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# Ch. 4 – Enhancing Students’ Motivation to Learn

Williams, Carl B. (2009). *No limits: A practical guide for teaching deaf and hard of hearing students*.  
Butte Publications, Hillsboro OR

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- Fact: the greater the student motivation, the greater the student achievement (p. 72)
    - What causes a student to be motivated?
    - How often do students experience such motivation as they go through the school day?
    - What happens when students are not motivated to learn in a given lesson?

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## ■ Computer Based Technologies

- Digital amplification devices
  - Hearing aides
  - Cochlear implants
- Classroom based FM systems
- Computers & LCD Projectors
  - See presentations entitled
    - “Challenges – What do we know about the use of technology to enhance learning.ppt” provided on 10/07/09
    - “Final - Instructional Strategies that Enhance Teaching and Learning.ppt” provided on 9/30/09

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- Computers & LCD Projectors (cont.)

- Bransford, J.D., Brown, A.L., & Cocking, R.R. (Eds.) (1999e). *How people learn: Brain, mind, experience and school – Chapter 9: Technology to support learning*. National Academy Press, Washington, DC. Retrieved on June 2, 2004 from:

<http://www.nap.edu/html/howpeople1/ch9.html>

- potential of new/emerging technologies ...enhanced by creating new learning environments and communities
- key features of effective technology applications within education:
  - interactivity
  - visualizations of difficulty to understand concepts
  - access to information and individuals and learning opt. outside of the classroom

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- key uses of technology to enhance teaching and learning...
    - bringing exciting curricula that is based on real world problems into the classroom
    - providing scaffolds and tools to support and enhance learning
    - giving teachers and students more opt. for feedback, reflection and revisions
    - building local and global communities that include all of education's stakeholders
    - expanding opt. for teacher learning

- ...use of tech to create environments in which students not only solve problems, but also...
  - ...identify the problems that are to be solved – this is in contrast to “...the typical school classroom, in which students spend most of their time learning facts from a lecture or text and doing the problems at the end of the text.”
- “Since the ultimate goal of education is to prepare students to become competent adults and life long learners, there is a strong argument for electronically linking students not just with peers...
  - ...but also with practicing professionals.”
- p. 9 – the use of technologies to present complex ideas/information/concepts in a visual manner...
  - ...consistent with the way we learn...thus a needed technological application for both learning and demonstrating what has been learned

# Critical Information Concerning Hearing Loss Amplification Devices

- Degrees of hearing loss + functional description
  - University of Rochester – Medical Center
    - <http://www.stronghealth.com/services/Audiology/hearing/degreehearingloss.cfm>
      - Mild
        - “Difficulty hearing soft speech and conversations, but can manage in quiet environments”
      - Moderate
        - “Difficulty understanding conversational speech, especially when there is background noise. Higher volume levels are required for hearing TV and radio.”
      - Moderate to Severe
        - “Clarity of speech is significantly affected. Speech must be loud and you may have difficulty in group conversations.”
      - Severe
        - “Clarity of speech is significantly affected. Speech must be loud and you may have difficulty in group conversations”
      - Profound
        - “Unable to clearly understand even amplified speech “

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- Critical info (cont.)

- Hearing Loss Sampler

- What it sound like to have different types and degrees of hearing loss

- <http://facstaff.uww.edu/bradleys/radio/hlsimulation/>

- Please explore this multimedia resource on your own to gain a better understanding of the impact of a hearing loss upon the perception and comprehension of speech

## ■ Critical Info. (cont.)

### □ Amplification Devices

#### ■ Hearing Aides

- <http://www.babyhearing.org/HearingAmplification/AidChoices/work.asp>



- Critical Info. (cont.)

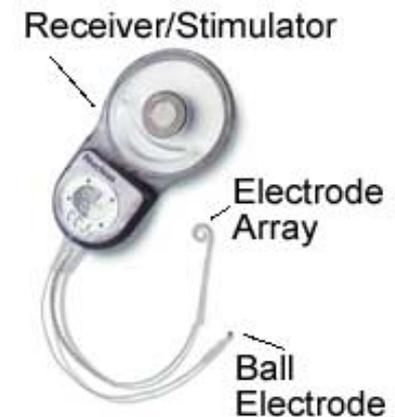
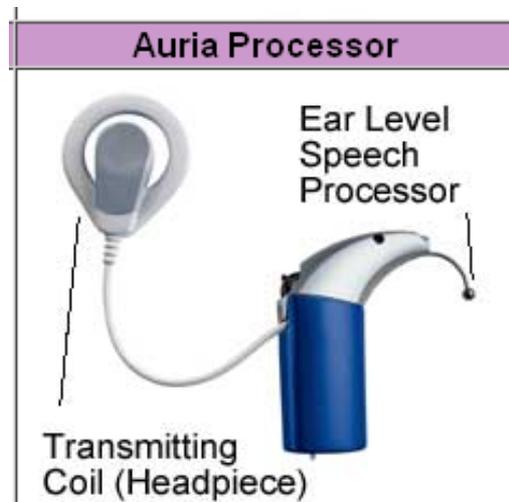
- Amplification Devices

- Cochlear Implants (CI)

- <http://www.babyhearing.org/HearingAmplification/Cochlear/whathow.asp>

- Multimedia simulation of how a CI works

- <http://www.babyhearing.org/av/HearingAmp/Cochlear/CIAnimation.MPG>



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- Critical Info. (cont.)

- Frequently Encountered Problems (FEP) Concerning Amplification Devices

- Hearing Aides

- Battery...dead, with no back ups
- Ear Mold...clogged with wax, or too small
- Hearing Aid...not turned on, not being worn, damaged, or lost
- Student's not taking responsibility to monitor and address problems
- Schools responsible for insuring students have consistent and effective access to appropriate amplification devices
- See school audiologist for assistance

- Cochlear Implants (CI)

- Schools are not responsible for assuring that CI are working correctly
- See school audiologist for assistance

## ■ Critical Info. (cont.)

### □ FEP

#### ■ Classroom FM Systems

##### □ Boys Town National Research Hospital

- <http://www.boystownhospital.org/Hearing/hearingaids/fmsystems.asp>

- **“Listening Problems In the Classroom”**

- “In a typical classroom, there are often many distracting background noises such as talking, paper rustling, shuffling feet, air-handling systems and audio-visual equipment. These sounds may be almost as loud as a teacher's voice. “

- “In addition, most teachers move around the classroom or turn away from students when writing on a chalkboard, causing the loudness of their voice to vary. For most students with normal hearing, everyday classroom noises do not cause problems.”

- I particularly urge you to listen to the sound delivered by the sound systems teachers are usually asked to use in classrooms with students who are d/hh. This simulation can be found at: <http://facstaff.uww.edu/bradleys/radio/fm/>



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## ■ Guidelines for Integrating Computer Technologies into Classrooms

- ❑ Do NOT use computer time as a reward for good behavior
  - Computers should be a learning tool, not a distraction
- ❑ Cooperative Learning
  - Small collaborative groups
    - ❑ Roles & responsibilities
    - ❑ = resulting communication and learning opportunities
    - ❑ = students who are d/hh often need to learn how to work as a member of a small group + the group needs to know how to effectively work with the student who is d/hh

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## ❑ Cooperative Learning (cont)

- Common myths & misunderstandings many hearing individuals have concerning deafness – such misinformation needs to be addressed BEFORE you expect students to work effectively together in small groups

- ❑ Information taken from a presentation by Dr. Nancy Scheetz & Dr. Susan Easterbrooks
- ❑ \*‘‘10 Common Myths and Misconceptions Regarding Deafness’’
  - <http://pride.valdosta.edu/online/TEN%20COMMON%20MYTHS%20AND%20MISCONCEPTIONS%20SURROUNDING%20DEAFNESS.htm>

\*Note: Before you can access these resources, you must establish a logon and password. The information is free and available 24/7

## ■ Myths & Misunderstandings re. Deafness

- Individuals who are deaf can not hear anything.
  - Amount an individual can hear depends on the type and degree of hearing loss
- All individuals who are deaf can read lips.
  - On 30-40% of speech sounds are visible, i.e., can be read
  - The amount of information an individual can lip-read is determined by such variables as degree and type of hearing loss, age of onset of the hearing loss, the visual clarity of the lips, the topic being discussed, etc.
- All children who are deaf have parents who are deaf.
  - Most, i.e., 88% to 92%, children who are deaf/hard of hearing (d/hh) are born to parents who are hearing.

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## ■ Myths (cont.)

- All individuals who are deaf know sign language.
  - Each culture has their own sign language
  - In order to learn sign language, you must have consistent access to native sign language models
  - Many individuals who are d/hh use a combination of speech, speech + signs, signs, and written forms of communication
- Children who are deaf can not read.
  - Student's literacy skills reflect the effectiveness of their education, not the degree of their hearing loss.
- Children who are deaf are not as intelligent as children who are hearing.
  - Students have the same range of learning potential as their hearing peers.

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## ■ Myths (cont.)

- Individuals who are deaf can not talk.
  - The intelligibility of an individual's speech is dependent upon the degree, type, and age at which they lost their hearing + onset and adequacy of their education + parental choice
- Hearing aids enable individuals who are deaf to hear speech.
  - Amplification devices enable individuals who are d/hh to perceive sound, the ability to comprehend speech is a subsequent skill that is achieved via education.
- Individuals who are deaf can not drive.
  - No difference in the driving records of individuals who are d/hh vs. hearing
- All individuals who are deaf wish they could hear.
  - Depends on the individual

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## ■ Enhancing Group Productivity

- “Does & Don'ts” of Teaching Students who are deaf/hard of hearing (d/hh)
  - Information taken from a presentation by Dr. Nancy Scheetz & Dr. Susan Easterbrooks
    - \*“Ten Does and Don'ts To Consider When Teaching a Student with a Hearing Loss”
    - <http://www.deafed.net/PageText.aspx?hdnPageId=97>
  - \*Note: Before you can access these resources, you must establish a logon and password. The information is free and available 24/7

# “Does & Don'ts...”

1. Do arrange the room to accommodate the student's communication needs, i.e.,
  - Unobstructed view of peers and teacher
  - quiet classroom
  - not facing the windows
2. Do present lessons, notes, assignments, etc. in a visual manner, e.g.,
  - Convey info via both speech & writing via use of black/dry boards, overhead projectors, LCD projectors, etc.
  - Capture the student's attention before you begin to teach.

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- “Does & Don'ts...” (cont.)
    3. Do recognize that children who are d/hh often find it to be VERY difficult to take notes, so either provide notes or a note taker.
      - If you use a note taker, they will need to be trained
    4. Do have the same expectations for students who are d/hh as you do for their hearing peers, try to avoid the use of “yes – no” questions.
    5. Do include students who are d/hh in small group work
      - Students within the small group will need to learn how to respect each other’s communication needs, e.g., turn taking, interpreter, translation, etc.

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- “Does & Don'ts...” (cont.)

6. Do provide students with strategies to both study for, and take tests.

7. Do make sure student's understand the classroom rules for student behavior and work.

- Students who are d/hh must be follow the same rules as their hearing peers.

8. Do collaborate with the with the individuals with expertise re. deafness, e.g.,

- Parents, Deaf Education Teacher, Interpreter, Speech & Language Pathologist, Audiologist

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- “Does & Don'ts...” (cont.)

9. Do provide your class with information concerning hearing loss, Deaf culture, and related technologies

- Degrees & types of hearing loss
- Hearing aides and cochlear implants
- Interprets, American Sign Language, Deaf Culture

\*Note: information re. each of these topics can be found at:

<http://www.deafed.net/PageText.aspx?hdnPageId=97>

\*Before you can access these resources, you must establish a logon and password. The information is free and available 24/7

10. Do not be afraid to ask questions

- The more you learn, the more effective you will be.

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## ■ Questioning Strategies

- Use of in schools (p. 80)
  - Check for understanding
  - Provide teachers with feedback concerning instructional effectiveness
  - Stimulate higher order thinking in students
  - Cue students to that information teachers find to be particularly important
  - Increase student involvement in the learning process
  - Provide students with opportunities to practice communication skills
- What the text did not talk about, but what is critical, is the use of questions to LEARN + teacher's modeling of such learning!

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## ■ Questioning Strategies (cont.)

### □ Correct Responses

- Probing...asking “why”

### □ Incorrect Responses

- Prompting...giving hints
- Scaffolding...linking to existing/prior knowledge

### □ Guidelines (p. 83)

- Distribute questions among volunteers and non-volunteers
- Ask questions before calling on a particular student to respond
- Give students adequate time to think before they have to respond
- Ask questions with more than one possible answer
- Encourage students to ask questions

- Questioning strategies to avoid...why? (p. 84)
  - Yes/no questions
  - Choice between answer 'a' or answer 'b' questions
  - Leading questions..."Why is Guam a great place to live?"
  - "Tugging questions..."What else can you tell me?"
  - Multiple questions....one question piled on the next, vs. one at a time
  - "Blanket questions"...."Does everyone understand?"
  - "Allowing Callouts"....students responding w/o being called on first.

# Strategies for Success in 20<sup>th</sup> vs. 21<sup>st</sup> Century Classrooms

- 20<sup>th</sup> Century
  - Teacher Centered
  - Isolated Work
  - Info Delivery
  - Passive Learning
  - Factual Learning
  - Artificial Context
- 21<sup>st</sup> Century
  - Student Centered
  - Collaborative
  - Info Exchange
  - Active Learning
  - Critical Thinking
  - Authentic Context

## ■ Strategies (cont.)

- 21<sup>st</sup> Century Teachers are those that...
  - ...understand the process through which learning occurs;
  - ...understand the content areas they teach;
  - ...design their instruction to focus on the interest and problems that their students face outside of school;
  - ...focus upon concepts, rather than facts;
  - ...assist their students to understand when and how they should use what they are learning; and
  - ...use instructional strategies that are matched with the academic content they are teaching.