

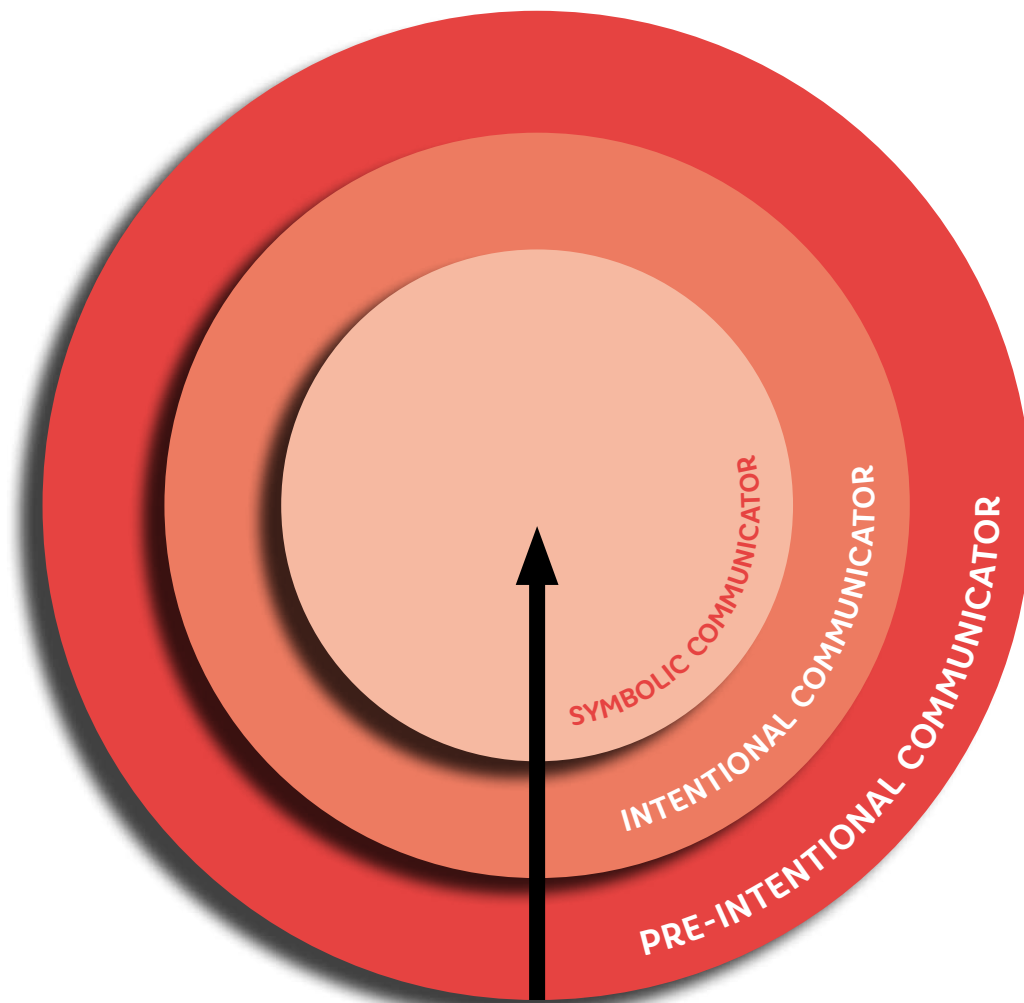


# Getting Started

Supporting and Guiding Communication  
Development of Students who are Pre-intentional  
and Intentional Communicators

By Dolly Bhargava





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# Acknowledgements

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# Introduction to the resource

The importance of communication in all of our lives cannot be denied. In fact, communication is perhaps the most essential lifelong skill. For the majority of students, the development of communication through the early stages to more complex stages occur rapidly and without much effort; however, for students with profound Intellectual disability may progress through the communication stages slowly or remain at a particular stage for a long time. They are dependent on their communication partners (i.e. parents, educators, peers and others) to support and guide their communication development

Children spend a lot of their time at school, and as educators we can have a powerful influence over a student's communication skills. This resource which is made of a booklet and DVD aims to educate, enable and empower educators with information about the needs of their student with profound Intellectual disability and suggest proactive ways to promote communication skill development within the classroom.

The resource has been divided into three sections: Section 1 – Intellectual Disability; Section 2 – Communication; and Section 3 – Supporting and Guiding Communication Development. Section 1 includes the definition, causes, diagnostic criteria and levels of Intellectual Disability. Section 2 includes the definition, components and stages of communication. Section 3 includes proactive strategies that can be used by educators to adapt their everyday interactions with a student with profound Intellectual Disability to facilitate the development of communication skills in classroom activities. This resource is filled with easy to use practical ideas and suggestions. Choose and adapt the suggestions to best suit the needs and style of both you and your student.

**Dolly Bhargava**



The background of the slide is composed of several large, overlapping circles in various shades of orange and red. The circles are semi-transparent, creating a layered effect with darker colors in the overlapping areas. The overall composition is abstract and modern.

Section 1

# Intellectual Disability



# Introduction to Intellectual Disability

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Intellectual Disability is a developmental disorder that occurs before the age of 18 years and is characterised by significantly below-average intellectual functioning and deficits in adaptive functioning (e.g. communication, social participation, education, play/leisure and activities of daily living) (American Psychiatric Association (APA), 2013).

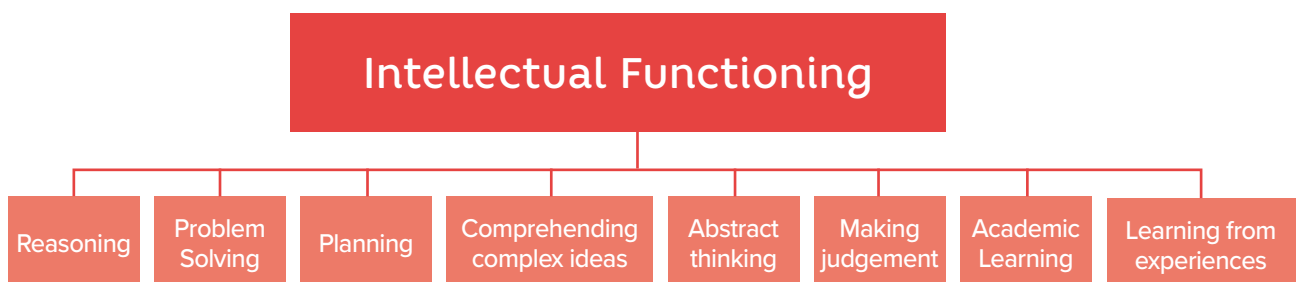
The causes of Intellectual Disability are categorised on the basis of when they occur in the developmental period, i.e. before birth, during birth or after birth. Some of the identified causes include:

- **Before birth** – genetic causes, exposure to maternal infection, alcohol or drugs
- **During birth** – prematurity, low birth weight and various labour /delivery related events
- **During childhood** – complications from infectious diseases, accidental injury to the brain and poverty

(Lovaasen, 2016)

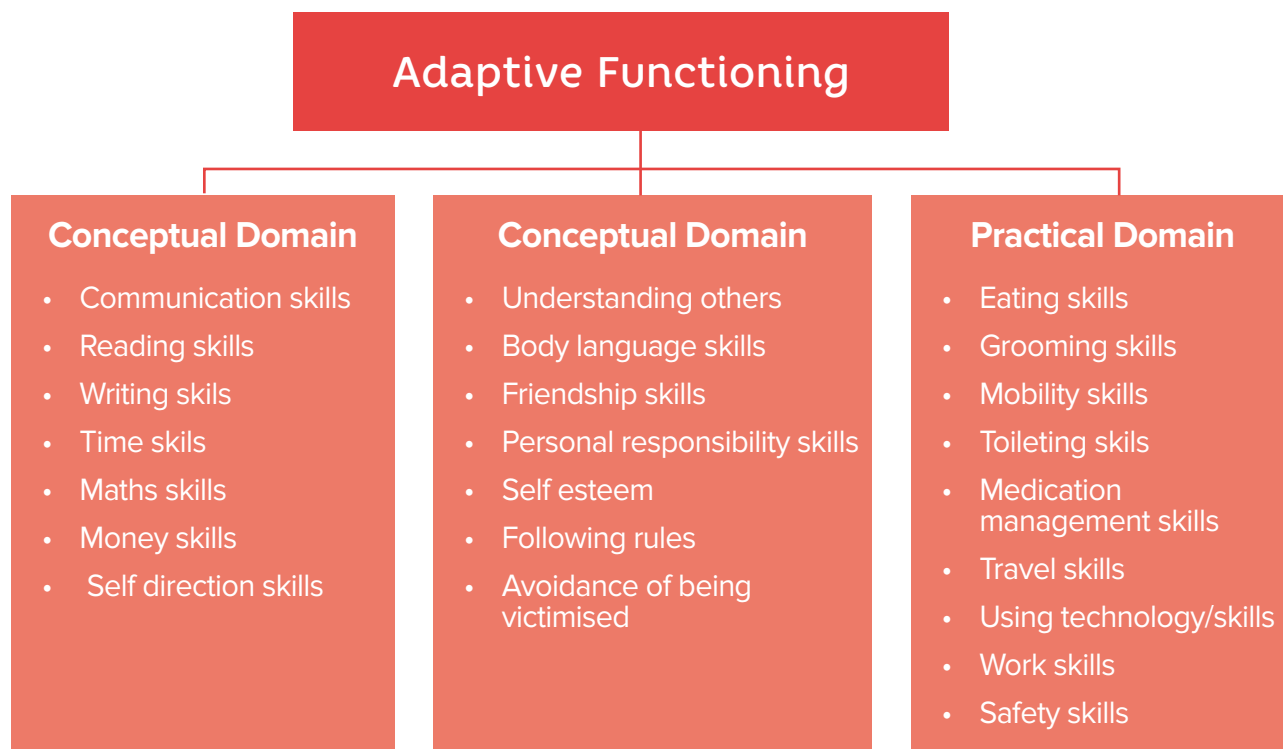
For a student to be diagnosed with an Intellectual Disability, the following three criteria must be met:

**Criteria 1 – Deficits in intellectual functioning (intelligence)** – Intellectual functioning refers to a student's ability to learn information, make sense of their surroundings and problem solve to figure out what to do (Gottfredson, 1997, Harris, 2002). The figure on the next page provides examples of the various intellectual functions that are necessary for navigating successfully through various situations, circumstances and life in general (APA, 2013; Carr, 2015; and Pratt, 2012).



All students with an Intellectual Disability have limitations in intellectual functioning to varying extents. One measure of intelligence is called the intelligence quotient, or IQ, which is determined by individualised standardised intelligence testing (APA, 2013). An IQ below 70 indicates significant deficits in intellectual functioning.

**Criteria 2 – Deficits in adaptive functioning** – Adaptive functioning refers to a collection of skills in the social, conceptual and practical domains that enable the student to cope with common life demands, and function independently, effectively and as expected in an age-appropriate manner (APA, 2013; Schalock et al, 2010). The figure below provides examples of domain specific skills.



To be diagnosed with an Intellectual Disability, the student must have deficits in at least one of the domains of adaptive functioning as determined by standardised rating scales, clinical interviews and observations in the student's environments (e.g. home, school) (APA, 2013; Weis, 2014; and Wicks-Nelson & Israel, 2015). The limitations result in the need for ongoing support at home, school, work and in the community.

**Criteria 3 – Onset** – Deficits in intellectual and adaptive functioning appear in childhood, before the age of 18 years.

# Levels of Intellectual Disability

Students with Intellectual Disabilities are often placed into levels (mild, moderate, severe and profound) to reflect the severity of their intellectual and adaptive functioning impairment (APA, 2013). The intent is to provide some general ideas about the types of support a student may need. The information below is from American Psychiatric Association 2013, Diagnostic and statistical manual of mental disorders (5th ed.), American Psychiatric Publishing, Arlington, VA.

Level	Conceptual Domain	Social Domain	Practical Domain
<b>Mild</b>  Intelligence Quotient (IQ) Score Range 50 – 70	<p>For pre-schoolers: May have no obvious conceptual differences.</p> <p>For school-aged students: Difficulties learning academic skills involving reading, writing, arithmetic, time or money. Abstract thinking, executive functioning (e.g. planning, organising, sequencing, cognitive flexibility) and short-term memory is impaired. Support may be needed in one or more areas to meet age-related expectations. A concrete approach to problems and solutions is used.</p>	<p>Communication, conversation and language are more concrete or immature than expected for age. Difficulties regulating emotion and behaviour in age appropriate fashion. Limited understanding of risk in social situations. Social judgment is immature for age. At risk of being manipulated by others (gullibility).</p>	<p>May function age-appropriately in personal care. Needs some support with complex daily living tasks compared to peers such as shopping, transportation, cooking and money management.</p>
<b>Moderate</b>  Intelligence Quotient (IQ) Score Range 35 – 49	<p>For pre-schoolers: Language and pre-academic skills develop slowly.</p> <p>For school-aged students: Progress in reading, writing, mathematics and understanding of time and money occurs slowly across the school years and is markedly limited compared with that of peers. Ongoing daily support is needed to complete conceptual tasks of day-to-day life, and others may fully take over these responsibilities for the student.</p>	<p>Shows marked differences in social and communicative skills compared to peers. Spoken language is simplistic and concrete. Social judgment and decision making are limited. Friendships with peers are often affected by social or communicative deficits. Significant social and communicative support is needed for success.</p>	<p>Needs extended period of teaching, time and practice learning self-care skills, such as eating, dressing, toileting, hygiene and other household skills compared to peers. Challenging behaviour is present in a significant minority and causes social problems.</p>

Level	Conceptual Domain	Social Domain	Practical Domain
Severe  Intelligence Quotient (IQ) Score Range 20 – 34	Attainment of conceptual skills (e.g. understanding of written language or concepts involving numbers, quantity, time and money) is limited. Caregivers must provide extensive support for problem solving throughout life.	Spoken language skills are limited with simplistic vocabulary and grammar. Speech may be single words/ phrases supplemented or enhanced by Augmentative and Alternative Communication (AAC). Speech and language are focused on the here and now within everyday events. Language is used for social communication more than for explication. Individuals understand simple speech and gestural communication. Relationships with family members and familiar others are a source of pleasure and help.	Requires ongoing support for all activities of daily living (eating, dressing, bathing, elimination). Skill acquisition in all domains involves long-term teaching and ongoing support. Caregivers must supervise at all times. Cannot make responsible decisions regarding well-being of self or others. Challenging behaviour, including self-injury, is present in a significant minority.
Profound  Intelligence Quotient (IQ) less than 20	Conceptual skills generally involve the physical world rather than symbols (e.g. letters, numbers). May use objects in goal directed fashion for self-care, work and recreation. Some visual spatial skills, such as matching and sorting, based on characteristics may be acquired with practice. Co-occurring physical and sensory impairments may greatly limit functioning.	Limited understanding of symbolic communication in speech or gesture. May understand some simple instructions or gestures. Expresses his or her own desires and emotions largely through non-verbal, non-symbolic communication. Enjoys relationships with well-known family members, caretakers, and familiar others and initiates and responds to social interactions through gestural and emotional cues. Co-occurring sensory and physical impairments may greatly limit functioning.	Dependent on others for all aspects of daily physical care, health and safety, although he or she may be able to participate in some aspects of self-care. Simple actions with objects may be the basis of participation in some vocational activities with high levels of ongoing support. Co-occurring physical and sensory impairments are frequent barriers to participation (beyond watching) in home, recreational and vocational activities. Challenging behaviour, including self-injury, is present in a significant minority.

To summarise, the differences between the different levels of Intellectual Disabilities lie in the scope and level of sophistication of the available skills and the role performed by the people who engage and support the individual on a regular basis (Bunning, 2004).

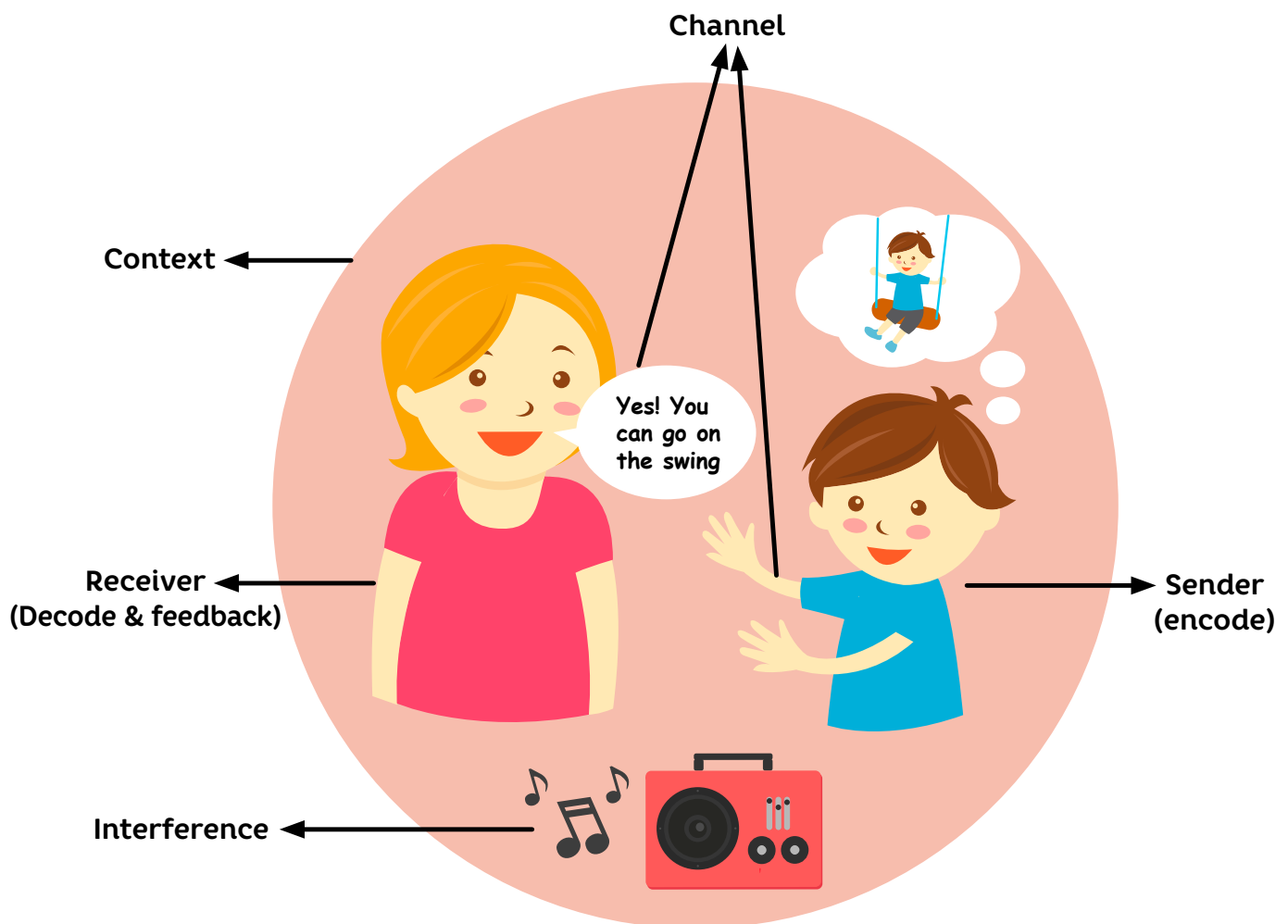


# Section 2

# Communication

# Introduction to Communication

‘Communication is the basis for all human interaction’ (Clarke & Pittaway, 2014, p.169). It’s how we connect with others, express ourselves, make changes, learn about our environment, and guide and influence others. Communication, as defined by Webster’s New World College Dictionary, Fifth Edition, is the act of transmitting, giving or exchanging information, signals, or messages by talk, gestures or writing. This exchange of messages between two or more people involves a complex process that is made up of a number of components. The diagram below illustrates the various components that make up the communication process.



The table below provides a brief description of the various components that make up the communication process.

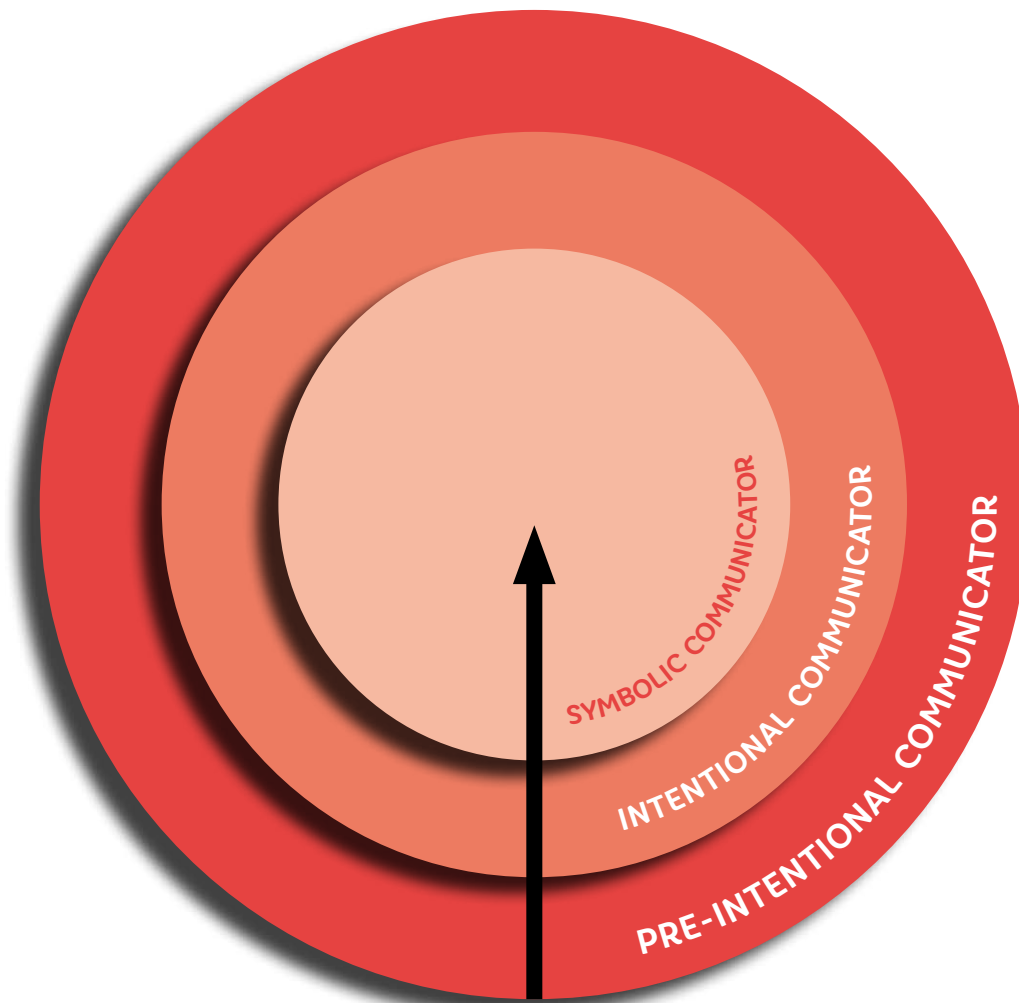
Component	Definition
<b>Sender</b>	Refers to the person (i.e. student or teacher) who is <u>conveying</u> the message. To do this the sender must encode (i.e. transform) their message (i.e. thought, idea, or information) into a form by selecting a channel (e.g. speech, body movement, signs or photos). The process of conveying a message to the other person is referred to as <u>expressive communication</u> .
<b>Receiver</b>	Refers to the person (i.e. student or teacher) who <u>gets</u> the message. The process of receiving, interpreting and assigning meaning to the message from the other person is referred to as <u>receptive communication</u> . To do this the receiver must have the skills, knowledge and understanding to decode (i.e. make sense of) the message. The receiver's feedback (i.e. response to a message) indicates whether the message has been received and understood in the way it was intended.
<b>Context</b>	Refers to the setting i.e. <u>where</u> , <u>what</u> , <u>when</u> , and <u>with whom</u> the communication is taking place.
<b>Channel</b>	Refers to the <u>method or means</u> (e.g. speech, signs or photos) by which a message (i.e. thought, idea, opinion or information) is delivered and received.
<b>Interference</b>	Refers to factors that can <u>block, distort or interfere</u> with sending or receiving a message (e.g. noise, distance, awareness of the sender's communication channels, different perceptions of the meaning of the message and attitudes).

The effectiveness of the communication process is dependent on these components working together to ensure that each person (e.g. teacher, student) in the two-way exchange feels heard and understood.

# Stages of Communication

Students with profound Intellectual Disability are a heterogeneous group. Within a group of students with the same Intellectual Disability classification, there will be great variation in their communication abilities. Hence, a more specific description of the student's stage of communication development is more useful.

The diagram below illustrates the progression of communication skill development through the early stages and moving towards more complex stages, i.e. pre-intentional communicator stage → intentional communicator stage → symbolic communicator stage.



Within each communication stage exists a continuum of growing communication ability. For the sake of simplicity, in this resource we will consider each stage individually and not further divide them into sub-stages.



# Stages of communication defined

## Stage 1 – Pre-intentional communicator

Students who are at the pre-intentional communicator stage use non-verbal behaviours such as facial expressions, muscle tension, breathing patterns, body movements and eye gaze to reflect their needs, wants and feelings. These non-verbal behaviours are involuntary or reflexive responses to the sensations the student is experiencing internally (e.g. experiencing pain, hunger or thirst) and/or in response to what is happening externally in their environment (e.g. hearing a loud bang, suddenly being moved or touched). The student is dependent on the communication partner (i.e. parent, teacher, peer) to recognise, interpret and respond to their behaviour. Over time, by consistently responding to the student's behaviour, the student realises that performing a particular behaviour can affect objects, communication partners and the environment. Additionally, to help the student understand what is happening in the environment, they are dependent on the communication partner to use of a predictable and a consistent approach when interacting with them.

## Stage 2 – Intentional communicator

Students who are at the intentional communicator stage have made a connection between their non-verbal communicative behaviour (e.g. facial expressions, vocalisations, gestures and body movements) and its effect on the communication partner, objects and the environment. The student is still dependent on the communication partner to use a predictable and consistent approach when interacting with them to help them understand what is happening in their environment.

## Stage 3 – Symbolic communicator

Students who are at the symbolic communicator stage use non-verbal communicative behaviours and symbols to communicate a message. A symbol is something that stands for or represents something else. These symbols have a shared conventional meaning between the sender and receiver because they look like, feel like, move like or sound like what they are meant to represent. For example, to represent the concept of having a drink the following symbols can be used:

- Spoken word 'drink'
- Sign for 'drink'
- Object symbol such as a drink bottle top stuck on a card
- Photograph of a drink bottle
- Computer line drawing of a drink bottle
- Written word 'drink'

In this resource we will be focusing on supporting and guiding communication development of students with profound Intellectual disability who are at the pre-intentional and intentional stage.



## Section 3

# Strategies for Supporting and Guiding Communication Development

# Supporting and guiding communication development through the pre-intentional stage and intentional stage

Supporting and guiding the student's communication development will require everyone interacting with the student to work together as a team. Collaborate with the student's parents, teaching staff, therapists and other key people to identify how the student is currently communicating and what strategies can be used to facilitate their communication development. The information below describes the various components of the communication process and the strategies that can be used to support and guide communication development in the classroom. The information has been adapted from Bloom, Y. & Bhargava, D. (2003). *Participation Through Communication Guide*. Sydney, NSW: Innovative Communication Programming.

## Component: Student as the sender

Students who are at the pre-intentional stage use non-verbal behaviours such as facial expressions, muscle tension, breathing patterns, body movements, vocalisations and eye gaze to reflect their needs, wants and feelings. These non-verbal behaviours are involuntary or reflexive responses to the sensations the student is experiencing internally (e.g. experiencing pain, hunger or thirst) and/or in response to what is happening externally in their environment (e.g. hearing a loud bang, suddenly being moved or touched). The student is dependent on the communication partner (i.e. parent, teacher, peer) to recognise, interpret and respond to their behaviour.

Students who are at the intentional stage have made a connection between their non-verbal behaviours and its effect on the communication partner and/or the environment. The student uses their behaviours in a deliberate attempt to express needs, feelings and wants. The student is still dependent on the communication partner to recognise, interpret and respond to their behaviour consistently.

Listed below are a range of strategies that can be used to help student who is a pre-intentional communicator to realise that a particular behaviour can affect objects, people and the environment. The strategies also assist students who are intentional communicators to shape and extend the range of messages they communicate.

### Strategy 1 – Create a personal communication dictionary

A personal communication dictionary consists of a combination of photographs, videos and written descriptions of the student's communicative behaviours, what they possibly mean and ways others can best respond to them. Interpreting the student's behaviours and responding in consistent ways can shape these actions that might initially seem random into purposeful actions. i.e. meaningful, planned and intentional behaviours. Once the behaviours become intentional you can then create situations to extend the range of messages.

Below is a list of steps to develop the personal communication dictionary.

**Step 1 – Collaborate with the student’s parents, teaching staff, therapists and other key people who know the student well to identify the non-verbal communicative behaviours the student currently exhibits. Look at the examples of non-verbal behaviours provided in the table on the next page to identify them. The information in the table is not a comprehensive list of all the possible non-verbal behaviours a student may exhibit.**

## Component: Student as the sender cont.

Examples of Non-Verbal Behaviours			
Arms and hands	Trunk	Legs	Head
<ul style="list-style-type: none"> <li>• Hands (reaching, grasping, squeezing, shaking, releasing, stretching, turning, tearing, waving, picking, feeling, scratching, throwing, dropping)</li> <li>• Lifting arms</li> <li>• Lowering arms</li> <li>• Flapping arms</li> <li>• Relaxing arms</li> <li>• Tensing arms</li> <li>• Becoming still</li> </ul>	<ul style="list-style-type: none"> <li>• Stiffening trunk</li> <li>• Leaning towards object or person</li> <li>• Leaning away from object or person</li> <li>• Turning away from object or person</li> <li>• Relaxing trunk</li> <li>• Becoming still</li> </ul>	<ul style="list-style-type: none"> <li>• Extending legs</li> <li>• Extending feet</li> <li>• Moving feet (e.g. kicking stamping, shaking, raising, lowering)</li> <li>• Becoming still</li> </ul>	<ul style="list-style-type: none"> <li>• Turning head</li> <li>• Protruding tongue</li> <li>• Opening mouth</li> <li>• Moving head by nodding, shaking</li> <li>• Change in breathing pattern</li> <li>• Change in oral motor pattern</li> <li>• Becoming</li> </ul>
Vocalisations	Eye gaze	Face	Challenging behaviours
<ul style="list-style-type: none"> <li>• Whining</li> <li>• Crying</li> <li>• Grunting</li> <li>• Screaming</li> <li>• Babbling (sound play)</li> <li>• Quietening</li> <li>• Changing voice (loudness, pitch, intonation)</li> <li>• Sounds (e.g. /aaaaa/, /wheeee/, /uuuuu/)</li> </ul>	<ul style="list-style-type: none"> <li>• Looking towards</li> <li>• Looking away</li> <li>• Shutting eyes</li> <li>• Making eye contact with a person</li> <li>• Eyes widening</li> <li>• Brief eye contact</li> <li>• Staring</li> </ul>	<ul style="list-style-type: none"> <li>• Smiling</li> <li>• Surprise</li> <li>• Grimace</li> <li>• Frowning</li> <li>• Becoming still</li> <li>• Tensing facial muscles</li> <li>• Relaxing facial muscles</li> </ul>	<ul style="list-style-type: none"> <li>• Stereotypic behavior (e.g. rocking, flapping)</li> <li>• Self-injurious behavior (e.g. head banging, hand biting)</li> <li>• Aggressive behaviour (e.g. pinching, kicking)</li> <li>• Destructive behaviour (e.g. throwing or breaking things)</li> </ul>

**Step 2** – Record the student’s name, the names of the contributors and the date the information is recorded in the spaces provided. Describe the student’s behaviours by using a combination of photographs, videos and written descriptions in the ‘what does the student do’ column:

**Student name:**

**Names of people who have contributed:**

**Date:**

**What does the student do?**

**Step 3** – As a team, determine what these behaviours mean. Examples of messages include:

- Expressing feelings (e.g. hunger, thirst, pain, tired and discomfort)
- Requesting attention/affection/interaction
- Rejecting attention/affection/interaction
- Requesting an object or action
- Rejecting an object or action

Write down the meaning of the corresponding behaviour in the ‘what it possibly means?’ column:

**Student name:**

**Names of people who have contributed:**

**Date:**

**What does the student do?**

**What it possibly means?**

**Step 3** – As a team, agree on an appropriate way to acknowledge, label and respond to the student’s behaviour by completing the ‘What should you do?’ column:

**Student name:**

**Names of people who have contributed:**

**Date:**

What does the student do?	What it possibly means?	What should you do?

**Step 4** – Review and update the information in the personal communication dictionary regularly.

### Personal Communication Dictionary – Example 1

**Student name:** Lucy

**Names of people who have contributed:** Mum, Dad, Teacher

**Date:** 11/9/16

What does Lucy do?	What it possibly means?	What should you do?
<p>Moves her head around.</p> <p>Arms and legs move around erratically.</p> <p>Grinds her teeth.</p> <p>Appears uncomfortable.</p> <p>Doesn’t calm easily.</p> <p>Wiggles a lot.</p> <p>Skin and jawline is tense.</p> <p>Eyes moving everywhere.</p>	<p>I’m feeling anxious.</p> <p>I don’t want to participate in the activity.</p> <p>I’m feeling pain.</p>	<p><b>Communication Partner should say</b></p> <ul style="list-style-type: none"> <li>• Acknowledge Lucy’s discomfort “You’ve got a sore tummy”.</li> <li>• Inform her of what you are going to do, e.g. before you move her say, “I’ll get you out of the chair”.</li> </ul> <p><b>Communication Partner should do</b></p> <ul style="list-style-type: none"> <li>• Take her out of the wheelchair so that Lucy is elongated and put her head on your shoulder with a firm hold or firm back pat.</li> <li>• Put her on her wedge and then rub her back.</li> <li>• If Lucy goes to sleep, let her sleep</li> </ul>

## Personal Communication Dictionary – Example 2

**Student name:** Matt

**Names of people who have contributed:** Mum, Dad, Teacher

**Date:** 11/9/16

What does Matt do?	What it possibly means?	What should you do?
Leans back in chair and waves hands	I don't want to engage in this activity	"Matt you don't like _____. It's OK! I'll help".
Places hands on activity	I want to explore the activity	Use hand-under-hand communication by placing your hands under Matt's hands to enable him to engage in the activity at his own pace. Comment as you explore the activity together.
Humming (mmmm)	I like this activity	Keep doing what you're doing.

## Strategy 2 – Create communication opportunities

**Step 1** – Identify activities the student likes. Below are some suggestions

- Action songs
- Aromatherapy
- Ball play
- Body massager
- Bolster swing
- Bubbles
- Building blocks
- Cooking
- Dancing
- Dressing up
- Facial massage
- Foot massage
- Foot spa
- Gym equipment
- Hairstyling
- Hammock
- Hand massage
- Handheld fans
- Listening to music
- Mirror play
- Musical instruments
- Peek a boo games
- Physiotherapy balls
- Play dough
- Putting on make-up and jewellery
- Riding a bike
- Rocking chair
- Rocking horse
- Scooter board
- Slippery dip
- Swing
- Switch adapted toys
- Tickle games
- Trampoline
- Vibrating toys/cushion/massager
- Water play

**Step 2** – As often as possible during the activity, imitate what the student does (i.e. sounds, actions) by matching the student’s pitch, rate, pace, duration (time length) and volume levels. When copying actions or sounds, stop when the student stops and resume when they resume. Periodically check for the student’s awareness of the communication partner, e.g. do they look at the communication partner when they copy their actions or sounds? For example, during mirror play Jacob will look at himself and say /b-b-b-b/. His teacher will copy his sound and say /b-b-b-b/. After the teacher has done this a few times, Jacob will look at his teacher. Another example is when Jacob starts tapping a drum after it is offered to him. His teacher will tap the drum at the same pace as him.

**Step 3** – When an activity has been done several times and the student seems to be familiar with the sequence of steps, interrupt the sequence by pausing. Wait expectantly and carefully observe any change in the student’s behaviours. Interpret, acknowledge and label this change as a request for more before carrying out the next step. For example, Jeremy’s teacher has a routine for playing with bubbles: she takes the lid off the mixture → puts the lid down → takes out the stick → brings the stick near her mouth → pauses → blows → says “Bubbles... Pop... Pop”. She repeats the steps in the same sequence each time she and Jeremy play bubbles. After a few weeks of doing this sequence daily, when his teacher pauses before she blows the bubbles Jeremy will move his mouth and lean forwards. Jeremy’s teacher interprets, labels and responds to his behaviour by saying “Blow” and then blowing the bubbles.

**Step 4** – Create additional communication opportunities by deliberately sabotaging the situation to create a need to communicate. For example:

- Provide inappropriate amount of materials so student has to request for more
- Put a desirable object in sight but away so student has to make a request
- Interrupt routine so that the student has to request for more.
- Give the student a desired item that requires him or her to ask for help.
- Offer the student something that they dislike so that they have reject it.
- Offer choices



# Component: Student as the receiver

Students who are at the preintentional stage understand messages that are related to the here and now. They are dependent on the communication partner's use of a predictable and a consistent approach when interacting with them and using a variety of natural cues (e.g. smell, touch, sound etc.) to help them understand the message. Student appears to have limited recognition of voices, do not appear to differentiate intonation patterns, do not respond to their own and do not demonstrate an understanding of frequently occurring words or phrases (McLinden & McCall, 2016).

Students who are at the intentional stage recognise familiar voices, respond to different intonation patterns and recognise their own name. The student continues to need cues in addition to speech to receive and understand messages from the environment (McLinden & McCall, 2016).

Listed below are a range of strategies for assisting students who are preintentional and intentional communicators to receive and understand messages from their environment.

## Strategy 1 – Go slow

The overall pace of the interaction should allow the student to attend to the interaction, process what they're experiencing and organise their responses.

## Strategy 2 – Consistent activity patterns

Every activity has a beginning, middle and end. By having a consistent beginning, middle and end, a predictable pattern can be created which will assist the student in receiving and understanding messages. On the next page is a list of steps for creating a consistent activity pattern:

**Step 1** – With the team, identify what the beginning of the activity looks like. Things to consider include:

- How should the student be approached? For example, from the | front | behind | right side | left side
- What should be the approximate distance between the educator and student?
- Where is the best position to be in the student's view?
- How should the student be greeted?
- How should the educator introduce themselves?
- How should the student be informed of the upcoming activity?

**Step 2** – With the team, identify what the middle of the activity looks like. Things to consider include:

- What is the sequence of steps?

**Step 3** – With the team, identify what the ending of the activity looks like. Things to consider include:

- What student behaviours indicate the ending of the activity?
- Alternatively, how do you inform the student of the ending of the activity?
- What is the sequence of steps for finishing the activity?

Below is an example of a script that was written to inform everyone how best to transfer John into the wheelchair. By outlining the steps in enabled everyone to provide a consistent activity pattern to John. **NB: The information on cues is provided on page 30.**

## BEGINNING

Approach:

*Try to always approach John slowly from the front because he startles easily.*

*Bend down to John's eye level.*

*Touch John's hand and smile.*

*Greet John by saying "Hello John, it's staff member's name" + let him feel the watch.*

*Pause for up to 10 seconds for John to respond.*

*John will respond by vocalizing 'ahh' and/or smiling. If he doesn't respond, repeat greeting and pause.*

*Inform John about upcoming activity by saying "John, it's time to sit in the wheelchair" + tap the wheelchair seat.*

*Pause to provide John with an opportunity to respond, e.g. by looking at the chair, vocalising or stilling.*

## MIDDLE

*If John is lying on the floor, assist him to push up through his left elbow by gently pulling his right hand and encouraging him to turn to his side to sit upright.*



*Lift and guide him to sit on your lap as you kneel on the floor behind him.*



*Place his feet flat on the ground.*

*Staff member: "1-2-3 stand up."*

*Support John around his trunk and move his weight forward until he stands up.*



*Log lift – lift John on to the footplates in a standing position, holding him close to your body.*

*Staff member: "Sit in chair" + tap chair.*

*Pause for John to sit independently in the chair.*

*Staff member: "Seatbelt on" + click seatbelt together + sound of seatbelt clicking together.*

*Staff member: "Tray on" + place tray on.*

*Staff member: "Hold on" + place his hands onto the armrests of the wheelchair.*

## ENDING

*Staff member: "Good John" + sign good.*

*Staff member: "Lifting is finished" + wiggle John's thumb backwards and forwards several times.*

## Context

### Strategy – Create an individualised activity context

**Step 1** – Create activity-specific areas so that the student can make an association between an activity and the location. This will help the student recognise and anticipate the activity.

**Step 2** – Be aware of the student's level of alertness. If the student is feeling drowsy, tired or unwell then concentrating and participating in an activity will be difficult. Thus, it is important to plan ahead and schedule activities at times in the day when the student is most alert.

**Step 3** – Identify the length of the activity according to the student's ability to stay alert, focused and engaged.

## Channel

### Strategy – Create a cue communication channel

For the student to receive the message, they depend on the communication partner to use a variety of cues with the spoken word.

**Step 1** – Select from the listed cues and tailor based on how the student responds.

**Speech cues** – Speech cues are words that you use to prepare, inform and make comments to the student about what is happening. Be face-to-face to let the student know that you are talking to them. Call the student's name before you are about to present something and/or say something to them (e.g. "Michael, hello"; "Michael, stand up"). Use animated facial expressions such as big smiles and wide eyes to capture their attention. Use simple short phrases with key words rather than long sentences, e.g. "Stand up" vs. "Ok! It's time for you to stand up". Match your words with the student's or your own actions to help them make the association between what is being done and what is being said. Try to repeat the key words when carrying out the particular activity so that the student becomes familiar with them. Be consistent with the words that you use, e.g. to indicate that an activity has come to an end, try to use the same word or phrase, e.g. "finished" rather than using a variety of words like "all done", "all gone", "no more", and "finished".

Speech cues also include speech features (fine details) that are paired with the spoken message. They affect the way something is said and provide further meaning to the student. Some of these additional features include intonation, volume, stress, facial expressions, speed of the spoken message and pausing between spoken messages. Intonation refers to the sound of your voice; for example, try saying "Are you happy now?" in an angry tone, a sad tone and then a happy tone. The meaning conveyed is different each time even though you're saying the same words. Saying a keyword slightly louder or more softly can emphasise it; by saying something with extra stress you can highlight the target keyword that you want the student to learn; by using exaggerated facial expressions you can add meaning

to what has been said. Speed of the spoken message can also provide more information (e.g. singing a song 'slowly' vs. 'fast'). Pausing after saying something allows time for the student to perceive and process what has been communicated.

Speech cues should accompany all the other cues. Even if the student does not hear the spoken word they may receive information from your facial gestures and expressions when you are speaking. Thus, using speech cues consistently it will help them understand in order to learn to predict or anticipate what will happen next. Pairing the speech features with the spoken message will help make the communication partner's voice sound more interesting to listen to, which will help gain and maintain the student's attention.

Activity	Speech Cue
Wiping face	Say "Wipe, Wipe" as you wipe their face.
Drinking from a cup	Say "Drink" as you bring the cup towards their lips.
Getting into a wheelchair	Say "Sit" as you place the student on the wheelchair.
Going for a walk	Say "Time to walk" as you take the student for a walk.

**Object cues** – An object cue is a type of tactile cue that involves using an object to represent people, places and activities. They can be given to the student to see, touch and hold to inform them that something is about to happen. By using the same object consistently, you can help the student learn to associate the object with the activity or person. Start by using a few object cues that represent activities that occur frequently or that the student enjoys by presenting the object before the activity begins. Doing this consistently will help the student develop anticipation and an understanding of the activity.

Activity	Object Cue
Wiping face	Show wash cloth and say "Wipe face".
Drinking/Eating	Show cup and say "Drink". Show spoon and say "Eat".
Getting into a wheelchair	Show the wheelchair and say "Sit in wheelchair".
Going for a walk	Show walker and say "Go for a walk".

Sometimes it can be difficult to identify or use a whole object that can be used to represent the activity in such situations you may use a:

- Partial object - *e.g. rope to represent swing.*
- Associated object - *e.g. bumbag to represent going shopping.*
- Arbitrary object - *e.g. round piece of trampoline mesh black to represent the trampoline.*
- Miniatures - *e.g. a doll's brush may be used to represent grooming.*

Communication partners may use an object or personal item to identify themselves, such as a ring, earrings, beard, watch, etc. that the student can touch as the communication partner verbally announces themselves. They should select an object that is with them at all times to “represent” their name. Consider vision when deciding what object cues to use as the size, texture and colour of the object, the background and where the object is presented may make a difference.

**Sound cues** – Sound cues are environmental sounds that are either naturally made or can be made by the activity items to get the student’s attention and inform them of what is about to happen. When selecting an auditory cue consider the student’s hearing ability.

Activity	Sound Cue
Eating	Tapping a bowl with a spoon.
Have a drink	Shaking the juice in the container before giving juice to the student.
Getting into a wheelchair	Tapping the wheelchair seat before placing the student on the wheelchair.
Going for a walk	Jingling the keys, opening the door.

**Touch cues** – A touch cue involves touching the student in a specific way on their body to get their attention, inform them of what is going to happen next and provide feedback. The student may already be provided with a variety of natural touch cues so formalising the use of touch can ensure that the cues are presented in the same way each time by all communication partners. Consistency will develop the student’s ability to attend to the touch cue, helping them learn the meaning of the touch cue by making an association between the cue and the activity or action. This will help the student begin to anticipate what will follow. This can result in the student producing a response to demonstrate their understanding of the cue. It is important that the cue used for each activity is different (e.g. made on different places on the student’s body) so that the student can distinguish them easily. Initially, only a few touch cues should be presented and when the student begins to show anticipation and/or comprehension of them, more cues can be added.

A touch speech cue is a simultaneous touch–speech production in which keywords or phrases are paired with a consistent touch signal on the student’s body or limbs (Goold and Hummell, 1993). Example of touch speech cues would be saying “Sit down” while touching the student’s shoulder, or asking them to get up by saying “Get up” while lifting their arm. When selecting touch cues, consult an occupational therapist regarding information relating to the student’s responses to touch.

Activity	Touch Cue
Wiping face	Stroke cheek before wiping face.
Drinking from a cup/ Eating from a spoon	Hold their chin before bringing the cup up to their lips. Tap their lips before bringing the spoon to their lips.
Getting into a wheelchair	Tap their legs gently before lifting the student.
Going for a walk	Gently tap elbow 3 times and say “Up-Up-Up”.

**Smell cues** – Smell cues are smells that are associated with activities, objects and people. They can be used to let the student know what is about to happen

Activity	Smell Cue
Washing hair	Before washing the student’s hair let them smell the shampoo.
Eating	Let the student smell the food in the bowl before giving them a spoonful.
Grooming	Let the student smell perfume before you put it on the student.
Going for a walk	A teacher who takes a group of students for a walk regularly wears the same cologne.

**Movement cues** – Movement cues inform the student of the motions that are related to an activity. These cues are used especially when handling, positioning and moving the student in certain ways to help the student associate the movement with the upcoming activity. Movement cues are a useful way of promoting the student’s understanding that their movements can regulate other people’s actions. Performing a movement with another person develops the student’s awareness and understanding of “self” within their social and physical environment. When selecting movement cues, consult an occupational therapist and/or a physiotherapist regarding specific positioning and handling related to the student’s tone. Do not use movement cues that will cause reflexive or involuntary responses.

Activity	Movement Cue
Rocking on a rocking horse	Rocking back and forth with the student before placing them on the rocking horse.
Removing their shirt	Lifting the student's arms above their head.
Eating	Gently lifting the student's right hand with the spoon towards their mouth.
Standing up	Gently moving the student's left shoulder forward.

**Location Cue** – This refers to the place/area where an activity occurs. Designate an area where an activity should occur and carry out the activity in the particular place consistently. Quill (2000) suggests a variety of strategies you can use to help the student learn to associate the place with the activity. For example, you can separate large spaces (e.g. a classroom) into smaller defined areas, then have items that are related to the activity in each specific area. When engaging the student in a particular activity, reduce clutter and distractions. For example, if playing with a particular item, have only the single toy, activity or play set

Activity	Location Cue
Book corner	Rocking back and forth with the student before placing them on the rocking horse.
Bathroom	Lifting the student's arms above their head.
Dining Room	An area where the student has all their meals (i.e. breakfast, lunch, dinner, snacks).
Backyard	Playing on the swings.

**Taste Cue** – A cue that provides information about the taste of the item. The student can use this information to make decisions about their preferences. For example, during mealtime offering the student a spoonful of vanilla ice-cream and liquorice ice-cream. Based on the student's response you can interpret their preference and give them the ice cream of their choice.

**Gesture/Sign Cue** – Gestures are commonly used body and facial expressions that mimic an action or the shape of an object. These movements can be used to provide information to the student about a variety of places, activities, objects, people and actions. For a student with little or no vision, the communication partner can present the gesture on the student's body. Once the student learns to pair a gesture with its meaning they can begin to anticipate what is going to happen next and produce the appropriate response. Use signs that are iconic, i.e. are easy to understand and closely resemble the item/concept that they are meant to represent.



Activity	Gesture/Sign Cue
Wiping face	Gesture wiping by moving your open hand in a clockwise direction.
Drinking from a cup	Shape your hand as if holding a glass and tilt towards your mouth to indicate drinking.
Getting into a chair	Use the sign for 'sit' which can be expressed by placing an open right hand on the back of an open left hand and moving the formation downwards.
Going for a walk	Flick your hand as if telling someone to go.

**Time Cue** – Creating a routine or a daily rhythm where the activities occur around the same time will help provide an order and structure to the day which will help the student anticipate the activity (*Blythman and Diniz 1993*).

Activity	Time Cue
Physical exercise	9am
Morning circle	9:15am
Fine motor activity	10am
Recess	10:45am

## Step 2 – Use the selected and tailored cues:

- Consistently (e.g. always show Lisa her swimming costume and guide her to touch it before going swimming) so that the student can make a clear connection with what they are meant to represent.
- Always provide the cue in conjunction with speech (e.g. say “Do you want a massage?” + rub the student’s hand using a circular motion - touch cue) so that the student can develop an understanding of what the spoken words mean.

Pause after you have given the cue so that the student can process the information and respond.

## Interference

There are a number of factors that can block, distort or interfere with the student's ability to participate equally in the two-way communication process as a sender or receiver of a message. Some of the factors include:

- **Responsiveness factor** – As mentioned previously, the student's communication behaviours are often subtle, non-conventional and inconsistent. This can often result in the communication partner having difficulty with recognising, interpreting the meaning of the behaviour and responding to those behaviours consistently. Consequently, it can lead to the student feeling that they cannot change or influence the environment. This can lead to 'learned helplessness' (Guess, Benson, & Siegel-Causey, 1985). Learned helplessness results in a progressive reduction or cessation in attempts to engage with objects and people. In addition, the student may develop challenging behaviours such as self-injurious behaviours, self-stimulatory behaviours and withdrawal (Carr et al., 1994; & Durand, 1990).
- **Consistency factor** – Consistent patterns of interaction, routines and communication opportunities help the student feel calm, safe and alert, whereas inconsistency causes the student to feel anxious, fearful and stressed. Each communication partner may read the student's communication behaviours differently and a lack of consistency in responses from communication partners will make it difficult for the student to develop an understanding that when they produce a particular behaviour, a specific result occurs. Thus, consistency is vital.
- **Stimulation factor** – As previously mentioned, the student's non-verbal communication behaviours are responses to the sensations they are experiencing internally and/or in response to what is happening externally. If the external environment is overstimulating (e.g. too bright, too noisy, too many smells, lots of people moving around and touching the student suddenly) or under-stimulating (e.g. insufficient lighting, too quiet, activity is too boring and hardly anyone is interacting with the student), the student may withdraw, shut down or engage in challenging behaviours (e.g. self-stimulatory behaviours, self-injurious behaviours). This also applies to internal stimulation. For example, if the student is feeling unwell, experiencing medication side-effects or is in pain, they will show similar behaviours. Hence, over-stimulation and under-stimulation negatively impact the student's ability to communicate. The student is dependent on the communication partner to adjust the level of stimulation so that the student is able to communicate.

# Conclusion

Effective communication is not just a matter of luck especially with students with the most complex communication challenges. As the more skilled participant in the two-way interaction process the onus is on us to interact in ways that facilitate communication. To ensure that this can happen we must:

- have **an in-depth knowledge of all of those strategies** used by the student,
- be **aware of the circumstances** under which communication is facilitated,
- be **aware of the effect of their own behaviour** on the communication process.

*(McDonald, 1997)*

I hope this resource has provided a range of practical ways for making this happen.

**Dolly Bhargava**

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