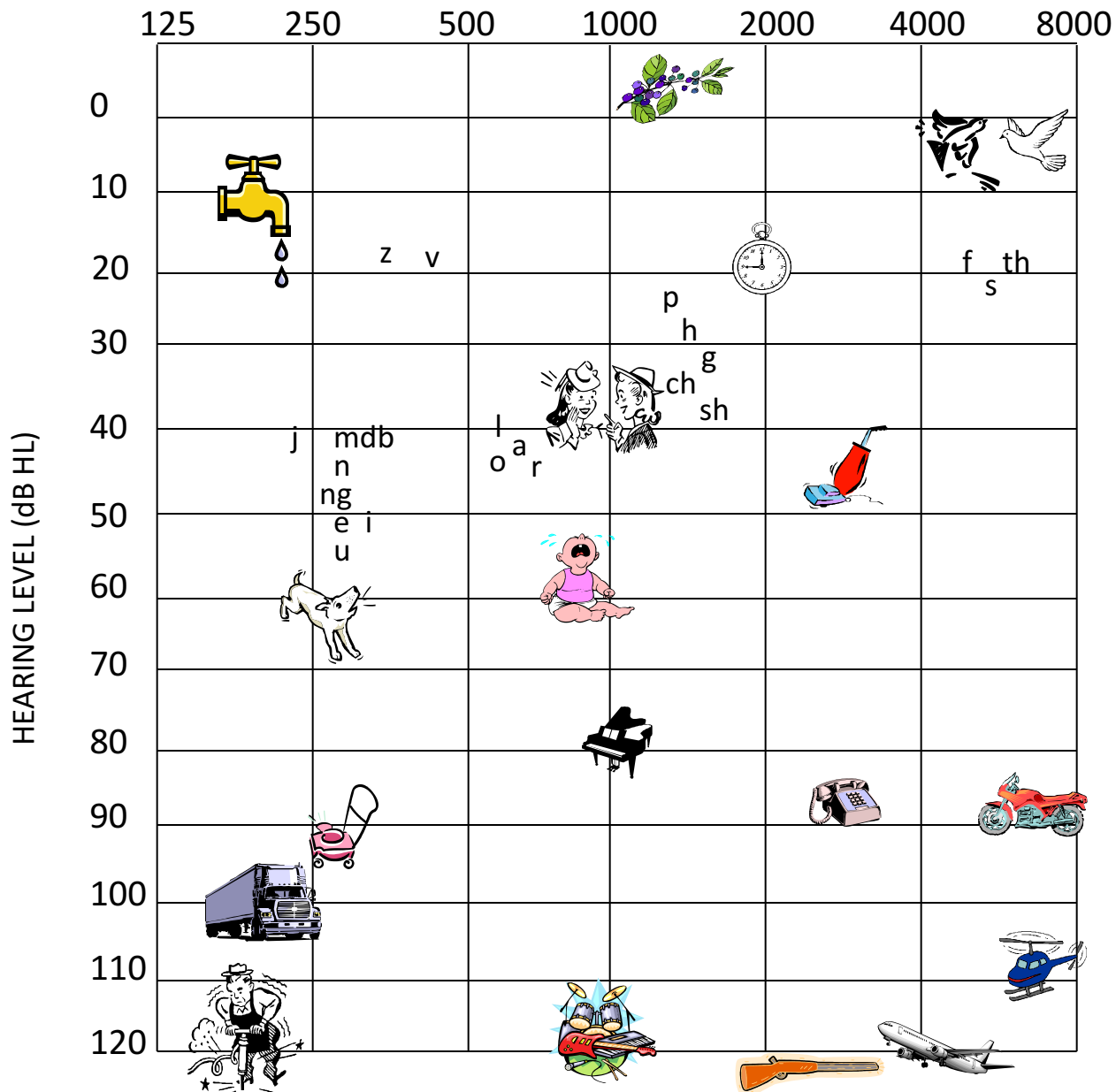
- The issue is NOT loudness but clarity.
- Most children we serve have a mixed loss.
- Hearing aid amplifies sounds we need and sounds we don't need.
- Loss shown all over audiogram (may be sloping, rising, or curved).



HEARING LEVEL (dB HL)

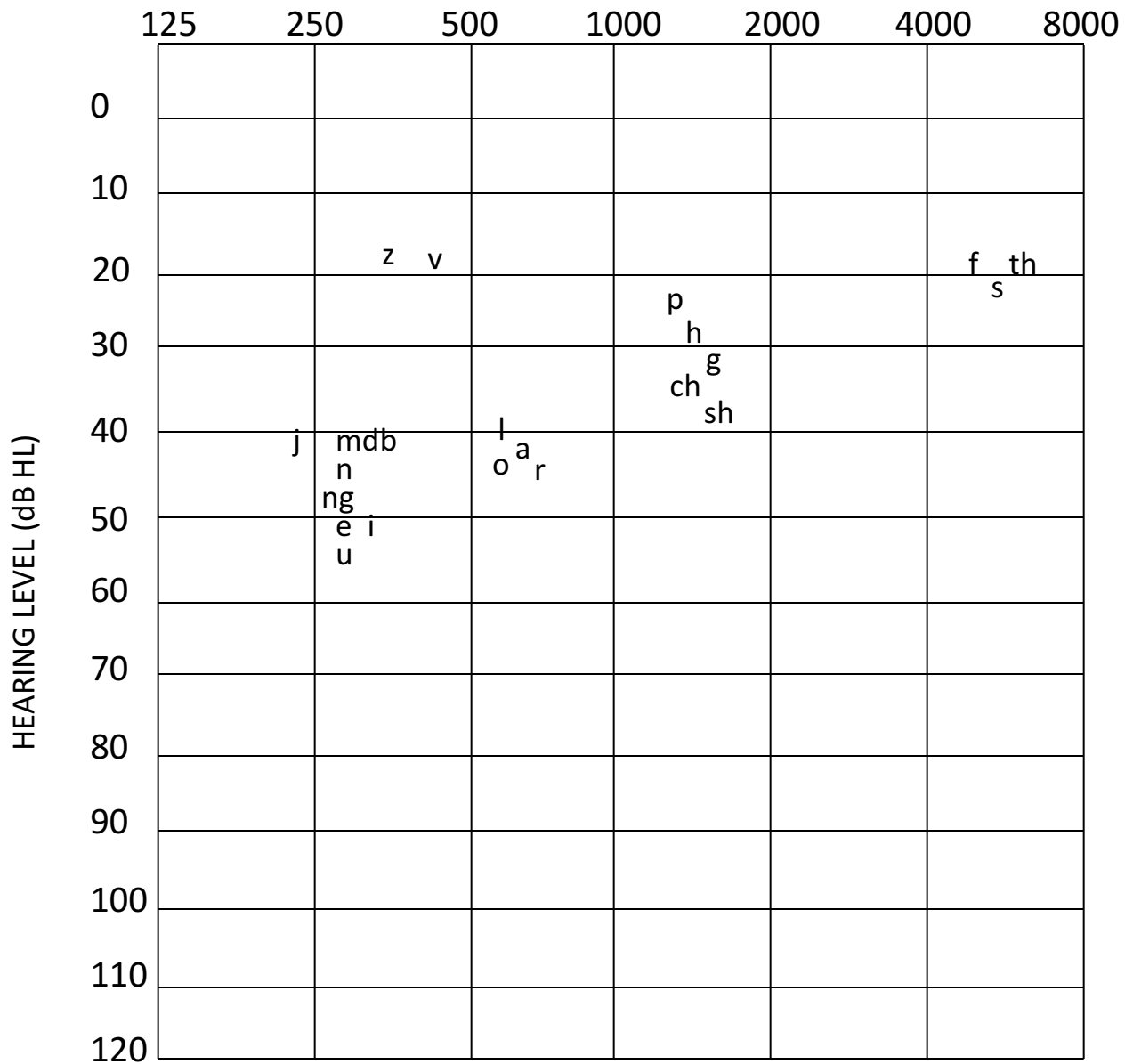






# AUDIOGRAM OF FAMILIAR SOUNDS

FREQUENCY IN CYCLES PER SECOND (HZ)



## AUDIOGRAM OF SPEECH SOUNDS

FREQUENCY IN CYCLES PER SECOND (HZ)



# Spelling Test

“Number your paper from 1 to 10.”

1.

6.

2.

7.

3.

8.

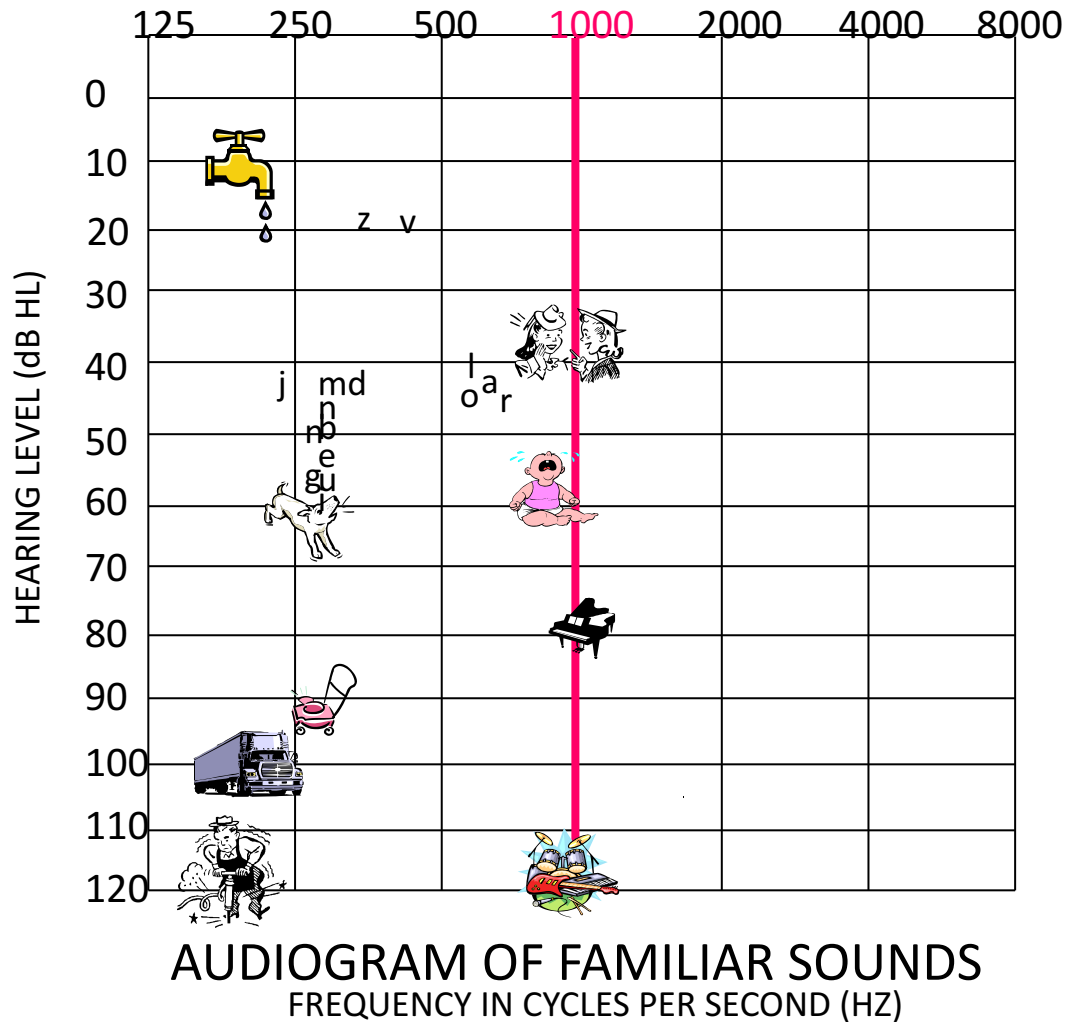
4.











9.

5.

10.

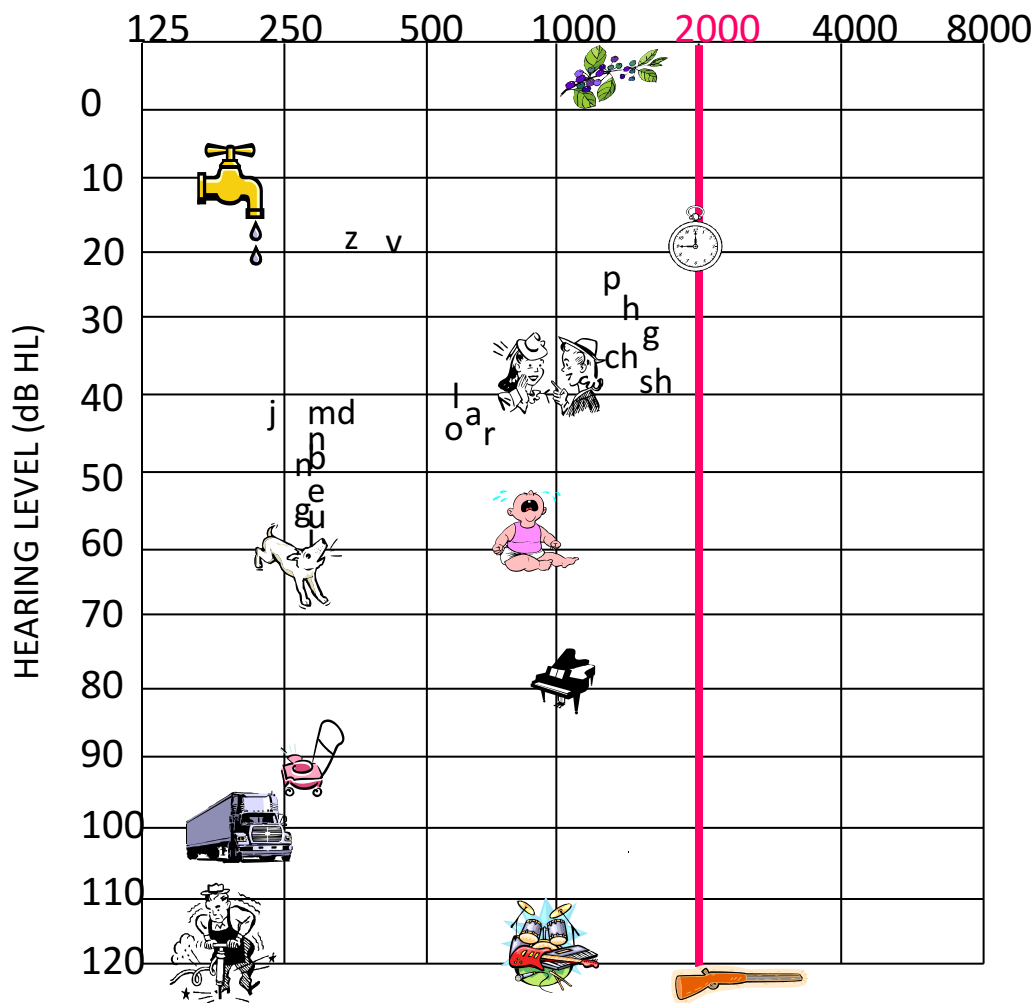
# Spelling Words through Simulated Hearing Loss above 1000 Hz



1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

Click on Speaker to Present Spelling word.

# Spelling Words through Simulated Hearing Loss above 1000 Hz



**AUDIOGRAM OF FAMILIAR SOUNDS**  
 FREQUENCY IN CYCLES PER SECOND (HZ)

1.



2.



3.



4.



5.



6.



7.



8.



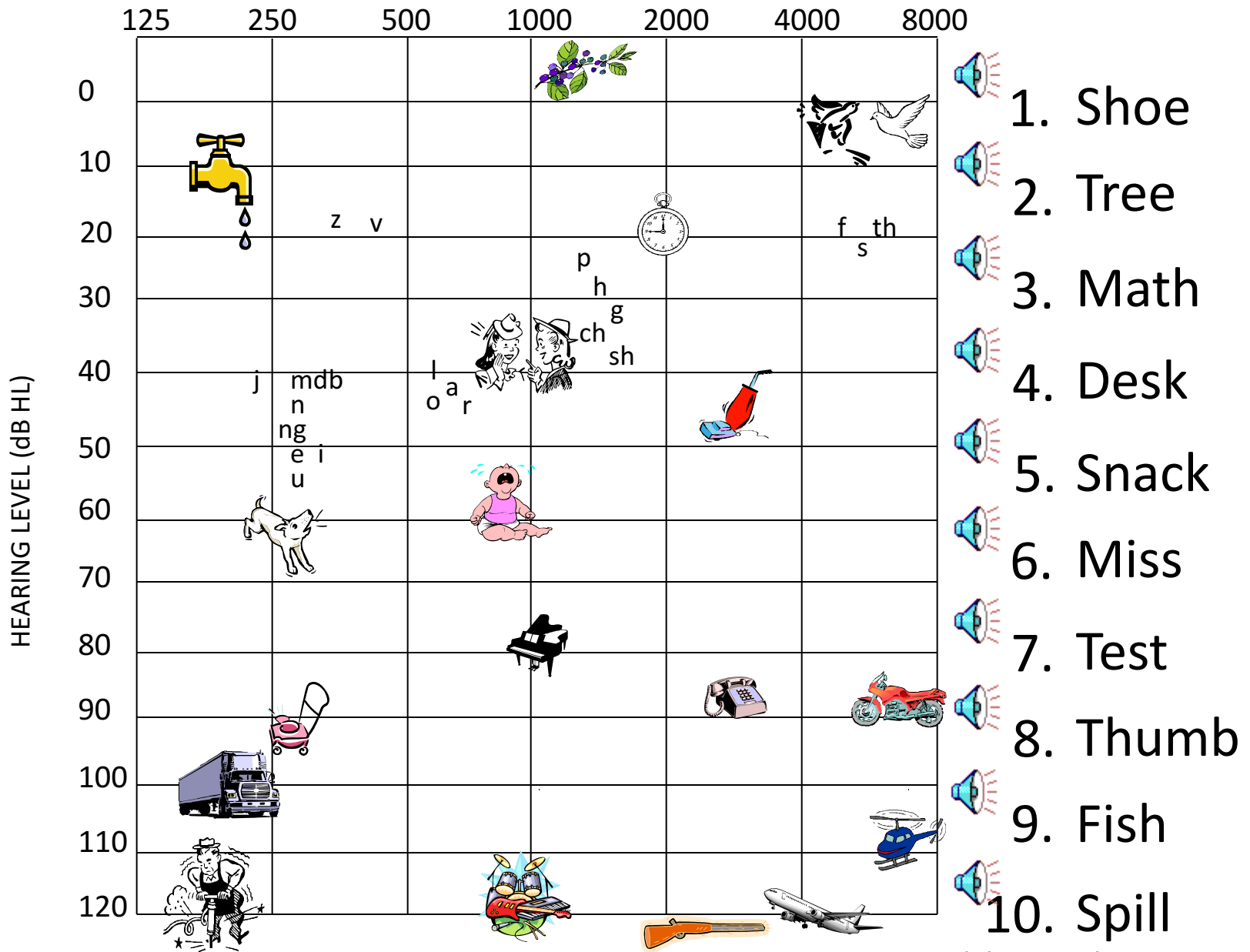
9.



10.



Click on Speaker to Present Spelling word.



## AUDIOGRAM OF FAMILIAR SOUNDS

FREQUENCY IN CYCLES PER SECOND (HZ)

Click on Speaker to Present Spelling word.

# Therefore.....

- With a hearing loss, the question should never be if the person can hear you.
- The question should be if the person can understand what you are saying.

# Won't a student tell the teacher if they're not hearing everything?

- The problem with “not hearing so good” is that you don't hear what you don't hear and you don't know that you didn't hear because you didn't hear it!
- So even if a teacher asks, “Are you hearing me?” They will almost always say “yes!”

*Note: Preferential seating is not **THE** answer.*



# Comments made by Local Teachers...

- “I don’t think she needs the speakers, she hears me fine.”
- “I have a loud voice...I don’t need the microphone.”
- “She just has selective hearing and hears when she wants to.”
- “He hears me all the time when I call his name and I don’t have a microphone on.”

# Minimal Hearing Loss

- Study of 1218 children with minimal hearing loss (less than 20 dB) showed that 37% had failed a grade.

Bess, Dodd-Murphy & Parker, (1998). *Children with minimal sensorineural hearing loss: Prevalence, educational performance, and functional status. Ear and Hearing, 19(5), 339-354.*

# Unilateral losses

- Children with unilateral hearing loss are 10 times more likely to fail a grade by age 10.

Bennett, J.A., & English, K. (1999). *Teaching hearing conservation to school children, comparing the outcomes and efficacy of two pedagogical approaches*. *Journal of Educational Audiology*, 7, 29-33.

- Almost 50% of children with at least a 30 dB hearing loss in one ear, have failed one or more grades...or are receiving support services.

DeLuzio, Joanne, M.Cl.Sc, Audiologist, (2003). *Update on Hearing Health Care for Preschool Children*. *University of Toronto Medical Journal*, pp 256 – 258.

# Impact of Hearing Loss

## Normal Hearing

### Age

- 4/5 yrs.
- 7/8 yrs.
- 17 yrs.

### Vocabulary

2,000  
22,000  
80,000

## Profound Hearing Loss

### Age

- 4/5 yrs.
- 7/8 yrs
- 17 yrs.

### Vocabulary

>500  
nouns, some  
verbs & adj.  
< 3rd grade

# Language delays based on levels of hearing loss

- 15-26 dB loss
- 27- 40 dB loss
- 41-55 dB loss
- 56-70 dB loss
- 1.2 year delay
- 2.0 year delay
- 2.9 year delay
- 3.5 + year delay

Language is NOT taught it is acquired.

# Impact Consideration Points

*.....often long before you meet them*

Prime time for acquiring language- Birth to 3

- Degree, type and configuration of hearing loss
- Etiology
- Age of onset
- Age and consistent use of amplification
- Level of functional listening benefit
- Well-maintained ALD

## Access to language

# Cochlear Implants

## *...they can hear now right?*

- Implant age: 12 months or older
- Auditory Development:
  - detection – discrimination – identification –comprehension
- Mapping- follow-up
- Assistive Listening Devices – must be a successful CI user
- Assessments may indicates age equivalent language:
  - 3<sup>rd</sup>/4<sup>th</sup> grade begin to struggle
  - Foundational incidental language
- Communication Mode - IEP Consideration Factor
  - Shift from spoken language to spoken language and the curriculum

# Classroom noises

- In a typical classroom...the noise levels can reduce the student's ability to understand to 60% or as low as 27% without appropriate acoustics (ex. carpet, etc.)





# Why isn't speech/lipreading enough?

- 30% to 35% of English sounds are visible
- 13 – 15 speech movement per seconds, eyes can detect only 8 – 9 movements
- Language required
- 23% of hard of hearing people **become** effective lip readers- these are children
- Fatigue factor- concentration!

# The Why's

Why can't I just talk louder?

- It seems like talking louder would help...however, studies show that talking louder **only** increases vowel energy and not consonant energy.
- Ironically, yelling increases audibility but not intelligibility.
- They need speech 10 times louder than the background noise.

# POSSIBLE SOCIAL AND EMOTIONAL IMPLICATIONS OF HEARING LOSS

Students with hearing loss in the regular classroom may exhibit one or more of the following traits.

1. Hesitant to speak.
2. Pretends to understand when he/she does not understand.
3. Does not ask questions to help his/her understanding.
4. Needs to watch other students to understand instructions.
5. Is not aware of what is happening or how to respond in social situations.
6. Does not understand why he/she is being disciplined.
7. Does not pick up social courtesies, graces or tact immediately.
8. Hides the fact that he/she has a hearing loss.
9. Resents wearing his/her hearing aid.
10. Is withdrawn.
11. Is overly aggressive.
12. Has fewer or younger friends.
13. Has family problems.

# UNDERSTANDING THE DEAF AND HARD OF HEARING STUDENT:

1. Because speech reading is fatiguing, students with hearing loss may have difficulty holding their attention for long periods.
2. Students, including deaf and hard of hearing, can learn to look attentive and appear to understand when they do not. Ask direct questions.
3. It is better, for understanding, for other persons to be in close proximity to the deaf and hard of hearing student.
4. Speak to the student and call his/her name for attention. Touching or tapping the arm should not be any more necessary than with other students.
5. Remind hearing students to speak in complete sentences, to enunciate clearly and to face in the direction of the student with hearing loss.
6. Students with hearing loss need to learn any “in” expressions or words used by hearing students.

# Deafness and Hard of Hearing

- Deaf and Hard of Hearing are **two separate exceptionalities**
  - Based on ability to access spoken communication
  - Cochlear Implants may be either deaf or hard of hearing

*Ages 3-5:*

*Developmental delay result of hearing loss- eligibility shall be under Deafness or Hard of Hearing.*

*EC for SLD:*

*Must give assurance that underachievement is not primarily the result of a visual, hearing or motor disability.*

# What about the student on grade level or the preschooler with age-equivalent language?

- Diagnosed hearing loss:
  - permanent, fluctuating, bilateral or unilateral
  - Any type, degree or configuration
- EC determines the hearing loss adversely affect educational performance in that:
  - Team determines need for special education services (DHH itinerant services, sign language or Cued speech interpreting services, real-time captioning services, assistive technology and audiology services- FM systems) and
  - Services needed in order to prevent hearing loss from causing a delay in academic achievement
- The question also comes up frequently at the time a three year old is transitioning from WVBTT (Part C) to Part B.

- "Each State must ensure that FAPE is available to any individual child with a disability who needs special education and related services, even though the child has not failed a course or grade, and is advancing from grade to grade." (CFR Section 300.101)
- "A public agency must provide a child with a disability special education and related services to enable him or her to progress in the general curriculum, thus making clear that a child **is not ineligible** to receive special education and related services just because the child is, with the support of those individually designed services, progressing in the general curriculum from grade-to-grade or failing a course or grade." (Discussion: 300.101(c))

# Additional Considerations

- Assistive Technology
  - Cochlear Implants not part of definition for Assistive Technology and Services
- Communication considerations
  - “In the case of the student who is deaf or hard-of-hearing, the IEP Team will consider the language needs of the student, opportunities for direct communication with peers and professional personnel in the student’s language and communication mode, the student’s academic level and his or her full range of needs including opportunities for direct instruction in the student’s language and communication mode.”
  - IEP Consideration Factors for the Student Who is Deaf or Hard of Hearing



# Additional Considerations

- Daily monitoring of hearing aids/cochlear implants
- Access to extra-curricular activities
- Acoustical environment

## WVDE Board Policy 6200

- Adaptations to the general and special education classroom environments:
  - Sound levels are to meet ASA guidelines
    - Installation of appropriate floor covering and ceiling tile
    - Acoustical panels and tile as required
    - Drapes
    - Visual safety signals for areas accessible by students

# Educational Interpreters....

*the long and winding road*

*2006 Board Policy 5202: Licensure of Professional/Paraprofessional Personnel established certification requirements for Educational Interpreters*

## *Effective Dates:*

- *July 1, 2008                      Initial Certification*
- *July 1, 2010                      Permanent Certification*

## *September 13, 2011*

- *15 interpreters hold permanent certification*
- *10 interpreters hold initial certification*
- *10 individuals have pending applications*

# It is not enough to know signs....

sometimes we duck them sometimes we address them even when we address them however we do not always decide to resolve them sometimes we simply brood endlessly over possible outcomes or agonize about paths to pursue and even if we do try to resolve them we do not always do so by energetic self-reflection sometimes we simply bulldoze our way through to a conclusion by sheer impatience and assertiveness as if as though getting it resolved were more important than getting it right

# WHY?

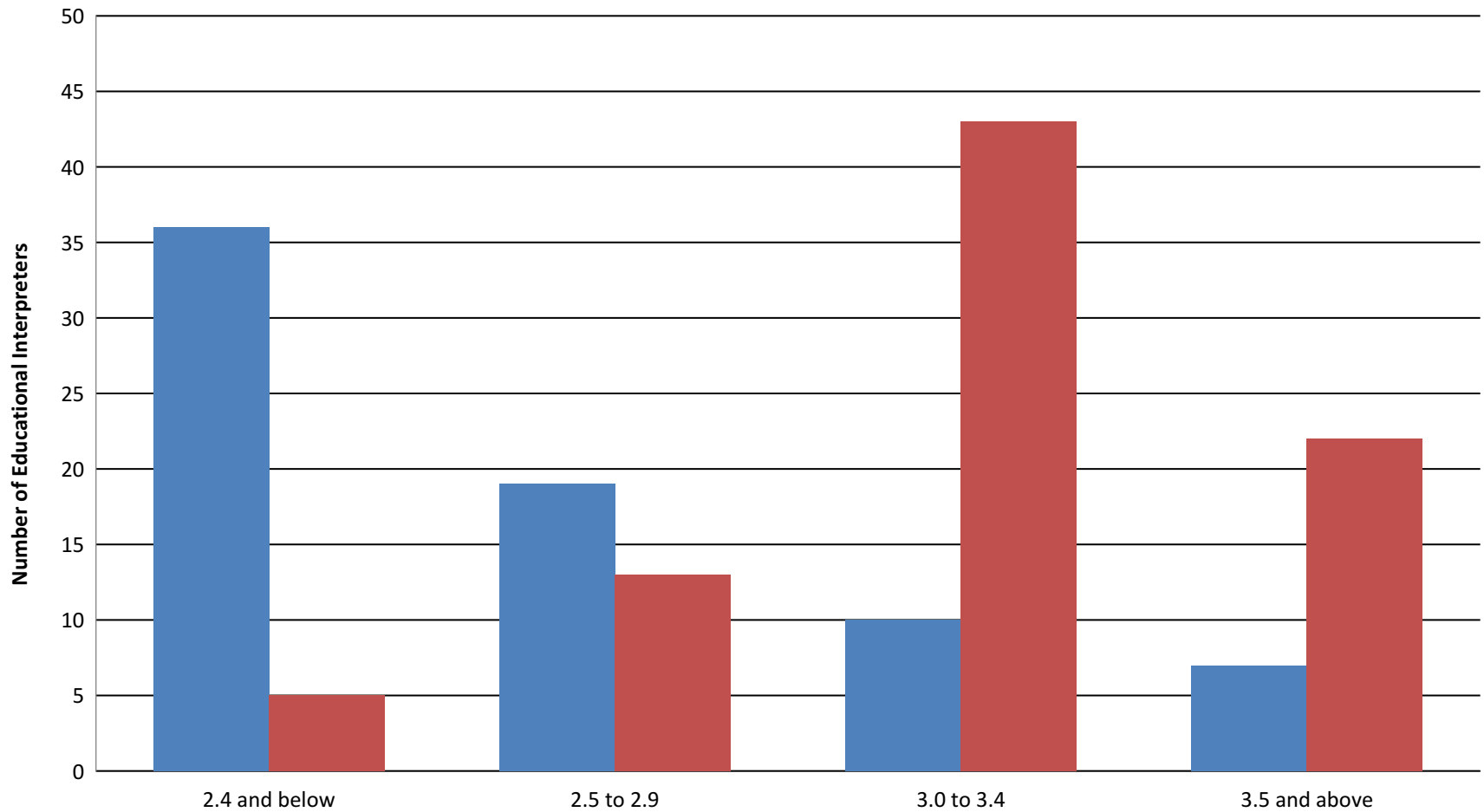
## WV 2003 EIPA Results

EIPA Score: 2.33

- Roman I 1.81 (Grammar)
- Roman II 2.43 (Sign to voice)
- Roman III 3.19 (Vocabulary)
- Roman VI 1.89 (Overall)

Minimum Score Recommended: 3.5

## West Virginia EIPA Score Comparison 2003 and 2011



# Paraprofessional Certificate: Educational Interpreter

*July 1, 2008*

- Phase I (Initial Certification)
  - EIPA 3.0 (NAD III, RID, NIC)
  - Valid for 1 year with 15 hours approved by WVDE
  - Recommendation of Superintendent
- Phase II (Permanent Certification)
  - EIPA 3.5 (NAD IV, RID, NIC)
  - Passing score on the EIPA-WT
  - Recommendation of Superintendent

Note: Minimum score of 4.0 is recommended

# Interpreter

vs.

# Sign Language Specialist

- Interpreter Services are a Related Service
- Sign Language Specialists – Supplementary Aids and Services
- Superintendent's Interpretation
- Interpreters are **NOT** dependent:
  - On exceptionality
  - On availability

# Supporting Students who are Deaf or Hard of Hearing

- Policy 2520.18 American Sign Language
- Foreign Language Credit
- Listserv
- MU certification program- tuition free
- WV Educational Mentor Program
- Conferences/Training
- New Teacher Orientation- Nov 9
- Your help- contact information



# Deafblindness

## WV Deafblind Census

- Birth - 21
- 122

## December 1 Child Count

- Ages 3 – 21
- 10

## Who Qualifies:

- Concomitant vision and hearing
- Needs can not be addressed solely in program designed for deafness or blindness

# Consideration of Needs

- Impact is multiplicative not visual impairment plus hearing impairment
- Unique needs
- IDEA
  - Does not include deafblindness in multiple disability
  - States the combined loss is to be Deafblind

Case Manager

Deafblindness is not a certification area in 5202

# Support Students who are Deafblind

## WV SenseAbilities

- Family/service provider partnership
- CVI Mentorship
- Summer Institute, Family Weekends, Topical Workshops
- Building Effective Student Teams (BEST)
- SPARKLE (Families)
- The Greater Kanawha Valley Foundation (TGKVF)

# Evaluation/Reevaluation

- Selected and administered so as not to be discriminatory on a racial or cultural basis
- Provided and administered in the student's native language and in the form most likely to yield accurate information...*Attempts to provide a qualified examiner in the student's native language or mode of communication must be documented*
- Test selection for students with impaired sensory, manual or speaking...accurately reflects the student's aptitude or achievement level...this includes provision of accommodations such as AT, braille and interpreters.

# Welcome!

Kurt Metz

School Psychologist

West Virginia Schools for the Deaf and Blind

Consultation Service

- Cognitive
- Academic
- Social –emotional needs



Accessible Instructional Materials in West Virginia

### Special Education Plan- Assurance

The district has opted to coordinate with the National Instructional Materials Access Center when providing core instructional materials in specialized formats to qualified students with print disabilities when needed, as required by IDEA 2004 section 612(a)(23). It is the responsibility of a student's IEP team to identify the type of specialized format(s) a student will need and document this on the IEP.

# Why Provide AIM?

## *The Legal Connection*

Provisions within the Individuals with Disabilities Education Improvement Act of 2004 require state and local education agencies to ensure that textbooks and related core instructional materials are provided to students with print disabilities in specialized formats in a timely manner.

Section 300.172, Final Regulations of IDEA  
2004

# Who needs AIM?

- Students who are unable to obtain information through the use of traditional print materials and require accessible materials appropriate to their individual needs
- Students with print disabilities who must gain the information they need to complete tasks, master IEP goals, and reach curricular standards



# Responsibilities of Decision-Making Teams

1. Establish need for instructional materials in specialized format(s)
2. Select specialized format(s) needed by a student for educational participation and achievement
3. Commence SEA- and/or LEA-defined steps to acquire needed format(s) in a timely manner
4. Determine supports needed for effective use for educational participation and achievement.

Special Programs

- CONTACT INFORMATION
- DOCUMENTS AND PUBLICATIONS
- IMPROVING RESULTS / INSTRUCTIONAL SUPPORT
- BUILDING LITERACY PRE-K - GRADE 12
- MEDICAID
- PARENT / PUBLIC PARTNERSHIPS
- POLICY AND PUBLIC REPORTING
- TEACH IEP
- COMPLIANCE
- ACCESSIBLE INSTRUCTIONAL MATERIALS

Other WVDE sites



## Accessible Instructional Materials

- [Accessible Instructional Materials in WV](#)
- [NIMAS Accessible Textbooks in the K-12 Classroom](#)
- [CAST Transforming Education through Universal Design](#)

Contact Information
<a href="#">Annette Carey</a>

**Office of Special Programs**  
Building 6, Rm 304  
1900 Kanawha Blvd  
Charleston, WV 25305  
Phone: 304-558-2696  
Fax: 304-558-3741



- Many digital materials are NOT accessible!



Welcome to the National Center on Accessible Instructional Materials!

This site serves as a resource to state- and district-level educators, parents, publishers, conversion houses, accessible media producers, and others interested in learning more about and implementing AIM and NIMAS.

[Learn more About AIM](#)

STAY CONNECTED

→ Get e-newsletter: AIM Connector

email address  go

→ Join us on:



AIM IN YOUR STATE

What is your state doing?

--Select your State--  go

LEARN

About Accessible Media, Policy, and Practice

Spotlight: [Accessible Textbooks in the Classroom II](#)

EXPERIENCE

AIM and NIMAS Tools and Resources

Spotlight: [AIM Navigator](#)

COLLABORATE

With the AIM Community

Spotlight: [aim.ig.listserv](#)

UPCOMING EVENTS

→ [View all Webinars](#)



Examples

Access to Instructional Materials for Students with LD: Getting it Done  
10/14/10, 1:00 p.m.-2:30

QUICK LINKS

- [AIM Product Tutorials](#)
- [Technologies for AIM and NIMAS](#)
- [What is NIMAS?](#)
- [Primary Contact for](#)



STAKE-HOLDER FOCUSED AIM RESOURCES

- [Parents and Students](#)
- [Teachers](#)
- [SEAs and LEAs](#)
- [Developers of NIMAS](#)



HIGHLIGHTS FROM THE FIELD

- [October 6, 2010: Blog post - Accessibility and eBooks - Resources and an Interview](#)
- [October 4, 2010: Barnes & Noble Launches PublIt\(TM\), Easy-to-Use Digital Publishing Platform for Independent and Self-Publishers](#)
- [October 4, 2010: Tablets and E-Readers Give Hope to Publishers But Not to Broadcasters](#)
- [September 28, 2010: Blio eReader Now Available for PC](#)
- [August 23, 2010: Inside Higher Ed-](#)

# The AIM Navigator

A process facilitator that assists educators, families, and students with decisions about AIM for an individual student

- Four Major decision points  
*Need, Selection, Acquisition, and Supports for Use*
- Guiding questions and instant feedback
- Built-in scaffold supports
- Extensive references and resources
- Student Summary and To Do List

Not a screening or evaluative tool

# AIM CENTER TARGETED TECHNICAL ASSISTANCE

- Targeted Technical Assistance (TTA) from the AIM Center will be state-focused and will proceed in accordance with an individualized TTA Plan collaboratively developed and agreed upon by the state AIM Coordinating Committee and the AIM Center. TTA will be provided to the SEA personnel and designees involved in the provision of AIM and three to five collaborating LEAs within the state.

# WV AIM Coordinating Committee

- David Allen – WWSB
- Robert (Greg) Bartlett – RESA 6
- Erin Bashaw – Marion County
- Craig Hesson – Mason County
- Donna Simmons – Randolph County
- Donna See – Instructional Resource Center
- WVDE Staff
  - Annette Carey
  - Lorraine Elswick
  - Melissa Gholson
  - Kathy Knighton
  - Sandy McQuain
  - Betsy Peterson
  - Karen Ruddle
  - Alma Simpson
  - Phyllis Veith
  - Valerie Wilson

# WV AIM's Identified Priorities

- Operational Guidelines
- Learning Opportunities
  - Administrators
  - Teachers
- Acquisition Steps



Thank you