

## INSTRUCTIONAL ACCESS: BARRIERS & ADAPTATIONS

Instructional Access = Ensuring equal learning opportunities for all students, regardless as to their abilities, through the use of appropriate instructional materials, teaching methods and learning activities that make learning achievable, at an individual and appropriate rate and depth.

- Factors impacting access for the student with hearing loss in the integrated classroom: rate/pace of classroom instruction, rigor of general education curriculum and expectations, incidental learning/listening issues inherent with hearing loss, the complexity of the language of instruction.
- Some individuals think that if we remove communication barriers through sign language, cochlear implants, environmental accommodations, etc. deaf children should learn the same material at the same rate in the same ways as hearing children. That is not the case however. (Marschark, et al)
  - **Reality:** The linguistic structures and vocabulary used by the teacher during everyday instruction reflect the content and rigor of the curriculum at that grade level.
  - **Reality:** Typical classroom communication ranges from classroom context-embedded and cognitively undemanding to less context-specific and more abstract.
  - **Reality:** As the cognitive-linguistic sophistication increases, so does demands on the student's language proficiency.
  - **Result:** Mismatch = learning breakdown.

### BARRIERS

<b>BARRIERS</b> may vary according to nature/degree of hearing loss, innate abilities, availability of assistive technology, levels of classroom and parental support.
Language Development - <u>Vocabulary</u> develops more slowly; concrete vs. abstract, function words, multiple meanings (Example: "bank" can mean the edge of a stream or a place where we put money).
Language Development - <u>Sentence Structure</u> : children with hearing loss comprehend and produce shorter and simpler sentences, have difficulty understanding and writing complex sentences, such as those with relative clauses ("The teacher whom I have for math was sick today.") or passive voice ("The ball was thrown by Mary.") often cannot hear word endings such as -s or -ed affecting understanding and appropriate use of verb tense, pluralization, subject-verb agreement and possessives, etc.
<u>Speech</u> : Often cannot hear quiet speech sounds such as "s," "sh," "f," "t," and "k" and therefore do not include them in their speech, making speech difficult to understand. May not hear their own voices so volume, pitch, inflection and/or rate may be inappropriate.
<u>Academic</u> : May have difficulty with all areas of academic achievement, especially reading and mathematical concepts which are highly dependent on language development. Children with mild to moderate hearing losses, on average, achieve <u>one to four grade levels lower</u> than their peers with normal hearing, unless appropriate management occurs. Children with severe to profound hearing loss usually achieve skills no higher than the third- or fourth-grade level, unless appropriate educational intervention occurs early. The gap in academic achievement between children with normal hearing and those with hearing loss usually widens as they progress through school. The level of achievement is also related to parental involvement and the quantity, quality, and timing of the support services children receive.
<u>Auditory Skills</u> : Difficulty with the detection, discrimination & comprehension of sounds, exacerbated by background noise.
<u>Social-Emotional</u> : May miss subtle conversational cues, may miss peer interaction, impacting socialization and self-concept, and may be perceived as daydreaming or inattentive. Background noise = added stress. Socialization becomes difficult due to communication challenges. Poorer self-concept, social immaturity, and sense of rejection may result from negative feedback from adults and peers. May fatigue more easily, resulting in inattentiveness or inappropriate behavior. May be confused, annoyed or embarrassed about missing what was said. May develop undesirable coping strategies. Student is perceived by peers as less competent (equipment, accommodations) resulting in lower self-concept.
<u>Behavior</u> : Substantially higher incidence of behavioral issues in deaf children. Aplin (1987): Prevalence= 4.8-19.7% in mainstream settings and between 19.7 and 36.1% in residential settings (Possible reason??); Van Eldik (1994) boys, 6-11: 28.4% to 23.2, deaf to hearing; Hindley (1997) 43-50.3% among D/HH students

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### CRITICAL ACCESS ISSUES

Critical Access Issues	Factors to Consider
Language of Instruction	<u>Students with hearing loss may be:</u> Delayed in their language development. More literal and less flexible in their word comprehension. Able to recognize and even read a word accurately, and can define it in one sense, but may not understand the many applications a word may have in various contexts. Less capable in understanding complex sentences, particularly in background noise and/or when given inadequate processing time.
<i>Classroom directions</i>	<u>Classroom directions require:</u> processing the linguistic elements of the actual direction, sequencing multiple parts and completing the desired action in a context that maybe unfamiliar.
<i>Figurative language</i>	Tasks necessary to comprehend figurative language: Recognize that an analogy is being used. Compare any unknown material to known material. Interact with new material to recognize the similarities. Correct the initial interpretation to support comprehension. Requires reader to use cognitive processing skills, linguistic and nonlinguistic competencies and existing knowledge to comprehend.
<i>Vocabulary</i>	Average vocabulary of 18 year-old deaf student is comparable to that of a 9 year-old hearing child. General difficulty with abstract words, function words and those with multiple meanings.
<i>Question/ Answer Routines</i>	Stages of acquisition of question forms in students with hearing loss approximate those in their hearing peers, <u>the rate</u> at which these acquired forms develop is typically delayed. Add the <u>fast pace</u> of the general education classroom and the <u>lag in perceiving</u> the question if the student is using mediated communication (i.e., a sign language interpreter, transliterator or a captioner) and comprehending the question and responding appropriately is a formidable challenge.
Environmental Print	Conveys key concepts in classroom: Content/vocabulary, Rules and expectations, Examples/models of student work, Schedules, Assignments, Jobs.
Rituals & Routines	Classroom rituals and routines create a sense of predictability and stability. Support an environment in which students feel like they belong. Encourage students to feel confident and competent. Support appropriate social interaction and encourage development of friendships.
Test-taking	The availability of fair and appropriate testing formats and procedures is critical in allowing each student to demonstrate their strengths and deficits. Tests may be paper-and-pencil in nature or in the form of a performance such as a demonstration, presentation or product. The format must match the intended outcome i.e. If you are measuring the student's knowledge of social studies concepts, don't use a format that depends heavily on sophisticated reading comprehension tasks.
Textbooks	There is often a mismatch between readability of textbooks and student's reading comprehension level. If so, materials must be available in formats compatible with student's reading level.
Paper/Pencil Assignments	Questions to ask: Is the vocabulary used in written assignments familiar to student (e.g., Find..., Circle..., Match..., Give examples of...)? Is the length appropriate or should it be broken down into smaller steps? Is there an alternate format that would allow for more accurate demonstration of understanding? Are models needed and provided? Does the student require a rubric so he clearly understands teacher expectations? Does the student records all assignments in a planner? Does the student need resources to complete the assignment?
Class Participation/ Communication	The student's ability to "hear" and be heard is critical to academic success. Students learn as much from incidental opportunities such as group discussions and peer comments as they do from structured instruction. Components of classroom participation: Volunteering to answer/ask questions. Using strategies when not understanding or not being understood (communication repair). Appropriate social language/behavior. Most hearing aids and cochlear implants are designed to work best at a conversational distance of <b>3 – 6</b> feet. Students often tell us that they feel more confident in the ability to hear and understand their teachers than they do their peers.

### EVALUATION TECHNIQUES

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- Evaluating the student in light of his access to curriculum and instruction is a critical aspect in determining if his or her hearing loss is impacting the ability to make progress in the general education curriculum.
- To ensure access, teachers must consider how students' disabilities affect their involvement and progress in the general education curriculum and the programmatic or instructional supports needed to enhance involvement and ensure progress. **Access Denied is Opportunity Denied!**

### Evaluation Procedure

1. Determine why are you evaluating
2. Determine what you need to know (formulate questions)
  - a. Sensory: How does the student's hearing loss impact his classroom functioning, access, and participation?
  - b. Academic: What is the academic achievement of the student compared to typical peers?
  - c. Communication: How does the student's hearing loss affect his use of language in the classroom?
3. Figure out what info will answer your questions
4. Develop an evaluation plan; identify the tools
5. Collect (conduct evaluation), analyze the data and draw conclusions
6. Communicate results to student, parents and professionals
7. Apply results (e.g., modify program)

### Options for Determining Student Access: Informal Evaluation

Systematic classroom observations; Classroom comprehension checks; Parent, teacher, and/or student interviews; Homework completion record; Performance on weekly spelling, unit tests, etc. Written and expressive language sample analyses; Grades (assignment and report card); Work samples/student portfolios; Observation/evaluation of student sign language or cueing skills; Staff comments and observations; IEP periodic review statements; Informal checklists completed by teachers (e.g., LIFE-R).

**Interviews:** Task: compare target student to peers or siblings. Tools: Must address domain in which there are concerns. Must be quick and easy, especially to understand and use if in paper form.

### Systematic Observation:

Options: 1) A script of classroom interaction with post-observation analysis, 2) A simple record of student behavior, 3) A systematic peer comparison.

Classroom observations provide critical student data about: A. Understanding of classroom content and whether there is a need to consider an educational interpreter, transliterator, or a notetaker to increase the student's level of access. B. Eligibility for special education services according to established criteria (adverse educational affect). C. Documentation for present level of academic achievement and functional performance statements. D. Access to general education curriculum. E. Utilization of conversational repair strategies. F. Utilization of advocacy or compensatory skills. Learning and academic progress compared to other classroom peers.

### EVALUATION TECHNIQUES

**Method Selection** for systematic observation should be chosen based on data needed/concerns requiring addressing:

- ▶ To what extent did the student understand the main idea/details of the lesson? The vocabulary and/or language?
- ▶ Was the student an engaged and active participant during the lesson?
- ▶ If learning breakdowns occurred, what did the student do?
- ▶ Did the student appear to understand the directions that were given? Information presented orally by peers? By the teacher?
- ▶ What compensatory strategies did the student utilize? Visual cues?
- ▶ What were the student's social exchanges with peers?
- ▶ Did the student independently initiate work after an assignment had been given?

**Compare student  
performance to typical peers.**

Data Collection: use methods that will produce consistent and reliable data. Make sure resulting data is relevant. Several observations may be necessary.

Continuous Recording Method: Recording the behavior each and every time it occurs throughout a given time period. Record the frequency or the duration of a particular behavior (e.g., *Tyler turned to watch his peers offering oral responses 2/9 times or 22% of the time*).

Interval Recording Method: Recording the absence or presence of a pre-determined behavior within a series of time intervals; use when the behavior of concern occurs with such high frequency that continuous recording would be difficult to implement (e.g., *During Marianne's 45 minute math class on October 12, she attended to the interpreter 44% of the time. The longest interval of attending was 5 minutes*).

Time Sampling Method: The student is observed at the end of fixed intervals e.g. 10 sec., 1 min. The observer marks whether or not the behavior has occurred (e.g., whether the student is off task at the end of a 1 minute interval). Time sampling does not require constant observation (e.g., *in the morning it takes William 7 minutes to follow instruction after the teacher gives a direction. In the afternoon it takes William 4 minutes to follow an instruction given by teacher*).

Scripting and Analysis Method: record all utterances of the target (e.g., teacher, student, peers or all). After the class period, analyze according to desired outcome (e.g., how much of the teacher's instruction involved giving two to three-part directions?).

Informal Checklists: Using checklists is a quick way to obtain specific information in a repeatable manner. Checklists can be used: a) to inform the team of possible areas of concern that may need specific assessment, b) to raise teacher awareness of behaviors that may be affected by the hearing loss, c) to raise teacher awareness of reasonable expectations for the student, and d) over time as an indication of progress in skill development and/or use. Evaluating the student can point out gaps in teacher understanding. Using teacher-focused checklists can point out pertinent issues. Refer to *Supporting the Success of Students with Hearing Loss: A Self-Checklist for Classroom Teachers*.

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### EVALUATION SPECIFICS: Examples of Methods for Collecting Data

Language of Instruction Classroom directions	<p>Observation: <u>Scripting and analysis</u>: What kind of directions did the teacher give to the students? Give those same directions to the student under varying conditions (noise vs. quiet) and determine which directions provide difficulty, etc. <u>Continuous recording</u>: How many times did the student not follow the teacher’s directions within a specified class period? How did the student’s performance compare with peers? Informal Checklists: Checklist for Language of Directions Skills Development (example) Hierarchy of Language Directions: Basic one-step directions (Draw a circle); Expanded one-step directions (Find two different markers that are the color of apples.); Basic two-step directions (Pick up a book and give it to me.); Expanded two-step directions (Pick up the green car with three wheels and put it in the box.); Complex directions (Read the first paragraph, answer the odd questions and write your name at the bottom of the paper.).</p>
Figurative language and Vocabulary	Use observation-scripting: Record the figurative language and instructional vocabulary used during a specific timeframe or lesson. Test the student’s comprehension, as well as that of several peers, after the session and compare the results. Before the beginning of a unit, obtain the new vocabulary/language to be introduced and develop a matching test. Use the same test weekly and chart the results with the student to determine if progress is occurring (curriculum-based measurement). Design a project that will require the student to draw or manufacture in clay or other media a representation of the word or concept.
High level language targets	Assessing Language Competence and Selecting Targets - recommended assessment = The <u>Cottage Acquisition Scales for Listening Language and Speech</u> (CASLLS) charts language development; Curriculum guide for children birth – age 8; Targets increasingly complex syntactic structures; Often used beyond age 8 because most students with hearing loss do not have age appropriate depth and breadth of language to allow them to be competitive with average age peers; Preverbal, Pre-Sentence & Simple Sentence Levels to age 4 help define language gaps for lower kids. Another option for assessment: AuSpLan
Question/Answer Routines	Determine student’s level of language development using tools normed or based on students with hearing loss: EXAMPLES = a) Grammatical Analysis of Elicited Language (GAEL); b) KSD Kretschmer Developmental Questions Screening Test (KDQ); c) Teacher Analysis of Grammatical Structures (TAGS); d) Test of Relational Concepts-Deaf/Hard of Hearing (TRC-D/HH); e) Test of Syntactic Abilities-Screening (TSA). Determine the questions forms most typically used in instruction. Teach those forms not within the student’s current understanding or use.
Environmental Print	1. Determine student’s level of reading comprehension. 2. Survey the classroom’s posted print to determine the materials that are <u>critical</u> to successful classroom functioning. 3. Use a readability formula, as appropriate, to determine if text levels are compatible with students reading comprehension skills.
Test-taking	Consider the student’s performance on tests according to the following: Are question forms, vocabulary and syntax used in test items compatible with student language skills? Does the student have the requisite thinking skills such as compare, contrast, predict? Does the student have the memory skills to recall required information? Can the student organize his thoughts to demonstrate his content knowledge? Can the student express his thoughts in writing? Is the student’s spelling accurate enough to render clear responses? Can the student budget his time during the test? Will anxiety/fear get in the way of task completion? Has the student had experience with the particular type of test? Is the student familiar with grading criteria, especially in essay exams? Does the student’s physical well-being support optimal performance?
Classroom Rituals & Routines	Use “observation-continuous recording.” Determine how often the student is participating appropriately in a given ritual or routine. Be sure to chart similar data on several peers to provide a frame of reference for what should be expected.

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<b>EVALUATION SPECIFICS: Examples of Methods for Collecting Data</b>	
Textbooks	Determine student's reading comprehension level. Interview teachers and service providers re: other potential challenges. Examples: motor issues = managing the pages of large textbooks difficult; colorblind = deciphering charts challenging; ADHD = attending to lengthy paragraphs counterproductive; vision = requires at least a 14-point font. Survey classroom texts to determine if there is a match between student's abilities and textbook readability.
Paper/Pencil Assignments	"Teacher Interview" will disclose useful information re: optimal formats for supporting assignment completion: What types of written assignments produce the most accurate picture of the student's skills? Can the student complete regular assignments? With support? With modification? With increased time? What are the student's completion habits? On time? Incomplete? Inaccurate? What other formats have been tried with success? Computer-assisted? Product-based? Oral instead of written, etc.?
Class Participation/Communication	Use "observation" to determine the following: Participation rate compared to peers? Strategies or compensatory skills used? What does the student do when there are learning breakdowns? How does the student understand and utilize social language in the integrated setting? Are the student's use and understanding of social language competencies appropriate?

**Planning for success:** Once you have determined the student's vulnerabilities related to classroom access, you can identify accommodations and strategies to address those areas of need.

### STRATEGIES FOR IMPROVING ACCESS

Language of Instruction Classroom directions	Have a colleague observe classroom lessons to record the structures typically used in giving directions. Target the types of direction that need explanation as necessary to meet individual needs. Purposely teach the language related to the unfamiliar direction types. Frequently interject language easily understood by the student to foster comprehension and learning of the challenging language. Give the student multiple opportunities to practice carrying out directives in a variety of media and environments. Provide a peer listening buddy to help the student understand what he needs to do. Share the language of students are expected to comprehend with other service providers so that they can reinforce the terminology during their time with the student. Send home examples of those structures presenting specific challenges to the student and ask the parents to use similar language around the home to reinforce student understanding.
Figurative language and	Presentation of figurative language should be done sequentially: 1. Analogy, 2. Simile, 3. Metaphors with specific referents, 4. Metaphors with nonspecific referents. Use real objects, pictures and/or movement activities to illustrate meanings. Match complexity to student's linguistic development and background knowledge.
Vocabulary	Connect new vocabulary to previous learning. Pair vocabulary with visuals whenever possible. Use "sandwiching" - say the word, point at the printed word, say the word. Use "chaining" - say/sign/fingerspell the word, point at the printed word, and then point to a picture. Send home books the student has read in class so parents can review new vocabulary at home. Explain the meaning of new words before they are introduced in class. Provide students with opportunities to read a variety of materials which use the new vocabulary and encourage them to check out similar subject-information from the library. Use <a href="http://bookbuilder.cast.org/">http://bookbuilder.cast.org/</a> to create your own books and materials using target vocabulary. Send home books the student has read in class so parents can review new vocabulary at home. Conduct hands-on activities involving new vocabulary and concepts. Teach students cognitive or language strategies that will help them understand the vocabulary and related text (prediction, compare and contrast, recall, sequencing, inferencing, etc.). Assist students in developing a new vocabulary journal in which they record definitions and/or pictures which will help them remember the meaning when they encounter the word in a new context.

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### STRATEGIES FOR IMPROVING ACCESS

Question/ Answer Routines	<p>Explicitly teach the more commonly used question forms: Wh-questions: who, what, where, when, why; Comparing/contrasting: How are these different? Predictive: What would happen if...? Evaluative: Do you agree about...? Can you explain...? Ask questions consistently across content areas and in a variety of situations and environments. Help the student analyze what type of response is expected (e.g., open-opinion versus closed-factual). Provide examples of acceptable responses. <u>Give adequate wait time</u>, allowing the student to not only hear the question, but to process the components and formulate an answer. Provide <u>multiple opportunities for guided practice</u> until the student is confident of his ability to participate accurately in lessons requiring response to a variety of question formats. Use question forms sequentially when possible that are developmentally appropriate: <b>Remember</b> (In what year...); <b>Understand</b> (Why was...); <b>Apply</b> (How did...); <b>Analyze</b> (What are the differences between...); <b>Evaluate</b> (What do you think...); <b>Create</b> (What changes would you make...).</p>
Environment al Print	<p>Develop background knowledge and utilize the visual modality: Make sure every student clearly understands the purpose behind each piece of printed material. Add pictures (real-life whenever possible) to provide clues about content. Give the student multiple opportunities to practice reading the materials independently and with you. Provide a peer reading buddy, so they can read printed materials together and discuss their meaning and application. Ensure a match between reading materials and the student's background knowledge and linguistic development: Use a variety of language structures in posting environmental print, ensuring that many are at the reading level of the student. Make sure at least some of the printed materials represent the student's culture and experience. Familiarize the student with the new information necessary to comprehend the materials displayed. Send home the materials, when possible, so students can share the print with their families.</p>
Test-taking	<p>Provide alternate tests if necessary by creating the text of the test at a reading level that is easily understood by the student with hearing loss. You want to measure the student's understanding of the content, not on his reading comprehension, unless you are specifically testing those skills. Provide the student with a study guide prior to the test so that he can focus his time and energy on the targeted subject matter. Know your student and recognize signs of illness, fatigue and/or stress and adjust the testing situation to accommodate these situations to ensure validity and reliability. If your student has memory problems, allow him to use reference materials or notes. Provide a rubric with expectations for organization, format, references, etc. Remind the student periodically about the amount of time left to complete the test. Providing a visual is sometimes less intrusive or stress-inducing than a verbal reminder.</p> <p>Use consistent testing formats across content areas to provide multiple opportunities for the student to become comfortable with assessment design and apply learned strategies that support accurate responses. Caution: Use data from a variety of evaluative sources to ensure that you are truly evaluating the student's knowledge of the content rather than their reading comprehension or their ability to give essay-type responses, etc.</p>
Classroom Rituals & Routines	<p>Structuring the activity so all students feel they can fully participate is essential to ensuring positive outcomes: Start out with simple, short routines. Increase routine number and complexity as the student's ability to participate increases. Pre-teach the language you will be using in your routines. Use pictures to support comprehension. Provide a visual reminder, such as a picture of the activity in stages or a list of what to do when. Review of the activity prior to its start to help all the students in the classroom experience success. For those students unable to participate verbally, support their participation through signing or allow them to provide a rhythm accompaniment (musical instruments, hand-clapping, flag waving, etc.). Allow other children to do the same so that the student with hearing loss doesn't feel singled out. For those routines involving a memorized song, poem, rhyme, etc., send the text home to be practiced with family members. Keep the classroom rituals and <u>routines as consistent and predictable as possible</u>, until all students are fully engaged.</p>
<b>STRATEGIES FOR IMPROVING ACCESS</b>	

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Textbooks	<p>Questions for planning what and how the student will learn from the textbook: What do I want the student to know after reading the text? What language structures and vocabulary do I need to pre-teach to enable the student to comprehend the content? What visual or other aids included in the textbook will assist the student in understanding the text? Give the student a study guide, graphic organizer or outline that highlights the important content and supporting information. Allow the text to be read in a group, either by the whole class, in a small study group or with a peer. Avoid asking the student to read the text aloud to the class unless you are sure that he can do so comfortably. Highlight key concepts or facts in the text prior to the student reading it. Use games to increase understanding such as Round Robin, Jeopardy, or computer-based games. Many textbook publishers offer alternate materials including reduced-demand texts, auditory delivered versions, or adapted supplemental materials for learners with language challenges. These content-specific materials are created for special needs and are also great time savers for busy teachers. If a simplified version of the text is not available from the publisher, rewrite important text at the student’s level of understanding. Use maps and charts from the original text to aid in comprehension.</p>
Paper/ Pencil Assignments	<p>Break assignments down into smaller steps e.g., Cut a worksheet in half and give the student one part at a time to facilitate completion. Provide an alternate format (adapted language and vocabulary). Use language at the student’s level (instead of using, “Define...,” use, “What does ____ mean?”) or allow the student to match the word with a simply-stated definition. Provide a model of the desired outcome whenever possible. Supply a rubric when appropriate so the student clearly understands teacher expectations. Make sure the student records all assignments in a planner in enough detail to support accurate completion at a later time or at home. This is especially important in families where parents may not read and therefore cannot provide their child with additional support. Allow the student with hearing loss to work cooperatively with a peer to complete the assignment. Let the student answer assigned questions orally rather than in writing. Identify the resources the student may use to complete the assignment, i.e., dictionary; posted resources; internet; textbook</p>
Class Participation/ Communication	<p><u>Participation and Communication:</u> Set up the room to support visual access for all students (e.g., student desks in a U-shape). Provide incentives for positive lesson involvement (e. g., stickers or charts). Make sure everyone gets an equal opportunity to respond. Slow down pace of discussion to give this student time to process and respond. Role-play what positive participation looks like. Allow for varied means or response, e.g., holding up a card; clickers; standing up/sitting down, etc.</p> <p><u>Evaluate:</u> Are key strategies to communicate in place? Is the student able to access peer discussion? Results of comprehension checks? Becoming an effective communicator is a long process for students and requires modeling, praise and encouragement from teachers.</p> <p><u>Physical arrangements:</u> When classmates are arranged in a circle or semi-circle arrangement, the student has visual access to all classmates and it is easier to track speakers. A horseshoe arrangement is preferred over rows. Move desks into a horseshoe for discussion and rows for lecture.</p> <p><u>Speaking Rules:</u> Have a system in place for turn-taking to control the pace; only one person at a time. Encourage them to make eye contact and to speak in a loud, clear voice. Ask students to stand so they can be seen more easily from across room. Teach older students to answer in a complete sentence; rule for group communications – don’t accept one-word answers. Older students can practice summarizing what the previous student said before adding new comments.</p> <p><u>Listening Rules:</u> Maintain a quiet environment; wait for quiet before speaking (teachers model this). Make eye-contact with the speaker. Establish what students should be listening for – and ready to respond to – in a given activity. Example: sharing time for younger students might involve students choosing three specific things to tell related to an item brought from home. Teacher calls on students randomly to check listening: “Sammy, who gave Sue the doll?” “Mary, how old was Sue when she received the doll?”</p> <p><u>Peer comments – repeat &amp; rephrase:</u> Having teachers who repeat or rephrase comments and questions from other students is <u>vital</u> to their ability to understand class discussions. “Susie is saying that...” “Johnny has a question about...” Identify the speaker and provide</p>



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<p>Class Participation/ Communication continued</p>	<p>students with a second opportunity to hear what a classmate shared. By listening to your rephrasing, students can either confirm that what they heard was correct, fill in pieces that were missed, or correct what was misheard.</p> <p><u>Use of FM technology:</u> FM – teacher uses a microphone transmitter; her voice is received at the child’s ear. Teacher can use her transmitter and have a second pass-around microphone to use during class discussions. It also helps to control pace of the discussion and makes it easier for the student to locate each speaker. A lapel mic can be clipped to a ruler, making it easier for the teacher to aim the mic near the student who is speaking. Small group discussion – the microphone should be placed on center of the table. Easing the task of older students taking the microphone from class to class: Students can slip the FM mic over their own neck. Carry the transmitter in a special bag, purse or zip it into a pencil case. Another great idea is to have a friend wear the FM transmitter allowing the student to enjoy better access to conversation while moving from class to class in noisy hallways.</p> <p><u>Peer comments – MODEL:</u> Model how to wait for quiet in the classroom before speaking. Model how to ask for clarification: “Your voice was a little soft. Could you please say that again?” “I heard what you said about _____ but missed the second part of what you said. Can you please repeat?” Encourage students to ask for clarification if you see puzzled faces during discussion.</p> <p><u>Participation – Group Activities:</u> Without a structure in place, communication can become a free-for-all and impossible for students with hearing loss to follow: Assign each student a specific role and rotate responsibilities. Limit the number of students in the group. Many find working with one partner makes following conversation much easier. Some students have been able to identify a core group of peers who are sensitive to their communication needs and are successful in working in a group with them over time. Allow the student and his group to move to a quieter location if space allows. Remember – hearing aids amplify ALL sound!</p> <p>Provide students with sentence starters and require that they use them: “I agree/disagree with you because...” “I think that...” “I feel that ....” “Do you think...?” “I wonder if ...” Require that only one person speak at a time, using a ‘talking object’ to control conversation flow. Try non-verbal strategies for responding: Color-coded paddles or cards (red &amp; blue) where one color means “I agree” and the other “I disagree”. The cards can be used to keep the noise down when multiple groups are working. Each student has a set number of objects (i.e. 3 marbles) to share at least this many ideas. Each time a student shares an idea they place one item in a cup in the center of the group. Rotate who will be “reporter” for the group that the teacher will call on.</p>
<p>General Strategies</p>	<p><u>Make sure students know what and how they are expected to learn</u> by: previewing new topics and showing how the new material fits in with parts already learned, being explicit about what you expect students to learn from a lecture, summarizing the main points and making clear how that topic will be assessed. Integrate instructions on how to learn the content. Design the workload so that students have time to reflect on what they have learned, see how it fits in with their previous learning and experience, and work out what they need to learn next.</p> <p><u>Help students see the relevance of their learning</u> to broader personal and vocational goals. Provide opportunities for students to relate what is taught in class to their own experiences and values. Demonstrate your interest and enthusiasm for your subjects of interest.</p> <p>Provide adequate feedback on how students are progressing with their learning.</p> <p><u>Students may also learn best when:</u> They have some choice about what and how they learn. Where possible, provide short "electives" within a subject, and introduce a variety of learning tasks – project work, problem-based and resource-based activities. They can talk through the material with other students or a tutor. There are many benefits to be gained from shared experiences in learning. They can apply their learning in a practical or vocationally relevant way. Project work can take into account various career or further study options available. They are able to move from the concrete to the abstract. In instruction, always begin with examples or applications of theory to "real life" situations, and then move to discussion of the more abstract ideas</p>

**Two-Pronged Approach to Addressing Access Issues:** Student focused and teacher focused. Educate the classroom teacher on: Impact of hearing loss on learning; Environmental accommodations; Use of equipment; Social/cultural considerations; Communication strategies; Access issues.

### Now it's your turn...

You are an itinerant teacher of the Deaf/Hard of Hearing and you are observing your student during a classroom "Ritual and Routine", the morning meeting.

Answer the following:

What barriers would your student encounter during this session?

How has this teacher adapted the session to make it work for the student with hearing loss?

What would you do to improve your student's access to this lesson?

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