



















# EDUCATION

Introduction	67
Creating a DHH-Friendly Environment	68
■ Environmental Adaptations 	69
■ Facilitating Communication 	70
■ Classroom Management 	71
■ Classroom Assessment Adaptations 	72
Assessment	73
■ Classroom-Based Assessment	73
■ Specialized Assessment	73
Student-Specific Planning	74
■ Student-Specific Outcomes	75
■ IEP Domains	75
■ Programming Review	78
Strategies for the Classroom	79
■ Supporting Communication Approaches 	80
■ Developing Communication Skills—ASL 	81
■ Developing Communication Skills— Listening and Speaking 	82
■ Vocabulary and Concept Development 	83
■ Home–School Connections for Developing Vocabulary and Concepts 	84
■ Developing Language Skills—Directions, Questions, Storytelling 	85
■ Developing Theory of Mind Skills 	86
■ Developing Critical Thinking Skills 	87
■ Developing Executive Functioning Skills 	89
■ Higher-Level Reasoning Skills	91

<b>Literacy Skills</b>	92
■ Areas of Potential Difficulty in Reading and Writing	92
■ Bridging the Language Gap during Language Arts Instruction	93
■ Language and Literacy Strategies Used by Teachers of the Deaf and Hard of Hearing	95
■ Specific Areas of Potential Difficulty 	96
■ Suggestions for Reading with Students Who Are DHH 	97
■ Reading Goals 	98
■ Suggestions for Writing with Students Who Are DHH 	99
<b>Inclusion for Students Who Are Using ASL</b>	100
■ Differentiated Instruction for Students Who Are Using ASL	100
■ Reading and Writing with ASL	102
■ Suggestions for Reading with Students Using ASL 	103
<b>Supports for Students Who Are DHH</b>	104
■ Tutorial Sessions	104
■ ASL-English Interpreting	105
■ Oral Interpreting	109
■ Computerized Notetaking	109
<b>Supports for Students Who Are DHH with Additional Needs</b>	111
<b>Supports for Students Who Are Deafblind</b>	112
<b>Transitioning</b>	113
■ Transitioning Students from Preschool to School	115
■ Transitioning Students from High School to Post-Secondary Education	116
■ Transitioning Students from High School to Community	116



## Introduction

Hearing loss can affect the way

- the student communicates
- the student learns language
- the student receives information
- the student demonstrates learning
- the teacher assesses learning

Language skills often affect the student's ability to meet curricular outcomes. Students with language delays may require adaptations to accommodate their learning needs.

The characteristics and needs of students with hearing loss have changed over time:

- Increasing numbers of students are receiving cochlear implants.
- Fewer students are using ASL than in the past, due to improved technology and increased access to sound.

- Surveys indicate that 35 to 50 percent of students who are DHH have an additional, educationally significant condition or disability (Marschark and Spencer 171).
- Newcomer students in Manitoba are often being identified as having significant hearing losses. These students often have not received amplification or intervention services and often have limited or no language skills. Programming appropriately for these students poses a great challenge for schools, and both students and families require intensive supports.

The communication and educational needs of students need to be considered, and appropriate supports put in place to address them.

This section will provide information about how to make classrooms and teaching practices more friendly and appropriate for students who are Deaf or hard of hearing.

## Creating a DHH-Friendly Environment

Students with a hearing loss may face many challenges in an educational setting.

Classrooms are language-rich listening environments, but they are also large and noisy. Children with mild hearing loss may be able to understand their teacher or classmate on a one-on-one basis; they may be able to follow class discussions with the assistance of technology. Still, they cannot reliably access the incidental learning that takes place in every classroom. They may miss a response from a student across the room, a comment from the teacher about an incorrect answer, or a new topic raised as the teacher writes on the blackboard. (Meyer 20)

Adaptations are supports provided to students to assist their learning. They are required for the students to achieve most of the curricular outcomes prescribed by Manitoba Education.

Students who are DHH may benefit from environmental adaptations and strategies for facilitating communication, classroom management, and classroom/assessment adaptations. The four handouts that follow give suggestions to help provide an effective learning environment for all students in the classroom.



### Comments from Students Who Are DHH

"I hate it when. . .

- ". . . I don't hear something and people say 'never mind,' 'tell you later,' or 'it's not important.'"
- ". . . I can't hear people during group work when it is noisy in the classroom. I just tune out!"

Please take the time to include students by rephrasing, repeating, or providing a visual cue.


## Environmental Adaptations

Target	Strategies
Minimize Noise	<ul style="list-style-type: none"> <li>■ Treat the room: use muffling devices (e.g., “Hushh-ups” or “Floor Friends”) on chair and table legs, add carpet, add room dividers, hang cloth banners/crafts, and so on.</li> <li>■ Encourage quiet in the classroom.</li> <li>■ Reduce auditory “clutter” (e.g., no background music, close windows and doors).</li> <li>■ Seat the student away from noise sources (e.g., fans, computers, outside traffic, pencil sharpener).</li> </ul>
Maximize Speaker’s Voice	<ul style="list-style-type: none"> <li>■ Use a wireless audio system if available.</li> <li>■ Encourage peers and guest speakers to use the sound system microphone, and pass the microphone in group discussions (to help visually identify the speaker and provide clearer communication).</li> <li>■ Move closer to the student with a hearing loss.</li> </ul>
Maximize Visual Access	<ul style="list-style-type: none"> <li>■ Ensure good lighting—keep the room bright enough for students to see speaker’s face.</li> <li>■ Do not stand in front of a bright window when talking, as this will put your face in a shadow.</li> <li>■ Face the class as much as possible, and minimize walking around the room while speaking.</li> <li>■ Stop talking when turning to write on the board.</li> <li>■ Face the students while giving notes—use overhead projectors or electronic whiteboards.</li> <li>■ Preferential seating should be available—allow students who are DHH to choose where they see and hear best.</li> <li>■ Circular or semicircular seating arrangements provide visual access to information.</li> <li>■ Use visual aids (e.g., maps, objects, pictures, charts, vocabulary word wall, concept maps, written key ideas, daily schedules, lesson outlines).</li> <li>■ Use closed-captioning (CC) when viewing videos, DVDs, and TV programs. Use CC or SDH (subtitles for the Deaf and hard of hearing), which provide background sounds in addition to regular subtitles.</li> <li>■ Use flashing lights for safety alarms. Establish a visual system (signal, text) for emergency situations (e.g., lock down) for students with significant hearing loss.</li> </ul>
Reduce Auditory/Visual Fatigue	<ul style="list-style-type: none"> <li>■ Be aware that students who focus intently on auditory information all day may need brief auditory breaks, while those who focus visually (e.g., on speechreading, watching ASL interpreter) may need brief visual breaks.</li> </ul>



Circular or semicircular seating works best. It allows students to see one another, more easily identify the speaker, and better follow the conversation/discussion.

## Facilitating Communication

Target	Strategies
Reduce Auditory Fatigue	<ul style="list-style-type: none"> <li>■ Alternate heavy listening demands with quiet activities.</li> <li>■ Keep instructions short and clear.</li> <li>■ Speak at a normal volume and rate.</li> <li>■ Pause between statements to emphasize key concepts.</li> <li>■ Some students may require extra processing time.</li> <li>■ Allow downtime privileges if needed (e.g., a quiet place to go).</li> </ul>
<p data-bbox="261 531 544 562">Communicate Clearly</p>  <p data-bbox="261 787 544 955">Locating the speaker in large classrooms is difficult—call students by name or point to indicate who is speaking.</p>	<ul style="list-style-type: none"> <li>■ Get the attention of the student prior to beginning a lesson or group discussion (e.g., wave, turn lights off/on once, gently tap the table, or touch the student’s shoulder).</li> <li>■ Ensure that only one student speaks at a time.</li> <li>■ Identify the person speaking—call students by name or point to indicate who is speaking.</li> <li>■ Encourage all students to turn and look at the speaker when listening.</li> <li>■ Repeat or rephrase other students’ comments.</li> <li>■ Students who are DHH may become lost when rapid topic changes occur during the lesson—draw attention to changes in topic, so that the student can contribute to the discussion.</li> <li>■ When talking about an object, or someone in the room, glance or point in that direction.</li> <li>■ If a student is reluctant to ask for clarification, create a “secret signal” for the student to use.</li> <li>■ A smaller group of students, in a quiet location, will allow students to have more opportunities to effectively access communication, to feel included, and to share ideas.</li> <li>■ Use technology. Open, closed-, or real-time captioning can be helpful for all students.</li> <li>■ Maintain good eye contact, speak clearly, and write down important information.</li> </ul>
Optimize Visual Environment for Students Who Use ASL	<ul style="list-style-type: none"> <li>■ Have a visually uncluttered environment.</li> <li>■ Wear clothing with minimal or no pattern.</li> <li>■ Minimize jewelry worn.</li> <li>■ Provide good sightlines between students and interpreter or signer.</li> </ul>



Hearing children passively absorb essential daily information by overhearing conversations, as much as 90 percent of their learning. (Chotiner-Solano)

## Classroom Management

Strategy	Description
Professional Learning	<ul style="list-style-type: none"> <li>Ask the teacher of the Deaf and hard of hearing to provide professional learning opportunities on hearing loss and communication strategies for peers and staff early in the school year.</li> </ul>
Routines	<ul style="list-style-type: none"> <li>Establish schedules and routines, notifying students of any changes.</li> </ul>
Listening	<ul style="list-style-type: none"> <li>Make listening a class issue rather than singling out the student who is DHH.</li> </ul>
Organized Material	<ul style="list-style-type: none"> <li>Provide class material that is well organized and easy to follow, and that connects to a well defined goal.</li> </ul>
Announcements	<ul style="list-style-type: none"> <li>Jot down announcements on the board or request a printed copy from the office. Repeat intercom information for the class.</li> </ul>
Interpreter or Computerized Notetaker	<ul style="list-style-type: none"> <li>Use an ASL-English interpreter or a computerized notetaker as needed.</li> </ul>
Hands-On Learning	<ul style="list-style-type: none"> <li>Use visual aids and hands-on techniques.</li> </ul>
Group Work	<ul style="list-style-type: none"> <li>Teach in small groups.</li> </ul>
Community	<ul style="list-style-type: none"> <li>Develop strategies to promote friendships among students—this will help all students feel that they are valued members of the classroom community.</li> </ul>
Test Preparation	<ul style="list-style-type: none"> <li>Prepare students for test formats by providing sample tests for tutors and/or family to review. Do the same for difficult worksheets, particularly story problems in mathematics.</li> </ul>
Team Communication	<ul style="list-style-type: none"> <li>Keep the team apprised of progress by making a short comment or two at the end of the day using a notetaker and/or a communication home-school notebook for younger grades.</li> </ul>
Awareness	<ul style="list-style-type: none"> <li>Be sensitive to a lack of incidental learning opportunities. Lack of incidental language learning experiences is reflected in all aspects of the curriculum.</li> </ul>
Openness	<ul style="list-style-type: none"> <li>Be open and candid, and maintain a sense of humour.</li> </ul>
Participation	<ul style="list-style-type: none"> <li>Expect participation from students who are DHH in the same manner as from other students in the class.</li> </ul>



Write down key ideas.



## Classroom/Assessment Adaptations

<b>Classroom/Assignment Supports</b> (Check all that apply)	<b>Assessment Supports</b> (Check all that apply)
<input type="checkbox"/> preferential seating <input type="checkbox"/> visual attention getters/transition strategies <input type="checkbox"/> frequently varied activities <input type="checkbox"/> material sent home to preview <input type="checkbox"/> pre-taught/post-taught lesson <input type="checkbox"/> comprehension checks <input type="checkbox"/> educational assistant support in most classes <input type="checkbox"/> interpreter support in most classes <input type="checkbox"/> computerized notetaker support in most classes <input type="checkbox"/> scribe support in most classes <input type="checkbox"/> use of calculator <input type="checkbox"/> small group support <input type="checkbox"/> audiotapes/materials read <input type="checkbox"/> use of large print materials <input type="checkbox"/> use of alternate reading materials <input type="checkbox"/> photocopied notes/test <input type="checkbox"/> fewer paper-and-pencil tasks <input type="checkbox"/> highlighted notes/text <input type="checkbox"/> directions given in small steps, repeated by student <input type="checkbox"/> reduced/minimized distractions <input type="checkbox"/> redirection/refocusing <input type="checkbox"/> written backup for oral directions <input type="checkbox"/> modelling of friendship skills/support for social skills development <ul style="list-style-type: none"> <li>■ concrete reinforcement</li> </ul> <input type="checkbox"/> use of assistive technology <ul style="list-style-type: none"> <li>■ hearing aid(s)</li> <li>■ cochlear implant(s)</li> <li>■ bone-anchored implant</li> <li>■ computer or tablet</li> <li>■ wireless audio system</li> <li>■ soundfield system</li> <li>■ dictation software</li> </ul> <input type="checkbox"/> extended time for completion of assignments <input type="checkbox"/> manipulatives <input type="checkbox"/> use of graphic organizers taught <input type="checkbox"/> tutoring/peer tutoring <input type="checkbox"/> shortened assignments <input type="checkbox"/> reduced amount of homework <input type="checkbox"/> assistance with organizational skills <input type="checkbox"/> reduced/adapted reading level of materials <input type="checkbox"/> written daily schedules <input type="checkbox"/> augmentative communication system <input type="checkbox"/> directions repeated by student <input type="checkbox"/> opportunities for socialization <input type="checkbox"/> specific use of student's learning style <input type="checkbox"/> behaviour contract <input type="checkbox"/> other (specify) _____	<input type="checkbox"/> use of vocabulary sheet <input type="checkbox"/> use of calculator <input type="checkbox"/> use of dictionary <input type="checkbox"/> opportunities for breaks <input type="checkbox"/> enlarged print size/specific font <input type="checkbox"/> extended time <input type="checkbox"/> simplified wording <input type="checkbox"/> test/exam review <input type="checkbox"/> practice questions <input type="checkbox"/> provide clarification <input type="checkbox"/> test read to student/oral testing <input type="checkbox"/> open-book exam <input type="checkbox"/> scribe assistance <input type="checkbox"/> shortened test <input type="checkbox"/> clues provided <input type="checkbox"/> taping of test <input type="checkbox"/> alternative assignments/project in lieu of test <input type="checkbox"/> alternative methods to demonstrate mastery of content <input type="checkbox"/> permitting rewriting/resubmission to improve grades <input type="checkbox"/> repeated modelling/practice <input type="checkbox"/> use of pictures <input type="checkbox"/> use of manipulatives <input type="checkbox"/> use of webbing/mapping/brainstorming <input type="checkbox"/> alternative setting <input type="checkbox"/> take-home exams <input type="checkbox"/> use of actual test as study guide <input type="checkbox"/> use of assistive technology <ul style="list-style-type: none"> <li>■ hearing aid(s)</li> <li>■ cochlear implant</li> <li>■ bone-anchored implant</li> <li>■ computer or tablet</li> <li>■ wireless audio system</li> <li>■ soundfield system</li> <li>■ dictation software</li> </ul> <input type="checkbox"/> preferential seating <input type="checkbox"/> adapted format (multiple choice, fill in the blanks, etc.) <input type="checkbox"/> explicit teaching of how to take tests <input type="checkbox"/> other (specify) _____ <input type="checkbox"/> _____



## Assessment

### Classroom-Based Assessment

Assessment is a regular ongoing process in every classroom. Effective assessment practices include using a variety of tools and methods, such as classwork, tests, developmental checklists, and portfolios of student work.

Assessments for students who are DHH will be similar, but may require adaptations. Examples of assessment adaptations are

- clarifying directions
- providing a quiet room for tests
- allowing a longer period of time for exams or tests
- providing verbal or signed tests and assignments
- providing alternative ways to test knowledge other than written

When assessing students who are DHH, ensure that you are using language at the student's level. Test academic knowledge, not language skill. For example, the student may know the science concept but may not understand the complex English language sentence used in the test question.

### Specialized Assessment

Assessments are often conducted with students who are DHH in order to establish a baseline of receptive and expressive skills. Formal assessments in areas such as cognitive, language, speech, and auditory skills are done by a specialist such as an SLP, a TDHH, an AV therapist, an ASL specialist, an audiologist, or a psychologist. Any assessment of students who are DHH includes consideration of their primary communication mode and, if appropriate, their hearing age versus chronological age.

All the areas of communication, speech, and language that were discussed in the Communication section can be assessed using specialized tests (e.g., vocabulary tests, language tests, reading and writing tests, and articulation tests). The purpose of this testing is to measure the progress students are making and, in the case of **standardized tests**, to compare their achievement to that of other students of the same age or grade level.

The specialists conduct an initial assessment to establish a baseline of skill level in specific areas. Follow-up assessments will reveal progress and areas requiring further development. Assessments are also used to

#### Standardized tests

are "carefully constructed measurement instruments that require specially trained individuals to ensure they are properly selected, interpreted, and used" (Manitoba Education, Citizenship and Youth, *AEP: Handbook for Student Services* 79).



*Appropriate Educational Programming in Manitoba: Standards for Student Services* (Manitoba Education, Citizenship and Youth) is available online at [www.edu.gov.mb.ca/k12/specedu/aep/pdf/Standards\\_for\\_Student\\_Services.pdf](http://www.edu.gov.mb.ca/k12/specedu/aep/pdf/Standards_for_Student_Services.pdf)

- identify gaps between curriculum goals and the student's skills
- identify specific skill areas requiring further development (IEP goals)
- measure the effectiveness of tutorial goals and the appropriateness of materials

In some cases, resource teachers or special education teachers might also do some testing with students who are DHH.

Students with a hearing loss may require adaptations (e.g., the use of signed language, support of pictures or gestures) during standardized assessments to accommodate their learning needs. In addition, the results of testing must be interpreted with caution because the tests are not developed specifically for students who are DHH.

The specialists in this area will interpret test results and provide information to help the classroom teacher work with students in the classroom and to help parents work with the students at home.

The school support team or specialists can provide further information regarding information about assessing communication skills in students who are DHH.

## Student-Specific Planning



*Student-Specific Planning: A Handbook for Developing and Implementing Individual Education Plans (IEPs)* (Manitoba Education and Training) is available online at [www.edu.gov.mb.ca/k12/specedu/iep/](http://www.edu.gov.mb.ca/k12/specedu/iep/).

Student-specific planning is the process through which members of student support teams, including educators and parents, collaborate to meet the unique needs of individual students. The purpose of student-specific planning is to help students attain the skills and knowledge that are the next logical step beyond their current levels of performance. Through the student-specific planning process, the student support team works to identify a student's learning needs and to develop, implement, and evaluate appropriate educational interventions.

*Student-specific plan (SSP)* is a global term referring to a written document developed and implemented by a team, outlining a plan to address the unique learning needs of a student. An SSP is a document that functions as a planning, record-keeping, and communication tool.

SSPs for students who require adaptations within programming based on provincial curricula can often be completed in one or two pages. This may be an appropriate plan for a small number of students who are DHH.

The majority of students who are DHH, however, even if they are following the regular curriculum, have more complex needs. They require student-specific outcomes in domains outside of the provincial curriculum and thus require a more detailed and comprehensive SSP called an **individual education plan (IEP)**.

An IEP is tailored to the individual student's needs in the school environment. When trying to decide which areas to address in programming for a student with a hearing loss, consider the following:

- educational implications of the student's hearing loss
- teacher observations/student's classwork
- verbal/ASL/written expression
- formal assessments (from SLP, **psychologist**, ASL tutor, **occupational therapist [OT]**, **physiotherapist [PT]**)
- student's values and goals
- parents' values and goals for the student
- age appropriateness
- urgency of the need
- social development

The focus of an IEP for a student who is DHH is typically on communication, language acquisition, identity, and socio-emotional development.

## Student-Specific Outcomes

The student's current level of performance in each targeted domain is described in the IEP and is used by the team to

- select appropriate **student-specific outcomes**
- determine ways to adapt materials, instructional strategies, and assessment procedures
- assess student progress (see Red Flags chart on page 78)

The student's levels of performance when the IEP is developed serve as a baseline for assessment when the IEP is reviewed.

## IEP Domains

Depending on the individual student, some or all of the following areas of need might be addressed in the IEP:

- language—English, ASL (e.g., speech, vocabulary, grammar, pragmatics [social language], higher level language skills needed to develop reasoning, Theory of Mind, executive functioning)
- basic concept knowledge (e.g., quantity, size, directions, time, prepositions)
- listening skills (e.g., awareness/comprehension of sound, following directions)
- social skills (e.g., classroom routines, social rules, demonstrating responsibility, respect, problem solving, helping peers understand hearing loss)

### Student-specific outcome

is a term used for "goal" in an IEP for a student; it states what the student will learn, when this will be accomplished, and how the goal will be met.

## Domains

are specific areas of development that might be targeted in the IEP. Examples of domains include communication, social, independent living, and motor skills.

- independence, self-advocacy, identity (e.g., hearing aid use and maintenance, requesting repetition/clarification, stating needs as a person who is DHH, identity as a Deaf or hard of hearing person)
- other areas as needed (e.g., behaviour, occupational therapy, physical therapy)

In developing the IEP, teams prioritize and categorize the identified needs into **domains**.

## Communication Domain

The communication domain is often the main area of need for students with hearing loss, regardless of the student's age. The SLP, TDHH, AV therapist, ASL specialist, Deaf ASL instructor, or audiologist may suggest focusing on the following areas (these are suggestions—goals may vary, depending on individual student needs):

- Vocabulary
  - Early Years: directions and language of instruction, classroom, weather, holidays, adjectives/adverbs, basic concepts, curriculum
  - Middle and Senior Years: curriculum, language of instruction, current events, peer-related language (e.g., current slang, relevant social media, famous people in the news)
- Speaking Skills
  - All ages: speech sounds, voice quality, volume, intonation/pitch, rhythm/timing
- Grammatical Structures
  - Early Years: plurals, verb tenses, possessives, pronouns, question forms, adjectives/adverbs, different sentence types
  - Middle and Senior Years: clauses, passive voice sentences, hypothetical questions, writing paragraphs/essays
- Understanding/Use
  - Early Years: directions, idioms, multiple meanings, figurative language, humour, inferences, higher-level thinking skills, recognizing and correcting grammatical errors, Theory of Mind, executive functioning
  - Middle and Senior Years: opinion, sarcasm, persuasion, higher-level thinking and reasoning skills, Theory of Mind, executive functioning
- Pragmatics (may also fall in Social Skills Domain)
  - Early Years: take turns, start a conversation, maintain a topic, seek and give clarification, use appropriate register, retell information, interrupt appropriately, participate in a group

PCS = picture communication symbols

- Middle and Senior Years: use the “in” language of peers, respect others’ opinions, converse with the opposite sex, participate in clubs and teams
- American Sign Language
  - An ASL specialist or a Deaf ASL instructor may suggest development of the following areas: vocabulary, ASL grammar, handshapes, non-manual markers, classifiers, pragmatics, Deaf culture
- Augmentative Communication
  - Students who are DHH with additional needs may require a form of augmentative or alternative communication (e.g., PCS symbols, Boardmaker software, speech-generating device)
- Auditory Skills
  - awareness, discrimination, recognition, comprehension of sounds/voices
  - ability to detect and understand directions/sentences of increasing length and complexity in quiet and in background noise
  - ability to answer questions based on information provided orally only

### **Independent Living Domain**

The TDHH, AV therapist, or ASL specialist may suggest focusing on the following areas to develop student understanding of being a person who is DHH and to develop skills in independence and self-advocacy:

- Knowledge—Develop an understanding of own hearing loss and its implications, including
  - parts of the ear and how it works; cause of hearing loss
  - parts of the hearing aid/CI/wireless audio system and how they work, how they help, and their limitations
  - the audiogram; identify own hearing loss; understand that the audiogram does not always reflect communication ability
- Coping Skills/Self-Advocacy—Develop own independence and self-advocacy skills:
  - Use a variety of coping skills—request repetition/clarification, avoid/reduce noise, use amplification/appropriate seating/interpreter, cope with teasing.
  - Request communication accommodations as needed.
  - Become aware of and access community supports, agencies, and associations for individuals who are DHH.

- Amplification—Develop an understanding of how the equipment works:
  - Put the hearing aid/CI/wireless audio system on independently, and adjust the controls as needed.
  - Use and care for the equipment appropriately.
  - Indicate malfunctions and fix if possible.
- Identity—Build own self-concept, identity, and self-esteem:
  - Identify personal implications of hearing loss.
  - Interact with others who are DHH.
  - Learn about Deaf culture.
  - Discuss self-identity—Deaf, hard of hearing, or hearing? What is the difference? Students may identify themselves differently, based on the communication partner or situation (e.g., a quiet versus noisy environment, a gathering in the Deaf community).

Further information is available in the Identity section, pages 27 to 34.

Students may also have needs in other domains, which should be included in the IEP as required.

## Programming Review

A student’s programming, adaptations used, and the IEP should be regularly reviewed to monitor student progress. Changes can then be made as needed to ensure the development of skills in all areas.

The following chart provides suggestions as to how to respond when programming (classroom and/or student-specific) is not meeting the needs of the students.

<b>Red Flags</b>	
Questions to Ask	How to Respond
Has the student had a change in hearing acuity?	Refer the student to the audiologist for re-evaluation.
Is the student wearing hearing aids/CIs/ personal wireless audio system consistently?	Consult with the family/school to establish the need for consistent use of amplification.
Is the student making minimal progress (e.g., due to frequent absences from school or programming not meeting student’s needs)?	<ul style="list-style-type: none"> <li>■ Meet with school/family and establish need for consistent intervention and academic programming.</li> <li>■ Consider additional/alternative supports for the student (e.g., IEP review/revision, increased resource/ SLP/tutoring support).</li> <li>■ Consider alternative modes of communication (e.g., visual supports, AAC, ASL, SSS).</li> </ul>

## Red Flags (continued)

Are there additional concerns regarding development, behaviour, language/learning, oral motor skills therapy/speech, and/or family support?

- Refer to the clinical support team for assessment (i.e., SLP, psychologist, reading clinician, occupational therapist, physiotherapist, social worker, behaviour consultant).
- Assist the family in/develop supports for improving communication skills in the chosen mode (e.g., listening/speaking, AAC, ASL).



Lack of incidental language learning experiences is reflected in all aspects of the curriculum.

## Strategies for the Classroom

Even in a DHH-friendly environment, students with a hearing loss do not have access to the daily incidental language learning that hearing students have. This limited access is compounded if

- background noise is present
- the student receives limited benefit from amplification or does not use amplification consistently
- the ASL signer has limited skill
- the student has limited ability to interact with/learn from peers (i.e., has limited social skills)

Educators can be sensitive to this lack of incidental learning and provide more direct instruction whenever possible to help students in their acquisition of English grammar and to develop language knowledge and skills.

This section provides a variety of handouts outlining practical suggestions for developing different communication approaches, helping students acquire English grammar, building various listening and speaking skills, developing the everyday language knowledge and skills (such as vocabulary, following directions, Theory of Mind, critical thinking, and executive functioning) needed to succeed in the classroom.



Expect participation from students who are DHH in the same manner as from other students in the class.



## Supporting Communication Approaches

### Aided language stimulation

is a naturalistic technique in which a facilitator models ways that symbols can be used for communication.

### Adaptation

is a change made in the teaching process, materials, assignments, or student products to help a student achieve the expected learning outcomes.

#### ASL/EAL

To support the development of English as an additional language in the classroom, consider doing the following:

- Support the development of the students' first language.
- Incorporate visual supports in the classroom and curriculum.
- Make what is implicit explicit.
- Provide background information along with any new topics.
- Include teaching methods that encourage classroom conversations.
- Have students work in small groups.
- Hold one-to-one conferences with students.
- Work collaboratively with the teachers of the Deaf and hard of hearing.
- Allow translation between English and ASL to facilitate comprehension.
- Maintain students' motivation and self-concept by ensuring that they frequently experience success in classroom activities.
- Incorporate language and cultural role models (adult guests who are DHH) within the classroom/school.

#### AAC

Consider doing the following to use AAC effectively in the classroom:

- Encourage the use of the AAC system frequently and in all environments—at home, at school, and in the community.
- Use AAC in the early stages of language development, ASL or English, to facilitate growth.
- Use **aided language stimulation** techniques to enhance language growth.
- Create materials with picture communication systems (e.g., PCS or PIC symbols) for the student to actively participate in all curriculum areas.
- Classroom **adaptations** may include a labelled environment, adapted books, or adapted activities.
- Enhance literacy skills by using picture communication systems with the words printed under them.
- Encourage positive social interaction using an AAC system.

For more information, see pages 42 to 46 in the Communication section.



## Developing Communication Skills—ASL

The development of a student’s ASL skills should be encouraged. To facilitate this, the educational team could do the following:


- Involve the ASL/education consultant from Manitoba Education as part of the school team.
- Have the student participate in ASL tutoring sessions with a native ASL user such as a Deaf adult or the ASL/education consultant, and/or during video chats with other students who use ASL.
- Encourage the student to participate in activities where they can interact with peers and adults who use ASL (e.g., networking day, get-togethers, Deaf community events, City of Winnipeg *Leisure Guide* DHH youth group activities).
- Encourage students to participate in Deaf sports, camps, and leisure activities.
- Ask a Deaf adult and/or the student to host an ASL club in the school so peers can learn ASL.
- Have high school students take advantage of the ASL challenge for credit option.
- Develop the student’s ASL vocabulary and grammar.
- Play visually focused games.

## Developing Communication Skills—Listening and Speaking

Auditory Training	Speech	Oral Motor Therapy
<p>The development of the student’s auditory skills should be encouraged during all school activities. To facilitate this, the educational team could do the following:</p> <ul style="list-style-type: none"> <li>■ Enhance classroom acoustics. (See Environmental Adaptations handout on page 69.)</li> <li>■ Provide an alternative (quiet) location for activities that involve increased background noise (e.g., group or partner work, lunch).</li> <li>■ Identify and resolve barriers to communication (e.g., background noise, poor seating arrangement, multiple speakers, pace, lighting).</li> <li>■ Encourage the student who is hard of hearing to use communication repair strategies (e.g., “I heard _____”; “Did you say _____?”; “Please repeat.”).</li> <li>■ Encourage the student who is hard of hearing to understand their own hearing loss and amplification.</li> <li>■ Encourage the student who is hard of hearing to advocate for their communication needs.</li> </ul>	<p>Classroom strategies to support accurate speech production include</p> <ul style="list-style-type: none"> <li>■ responding to the content of the message</li> <li>■ modelling accurate sound production in conversation and reading</li> <li>■ reinforcing correct sound production</li> <li>■ using visual supports</li> </ul>	<p>The following are some general strategies to use with students who are DHH and who appear to be having difficulty acquiring speech:</p> <ul style="list-style-type: none"> <li>■ Auditory feedback is crucial. Amplification is required, as it plays a vital role in the acquisition of phonetic and phonological speech and auditory learning.</li> <li>■ Daily speech practice is important for consistent progress. Structure therapy so that the student experiences success.</li> <li>■ Therapy should be concrete. Set up situations to use the words in real settings.</li> <li>■ Movement activities can often support speech development and build muscle coordination, phonation (uttering vocal sounds), relaxation, and/or activation of some muscles. Appropriate positioning of the body is also crucial. Occupational and/or physical therapists can be consulted for this input.</li> <li>■ A multi-sensory approach is important. Auditory discrimination and mirror work is not enough. Use the following multi-sensory cues: <ul style="list-style-type: none"> <li>— Auditory: The student listens to the therapist using an amplification system and imitates the therapist.</li> <li>— Visual: The student watches the therapist’s mouth and uses visual cues, including hand signals and pictures.</li> <li>— Tactile: The therapist may use a tongue depressor to show the student proper placement for a speech sound.</li> <li>— Kinesthetic: The student is taught to make a hand signal together with the sound production, to pair large body movements or postures with words/phrases/sentences, and to touch pictures of words/phrases/sentences.</li> </ul> </li> </ul>

For more information about developing students’ listening and speaking skills, see pages 50 to 54 in the Communication section.

## Vocabulary and Concept Development

Strategy	Description
Theme-Based Approach	A theme-based approach helps the student draw connections. Share goals and themes with the school support team to ensure a consistent approach.
 Preview/Review	Preview/review concepts and vocabulary. Provide vocabulary lists in advance of instruction; give definitions with examples, jot down key words and new vocabulary on the board as they arise, and highlight important facts. Previewing provides a knowledge base for the student to link new information to previously mastered concepts. Encourage students to listen/watch for key words during instruction. Familiarity with the new words will help the students to follow classroom instruction/discussions. Frequently review the vocabulary/concepts in a variety of meaningful contexts (e.g., keep a word bank). Expose students to examples of new words that may have different meanings.
Visual Strategies	Use graphic organizers, semantic webs, and other visual teaching strategies. Semantic webs and graphic organizers help to link new information to known schema. New concepts are best taught in connection with known concepts. Attempt to discover what the student already knows about a concept. Refreshing past knowledge will help the student assimilate the new information. This helps the student create a category for the new concepts.
Rephrase	Rephrase information and new words in several ways and in different contexts.
Appropriate Language Level	Use language at the student's level; provide reading material on the same topic at a lower-language level if necessary.
Clarify	Provide clarification of assignment directions and test questions when needed. It is helpful to look at tests before the student takes them and troubleshoot for new vocabulary words or complex language structures.
Check Comprehension	Check student comprehension periodically. Ask the student to rephrase or summarize, and avoid using "yes/no" questions to judge if the student understood material.
Major Concepts	Focus on major concepts, rather than details, and on the quality of material rather than quantity.
Concrete to Abstract	Begin explanations with concrete examples, and work from them to the more abstract ideas.
Summarize	Develop the habit of summarizing salient points for the class.

For more information about developing vocabulary and concepts, see pages 55 to 57 in the Communication section.

## Home-School Connections for Developing Vocabulary and Concepts

Strategy	At-Home Examples	At-School Examples
<p><b>Categories</b></p> <p>Introduce, teach, and reinforce vocabulary within categories.</p>	<ul style="list-style-type: none"> <li>■ At home, an example might be naming all the clothes in the closet, or all the food in a cupboard, or all the colours of the crayons.</li> </ul>	<ul style="list-style-type: none"> <li>■ At school, an example would be grouping words/concepts into specific curricular topics (science, mathematics, social studies, physical education/health education, etc.).</li> </ul>
<p><b>Pre-teaching</b></p> <p>Pre-teaching can be done by selecting the key vocabulary or concepts from an activity or lesson and reviewing these with the student beforehand.</p>	<ul style="list-style-type: none"> <li>■ At home, this might mean discussing some of the important words in a story and making sure your child understands them before reading a bedtime story.</li> </ul>	<ul style="list-style-type: none"> <li>■ At school, this could involve reviewing the names of the chemicals and apparatus needed for a science experiment before conducting the lab activity.</li> </ul>
<p><b>Building Background Knowledge</b></p> <p>Always connect new information to the student's personal experiences. This will help to build background knowledge and make new information more meaningful.</p>	<ul style="list-style-type: none"> <li>■ At home, this could be reminding your child about the things you did at the beach while watching a television program that takes place near the water.</li> </ul>	<ul style="list-style-type: none"> <li>■ At school, it might involve getting students to talk about times when they were sad or upset in order to relate to how a character in a novel is feeling.</li> </ul>
<p><b>Visual Support</b></p> <p>Provide meaningful visual support.</p>	<ul style="list-style-type: none"> <li>■ At home, this could involve putting all the ingredients and the recipe book out on the table when you are making cookies.</li> </ul>	<ul style="list-style-type: none"> <li>■ At school, timetables and schedules can be displayed, charts or graphic organizers can be used to structure work, and written words and pictures can be added to help clarify spoken or signed messages.</li> </ul>
<p><b>Hands-On Activities/ Exploration</b></p> <p>Many students learn best by being actively involved in the process. Incorporate real objects and hands-on exploration as much as possible.</p>	<ul style="list-style-type: none"> <li>■ At home, this might mean letting children do things for themselves under your supervision (e.g., cleaning, cooking, shopping, banking).</li> </ul>	<ul style="list-style-type: none"> <li>■ At school, this could include using manipulatives for mathematics, experiments in science, projects in social studies, and drama in language arts.</li> </ul>

## Developing Language Skills—Directions, Questions, Storytelling

<b>Following Directions</b>	<b>Wh- Questions</b>	<b>Storytelling</b>
<p>There are strategies that a teacher can incorporate on a daily basis in the classroom setting to aid a student who is D/HH:</p> <ul style="list-style-type: none"> <li>■ First alert the student that a direction is going to be given by using a visual (e.g., flashing the lights) or verbal (e.g., “Listen, boys and girls”) strategy.</li> <li>■ Make sure the strategy you use is consistent so the students will learn to stop what they are doing and attend to the teacher.</li> </ul> <p>There are also strategies to help the students understand and remember the directions. These could include the following:</p> <ul style="list-style-type: none"> <li>■ simplifying</li> <li>■ demonstrating</li> <li>■ using visual supports such as gestures, objects, or writing the instructions on the board or in an agenda book</li> </ul> <p>For example, a direction such as, “Everyone, I want you to finish what you are doing now, but before you sit down for story time, make sure your tables are tidy” may be very confusing for a student who is DHH. The student may not understand the following:</p> <ul style="list-style-type: none"> <li>■ the concepts used in the directions: before/after</li> <li>■ the complex grammatical structure (embedded clause): “before x, do y.”</li> <li>■ the vocabulary: everyone or tidy</li> </ul> <p>The direction could be made easier by rearranging the order of the message, breaking it down into shorter phrases, and changing the vocabulary. For example, “Boys and girls, finish now. Put away your pens and paper. Sit down for story time.”</p> <p>Use gestural and/or verbal cues to indicate the order of the direction (e.g., first, second, third).</p> <p>Hold an object that represents part or all of the direction (e.g., the box for the pens and paper) to give the students a cue indicating what they are to do.</p>	<p>The following strategies will help students with wh- questions:</p> <ul style="list-style-type: none"> <li>■ use of visuals (e.g., pictures of objects/ people) to provide context for the question</li> <li>■ paraphrasing the question or using a cloze technique for responses (e.g., “What did you do on the weekend?” or “On the weekend I _____.” )</li> <li>■ providing example responses to guide the student toward the expected answer (e.g., “Where is the dog? Is he under the table? Is he with the cat?”)</li> <li>■ direct teaching of how to respond to wh- questions and use of context as an assistive device</li> <li>■ guessing games (e.g., “What’s in my pocket?”)</li> <li>■ use of activities to build vocabulary and other language skills</li> </ul>	<p>Strategies to promote understanding and use of narratives for students could include the following:</p> <ul style="list-style-type: none"> <li>■ Make photo or picture journals of their past experiences.</li> <li>■ Act out or role-play stories.</li> <li>■ Preview unfamiliar concepts and vocabulary within the story.</li> <li>■ Provide visual cues such as objects, pictures, or a story outline to help tell a story in sequence.</li> <li>■ Use appropriate questions and comments to assist students to comprehend a story or construct their own story.</li> </ul>

For more information about developing language knowledge and skills, see pages 57 to 59 in the Communication section.

## Developing Theory of Mind Skills

Schools can support the development of ToM in the following ways:

- Provide a language-rich environment so the student receives the best exposure possible to conversation and incidental language. For those with auditory skills, encourage the consistent use of amplification and a listening system (FM, digital).
- Introduce and explicitly use feeling words and mental state verbs (e.g., *think, know, imagine, believe, hope, remember, guess, wish, forget, realize*). Describe the feelings of others (e.g., “she is crying because she got hurt”), talk about your feelings/beliefs/values (e.g., “I believe we should all be kind to one another.”) and use specific questioning to introduce concepts (e.g., “Which is your favourite? I wonder what Miss S’s favourite is?”). Talk about misunderstandings and confusions.
- Foster pretend play and role-playing as they involve taking on someone else’s perspective.
- Read books with characters who share emotions, desires, and beliefs (e.g., *Little Red Riding Hood, The Rainbow Fish, The Diary of Anne Frank*). Encourage the student to make predictions and ask what the characters might be thinking or saying. Use animated voices when reading aloud to help portray the emotions behind the words.
- Discuss past, present, and future events, focusing on the feelings around those events. Use conversation starters such as “I wonder \_\_\_\_\_. Do you remember \_\_\_\_\_? What do you think she meant when she said \_\_\_\_\_?”
- Use writing tasks such as creating text for a wordless book, writing in the role of a character, and writing for a range of audiences to provide opportunities for children to demonstrate their ToM understanding.
- Look online and contact your SLP, TDHH, or AV therapist to find strategies, games, materials, and other resources that focus on ToM development.

For more information about developing Theory of Mind skills,  
see pages 59 to 60 in the Communication section.



## Developing Critical Thinking Skills

Schools can support the development of critical thinking skills in the following ways:

### Classification Skills

- Play classification games.
- Discuss why a certain item may or may not fit in a specific classification—discuss similarities and differences.
- Group vocabulary words by curriculum areas, by topic, and/or by other classifications.
- Create word webs and mind maps to show links between concepts.
- Organize and sequence ideas in each subject area.

### Comparing-and-Contrasting Skills

- Compare and contrast objects for various attributes (e.g., size, shape, colour, function, what it is made of). Classify those with like attributes together.
- Compare and contrast curricular concepts (e.g., simple machines in science, homes/foods/clothing of those in various communities in social studies, the philosophies of various political groups).
- Compare and contrast people's features, likes/dislikes, attributes.
- Compare and contrast actions and personalities of characters in stories/novels.
- Develop analogies.
- Use comparison charts and Venn diagrams.

### Answering True/False Questions

- Play games such as I Spy and 20-Questions.
- Have students interview one another.
- Use inquiry-based learning.
- Look at prior knowledge and new information. How do they fit together? Evaluate the information.
- Do activities that focus on opinion versus fact. Engage in debates.

### Making and Explaining Inferences

- Explicitly teach inferencing skills using real-life situations, sentences, paragraphs, and stories/novels being read in class. Help students to see the implicit factors and to “read between the lines.”
- Use visuals to chart the concepts and schema.
- Use guided reading.
- Analyze pictures and “read” wordless books so that students must use inferences to find the meaning.
- Add thought bubbles to show character thoughts in pictures in books.
- Identify a character's traits through what they say and do.

## Identifying Causes of Events

- Use play, pretend play, and science experiments to help students develop an understanding of cause/effect.
- Teach cause/effect vocabulary (e.g., *because of*, *since*, *as a result of*, *so*, *therefore*, *this resulted in*, *if/then*).
- Use graphic organizers to show relationships between events and to illustrate cause and effect.
- Analyze events in stories/novels, events that happen in the classroom and school, and social interactions to determine causes/effects.

## Problem Solving

- Engage students in real-life problem-solving tasks.
- Use a problem-solving framework, such as the one in Appendix G, to guide students through a step-by-step approach. Try multiple solutions and discuss why they did or did not work.
- Emphasize that a problem can be solved in multiple ways—there is not necessarily one “right” way to solve every problem.
- Play games and do activities where students must draw conclusions, find facts, and rely on reasoning.
- Ask open-ended and critical thinking questions.
- Form hypotheses together: “What do you think will happen if you do \_\_\_\_\_?”
- Pause and give students time to think.
- Encourage creativity.
- Explicitly teach sequencing, application, analysis, synthesis, and evaluation skills.

For more information about developing critical thinking skills, see pages 60 to 61 in the Communication section.



## Developing Executive Functioning Skills

Schools can support the development of EF skills in the following ways:

### Organization

- Use overt self-talk.
- Systematically teach organizational strategies.
- Provide a structured learning environment and help the student to see how it is structured.
- Sort, classify, and organize information (e.g., categorize vocabulary, distinguish between main idea and details, help students learn how to take notes and how to organize an essay).
- Provide graphic organizers and templates for data collection and organizing information.

### Planning

- Use systematic instruction—use rubrics, finished work samples, et cetera.
- Use calendars, schedules, and timelines to help set goals and to provide visual reminders.
- Provide guides, checklists, and templates for goal-setting, project planning, and scheduling.
- Model think-alouds of planning for various activities.
- Teach how to break long-term goals into short-term objectives.

### Flexible Problem Solving

- Help students understand figurative language and multiple meanings of words.
- Expand vocabulary to high levels.
- Teach problem-solving skills (e.g., What is the problem? What are options? What is my plan? Am I following the plan? How did I do?).
- Play games to develop skills in reading facial expression, other non-verbal cues, and tone of voice.
- Play games that involve planning and problem solving (e.g., chess, Battleship).
- Provide opportunities for students to shift ideas and be mentally flexible as they make decisions, solve problems, and engage in learning.
- Use open-ended questions.

## Working Memory

- Get the student's attention before sharing information.
- Give verbal or visual cues, and use visual teaching strategies.
- Avoid information overload, and reduce distraction.
- Repeat, rehearse, and review to help build retention of information.
- Teach strategies for recalling information, such as chunking information together.
- Think back and reminisce about events.
- Build language skills by playing games (e.g., What is black and white and starts with s? Combine these sentences without using the word *and*).
- Use "before, during, and after" reading strategies, such as using strategic questioning, to build links to known information, to the student's own experiences, and to ToM skills.
- Build background knowledge.

## Self-Monitoring

- Help students develop task checklists.
- Help students use sticky notes to remember information.
- Give students additional time to check and correct their work.
- Give feedback on the effort shown and the process followed as well as on the result of a task.
- Teach students to identify what a finished task looks like and then to evaluate their own performance on the task.
- Ask questions and provide templates to guide self-monitoring and reflection.
- Use differentiated models of self-assessment (e.g., role play, peer reviews).

## Inhibitory Control

- Help students learn to delay gratification (e.g., use a visual timer, class rewards).
- Prepare for situations requiring impulse control by reviewing them in advance.
- Cue students before activities and reward self-control.
- Practise response inhibition by role-playing and using songs/games (e.g., Simon Says, Bop-It, B-I-N-G-O).

For more information about developing executive functioning skills,  
see page 62 in the Communication section.

## Higher-Level Reasoning Skills

Students who are DHH may lack the language ability to understand and use abstract or higher-level concepts. Difficulties with higher-level language/reasoning skills interfere with the student’s ability to remember, understand, apply, analyze, evaluate, and create at concrete to abstract levels (revised Bloom’s Taxonomy). These skills may need to be explicitly taught and/or reinforced at a classroom or individual level. Instruction with an experiential component helps students generalize and transfer the skills to everyday situations. Role-playing and brainstorming activities are very effective with students who are DHH.

Figure 16

**Revised Bloom’s Taxonomy**

Cognitive Process Dimension						Knowledge Dimension
Remembering	Understanding	Applying	Analyzing	Evaluating	Creating	
Identify	Predict	Use	Construct	Reflect	Create	<b>Metacognitive</b>
Recall	Clarity	Carry Out	Integrate	Judge	Design	<b>Procedural</b>
Recognize	Classify	Provide	Differentiate	Determine	Assemble	<b>Conceptual</b>
List	Summarize	Respond	Select	Check For	Generate	<b>Factual</b>



An effective tool in teaching a problem-solving process is the use of external frameworks or visuals such as the Problem-Solving Framework in Appendix G.

See Appendix F for an in-depth outline of the revised Bloom’s Taxonomy.

## Literacy Skills

Hearing loss can add challenges to the already difficult jobs of learning to read and write.

The Laurent Clerc National Deaf Education Center has identified nine areas of literacy that should be used with students who are DHH for a balanced literacy program:

- reading to students
- language experience
- shared reading and writing
- guided reading and writing
- writers' workshop
- research reading and writing
- dialogue journals
- journals and logs
- independent reading

The research on students who are DHH indicates that “the most effective approaches are those that emphasize semantic elaboration techniques such as use of semantic maps, semantic feature analyses, word maps, and classroom discussions of words” (Loeterman, Paul, and Donahue).

### Areas of Potential Difficulty in Reading and Writing

In both reading and writing, students who are DHH are often bound by the literal meaning of words and often have difficulty with semantics, syntax, morphology, and irregular rules of grammar. Difficulties in reading and writing may occur at various levels:

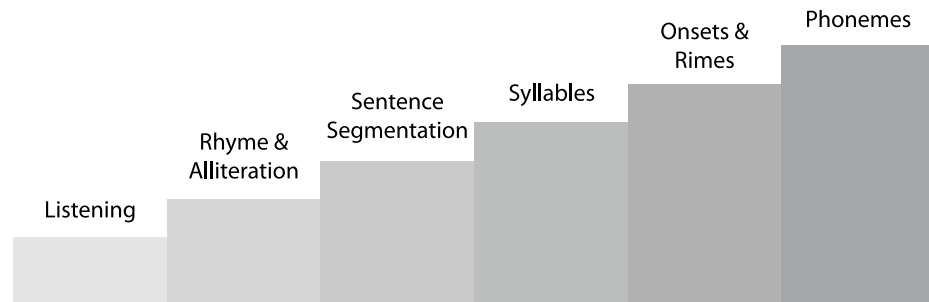
- phonological awareness (manipulating units of sound)
- word level (gaps in vocabulary concepts)
- sentence level (grammar and sentence patterns)
- paragraph level (sequencing, main idea, retelling)

Phonological awareness can be placed on a developmental continuum, beginning with basic listening skills and progressing through an ability to identify and create rhyme and alliteration, to distinguish words within sentences, syllables within words, and onset and rime within words, until a child is able to manipulate phonemes within words in a variety of ways.

Phonological awareness is highly related to later success in reading and spelling. These skills emerge between birth and Kindergarten.

Figure 17

## Phonological Awareness Continuum



Please see Appendix D for a developmental list of phonological skills.

### Supporting the Development of Phonological Awareness

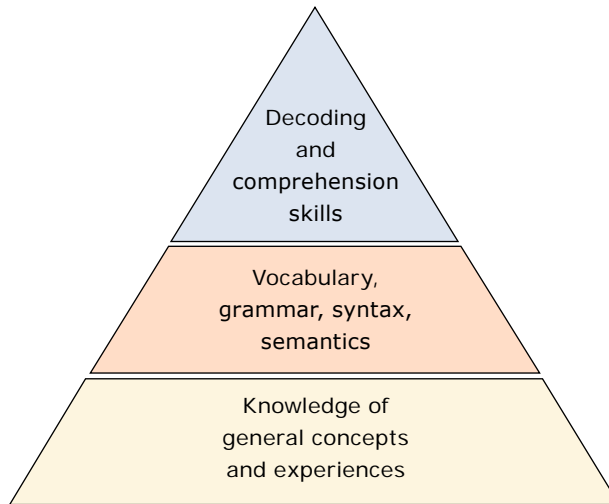
Phonological awareness is directly linked to success in literacy skills. Although most children develop this awareness incidentally, students with hearing loss may require a more direct or explicit method of instruction. Students using ASL would benefit from a visual phonics program (e.g., Touchphonics and/or Explode the Code by EPS Literacy and Intervention).

### Bridging the Language Gap during Language Arts Instruction

Students with hearing loss often have reading levels below that of the rest of the class, due to language difficulties. The major challenge in teaching language arts to students who are DHH is determining the level at which the students' problems arise.

Figure 18

### Literacy Pyramid



The bottom two sections of the pyramid are particularly problematic for students with hearing loss. Students may have a concept and language problem rather than a reading problem.

Students may understand what you mean when you say it or sign it, but not understand when it is in print.

Vocabulary is a predictor of reading ability. While vocabulary is necessary, it is not sufficient to move reading past early levels. Comprehension of grammar and sentence structure, and higher-level thinking skills are required.



Additional information on literacy development is available in Appendix H.

Figure 19

### The Importance of Comprehension



The importance of comprehension in the development of literacy skills cannot be overemphasized. Rote reading skills alone do not equal reading comprehension. A student may read confidently at a Grade 4 level, but be unable to retell the information or answer any questions beyond a Grade 2 comprehension level.

Gaps in reading comprehension often increase over time, as the student's growth in language does not keep pace with the rapidly increasing language and abstract concept levels presented in curriculum content



Please see Appendix I for an illustration of reading comprehension.

Difficulties in language/literacy are reflected across the curriculum (e.g., English language arts, social studies, science, and mathematics).

areas. The emphasis on paragraph comprehension and the need for higher-level thinking/reasoning skills further compound the situation.

Specific areas of concern are outlined in the chart on page 96.

Specific strategies to use to develop students' reading and writing skills follow on pages 97 to 99.

## Language and Literacy Strategies Used by Teachers of the Deaf and Hard of Hearing

Teachers of the DHH use a variety of language and literacy strategies to build students' knowledge and skills. The following chart outlines some of the most popular strategies:

Figure 20 **Language and Literacy Strategies**



Please see Appendix H for specific examples of strategies.

Source: Cannon, Joanna Erin. "Evidence-Based and Best Practice Literacy Strategies Used in BC: Results from an Online Survey Study of Teachers of the Deaf and Hard of Hearing." Canadian Association of Educators of the Deaf and Hard of Hearing Conference, 25 Oct. 2013, Kelowna, BC. Reproduced with permission.



## Specific Areas of Potential Difficulty

Meaning (Semantics)	Grammar (Syntax)	Parts of Speech and Function Words	Irregular Rules of Grammar
<p>A student may misunderstand word meanings and need direct teaching of the following:</p> <ul style="list-style-type: none"> <li>■ words with multiple meanings (e.g., <i>bat</i>, <i>run</i>, <i>light</i>)</li> <li>■ categorical language (e.g., hockey and swimming are <i>sports</i>; a <i>dog</i> could be a husky or a poodle)</li> <li>■ vocabulary expansion (e.g., walk → trot, stagger, lope)</li> <li>■ words denoting an auditory event (e.g., whisper, rustling leaves)</li> <li>■ function words or words that have no meaning except in context (e.g., <i>then</i>, <i>so</i>, <i>because of</i>, <i>however</i>)</li> <li>■ similar sounding words (e.g., <i>bluff</i>, <i>blush</i>)</li> <li>■ intonation and stress (e.g., in the question, "Why don't you do your homework?" the tone could be angry, calm, or questioning)</li> <li>■ abstract concepts (e.g., equality, judgment, friendship, time concepts)</li> <li>■ figurative language (idioms, metaphors)</li> <li>■ higher-level thinking (inference, analysis, evaluation, metacognitive skills)</li> </ul>	<p>Difficulty with syntax frequently interferes with the student's comprehension and production of English. The student may</p> <ul style="list-style-type: none"> <li>■ use mainly subject-verb-object patterns</li> <li>■ tend to write sentences that are simple, short, and rigid</li> <li>■ join sentences excessively</li> <li>■ primarily use concrete action verbs</li> <li>■ insert several words where one would suffice (due to a lack of vocabulary)</li> <li>■ read passive sentences as active (e.g., "Mr. White was chased by a dog" is read as "Mr. White chased a dog")</li> <li>■ misinterpret embedded clauses (e.g., "The hunter who shot the moose ran toward the car" is read as "The moose ran toward the car" —the student focuses on the nearest subject-verb-object)</li> </ul>	<p>Students may</p> <ul style="list-style-type: none"> <li>■ omit or incorrectly use markers for verb tense and number (e.g., "Yesterday we walk store" for "Yesterday we walked to the store")</li> <li>■ omit or demonstrate confusion with possessives ("That my dad jacket" for "That's my dad's jacket")</li> <li>■ omit auxiliary verbs such as <i>is</i> or <i>was</i> (e.g., "He my brother" for "He is my brother")</li> </ul>	<p>Irregular rules of grammar may also prove frustrating for students. These rules include ones around</p> <ul style="list-style-type: none"> <li>■ language of quantity (e.g., "I looked at some water" is correct, yet "I looked at some sun" is not)</li> <li>■ verb tense (e.g., "He was driven to the airport" is correct, yet "He has arriven at the airport" is not)</li> <li>■ plurals: (<i>house</i> becomes <i>houses</i>, but <i>mouse</i> becomes <i>mice</i>)</li> </ul>

For fluent reading comprehension, the rapid access to the meanings of words during reading has to be automatic rather than conscious and deliberate. (Marschark, Lang, and Albertini 164)



## Suggestions for Reading with Students Who Are DHH

Strategy	Explanation
Visual Organizers	Use semantic webs, story maps, and other visual organizers to build concepts and link language: emphasize development of schema and prior knowledge before reading.
Vocabulary in Different Contexts	Use targeted vocabulary words repeatedly in different contexts.
Meaningful Context	Teach skills in the context of whole and meaningful literature.
Sentence Patterns	Use repetitive sentence patterns—gradually introduce complex sentences.
Material Connected to Experience	Choose material that is based on concrete and familiar experiences to create a meaningful link between the text and the student's experience.
Appropriate Language Level	Provide individualized instruction using material at the student's language level: <ul style="list-style-type: none"> <li>■ Choose the same story written at a lower language level (e.g., <i>The Diary of Anne Frank</i>, plays of Shakespeare).</li> <li>■ Use an alternative book on the same theme (survival). Choose materials with controlled levels of vocabulary and sentence structures.</li> <li>■ Rewrite or adapt materials to an easier level if necessary.</li> </ul>
Text-Based Factors*	Consider the following text-based factors: <ul style="list-style-type: none"> <li>■ Vocabulary level—Is the student familiar with the vocabulary in the story?</li> <li>■ Sentence length and complexity—Specifically teach sentence structures (e.g., simple noun-verb to complex sentences that use clauses).</li> <li>■ Figurative language, abstract concepts, inferential knowledge</li> <li>■ Cohesion of text—Is the text organized and easy to follow (e.g., logical sequence of ideas)?</li> <li>■ Illustrations—Are they used in agreement with the text to improve comprehension?</li> <li>■ Familiar discourse structure or genres (e.g., "Once upon a time," poem, fable, song)</li> </ul>
Reader-Based Factors*	Consider the following reader-based factors: <ul style="list-style-type: none"> <li>■ Interest and motivation</li> <li>■ Prior knowledge or familiarity—Characters or settings that are familiar (e.g., camping) encourage comprehension.</li> <li>■ Purpose—Direct purpose encourages comprehension.</li> </ul>
Preview/Review	Preview and/or review vague or easily misunderstood phrases (e.g., "He broke off suddenly" means he stopped talking suddenly).
Study Skills	Provide direct instruction on how to study (e.g., know textbook formats, underline/circle main ideas).
Scaffold	Support students in using newspaper articles, the Internet, and other expository text that uses a high level of language.
Extend	Develop higher-level language and thinking skills.

\* Source: Ward, Rita, Verena Krueger, and Judith MacDougall. "Adaptations of the Reading Program." *Adaptation of Language Arts Curriculum for Teaching Hard of Hearing Kindergarten to Grade 2*. Winnipeg, MB. 1981. 61–63. Adapted with permission.

## Reading Goals

<b>Area for Improvement</b>	<b>Strategies to Achieve Goals</b>
Vocabulary Development	Provide background information, link new knowledge to existing knowledge, ensure students know the purpose for reading, and pre-teach new vocabulary and new language structures.
Comprehension	Help students to get the facts, read beyond and make judgments, recall word meaning from context, discuss word meaning, answer questions from the text, relate ideas in the text, and follow the parts of the story.
Drawing Conclusions/ Making Inferences	Have students practise this important comprehension sub-skill that students who are Deaf/hard of hearing frequently miss—noticing subtleties and clues. Practise with abstract questions before, during, and after reading.
Sequencing Events	Choose events that are important to the story, teach sequential words, and practise sequencing with cartoons.
Using Context Clues	Use pictures to develop student understanding of the storyline.
Predicting Story Outcomes	Help students learn to use contextual clues through abstract questioning (the student needs knowledge and comprehension of the story to respond).
Paraphrasing	Help students to remember, choose, and sequence relevant information as they paraphrase material for various purposes, such as a book report.
Word Attack Skills	Help students to use language skills and context to unlock meaning—this may be difficult for students with hearing loss.
Identifying Problem and Solution	Use story mapping to help students to identify the problem and solution of the plot.
Identifying Main Idea	Teach students to identify the main idea by modelling how a good reader distinguishes key ideas from supporting details.
Discussing/Describing	Have students practise discussing and describing different elements of the story—literature circles provide a good context for this.
Identifying Different Story Types	Offer students a variety of literature (fiction and non-fiction) and demonstrate the differences among the genres.



## Suggestions for Writing with Students Who Are DHH

Strategy	Explanation
Determine specific areas of need	Use the student's writing samples to determine areas of need.
Process approach	<ul style="list-style-type: none"><li>■ Teach the steps of a writing process.</li><li>■ Model the writing process and co-construct text.</li><li>■ Focus on writing tasks that are meaningful/purposeful and that integrate content, form, and use.</li><li>■ For first-draft writing, focus on ideas rather than correct grammatical structures. Students struggling with the difficult task of choosing the correct vocabulary and grammatical structures may become overwhelmed with the writing process.</li><li>■ Have students rehearse (orally or in ASL) each sentence before printing it as a bridge between spontaneous language and more structured written language.</li><li>■ Collaborative writing with a peer with similar writing abilities can make the task more enjoyable.</li><li>■ Explicitly teach composing strategies.</li></ul>
Assist with organization	Help the student with sequencing, main idea, paragraph writing, maintaining topic, and editing.
Direct instruction	<ul style="list-style-type: none"><li>■ Provide direct, explicit instructions on these key areas:<ul style="list-style-type: none"><li>■ text structure (story grammar and various types of expository writing)</li><li>■ cohesion—how to write cohesive paragraphs and overall stories/pieces</li><li>■ summarization</li><li>■ sentence combining</li><li>■ micro-level skills—spelling and other writing conventions</li><li>■ purpose—help students plan and compose their writing for a purpose (e.g., story, opinion, persuade)</li></ul></li></ul>
Mechanics in context	<ul style="list-style-type: none"><li>■ Teach grammar and mechanics in context, at the editing stage, and as items are needed.</li><li>■ Draw attention to the conventions of written English. Students tend to omit word endings as these sounds may be out of their hearing range and are not meaningful in and of themselves (the final /s/ on plurals, possessives, and verbs or the /ed/ ending on past-tense verbs).</li><li>■ Remind the student to check work for consistent verb tense.</li></ul>
Read aloud	When doing self-edits, have the students read their work aloud. Often students can become aware of more grammatical and word usage errors with the support of auditory cues than when they read silently.
Feedback	<ul style="list-style-type: none"><li>■ Provide specific, descriptive, non-judgmental feedback.</li><li>■ Offer direction on how to improve the writing and build on the student's current writing abilities.</li><li>■ Take into account the student's language skills.</li><li>■ Editing feedback is more effective when the student self-edits first.</li></ul>
Mentor texts	Use the writing of professional authors as models to teach specific literary devices (e.g., symbolism, metaphor).

Please refer to pages 32 to 33 in the Identity Section for Ideas for Students to Become Self-Advocates.



Talking and signing at the same time can be very confusing for some students who have not developed full grammar or syntax in either ASL or English. For these students, it is best to either sign or talk but not both at the same time. Ask the students what they would prefer.



See the DHH calendar of events and activities at [www.edu.gov.mb.ca/k12/specedu/dhh/](http://www.edu.gov.mb.ca/k12/specedu/dhh/).

“And I believe that Deaf kids are just as smart as hearing kids and with sign language we can do anything.”  
(Spradley and Spradley 281)

## Inclusion for Students Who Are Using ASL

The following ideas can assist in providing appropriate educational programming for students who are using ASL:

- The school team members (e.g., classroom teachers, administrators) learn basic everyday signs such as “Hello” and “How are you?” so that they are able to communicate directly with the students who are DHH.
- Students in the classroom/school learn sign language. A language is best learned from a native speaker of that language. If a student who is DHH runs the Sign Club, an adult who is Deaf can work with the student to ensure cultural and linguistic accuracy. An interpreter (or another hearing person) does not have ASL as a first language.
- Regular interaction with peers and adults who are DHH is important so that the student has positive adult role models who are DHH to develop a healthy sense of self and to be able to transition successfully to adulthood.
- Bring Deaf and hard of hearing resources such as the *The Canadian Dictionary of ASL* (Bailey and Dolby) or *Deaf Heritage in Canada: A Distinctive, Diverse, and Enduring Culture* (Carbin) into the classroom.
- Provide communication access (e.g., interpreters, notetakers) for all school-related activities including intramurals, field trips, guest speakers, meetings, clubs, sports activities, and so on.

## Differentiated Instruction for Students Who Are Using ASL

Students who are DHH are as capable of complex, abstract thought as their hearing counterparts. Many EAL (English as additional language) teaching strategies are helpful for working with students who use ASL. The following excerpt from the 2006 *English as an Additional Language (EAL) and Literacy, Academics, and Language (LAL), Kindergarten to Grade 12, Manitoba Curriculum Framework of Outcomes, Draft (11)* describes how learners who use ASL fit into the variety of EAL students in Manitoba schools:



For comprehensive descriptions of a variety of strategies for differentiating instruction, see *Success for All Learners: A Handbook on Differentiating Instruction* (Manitoba Education and Training).



Teach to the eye—use visuals and examples whenever possible.

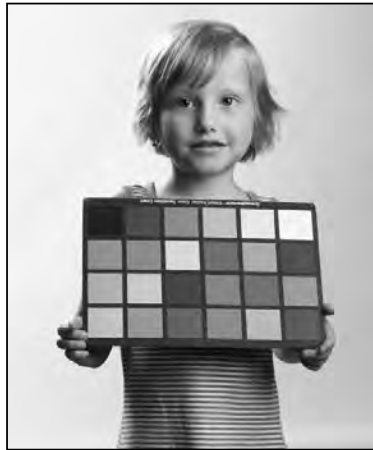
## EAL and LAL Learners in Manitoba Schools

### Students who are Deaf or hard of hearing, and whose first language is a signed language

These learners may

- have been born in Canada or elsewhere
- have various levels of fluency in the signed language of their home country or in American Sign Language (ASL)
- use ASL or a signed language as their first language and develop English through reading and writing as their second language
- have language(s) other than English as their second language
- attend a mainstream classroom, cluster program, or The Manitoba School for the Deaf

Students with a signed language as their first language will enter the Manitoba school system throughout K–12



Some examples of differentiated instruction include the following:

- Use an interpreter scribe for assignments and tests, especially for students with emerging EAL skills but strong ASL skills.
- Use alternative assessment methods such as oral exams, mind mapping, and graphic organizers.

**Note:** Music and jokes based on English and “sounds-like” examples may be difficult or impossible for the student to access/comprehend. Humour, poetry, and song are visually based in Deaf culture. In these situations, the student could be given an alternative assignment.

Several studies have demonstrated that exposure to both English and sign language provides strong support for the acquisition of reading skills, and stronger vocabulary knowledge appears to be an important product of that combination.

## Reading and Writing with ASL

A variety of investigations have indicated that readers who are Deaf, like hearing readers, use a combination of whole-word recognition, phonological or sound-based recoding, and orthographic (spelling-based) recoding to hold information temporarily in working memory. Some readers who are Deaf also recode English print into sign, at least some of the time (Marschark, Lang, and Albertini).

There may be a practical explanation for the writing difficulties students who are Deaf experience—students may be overburdening themselves with an effort to articulate thoughts in ASL and English at roughly the same time. Even if students know all the grammatical rules to be applied to an English draft, writing process theory suggests that preoccupation with language constraints in the early stages of writing can create a cognitive overload, adversely affecting the writer's ability to manage such other important writing concerns as what the writer wants to say. The writing process for students who are Deaf is further complicated by the need to code-switch (Mozzer-Mather).

ASL is unique, just as all languages are unique. Word-for-word translations from one language to another are not possible, due to different grammar rules and the cultural aspects of language. Therefore, an English sentence translated word for word into French would not create a grammatically correct French sentence. The same is true for translating English into ASL. Thus it is important for students who use ASL to first read the passage and then translate the overall concepts into ASL, rather than doing a word-for-word translation. Conversely, students who use English with sign supported speech (SSS), rather than ASL, may sign word for word when reading a passage (as they are signing in English rather than ASL).

ASL is a truly rich language that has its own forms of literature:

- ASL storytelling
- ASL poetry
- Deaf jokes
- ASL games (e.g., the Elephant Game, Guess Who?, handshakes)

The following handout provides suggestions for reading and developing vocabulary with students who are Deaf and/or using ASL.



## Suggestions for Reading with Students Using ASL

Strategy	Description/Example
Sign placement	Sign phrases on or with a book (e.g., sign tree beside a picture of a tree).
Pair text and sign	Point to the text, give an explanation in ASL, and then point back to the text.
Make connections	Make real-world connections between the text and the student's experiences.
Maintain attention	Encourage student involvement by maintaining eye contact with the student.
Use body language	Use facial expressions and body posture to demonstrate character changes.
Use non-manual signs	Use non-manual signs, such as raising eyebrows to indicate questions.
Use finger-spelling	Finger-spell words you want to emphasize. Practise finger-spelling all new words even if there are signs for them.
Read student books	Encourage students to write or dictate books—the story can be read frequently by the student author.
Keep word banks or personal dictionaries	Students each keep their own file box of word cards or a personal dictionary. When new words are encountered in print, they can add them to the file.
Provide choice	Use a variety of books—allow students to choose books that are of interest to them.
Play with new words	New words should be addressed before students read the story. Students can play games such as Pictionary, Concentration, or Go Fish.
Monitor students' knowledge of concepts	Be sure the students know a concept before asking them to spell the word.
Spot-check students' spelling	Use pictures and signs to help them write down the correct spellings.

## Supports for Students Who Are DHH

In addition to a DHH friendly environment and the use of appropriate instructional strategies, students who are DHH often require other classroom supports. These supports can include tutorial sessions, ASL-English interpreting, oral interpreting, or computerized notetaking.



Students benefit from daily tutorial sessions to preview/review curriculum content, particularly in core subjects. Older students can receive tutorials during spares; younger students can have sessions built into the timetable.



A low-traffic area with few visual distractions/ minimal ambient noise is ideal for tutoring. ASL is visual: a private tutoring space ensures that conversations are not accessible to observers. Ambient noise may interfere with the student's ability to use residual hearing/ amplification.

### Tutorial Sessions

Students who are DHH often benefit from regularly scheduled tutorial sessions, focusing on student-specific outcomes and curriculum-based language. These sessions are typically carried out by the educational assistant, ASL-English interpreter, signer, or computerized notetaker under the direction of the school team who have planned the content/ lessons. Support team members may be directly involved in providing remedial programming and/or modelling tutorial sessions, depending on the IEP goal (this could include the TDHH, resource teacher, SLP, ASL specialist, AV therapist, psychologist, behaviour specialist, OT, and PT).

The amount and frequency of tutorial support for the student with a hearing loss will depend largely on the student's needs and the teachers' goals. It is important for the tutor to meet regularly with the school team to review IEP goals and upcoming classroom topics.

Tutoring a Kindergarten student can be entirely different from tutoring a Grade 12 student. Generally, as students progress in their education, they will become more responsible for the content of their tutorial sessions. An elementary tutorial session will be planned by the school team and led by the person conducting it. A high school tutorial session will focus and build on what the student wants to be supported in.

### Working with Tutors: Information for Classroom Teachers

Tutorial sessions usually include

- development of student-specific goals as outlined in the IEP
- language development—modelling and expanding language, helping edit written work, and assisting with organization of thoughts
- daily previewing and reviewing of key vocabulary/curriculum-based language
- checking for comprehension and supporting expansion of ideas
- ensuring that the student understands assignment directions and is completing the work appropriately



- assisting the student in developing study skills and preparing for texts/exams by reviewing the format of upcoming tests and practising specific types of test questions
- using visual and concrete strategies when possible, such as adapting board games, to create a fun and motivating session

For more information on strategies, please refer to page 81 of this section

## ASL-English Interpreting

Students who use ASL require ASL-English interpretation to have full access to communication in the classroom and in all school activities throughout the day. Full access to language and communication is critical for full access to learning, social interaction, and emotional development.

Access to language opens doors not only academically, but socially and emotionally as well. "Language is multi-dimensional. It is key to our understanding of culture, social understanding, self-awareness, perception of life chances and interpersonal communication. Given the importance of language, it is essential that careful consideration be given when hiring interpreters." (Family Network for Deaf Children and Westcoast Association of Visual Language Interpreters 11)



ASL-English interpreters possess a language fluency that allows them to interpret smoothly and accurately.

**ASL-English interpreters** are professionals who have a degree or diploma from a recognized ASL-English interpretation program (AEIP). This post-secondary training provides graduates with knowledge of language systems, interpreting theory, cross-cultural communication, and ethical decision making. They are fluent in the languages they interpret, are qualified to interpret in most settings, are committed to following the code of professional conduct, and are highly knowledgeable about the role of the interpreter. They reduce linguistic, cultural, and physical barriers.

**Signers** are people who know some ASL, and are not trained interpreters. The skills of signers in Manitoba schools vary greatly from those who know only a few signs to those who are rather fluent. Signers may be able to communicate their own thoughts but may not be able to interpret the thoughts of others. It is extremely important that schools hire staff with a level of competency in ASL and knowledge of the interpreting process to ensure that students who are DHH have access to communication and to learning.



Parents who are Deaf and ASL users may require interpreting services for events such as parent-teacher conferences, IEP meetings, and school concerts. To book an interpreter, contact your teacher of the Deaf and hard of hearing or the student services administrator.



Students may not have full access to the curriculum if the interpreter is not available (e.g., assigned a non-interpreting task such as working with a reading group or photocopying). When interpreters are not actively interpreting or preparing, they may assist in other class activities.



The Manitoba Association of Visual Language Interpreters (MAVLI) and the Manitoba Cultural Society of the Deaf (MCSD) formed a partnership, in conjunction with other stakeholders, to develop an educational DVD called *Best Practices in Educational Settings—Making an Informed Choice: Trained Interpreters versus Signing EAs*. It is designed to illustrate best practices for interpreting in the classroom that will support the educational and social well-being of signing students who are Deaf or hard of hearing. Information on the Best Practices DVD and training requirements for ASL-English interpreting is available from MAVLI.

Educational interpreting consultants may offer a screening tool that evaluates the level of interpretation skills of potential and current school staff. These screenings can assist administrators in the hiring process and in completing school-based evaluations regarding interpretation skills.

For more information on accessing resources for signers and interpreters, see Appendix J: Hiring an ASL-English Interpreter and the Manitoba Education Deaf and Hard of Hearing Services Unit website at [www.edu.gov.mb.ca/k12/specedu/dhh/](http://www.edu.gov.mb.ca/k12/specedu/dhh/).

## Working with Interpreters: Information for the Classroom Teacher

The following information about working with interpreters is useful for the classroom teacher:

- The primary function of interpreters in Kindergarten to Grade 12 settings is to provide communication access for people who are Deaf and for hearing people who do not share a common language.
- Interpreters will interpret everything they can hear, including conversations, fire alarms, fights in the hall, sneezes, swearing, and any other audible sounds. Interpreters will also ensure that everything signed in a visible manner is also interpreted into English.
- Interpreters also interpret how things are said or signed (e.g., facial grammar conveys the tone of the message: pleased, disappointed, impatient).
- Interpreters will inform the student and teacher if information was misinterpreted or not interpreted.
- Interpreters are not participants in the interaction in the sense that they do not express their own opinions or delete information with which they do not agree.

Interpreters follow a code of ethics that binds them to professional behaviour and conduct. *Code of Ethics and Guidelines for Professional Conduct* is available at [www.avlic.ca/sites/default/files/docs/2000-AVLIC-CoEGPC.pdf](http://www.avlic.ca/sites/default/files/docs/2000-AVLIC-CoEGPC.pdf).

- Interpreters either sit or stand at the front of the classroom, near the teacher and board so that the student has visual access to both at the same time. Discuss with interpreters where a good location might be, based on personal teaching style.
- Speak at a normal pace. If interpreters miss something or need to ask for clarification, they will ask the speaker.
- Speak to the student who is DHH directly in the first person and not “through” the interpreter in the third person. Interpreters will encourage direct communication among students, teachers, peers, and others.
- Interpreters need to be seen to be effective. Consider adequate lighting during films, concerts, and activities where the lights are typically turned off.
- Interpreters can more accurately convey your message if you prepare them well by providing them with information for class lessons, assemblies, concerts, field trips, et cetera, with as much notice as possible to allow for prep time. Textbooks, copies of class notes, copies of movies to preview, and so on, all help the student have access to the same curriculum as other students. It is helpful if interpreters are given time within their daily schedule for preparation.
- Interpreters need processing time and are a little behind what is being signed or spoken. Keep this in mind during group discussions. Have students speak one at a time, and ensure that the student who is DHH has the opportunity to answer questions and to participate fully in group discussions.
- On occasion, some students may need translation from written English to ASL. Please note that this may occur during tests or exams but should be worked out collaboratively prior to the testing period so that you are aware of what is happening.
- Interpreters will provide school staff and students with information regarding the role and responsibilities of the interpreter.
- Interpreters act as part of the school team. They will consult with the school team regarding student needs and IEP goals, accommodations, and environmental factors for interpreting. They will provide input regarding student communication needs and may participate on the IEP team.
- Interpreters should meet with support team members (i.e., educational interpreting consultant, ASL/education consultant, TDHH) on an as-needed basis.
- Interpreters are active in their professional organizations. They benefit from opportunities to participate in professional development directly related to their field.

- Most interpreters in the Kindergarten to Grade 12 setting work alone for the entire day. This places them at risk for work-related musculoskeletal injuries (MSI) such as carpal tunnel or repetitive use syndrome. Interpreters need sufficient breaks and rest time in order to avoid MSI.

### **Working with Interpreters: Information for the Student**

The following information about working with interpreters is useful for the student:

- Participate in class and pay attention to the teacher through the interpreter.
- Work with the interpreter and the teacher on the best seating arrangements, keeping in mind visual communication needs.
- Interpreters will interpret in an appropriate manner for you, adapting the communication mode (e.g., ASL, oral support, speechreading) and language level as needed. Discuss any problems understanding the interpreter with the interpreter, and then with the teacher if necessary.
- Ask the interpreter for clarification of unfamiliar signs. Discuss with interpreter your language preferences and signing style (e.g., the number of finger-spelled abbreviations).
- Avoid conversation with the interpreter while they are interpreting information.
- Inform the interpreter if their clothing is visually distracting. If you are uncomfortable discussing this with the interpreter, talk to someone you trust about the situation in order to resolve it.
- Let interpreters know in advance when you are going to be away, if possible.
- You are responsible for ensuring that you understand instructions and homework assignments. The interpreter can help you to talk with teachers if you are uncertain about something.
- Interpreters are not teachers. If you do not understand something in class, it is best to ask the teacher.
- The interpreter will encourage you to be independent and to participate in all classroom activities.
- Interpreters interpret into English everything you say if it is signed in a visible manner. Private conversations that are not visible to the interpreter and others will not be voiced (i.e., interpreted into spoken English).

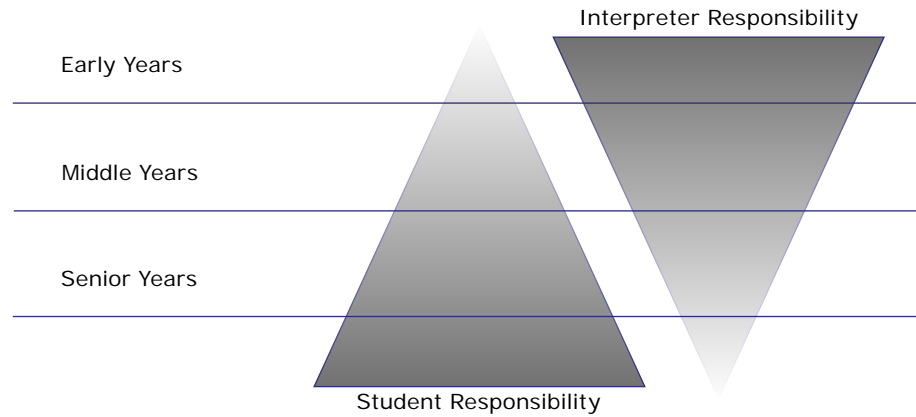
### **Roles and Responsibilities**

The responsibilities of the interpreter and student shift throughout academic life. More responsibility for various non-interpreting duties is placed on the interpreter in earlier grades, while the expectation is

that the student will assume more independence as the academic years progress. The figure below illustrates this shift.

Figure 21

### Interpreter-Student Responsibilities\*



\*Dennis Davino  
Orange County Department of Education  
Irvine, CA 1985

Young students or students transitioning to ASL as a primary communication code may be unfamiliar with how to use an interpreter. Students may need to be taught the roles of the adults in the classroom and given sufficient time to learn how to work with an interpreter. As the student progresses throughout the school year, the student should become more independent and self-reliant.

More non-interpreting roles, such as assisting students with dressing or keeping the student on task, will occur in the Early Years. In the Senior Years, interpreters typically spend the majority of their time interpreting, with tutoring as necessary.

## Oral Interpreting

Oral interpreters are professionals who facilitate communication between hearing staff and students, and students who are DHH who use speechreading (lip-reading and facial expression) instead of ASL. Oral interpreters are rarely employed by school divisions.

## Computerized Notetaking

Many students who are DHH are not able to hear and understand all oral communication and instruction in the classroom. If they do not use ASL, they may benefit from visual access to spoken communication through computerized notetaking (also known as graphic interpreting) support. The computerized notetaker (CN) uses a laptop to type a summary of the

information that is being spoken in a classroom and typically projects it on a screen for students to see. This information is saved, edited, and given to the student as class notes.

Computerized notetaking can be beneficial to all students in the class, particularly to those who have English as an additional language, those with attention difficulties, and those who are visual rather than auditory learners.

While notetaking services (e.g., TypewWell and C-Print) exist, most schools in Manitoba hire local staff to take on the CN role. The staff must have good typing and English skills.

Real-time captioning or CART (communication access real-time translation) is another service that provides visual information, in a format similar to that of a court reporter. The spoken language is relayed verbatim through a laptop using a phonetic encoding system. Due to the high cost for both the service and equipment, it is rarely used in a school setting, but it is sometimes used in a university setting.

Speech-to-text apps show promise as a possible avenue of providing notetaking for students. Currently the available apps are not sophisticated enough to provide 100 percent speech recognition, account for multiple speakers, and provide adequate formatting and saving of information. Thus, at this time, their effective use in the classroom is limited.



Students using a CN should have at least a Grade 4 reading level. The CN will match the level of the language to the student who is using the service.

### **Working with Computerized Notetakers: Information for the Classroom Teacher**

The CN usually

- provides graphic notetaking for all school-related activities (including co-curricular activities, parent meetings, and any other occasions that may arise)
- paraphrases, summarizes, and modifies the language level of verbal information to meet student needs
- modifies and summarizes notes; adapts the layout of notes and the content of the subject to meet student needs
- edits the information, then emails or prints copies of the notes for students, as required
- prepares for graphic notetaking: becomes acquainted with subject-specific language and knowledge
- transports the equipment from class to class

The student who is DHH can access this information in any of the following ways:

- Sit anywhere in the room and read the information off of a projected image. The laptop is connected to a projector and information is projected onto a screen or a whiteboard for all to see. (This is the typical classroom set-up for notetaking.)
- Sit near the notetaker and read the information off the laptop monitor.
- Sit close to the notetaker and read the information off of an external LCD monitor that is connected to the laptop.

### **Ideas for Notetakers**

The following approaches are effective:

- **Label:** Clearly label all sheets with the course name, date, and page numbers.
- **Vocabulary:** Use age-appropriate vocabulary and highlight new or difficult words to review later with the student.
- **Handouts:** Collect handouts and indicate that they are handouts and not part of the spoken lesson.
- **Complete Sentences:** Leave your notes in complete sentences so that students have the full picture when they refer to notes in the future.
- **Classroom Chatter:** Type all classroom communication even if it is off topic or inappropriate. If you hear it, the students who are DHH have a right to hear it too. Conversation not relevant to the class content can be edited out of the notes before they are sent to the student.
- **Layout:** Highlight key points and use indents, bullets, and numbers to visually enhance the meaning of the notes.
- **Abbreviations:** Use the auto-correct option on your word processing program to accept certain abbreviations to increase the speed of your notetaking (e.g., *USA* for United States of America; *ppl* for people).

## **Supports for Students Who Are DHH with Additional Needs**

Surveys indicate that 35 to 50 percent of students who are DHH have an additional, educationally significant condition or disability (Marschark and Spencer 171.)

They may have a hearing loss plus one or more other challenges such as physical disabilities, autism, vision loss, learning disabilities, ADD/ADHD (attention deficit disorder/attention deficit hyperactivity disorder), FASD (fetal alcohol spectrum disorder), cognitive challenges, behavioural challenges, mental health issues, and/or neurological challenges.

Students with additional needs may require additional supports and adaptations in order to meet their needs, such as the following:

- services from an OT, a PT, a consultant for the blind/visually impaired, a psychologist, a psychiatrist, a doctor, or a behaviour specialist
- specialized materials (e.g., picture schedules, communication devices or picture communication systems, large print, special cushions, wheelchairs)
- adapted, modified, or individualized lessons and assignments
- specialized teaching strategies
- environmental adaptations
- procedural/scheduling adaptations (e.g., movement breaks, frequent changes in activity)

Physical and cognitive challenges may prevent students from being able to speak or to use sign language for communication. Some students may require a picture communication system (such as PCS) or voice output device. Other students may be able to use sign language, but due to physical limitations, have uncontrolled, choppy movements when signing (e.g., students with cerebral palsy). Whatever the student's challenges, it is critical that an effective communication system be established. The communication system may need to be re-evaluated over time to reflect changes in the student's needs and changes in technology.

When working with students who are DHH with additional needs, it is important that the child's primary needs are determined and emphasized. If the hearing loss is not the primary area of concern, the student may be best supported in programming to meet their main needs, with the use of strategies for the hearing loss as an additional support. Communication still remains an important focus.

## Supports for Students Who Are Deafblind

An individual who is **deafblind** is one who has a combined vision and hearing loss, such that neither vision nor hearing can be used as a primary source of accessing information (Canadian Deafblind and Rubella Association). This is a functional definition, based on the combined effects of the losses rather than on a specific degree of loss to one or the other of the senses. The two sensory losses multiply and intensify the impact of one another, creating a severe disability.

A combined loss gives a person a distorted picture of the world and leads to immense difficulties in communication, mobility, learning, and interaction. All those with deafblindness experience sensory deprivation and are isolated from the world to varying degrees. Each person requires





The departmental document *Supporting Students Who Are Deafblind: A Handbook for Teachers* is available online at [www.edu.gov.mb.ca/k12/specedu/dhh/](http://www.edu.gov.mb.ca/k12/specedu/dhh/).

a unique educational approach—a range of learning opportunities and a variety of teaching modalities (auditory, visual, kinesthetic, and tactual) in an accessible environment—in order to ensure that she or he has the opportunity to reach her/his full potential. The challenge for each individual is to make sense of the world using the limited information that can be accessed.

The educational plan, designed to meet the student’s unique challenges and to reflect his or her skills, may include the following strategies:

- Conduct regular assessments to determine which teaching strategies are working.
- Emphasize development of communication skills.
- Provide initial training in basic self-help (e.g., dressing, feeding).
- Focus on exploration, orientation, and mobility.
- Develop connections with specific people.
- Include effective work habits and leisure skills in the plan as the student progresses.
- Provide learning opportunities for staff and classmates on the student’s needs and build a community that is accepting and supportive.

## Transitioning

Students who are DHH may face a number of challenges when they transition from school to school or from school to post-secondary education or work environments. They may encounter various levels of support and understanding of their needs depending on their new environment.

The Laurent Clerc National Deaf Education Center of Gallaudet University suggests transition skills guidelines for students from Kindergarten to Grade 12. The *Transition Skills Guidelines* focuses on five areas:

- advocacy and empowerment
- education and career planning
- work habits, skills, and attitudes
- independent living
- community roles, responsibilities, and resources

The *Transition Skills Guidelines* are used with the Laurent Clerc National Deaf Education Center’s educational standards and benchmarks for the student’s communication, thinking skills, life planning, and emotional intelligence. It is available online at the Laurent Clerc National Deaf Education Center website at <http://clerccenter2.gallaudet.edu/products/?id=216>.

The following is an excerpt:

<b>STANDARD 1: Student demonstrates the skills necessary to advocate [for] and empower . . . him/herself.</b>								
Topic	Grade K	Grades 1, 2, 3	Grades 4, 5	Grades 6, 7, 8	Grade 9	Grade 10	Grade 11	Grade 12
Self-Awareness	Identifies characteristics of self.	States positive traits and skills about self.	Identifies simple personal goals (academic, social, and career).	Identifies personal strengths and skills needed for family, school, and community success.	Links personal and academic skills to achieving personal, social, educational, and career goals.	Develops and implements a plan to strengthen skills needed for future goals.	Reflects on progress and updates plan to strengthen personal skills needed for future goals.	Implements and updates an always evolving post-secondary plan.

Manitoba Possible (formerly the Society for Manitobans with Disabilities) offers programs for recent immigrant/refugee families. Manitoba Possible can provide translation services for IEP, transition, and team meetings in as many as 18 different languages. Further information is available at [www.manitobapossible.ca/newcomer-navigation-and-support-unit](http://www.manitobapossible.ca/newcomer-navigation-and-support-unit). Some school divisions also provide translation services and cultural liaison officers to support families.

Transitions for students with hearing loss may include the following:

- initial transition into school (e.g., entering Kindergarten)
- transfer to a new school (e.g., progress to junior/senior high school or move to a new area)
- transition from school to post-secondary education or the community

A team approach involving all partners in the transition process—families, service providers (e.g., preschool, daycare), support agencies, and the school system—ensures a student’s successful transition into a new placement.

Suggestions for transitioning to a new placement include the following:

- Explore potential placement options as early as possible (e.g., in the spring for a September transition).
- Family, student, and team members make visits to potential placements to learn about their available supports and programming.
- Family and student, with support from the team, make a decision on the setting that would best meet the needs of the student.
- Family (or adult student) register at the new school.
- The sending school and the receiving school meet to discuss student strengths/needs and successful supports.
- The student visits the new placement in May or June preceding the change to become familiar with the new environment, personnel, and classmates, and therefore facilitate a smooth transition (depending on age and functioning level of student).
- For very young students, take pictures at the new setting and make a picture book of the new school/classroom/teacher that they can read over the summer to help them comprehend the transition and prepare themselves for the change.



The following resources provide information on transition planning and include an “Early Years Transition Planning Inventory” to facilitate information gathering and sharing:

- *Protocol for Early Childhood Transition to School for Children with Additional Support Needs* available at [www.gov.mb.ca/healthychild/publications/protocol\\_early\\_childhood\\_transition.pdf](http://www.gov.mb.ca/healthychild/publications/protocol_early_childhood_transition.pdf)
- *Appropriate Educational Programming: A Handbook for Student Services* available at [www.edu.gov.mb.ca/k12/specedu/aep/handbook\\_ss.full\\_document.pdf](http://www.edu.gov.mb.ca/k12/specedu/aep/handbook_ss.full_document.pdf)

- Investigate transportation needs (e.g., Is busing needed? Is student transitioning from school bus to public transit?). Discuss and arrange bus training if needed.

Questions to ask at a transition meeting include the following:

- Tell me about the student (e.g, strengths and challenges as a student who is DHH, other challenges).
- How does the student communicate?
- What supports/adaptations does this student require for communication, academics, and social skills?
- What is the student’s current academic level (especially reading and math)? Is a recent report card available?
- Are there any medical issues?
- Are there any behavioural or social-emotional concerns?
- Does the student need any specialized/adapted equipment (e.g., hearing aids, CI, wireless audio system, computerized notetaking equipment)?
- Are there any assessment/progress reports available (e.g., from the TDHH, the SLP, the AV therapist, the psychologist)?

## Transitioning Students from Preschool to School

It is important to plan early for a child’s transition into school. The planning typically occurs in the early spring prior to school entry and involves the preschool service providers and the school-based team, including the parents. This transition planning can assist the school in accessing the appropriate resources to support the educational programming.

## Transitioning Students from High School to Post-Secondary Education

Students who plan to attend post-secondary educational institutions (e.g., university, college, apprenticeship programs) may require support to explore options and initiate applications.

Services for students who are DHH are available from the student accessibility services offices at a variety of post-secondary institutions. Students may also pursue study at schools specializing in education for students who are DHH, such as Gallaudet University, the National Technical Institute for the Deaf (NTID), and the California State University at Northridge.



For further information about transitioning, see the following:

- *Bridging to Adulthood: A Protocol for Transitioning Students with Exceptional Needs from School to Community*, available online at [www.gov.mb.ca/healthychild/publications/protocol\\_swsn.pdf](http://www.gov.mb.ca/healthychild/publications/protocol_swsn.pdf)
- *Student-Specific Planning: A Handbook for Developing and Implementing Individual Education Plans (IEPs)*, available online at [www.edu.gov.mb.ca/k12/specedu/iep/pdf/planning/student\\_specific\\_planning.pdf](http://www.edu.gov.mb.ca/k12/specedu/iep/pdf/planning/student_specific_planning.pdf).

Students can receive assistance to help plan for post-secondary education from service coordinators at Manitoba Possible (e.g., planning supports, vocational rehabilitation funding).

## Transitioning Students from High School to Community

As students enter the Senior Years, they begin to plan for their options in life after high school. Transition planning begins in the school year in which the student enters high school. The process concludes in June of the calendar year in which the student turns 21 or graduates. During this time, the support team and the student work together to provide the student with a coordinated transition from school to life in the community.

The support team assists the student in exploring and accessing community supports, agencies, and associations for individuals who are DHH. Manitoba Possible provides life skills training, job preparation, and work placement services. Assistance with resumé writing, interview skills, and exploring employment opportunities is available through Reaching E-quality Employment Services (REES). Staff at Manitoba Possible and REES have experience in working with individuals who are DHH and can communicate in American Sign Language as needed.