V. Communication Skill Development

A. Barriers to Communication Development

Learning to communicate effectively is a priority “life skill” goal that enables individuals with Down syndrome to share their innermost thoughts, feelings and desires in words. It’s a difficult struggle to overcome the many barriers that impact communication skill development. Every individual is unique so, before setting goals, it is important to identify which barriers present the greatest challenges to each individual’s progress. The following barriers occur to different degrees in all individuals with Down syndrome:

1. **Cognitive Limitations** affect vocabulary and concept development, auditory and visual memory, auditory processing, word retrieval, incidental learning, abstract thinking and generalization skills.

2. **Attention and Memory Deficits** affect the ability to focus, learn, retain, retrieve and sequence information.

3. **Low Muscle Tone** causes the muscles for speech to be more relaxed or “floppy.” For example, the tongue tends to protrude from the mouth. Articulation or sound production, sound sequencing, speech intelligibility, fluency and voice quality are all affected.

4. **Sensory and Perceptual Skill Impairments** (i.e., vision, hearing and/or sensory deficits) affect the ability to attend and respond to environmental stimuli.

5. **Oral Motor Planning Difficulties** impede the ability to coordinate, sequence and time muscle movements for the correct articulation of sounds in words and sentences.

Years ago we were under the mistaken assumption that children with Down syndrome could not learn to talk. With confidence, we can now reassure parents that the majority of children do learn to talk, most speaking by school entrance. However, expressive communication skills lag significantly behind receptive communication skills. For the purposes of learning to talk, the biggest barrier to expressive language growth is weakness of the auditory channel. For example, auditory short-term memory deficits prevent the individual from remembering what to do or say. The challenge is to look to the visual channel for strategies to teach communication skills. (Kumin, Communicating Together, August 1996)

A person does not have “just” Down syndrome. As well as a range in severity of cognitive delays, potential associated chronic health complications can affect development as much or more than the Down syndrome itself. In particular, speech and language development is affected when a child cannot “look, listen and learn” from his environment because of overriding medical complications (e.g., heart, asthma, hearing). Research is very clear on the effects of otitis media with effusion (OME) on speech and language development. Individuals with Down syndrome have tiny ear canals with resulting fluid build up in the ears. This often results in chronic ear infections that can cause conductive hearing loss. Studies suggest that children with a history of chronic ear infections score lower on tests of speech production, as well as receptive and expressive language, and are more likely to demonstrate attention and behavioural problems at school. (Communicating Together, March 1995)
Parents play a critical role in closely monitoring their child’s health and aggressively managing ear infections to minimize the duration of the hearing loss. Physicians routinely place drainage tubes in the ears, but proper medical management dictates a more careful evaluation and balance of factors such as early detection, allergies, sensitivity to antibiotics, nutrition and sleep habits.

Experience has taught us … and research confirms … that, despite the obstacles, just five percent of individuals with Down syndrome acquire only limited speech and need an augmentative system to communicate. (Kumin, Communicating Together, 1996) Whether the student will learn to talk is a reflection of innate ability, early intervention and, of course, environmental expectations for oral speech. In reality, for the majority of individuals with Down syndrome, accomplishing intelligible speech takes tremendous family commitment and hard work. The work is made easier when early intervention has been available from birth onward and when consistent expectations for oral speech are made part of every day routines. For those individuals who cannot or do not learn to speak, augmentative communication systems such as sign language and symbol systems foster language development and ensures the individual has a nonverbal means of communication.

The ability to talk clearly is not a prerequisite for inclusion. Inclusive education is still the first option to consider.

For some students who have not had early intervention, school entrance is the first opportunity to access support services. Parents need to appreciate that their child is not alone in needing additional help in the regular classroom. Many other students also have language or learning difficulties. The difference is that their handicap may be “invisible” whereas Down syndrome is “visible.” From a speech and language development perspective, the benefits of the inclusive classroom include:

• peer modelling and teaching;
• increased motivation to use language;
• higher expectations for language use; and
• ‘real’ world experiences.

Students with limited oral speech skills can be successfully included in the regular classroom when:

1. **communication skills** are a primary focus of the student’s educational plan;
2. a **trained education assistant provides in-class supervision and support**;
3. **regular speech-language therapy** is available at school or in the community; and
4. **parents play an active role** on the teaching team, giving teachers permission to incorporate higher expectations for communication skills into daily classroom routines.
B. The Importance of Speech-Language Therapy

Individuals with Down syndrome follow much the same developmental progression as typical peers, but at a slower rate and on their own timeline. As is true in other areas of development, you cannot rush Mother Nature. The key to maximizing communication potential is ongoing, individual speech-language therapy. Since there is no predictable pattern of “Down syndrome” speech-language development, there’s no “Down syndrome” therapy program.

Speech-language therapy is needed at all ages and grade levels. In the preschool years, the speech-language therapist helps children learn to talk and shows parents how to become their child’s best language teacher. When the child enters school, the speech-language therapist becomes an invaluable member of the teaching team. Her role has a threefold function:

1. To ensure that speech goals are included in the educational plan, whether the student can speak clearly or needs augmentative communication;
2. To provide assistance to the teaching team in adapting curriculum and modifying the language of instruction to meet the student’s needs; and
3. To welcome parent input in setting consistent, common goals for language use at home and school.

There are no speech and language problems unique to students with Down syndrome. So, the knowledge and experience speech-language therapists have in working with others can be applied in the same way to meet the communication needs of individuals with Down syndrome. Parents need to advocate for their child’s right to access the same therapy services as their classmates.

Different Types of Speech-Language Therapy

The type of speech-language therapy provided is dependent on many variables, which may include caseload, scheduling, treatment model and funding constraints. For example, some speech-language therapists provide their services within a consultation model and individual therapy may not be offered as a service option. If so, the teaching team can discuss with parents the availability of services outside the school system such as private speech-language therapy.

Teachers are encouraged to make referrals for speech-language therapy services after identifying areas of concern. Sharing their observations and concerns assists the speech-language therapist in individualizing the student’s treatment program.

<table>
<thead>
<tr>
<th>In the Classroom If:</th>
<th>Therapy Can Focus On:</th>
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<tbody>
<tr>
<td>• the student is difficult to understand</td>
<td>– articulation, rhythm and rate</td>
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<tr>
<td>• the student does not understand verbal instructions</td>
<td>– vocabulary and concept development</td>
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<tr>
<td>• the student does not speak in sentences</td>
<td>– length of utterance, grammar</td>
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<tr>
<td>• the student speaks softly and is shy in class</td>
<td>– social conversation, loudness</td>
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<tr>
<td>• the student speaks too fast and is starting to stutter</td>
<td>– rate and fluency therapy</td>
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<tr>
<td>• the student is unresponsive to group instructions</td>
<td>– listening skills</td>
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<tr>
<td>• the student is unaware of turn taking in conversations</td>
<td>– social conversation</td>
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Results and Rewards of Speech-Language Therapy

The focus on early intervention and ongoing individual speech therapy during the school-age years has many rewards. Contrary to prior beliefs that a ceiling in communication development is reached in childhood, research now confirms that progress does continue for many adolescents and adults. (Communicating Together, September/October 1998) Trends in service delivery have shifted from a focus on articulation therapy to encompass a spectrum of both expressive and receptive language skills. For example, through teaching pragmatics – the social use of language – students learn observation, turn taking and staying on topic.

The development of effective communication skills has a tremendous impact on the overall development of the individual as a contributing member of the family, the classroom and, ultimately, the community. Students learn to feel good about themselves when others value whom they are and what they have to say. Family, friends and educators “raise the bar” for learning once students can communicate abilities clearly. Independence flourishes when they have the communication skills to integrate into home, school and community activities. No matter what the age or functioning level of the individual with Down syndrome, communication is the centre of learning from which interpersonal skills radiate.
C. Communication Goals in the Classroom

The Key is Motivation

In the classroom, initial communication goals should focus on motivating the student to talk spontaneously. Students with Down syndrome take longer adjusting to changes, learning routines and getting to know and talk freely with others. It’s common for them to be reticent in group settings. If speech is not an area of strength, they tend to “shut down” until the classroom becomes a familiar setting. Motivation varies with mood, circumstances and, of course, personality. Students with language delays need more time, more practice, more consistency and more reinforcement to learn communication skills.

Reinforcing effort strengthens motivation. The focus has to be on small steps as students need goals broken down into achievable tasks that are easily monitored and measured. Due to a decreased ability to generalize skills that are taught in one setting to another, the same skill may have to be taught in different situations. A focus on effort, not necessarily results, keeps the student trying his best even when progress seems slow to others. The following are indicators that the student is demonstrating effort:

- The student initiates and maintains eye contact;
- The student willingly sits or stands facing the speaker;
- The student listens and watches the speaker’s face intently;
- The student spontaneously imitates the speaker’s words/phrases; and
- The student displays pride when praised by others (i.e., smiles, clapping, high 5’s, thumbs up).

One of the biggest motivators for any student is to be a part of the group. Poor communication skills are a huge barrier to being welcomed by others into group activities. Before other students can grasp their role as helpers, they need to understand that similarities and differences do exist between peers. Teachers can facilitate acceptance, tolerance and understanding of the student with Down syndrome by encouraging classmates to ask questions, request help when needed and express their emotions without judgement. Students also learn by example. If the teacher models and posts classroom rules for courtesy, cooperation and consideration, all students will benefit. Respect for those with any special need is nurtured when teasing, mimicking and put downs are not allowed.

To maximize communication skill development, it’s important all members of the classroom be encouraged to play an active role. The education assistant has to facilitate interactions by deliberately stepping back to allow the teacher and classmates the time and opportunity to converse with the student. It’s particularly important for the student to perceive that the teacher is interested in conversing with him. Incorporating the following activities into class time ensures that everyone can communicate and learn together.

**Teachers Need To:**

- practice greeting/farewell routines
- call on the student in group activities
- provide public speaking opportunities
- give the student “speaking” jobs
- view the student as capable; “don’t baby”

**Classmates Need To Learn:**

- greeting/farewell routines
- small group turn-taking games
- buddy activities
- how to be good listeners
- how to be patient when assisting friends
- how to model language
- how to let others speak for themselves
Don’t Assume Motive or Meaning ...

When there’s a communication breakdown, adults often err in assuming that a student is unresponsive, uncooperative or rude in social conversation situations. In fact, weak listening skills, limited memory skills and other language processing difficulties can impair a student’s ability to remember or know how to respond. Refusing to answer or changing the topic may be avoidance behaviours the student has developed to cope in situations where he is confused. Using simplified language or repeating the question slowly will help him to comprehend what is being asked. Teach the student to ask others to repeat instructions, ask for help or say, “I don’t know.” When individuals with Down syndrome learn and practice strategies such as these in the classroom, communicating becomes less work and more fun. The result will be a student who is able to:

- talk to classmates;
- contribute to classroom discussions;
- share feelings and ideas;
- ask for help;
- present to a group;
- volunteer to participate in classroom activities.

Getting to Know the Student

Prior to setting communication goals, it’s important to have a clear perception of the student’s skills in a variety of situations. Communication competence is not measured solely on verbal ability but on how successfully the student interacts in class, on the playground and in public. In order to identify the words and sentences a student uses spontaneously, and those that he understands:

1. ask the parents for an expressive and receptive speech sample; characteristic utterances heard at home and typical instructions he can follow;
2. ask the education assistant to record a spontaneous speech sample during class time and note the student’s ability to follow individual and group instructions;
3. review any speech-language therapy reports in the student’s cumulative file;
4. request a consultation or assessment from a certified speech-language therapist;
5. every day set aside a few minutes to have a conversation with the student. Students with special needs do need some individual time, and the more you get to know them, the more you will understand their speech;
6. record novel utterances the student uses spontaneously as part of your regular progress notes. The parents and the speech-language therapist will be delighted to hear about new words or sentences.

This information gives the teaching team the facts needed to double check that goals are achievable, measurable and meaningful.

Tips for Communication Goals on the Individual Program Plan (IPP)

The purpose of this section is to help the teaching team identify communication goals for the IPP. Be assured it is not the role of the teaching team to perform individual speech-language therapy. Rather, their job is to ensure that expectations for language use are in place within the classroom and to reinforce the student for effort. It’s unrealistic to set goals in every area of speech and language development. Begin by focusing on two or three priority areas. With reasonable, consistent and measurable goals, student progress will be seen … and heard!
When setting goals, it’s important to identify what type of verbal reinforcement is most motivating to the student. The use of positive reinforcement is a given. However, for students with Down syndrome, it’s not enough to just say, “Good talking!” because they benefit more when reinforcement is specific rather than general. Praise is more meaningful and powerful when it is a reminder of what they have accomplished. For example, the specific “I like the way you _____” provides the student more meaningful feedback than the general “good talking.” This technique encourages everyone to identify concrete, tangible steps. On speech imitation tasks, successive approximation is the term used to describe how imitative attempts gradually increase in accuracy over time and number of trials. Rewarding effort is the key to ensuring the student perseveres in his attempts to master the task. When spontaneous imitation or use of targeted skills is evident, the student is ready to move on to the next step.

The following goals, strategies and techniques are sensitive to the learning style of individuals with Down syndrome and are “classroom friendly.”

**Eye Contact**

*To develop the student’s ability to initiate and maintain eye contact to indicate the desire to communicate …*

**Classroom techniques and strategies include:**

- getting down to the student’s eye level;
- saying “look at me” or pointing to your own eyes;
- waiting until the student initiates eye contact;
- holding the desired object up to your own face;
- cuing the student to “chin up”;
- saying, “I’m waiting for you to look”;
- waiting until the student stops fidgeting, then giving a visual cue (i.e., finger to eye).

**Listening and Attending Skills**

*To teach the student to attend to the speaker’s face and respond to visual and auditory cues …*

**Classroom techniques and strategies include:**

- teaching the listening position (i.e., hands down, head up);
- encouraging “stop, look, listen” – paired with visual gestures or signs;
- purposefully initiating eye contact;
- arranging preferential seating (i.e., close to the speaker);
- finger cuing;
- waiting for eye contact;
- visually signalling transition times (e.g., lights on and off);
- repeating group instructions specifically to the student.
Imitative Skills

To teach the student to watch others and imitate their actions and words ...

Classroom techniques and strategies include:
- finger cuing;
- modeling appropriate actions and words;
- instigating “buddy” activities;
- using action songs and finger plays in music;
- using consistent speech expectations in daily routines;
- reinforcing any spontaneous imitation of peers or adults with verbal praise;
- reminders to follow classmates’ lead (i.e., “Look at the others. What do you need to do?”).

Following Directions and Instructions

To teach the student to independently follow directions ...

Classroom techniques and strategies include:
- ensuring the student can see the speaker clearly;
- pairing instructions with gestures;
- using a vocabulary that is meaningful to the student;
- “chunk” lengthy instructions into understandable components;
- waiting for the student to finish a step before giving the next instruction;
- giving the student an instruction or job card (pictures or words) with each step numbered;
- cuing the student to self check the card to discover errors (i.e., “Did you miss any steps?”);
- after giving a direction, asking the student to “Tell me what you are supposed to do”;
- giving the student permission to say “I don’t know” or “Please tell me again”;
- repeating instructions slowly, emphasizing key words.

Greeting and Farewell Routines

To teach the student routines that acknowledges others and encourages social interaction ...

Classroom techniques and strategies include:
- establishing a daily routine (e.g., “Hi! How are you today?”);
- helping the student to learn the names of everyone in class at the beginning of the year (e.g., using a class photo book);
- pairing verbal with natural gestures (e.g., waving, shaking hands, high 5);
- educating others in the school community about appropriate greetings (i.e., no hugging).

Turn Taking

To teach the student to observe, listen and share with others ...

Classroom techniques and strategies include:
- modeling turn-taking language (i.e., “I want ____.” “My turn.” “Your turn.” “Wait.”);
- teaching turn taking first in small groups;
- calling on the student to take a turn in group discussions;
- teaching “hand up” to request a turn;
- having consistent consequences for interrupting;
- using visual cues to prompt passive students to take a turn.
Vocabulary

To teach the student the vocabulary to enhance their participation and learning …

Classroom techniques and strategies include:
• regularly reviewing theme and unit words;
• building word banks and personal dictionaries;
• creating word webs prior to writing activities;
• teaching dictionary skills;
• assigning reading that is related to the theme.

Word Retrieval

To teach the student to respond to cues to recall learned vocabulary …

Classroom techniques and strategies include:
• sound cuing (i.e., the first sound or syllable of a word);
• mouthing the word without making a sound;
• using signs and gestures;
• using cloze procedures to elicit words (i.e., “Time to _____!”);
• providing word associations (i.e., “It’s not hot, it is _____.”);
• cuing students with a rhyming word (i.e., “Sounds like _____”);
• asking students to “show me” or “tell me more.”

Intelligibility

To teach the student to use the strategies he needs to speak more clearly …

Classroom techniques and strategies include:
• modeling slow, clear speech and reminding the student to “speak slowly”;
• encouraging the student to augment his speech with gestures (i.e., “Show and tell me.”);
• asking the student to repeat himself if he hasn’t been understood (i.e., “I don’t understand you; please tell me again.”);
• finger cuing;
• finger pacing.

Grammar and Length of Utterance

To teach the student to use more mature grammatical structures that will lengthen his sentences …

Classroom techniques and strategies include:
• finger pacing;
• cuing verbally with “tell me more,” “tell me in a sentence,” “use a big sentence”;
• prompting the student with the first word in sentence (e.g., “I _____”);
• practicing question forms (i.e., yes/no, “wh” questions);
• modeling grammatical structures with emphasis and beat (i.e., “I want to go!”);
• providing printed sentence patterns for the student to refer to.
Loudness of Voice

To teach the student to use the appropriate voice in a given situation …

Classroom techniques and strategies include:
• teaching the concept of quiet and loud in different contexts;
• finger cuing “sh”;
• saying “use your big voice” or “I can’t hear you”;
• practicing indoor and outdoor voices.

Fluency

To teach the student strategies for smooth talking …

Classroom techniques and strategies include:
• encouraging the student to be a good listener (i.e., “Wait your turn.”);
• waiting until the student finishes – don’t interrupt;
• maintaining eye contact and letting the student know you are attentive and supportive;
• if the student is struggling or showing distress, consulting a speech-language therapist.

Feelings

To teach the student the words he needs to express emotions …

Classroom techniques and strategies include:
• setting the expectation to “use your words” rather than actions;
• modeling feeling words (i.e., “You look like you’re _____ Tell me how you feel.”);
• role playing and practicing scripts (i.e., “If he/she says _____, you will _____.”);
• problem solving aloud (i.e., “Let’s talk about what made you feel sad.”);
• having a “feelings” chart so the student can point to how he feels;
• using problem solving models (i.e., “What happened? What can I do now? What will I do next time?”).

Social Conversation Skills

To teach the student strategies to stay on topic during a conversation …

Classroom techniques and strategies include:
• cuing to stay on topic (i.e., “Stop; answer my question.”);
• redirecting the student back on topic (i.e., “We’re talking about _____ now.”);
• using photos (e.g., special events) and other visual cues (e.g., crafts) for conversation starters;
• developing a bank of social questions and meaningful social responses;
• practicing the rules of courtesy and cooperation (i.e., not interrupting);
• discussing the boundaries of personal space and demonstrating arm’s length for conversations;
• discussing the messages that body language conveys;
• creating a visual cue card to remind the student what to talk about.
Fluency

Fluency refers to the rate and smoothness of a student’s speech. Everyone has normal dysfluencies in their speech. Pauses and word repetitions often occur when we are distracted, tired or under stress. It is compounded in persons who have oral motor or sequencing difficulties. Fluency typically becomes a concern when individuals struggle to get words out and the frequency or severity of their dysfluencies alarms their caregivers. When these dysfluencies become a habitual pattern, we call the problem stuttering.

For most individuals, dysfluencies come and go; there is no set pattern. However, in children with immature language skills, a pattern of dysfluencies may develop if the child is speaking too quickly or too slowly, is stressed or fatigued, or is unable to compensate for learning difficulties such as word retrieval. For example, if they can’t remember what word to say, they may make whole word or sound repetitions because they are “stuck.”

There is no easy answer to the question, “Why do dysfluencies occur?” Parents and teachers need to consult a qualified speech-language therapist for assistance in handling these concerns. They also need to appreciate that dysfluencies are not deliberate, but are only a symptom. Fluency will not return to normal until the underlying factors are identified and addressed. In individual speech-language therapy sessions, students can learn strategies to help them speak more smoothly and, most importantly, parents and teachers will learn strategies to reduce both theirs and the student’s stress.

D. Visual Cues to Increase Speech Production

Depending on their unique combination of barriers to communication development, some students with Down syndrome will take longer to learn to talk. Finger cuing, finger pacing, sign language and the printed word are all visual techniques that nurture development of oral speech.

The visual cue acts as a signal to sequence sounds into words, and words into sentences. For most students, the use of these cues fades away naturally as they master sound and then word production. It is beneficial to teach students with limited oral ability to augment word production with gestures and signs to help communicate their message more clearly. The emphasis on “doing whatever it takes to get your message across” is called Total Communication.

**Finger Cuing and Finger Pacing**

Using fingers is a natural and “handy” visual tool to elicit speech. Finger cuing is used primarily to evoke sounds and words while finger pacing teaches sound and/or word sequencing.

**Finger cuing** is a visual cue that alerts the student to watch the movement of the speaker’s lips and tongue and prompts him to talk. The speaker gently taps her own lips with her index finger as she models sounds or words for the student to imitate. Frequent pairing of verbal prompts such as “tell me” with finger cuing urges students to “use your words.” Eventually, students will finger cue themselves to talk although this use fades away naturally as they gain confidence and start to use speech spontaneously.
**Finger pacing** visually cues a student to slow down and articulate each sound or syllable in a word, or each word in a sentence. The speaker holds up one finger at a time as she slowly models the sequence of sounds, syllables or words to be spoken by the student. Repeated practice helps him to memorize the correct sequences and generalize their use to conversation. The student may also finger pace to help himself articulate a multi-syllable word or to build a sentence.

**Gestures and Signing**

The use of natural gestures is a very accepted form of communication. Waving, pointing and other arm signals are all commonly used. From a young age, students with cognitive delays should be encouraged to “show and tell.” Pairing gestures with vocalizations helps the student communicate his message clearly.

Signing differs from gestures in that it is the formal language of the deaf community. There are pros and cons to using sign language as a visual cue to facilitate oral language in students with Down syndrome.

The benefits include building receptive vocabulary and early intentional communication through the visual channel. Signing is then a temporary or transitional communication system until the student is able to master speech. Students who use signs should always be expected to vocalize or verbalize at the same time. If signs are paired with words, the student will naturally drop the use of signs as words are mastered. In this scenario, signing has facilitated speech development.

Students with Down syndrome have adequate hearing and can develop an oral vocabulary that reflects their developmental age. The main disadvantage of signing is that if signs are not paired with oral speech, expressive language can be irrevocably delayed. When signs alone meet the student’s needs and parents do not expect speech, the student misses the opportunity to learn to talk. Additionally, if only one person in the family learns sign language, the child's ability to communicate with others is limited.

Even students with significant oral motor planning problems should be on an oral speech program, otherwise they could become too reliant on communicating with signs. If speech is not the focus, signing becomes easier and faster and the student neglects the intense repetitive practice needed to master sound and word production. So, it is critical that speech-language therapy focus on sound and word production as a priority goal.

Signing is an excellent **augmentative system** to enhance the potential for speech production development, but it is detrimental to “sign alone.”

**Reading**

Since the visual channel is a preferred channel of learning for students with Down syndrome, it’s only natural that learning to read positively impacts language development. For many students, learning to read is a catalyst for marked improvement in speech intelligibility and sentence length. The printed word can be a visual cue to articulate clearly, speak slowly and use longer sentences. Reading is an effective strategy that assists with:

- **Word retrieval**. Printed words help the student to recall what words to say.
• **Auditory memory.** Printed sentence patterns provide the student the repetitive practice needed to memorize and recall words in the proper word order.

• **Auditory sequencing.** Printed words cue the student to use grammatical structures that lengthen utterances.

• **Rate of speech.** Reading aloud helps the student naturally slow his speaking rate.

• **Following instructions.** Printed words provide the student a visual reminder to self-check and monitor assignments and homework.

Reading aloud daily is an excellent way to acquire new speech skills!

**E. The Power of Music**

The gift of music can benefit students in a variety of ways, but is particularly valuable in developing language skills. Intonation, beat and rhythm all act as cues for word retrieval, sequencing and memory. Music and song provides students with the motivation for repeated practice of actions and words, thus enhancing both receptive and expressive vocabulary development.

Many classrooms incorporate music in daily routines. In the younger grades, songs are common at opening and closing circle. Songs also act as cues for daily routines such as a “tidy up” song. Chants are common in older grades to remind students to keep their hands still or to line up. The practicing of songs for seasonal performances is great discipline and teamwork for students in all grades.

Using music and song helps the student to “tune in” and attend to auditory stimuli in a fun and motivating way that holds his attention. This novel approach to “getting the beat” uses intonation and rhythm to enhance the clarity of words. As students learn to sequence words together, sentences become more grammatical and intelligibility increases. Teaching strategies that make music a tool to facilitate language development in individuals with Down syndrome include:

- singing slowly, so the student can hear each word clearly;
- emphasizing key words;
- pairing words with actions or picture cues;
- choosing songs with meaningful vocabulary;
- clapping or tapping out the rhythm or beat;
- asking the student to show you or tell you what the song is about;
- cuing the student by mouthing the words rather than saying the word aloud;
- omitting the last word in each line of the verse for the student to sing on his own;
- using songs to signal the start or finish of activities; and
- giving directions using a musical or singsong voice.
In Conclusion - Behaviourally Speaking ...

The development of effective communication skills cannot be separated from learning socially appropriate behaviour. Both areas face the same barriers and evolve hand-in-hand. The question of “which comes first” can be debated but, in reality, they are interrelated skills. So the speech-language therapist must first establish behavioural expectations in order to teach the listening and attending skills essential for speech development. Likewise, the psychologist must incorporate communication strategies to help students learn socially appropriate behaviours.

Attention and memory deficits complicate the task of learning. Students are quick to perceive failure, and motivation is an ongoing challenge. It’s important for educators to recognize and accept the barriers that face each individual. However, the student does not benefit when inappropriate language or social behaviour is excused “because he has Down syndrome.” Students with Down syndrome can and will learn social conversation and behaviour skills when taught the rules of courtesy, cooperation and consideration. “Please,” “Thank you” and “I’m sorry” are but a few examples of key words for successful inclusion.

Parents and educators need to have regular, ongoing discussions about communication and behavioural concerns that arise at home and in the classroom. Keeping silent about concerns that negatively impact learning or socializing with peers only handicaps the individual further. An open discussion about barriers to communication, options for speech-language therapy and consistent expectations between home and school enhances student progress.

The good news is individuals with Down syndrome are now expected to learn to talk!

The even better news is we still have not yet learned the limits to their true potential.