MED EL

Thinking Together to Mind the Gap

hearLIFE

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The Ear Foundation®

Acknowledgements
This resource has been written in collaboration and is based on clinical experiences, observations, and existing resources and research. The author acknowledges the considerable input and advice from a number of clinicians.

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Introduction

Welcome to *Thinking Together to Mind the Gap*. This resource will:

- Explain what Theory of Mind (ToM) is and why it is important
- Outline what ToM skills look like in practice
- Outline the development of ToM
- Discuss how ToM relates to listening and language
- Provide practical activities and ideas for encouraging ToM in children with hearing implants

Theory Of Mind: What Is It?

Being able to recognize how other people are feeling and guess what they might be thinking is a key ingredient for communicating and connecting with people and developing friendships. Complex social situations require us to understand that what communication partners are saying may be different to what they are thinking and feeling. Communication requires us to use social cognition skills to understand the subtleties of social interactions to keep communicative relations successful and respond appropriately. This set of perspective-taking skills is known as Theory of Mind.

Theory of Mind is the human ability to recognize and attribute mental states, intents, desires, knowledge, and feelings—not only in oneself but also in others—and to understand that one's feelings and beliefs may be different than those of others (Premack & Woodruff, 1978; Baron-Cohen, 2001; Westby, 2004).

It is all about the mind—it is thinking about thinking.

Young children develop an understanding of their own thoughts, desires, beliefs, and feelings and how they are separate and can be different from the people around them. Children begin to understand that just because they like something does not mean everyone likes it and what they want may vary from what their peers want. Theory of Mind forms the basis of all social interaction and involves many different skills. It helps us to understand and predict behaviour in others.

The representations of reality generated by ToM are not directly observable and relate to mental state language. Mental state language vocabulary includes words like thinking, guessing, believing, knowing, remembering, pretending, feeling (e.g., *I guess it will rain tomorrow. I think your sister doesn't like cheese.*)

Other terms linked to Theory of Mind:

- Perspective taking
- Putting yourself in someone else's shoes
- Tuning into others
- People reading
- Social competence
- Social cognition

> *"It is through others that we become ourselves."*
>
> Lev Vygotsky

Key Concepts In Theory Of Mind

Recognizing one's feelings and those of other people: Being able to identify and attribute emotions to self and others. Children require an extended vocabulary for emotion words (e.g., irritated, angry, furious, glad, happy, ecstatic).

Real-Apparent Emotion: Knowing that someone may display one emotion but really be feeling another (e.g., a person may smile to be brave when really they are feeling sad).

Taking somebody else's perspective: Knowing that if I am holding a book, pointing at something in the book and laughing, and you are sitting opposite me, you can't see what I am laughing at; or the reason I grabbed your juice bottle is I'm really thirsty.

We all like different things: You might like chocolate ice cream, but I might prefer crisps. I don't like cars, so when we play, I will prefer the dinosaur model.

We can have different beliefs: I believe in Father Christmas but not the tooth fairy; or I believe your lost ball is under a bush but someone else may look for it behind a shed.

Seeing is knowing—having different access to knowledge: If I didn't see, then I don't know. I don't know what the present is until I unwrap it, as I can't see it. Playing hide-and-seek, I need to stay very quiet so you don't hear me or see me and then know where I am. I know how the movie will end because I have seen it before.

False Belief: I can think something and it turns out to not be true. I thought you were hiding behind the sofa but I was wrong, you were behind the door! In the story of *Little Red Riding Hood*, we know that it's the wolf but Red Riding Hood thinks it's her grandmother (a false belief).

Alternative Realities: We can agree on more than one reality. A banana can be a piece of fruit in one reality but a phone in another. Having alternative realities is a big part of imaginative play. I can be a little girl or a princess, a little boy or a crashing digger!

Why Is Theory Of Mind Important?

ToM is the foundation of a child's language acquisition and the development of appropriate social behaviour and skills. Understanding other thoughts and emotions, predicting and guessing other behaviours, taking perspectives, and putting yourself in someone else's shoes are essential skills to be developed by children. Such skills are important because they facilitate communication and social interaction with peers and support the development of pragmatic language skills (Russel et al., 1998).

It is through Theory of Mind that we know how to respond to people in appropriate ways, how to behave around our friends, to be empathic and thoughtful, and to regulate our own emotions and actions so they do not negatively impact others. We want the people around us to have positive thoughts about us. These same skills enable older preschool children to take part in more sophisticated, imaginative, pretend play. It helps them to make connections with characters and events in the narratives they read, to infer and problem solve, taking others' point of view and predicting what they might do next. Theory of Mind helps us figure out the hidden rules of sharing space with other people. It helps us to flexibly adapt as the rules change as children get older or as play and social interaction become more complex. Children with more developed Theory of Mind are considered more socially competent and rated as happier at school and more popular with their peers (Peterson, Slaughter, Moore & Wellman, 2016).

Research shows that a developed Theory of Mind is crucial for social functioning and healthy social relationships, like making and keeping friends. For instance, Caputi, Lecce, Pagnin and Banerjee (2012) indicate that Theory of Mind development in the transition from preschool to school years is associated with prosocial behaviour. This research also reveals a longitudinal connection between early Theory of Mind skills and peer acceptance or rejection two years later.

These findings are confirmed by Slaughter, Imuta, Peterson and Henry (2015), suggesting that ToM development has significant implications for children's peer relationships and that children with higher ToM scores in their cohort were also more popular in their peer group. Additionally, poor ToM skills predict becoming a victim or a bully-victim (Shakoor et al., 2012).

Theory of Mind is also important for academic success at school and is critical for literacy and academic achievements. Morgan (2015) indicates that delayed ToM development has significant academic consequences, especially in accessing higher levels of literacy which require a high level of pragmatic comprehension and ToM abilities. Furthermore, Pelletier and Astington (2004) indicate a link between Theory of Mind skills and understanding narratives.

Theory of Mind skills, such as understanding sarcasm, bluffing, and inference, which involve understanding the intentions expressed in a social situation, are often linked to overall language and literacy skills and include social cognition. Sarcastic speakers intend that the listener detects the deliberate falseness when they make a statement that violates the context (Dennis, Purvis, Barnes, Wilkinson, & Winner, 2001).

Given the importance of ToM development, encouraging and promoting social and mental language to support ToM starting with the early years and continuing in preschool and school should be a priority for families and teachers.

Theory Of Mind In Action

Greta is 2 years old. She is at the park with her mum and her 4-year-old brother Alex. As her brother accidentally runs into her, she drops the ice cream she is carrying over her brand-new shoes. Greta's Theory of Mind is only starting to develop, and she becomes extremely upset because she thinks Alex has done it on purpose. Since Alex's Theory of Mind is more developed, he knows why Greta is so upset. Alex can already anticipate what his mum will be thinking and is worried about the ice cream and the new, expensive shoes. Their mum explains that it was an accident and immediately knows why Greta is upset and how to reassure Alex.

Ammar is playing hide-and-seek and even though he wants to cough, he holds it in because he knows if he is heard he will be discovered.

Tom knows that when his mum is standing at the car door looking a bit stressed and looking in her handbag, she is looking for her car keys and is in a hurry.

Sarah and Chris are planning a trick on their friend Rob. They will put a plastic spider on his pillow. They know he hates spiders. They also know he will probably guess it is them because he played the same joke on them the day before.

Becky is very upset because she was expecting to get a trophy at her gymnastics competition for coming first, but only came fourth. Although her best friend Susan got a huge silver trophy for coming first in her ballet competition, Susan decides not to tell Becky just yet because she knows it is not the right time and can guess how it will make Becky feel.

Samira is 4 years old and knows that her sister is getting a guinea pig for her birthday. She also knows that the present is a surprise so she must not say anything.

How Theory Of Mind Develops In Children

The understanding that people don't share the same thoughts and feelings develops during childhood. This ability to tune into others develops in a predictable, developmental order. Babies can demonstrate an early-developing intuitive awareness that forms the precursor to Theory of Mind. For example, babies who demonstrated high rates of joint attention have better Theory of Mind skills as toddlers. In the toddler and preschool years, these intuitive skills become increasingly reflective and explicit. For example, toddlers begin to stop, think, and reflect on what they are doing. Children's developing language abilities during these early years of development play an important role in this transition from intuition to intention.

Similar to speech and language acquisition, ToM is a set of skills that needs many opportunities in the right context to develop and flourish. This cognitive ability develops by degrees from infancy throughout childhood and adolescence on into adulthood (Alic, 2009; Wellman, 2014). It emerges at around the age of 2 with skills such as, 1) knowing that people have different *desires* compared to themselves, 2) recognizing *emotions*, 3) responding to *empathy*, 4) recognizing when they've *hurt someone* and *apologize*. It is considered mastered at the age of 5 years when children pass the *false belief* tasks.

By the age of 6–8 years, children typically master the following TOM skills (see Figure 2):

- Think about what one person is thinking or feeling about what another person is thinking or feeling (e.g., A knows that B feels...)
- Understand that an individual can first have one thought or emotion about a situation, and then a second thought or emotion related to it
- Describe situations where emotions such as jealousy, pride, shame, and guilt may emerge

The stages of ToM development are described in detail by Westby and Robinson (2014) (see Figure 2) and adapted in this resource by permission from Chilton, Mayer & McCracken (2019). Furthermore, the authors divided ToM skills into two types, *Cognitive* ToM and *Affective* ToM.

- *Cognitive* TOM refers to mental states, thoughts, and beliefs, those within oneself (intrapersonal) and those between other people (interpersonal).
- *Affective* TOM refers to feelings, those within oneself (intrapersonal) and those between other people (interpersonal).

Every child will have strengths and challenges in different areas and a Theory of Mind profile can be worked out accordingly (see Figure 1 from Westby & Robinson; 2014).

THEORY OF MIND

COGNITIVE

Interpersonal

Understands that others can have thoughts, beliefs, desires different than my own

Infer mental states to others

Infer behaviour based on thoughts

Intrapersonal

Reflect on one's own mental state

Plan one's behaviour

Use metacognitive learning strategies

AFFECTIVE

Interpersonal

Recognize emotions of others

Infer emotions of others

Infer behaviour based on emotions

Empathize with others

Intrapersonal

Reflect on one's own emotions

Regulate one's own emotions and motivation

Figure 1: Westby & Robinson (2014).

Children With Well-Developed ToM Will Be Able To

- Understand the behaviour of others; why they do and say the things they do
- Interpret the motivation for daily behaviours (e.g., Why mum is rummaging in her bag as they stand outside a locked car)
- Recognize their own emotions to help regulate them
- Recognize when someone is happy, excited, sad, or frustrated and respond appropriately
- Empathize with people's needs and wants, even when they are different from their own
- Be more forgiving when someone accidentally hurts them
- Get along with other people and resolve conflicts more quickly
- Tell the difference between lying and having the wrong facts (e.g., fake news)
- Engage in more complex pretend play as they are able to put themselves in the shoes and minds of different characters
- Understand narratives and the perspective of different characters in storybooks
- Understand inference, reading between the lines in conversations and in written work at school
- Retell a story, knowing what order to put it in so it makes sense, knowing to give someone who was not there enough information to know what happened
- Maintain successful conversations by predicting what the listener may already know, when they need to add more information, how the listener is reacting to what they say, and what they should say next
- Learn in a group through collaboration, cooperation, negotiation, persuasion, reasoning, and empathy

Intrinsic Factors That Influence Theory of Mind Development

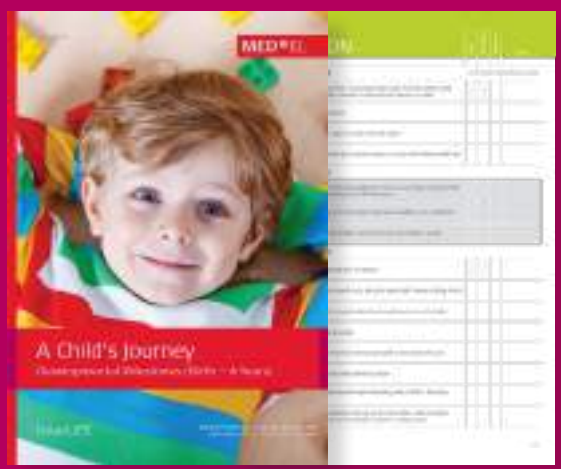
- The ability to access and understand the conversations happening around them (e.g., good listening skills, access to sound)
- Language abilities; children with communication difficulties are at risk for poor development of pragmatic and Theory of Mind skills
- Cognitive ability, particularly those that control and regulate behaviour (executive functions)

Key Environmental Factors That Support Typical Development of Theory of Mind

- An environment rich in language about thinking processes; Children raised in homes where they hear their parents/caregivers talk about their thoughts, desires, and feelings, and give reasons when correcting behaviour show an earlier awareness of mental states. It is important to talk about emotions!
- An environment where children are encouraged to be curious about people's thoughts and feelings and to independently solve problems
- Frequent social opportunities to put these language and social skills into practice
- Having brothers and sisters is linked to earlier awareness of mental states
- A school environment that fosters interaction with peers, creative problem solving, and exposure to mental state language (e.g., think, believe, predict, guess)
- Early participation in pretend play
- Storybooks being shared in ways that promote thought about characters' thoughts and feelings and encourage predicting what might happen next
- Many conversations about past experiences and reflecting on things that may happen in the future

MED-EL RESOURCE **A Child's Journey** provides a comprehensive guideline for monitoring child's development on pragmatic behaviour, congnition, and Theory of Mind (and on six more domains). The resourse helps identify current level of functioning and tracks growth for children from birth up to six years of age.

Check out Appendix 2 to see examples of the ToM skills.



Typical Development of Theory of Mind

AGE OF CHILD	THEORY OF MIND SKILLS
0–2 YEARS Begin to develop the precursors to ToM skills, as well as early ToM skills	• Joint attention, shared interest in same object or event • Distinguish different emotions expressed by others, such as happy, sad, and disgust (+/- 4 months) • Mimic early emotions (+/- 6 months) • Begin to make the connection that expressions match an inside emotional state, such as distress (+/- 12 months) • Early empathy
2 YEARS	• Recognize a wide range of emotions • Respond with genuine empathy • Know that people have different *desires* (I want...) from themselves • Recognize when they've hurt someone and apologize • Fake some emotions to get what they want (e.g., fall down and pretend to be hurt)
4–5 YEARS First Order Skills	• Pass false belief tasks • Attribute thoughts (cognitive) and feelings (affective) to others • Understand not only what people see but also how it appears to them • Understand that we know information because we can see it or hear it • Understand that others' knowledge (what they know) may not be the same as their own (what I know) • Understand that their beliefs (I believe...) may differ from someone else's • Understand that beliefs cause people to act in certain ways • Understand that thoughts and emotions are caused by what people think is the case even if it conflicts with reality • Describe situations where they are happy, sad, mad, scared, or surprised • Understand that *emotions* displayed may not be the same as they are felt
6–8 YEARS Second Order Skills	• Think about what one person is thinking or feeling about what another person is thinking or feeling (e.g., A knows that B feels...) • Understand that an individual can first have one thought or emotion about a situation, and then a second thought or emotion related to it • Can describe situations where emotions such as jealousy, pride, shame, and guilt may emerge
8 YEARS + Higher Order Skills	• Multiple embeddings (e.g., She thinks her mother knows that her brother hopes his girlfriend will want the gift.) • Understand lies, sarcasm, figurative language, and idioms • Understand that people use strategies to hide deceit and to detect deceit • Understand that one can have concurrent emotions of opposite types

Figure 2: Adapted from Chilton, Mayer & McCracken (2019)

Theory of Mind and Children With Hearing Loss

Research suggests that children with hearing loss have difficulties developing Theory of Mind skills (Morgan, 2015; Schick, De Villers, De Villers & Hoffmeister, 2007; Moeller & Schick, 2006), which impacts on how they behave socially and engage academically. Especially in the case of children with severe and profound hearing loss born in hearing families, communication and language development are often problematic due to their limited access to oral language, as well as their hearing parents' lack of proficiency in sign language (Schick, de Villiers, de Villiers, & Hoffmeister, 2007; Moeller, 2007; Moeller & Schick, 2006; Peterson, 2004; Peterson & Siegel, 2000). Such problems lead to restricted discourse and language understanding, as well as less use and understanding of abstract concepts such as mental states language (*think, feel, believe, pretend, remember, know*), compulsory for the development of social cognition and Theory of Mind (Peterson, 2004). If children with hearing loss don't understand the idea of thinking, they may not understand that people have different ideas and beliefs that are potentially true; and thus, they won't understand other people's actions which are based on what they think is true. This lack of understanding leads to significant academic consequences in accessing higher levels of literacy which require a high level of pragmatic comprehension and ToM abilities (Morgan, 2015). On the other hand, native signers have fewer difficulties developing ToM skills comparable to their typically-hearing peers (Peterson & Siegal, 2000; de Villiers, de Villiers, & Hoffmeister, 2007); indicating that native home language (spoken or signed) is associated with well-developed ToM.

Several factors affecting ToM development in children with hearing loss have been identified by researchers. One of these factors is delayed language development (de Villiers & de Villiers, 2000; Peterson & Siegal 2000), mainly with failure in false belief tasks (Peterson, 2004). Furthermore, complement syntax seems to be a factor that impacts false belief performance (de Villiers, 2005).

Likewise, later exposure to language is also associated with serious long-lasting deficits in social cognition as measured by both, story retelling and false belief tasks (Knoors & Marsharck, 2014). These deficits occur because language, in all its aspects (semantics, syntax, and grammar), enables understanding of complex theory-related concepts (Morgan, 2015).

Theory of Mind challenges in children with hearing loss arise when they have fewer opportunities to learn language through overhearing conversations because they are less able to access this communication environment compared with their hearing peers. This limited access to learning through overhearing has an impact on the process of acquiring Theory of Mind skills because around 90% of what children learn about the world is through incidental learning (Akhtar, Jipson, & Callanan, 2001). Another cause that might lead to these delays is limited opportunities to talk about mental states and to use vocabulary associated with thinking in daily life (Möller & Schick, 2006). Meristo and Morgan (2011) underline that children with hearing loss from hearing families, educated in either spoken or signed language, display low scores in false belief tasks because of the lack of access to a common native language.

However, early identification of hearing loss through neonatal screening and early access to hearing technology, particularly cochlear implants, allows children with different degrees of hearing loss to access auditory information through listening. As a result, many children with severe and profound hearing loss develop spoken language skills greater than ever before (Archbold et al., 2008; Leigh, Dettman, Dowell, & Briggs, 2013; Morgan, 2015). More than 90% of the children with profound hearing loss are born in hearing families (Morgan, 2015). Cochlear implants allow hearing families to develop a common native language in the home and to expose their children to spoken language.

However, late access to hearing technology, language delays, less exposure to vocabulary about emotions and thinking, and less exposure to overhearing conversations about mental state language might create a challenge in developing ToM skills. For instance, Goberis and colleagues (2012) found that children with hearing loss acquire Theory of Mind skills at the age of 7 that most hearing children acquire when they are 3–4 years old. Items not mastered with complex language by children with hearing loss by 7 years of age include:

- Provide information on request
- Apologize
- Interject in a conversation
- Ask for clarification
- Make promises
- Retell a story
- Create an original story

Other studies examining Theory of Mind in reading and writing skills of children with hearing loss reveal positive evidence of first order, second order, and in some children, even higher order Theory of Mind skills (Chilton, Mayer, & McCracken, 2019). Ketelaar and colleagues (2012) examined 72 children with cochlear implants, implanted below the age of 3 years, and found that they scored similar to their hearing peers at tasks involving understanding of intention, but lagged behind on desire and belief understanding. This finding suggests that although children with hearing loss who wear hearing technology develop good spoken language, they may need explicit teaching of abstract language at home and school to understand thoughts, feelings, and beliefs of others which might differ from their own.

Like young hearing children, children with hearing loss acquire language and develop Theory of Mind skills by hearing and seeing them naturally modelled through play, conversations, and everyday routines. However, some children with hearing loss still have a significant delay in Theory of Mind skills as they start school or that becomes obvious as they move to upper primary. For these children, the variety of skills involved in ToM may need to be more explicitly taught. As children with hearing loss are at risk in social situations because of the communication barriers (Antja & Keimeyer, 2015,) identifying and supporting those children with poor Theory of Mind skills early in life could help reduce their socio-emotional vulnerability.

> *“Theory of Mind: Children with hearing loss often need to be explicitly taught how to think about predicting what is in the mind of another person. Children [with hearing loss] often think that what they know, others also know. They need to be taught that a person knows what they have experienced and if they have not had access to specific information, they will make mistakes.”*
>
> Tiffany Hutchins

How Do We Encourage Theory Of Mind?

1. The Role of Language

a. Mental State Words
b. The Language of Emotions
c. The Language of Humour

The skills involved in Theory of Mind are typically seen in abundance in everyday situations and social interactions. They are typically the kind of skills that are caught and not taught. In typically-developing children, these skills evolve naturally in early childhood alongside language development.

> *We don't need to teach ToM; we need to see the learning opportunities in everything children with hearing loss do.*
>
> Helen Chilton

Because we cannot see abstract words, they often aren't directly taught, but instead are learned by overhearing others use them over and over in different contexts and conversations. The more we hear these words and practise using them, the more they can be used to expand and deepen our thinking, helping us see how the social world works.

One of the easiest ways to encourage more thinking skills is to use the language and the words that are required to express them. These words are often referred to as *cognitive* or *mental state* words; words used in everyday routines, when sharing books and having conversations. They are a mixture of words that describe feelings and different types of thinking.

Increased use of mental state language has been shown to accelerate ToM development of typical children.

Diagnosis of deafness has been shown to decrease the amount of mental state language used with deaf children.

1.a Mental State Words

Know	Remember	Favourite	Surprise	Cross	Excited	Expect	Cheerful
Guess	Forget	Idea	Ponder	Happy	Realize	Confuse	Excitable
Wonder	Believe	Imagine	Choose	Feel	Learn	Anticipate	Furious
Think	Predict	Wish	Presume	Anxious	Discover	Doubt	Suspicious
Notice	Negotiate	Prefer	Explain	Promise	Deserve	Think	Wary
Agree	Remind	Understand	Dream	Frustrated	Disappointed	Decide	Apologize

Clinicians and parents can facilitate the use of cognitive mental state language through rich and frequent conversations about the mind, beginning with developmentally early mental state talk (e.g., desire, affect, perceptual learning) to later cognitive state talk (Peterson & Slaughter, 2006; Taumpoepeau & Ruffman; 2006). A check list of internal state vocabulary (*Internal State Language Questionnaire*) for children up to 3 years of age is mentioned in the research of Kristen and colleagues (2014).

The questionnaire includes 78 internal state words divided into six categories:

- physiology (e.g., *hungry, tired*)
- volition/ability (*want, need, know*)
- perception (*hear, see*)
- cognition (*know, think*)
- emotion (*happy, sad, angry*)
- moral judgment (*good, bad, should, may*)

How can we encourage learning mental state words?

When it comes to developing Theory of Mind awareness, we can see it reflected in children's language. 2-year-olds talk about what they and others want, and like, and feel. When they are 3 years old, they also talk about what people think and know. Their language forms the basis of their learning, and their thinking is extended by learning new language.

Frequent Conversations

Early conversational turn-taking has been identified as the strongest predictor of spoken language development.

Lifting the lid on your thinking

Say it out loud; let children hear the thought processes, as people feel and regulate emotions, problem solve, and weigh up options to social scenarios.

Shining a light on what the child may be thinking

Build children's self-awareness by noticing their behaviours, facial expressions, and the scenarios they find themselves in and say aloud what you think they are thinking.

Matching thoughts with words

This strategy is about saying the right words at the right time. We all learn in context, so match what you are thinking and what the child may be thinking with the right words (e.g., *You look hungry. I bet you are wondering what is for dinner. Will it be your favourite?*)

Whenever possible, think of activities that will lead to discussions about yours and the child's thoughts, beliefs, and feelings. These activities can occur in one-to-one rehabilitation sessions, in groups with other children, or during daily routines at home. Maximize the opportunities they have to overhear others' thoughts so they can better understand what the different mental state concepts mean.

Making The Most Of Everyday Routines

Getting dressed:

Normally when we think about getting dressed, we focus on the names of clothing, giving choices, and encouraging the use of different words (e.g., jumper, wellie boots). To extend this idea to a Theory of Mind activity, we would explain our choices and explore the thinking involved with getting dressed and why we might choose different items of clothing (e.g., *The weather looks sunny now, so we might choose your favourite yellow t-shirt. But the weather report said it will be colder and rain this afternoon, so I'm going to make sure I pack my cardigan and a raincoat. What do you think you might like?*)

Granny is coming for tea tonight and remember she told us that her favourite dessert was apple pie. I'm looking at our apple tree full of ripe apples. Can you guess what I might be thinking?

The more children hear you talk about your thoughts and feelings, the more they will begin to recognize and understand their own.

We can't wait until children with hearing loss are at nursery and school before starting to encourage Theory of Mind skills. Rather maximize opportunities to encourage these skills in their everyday routines, weaving them into the fabric of daily life and play. For example, "Did you hear the doorbell? You looked up so I think you did. I'm guessing it's Susie at the door because I asked her to pop in at 4 p.m. I'm excited to see her. I know it's not Daddy because he has a key so would have just come in."

Match words with your own thoughts, beliefs, and feelings as you go about your day and use examples from your own life and retell them.

Talk about the interactions you had with people and use real-time conversations in group work and everyday situations to predict what they might be saying, thinking, or feeling, and why they might have these thoughts and feelings.

Highlight that our feelings and thoughts can differ (e.g., *I know you are looking forward to swimming, but Oliver feels nervous because he is not confident in the water. We might notice his face looking worried; we can encourage him.*)

ACTIVITY: 5 SENSES

MED-EL Lesson Kits series

provides many activities to encourage the development of mental state words. This activity is available in Lesson Kits 08 "Faces and Hands".
Many more activities to encourage the development of Theory of Mind skills for different ages and levels are found in all our Lesson Kits.

Try out the activity "5 Senses" in Appendix 3.

The whole series is available for free on the MED-EL Professionals Blog https://blog.medel.pro

For the development of Theory of Mind it is important that you explain why you are feeling the way you are feeling.

1.b Language of Emotions

> *"The limits of your language are the limits of your world."*
>
> Ludwig Wittgenstein

Children learn quickly when the words they hear match their thoughts and feelings with what they can see happening in front of them. Watch and wait to see where their attention is, then input the right words at the right time. Matching thoughts with the right words, using mental state words and emotional vocabulary.

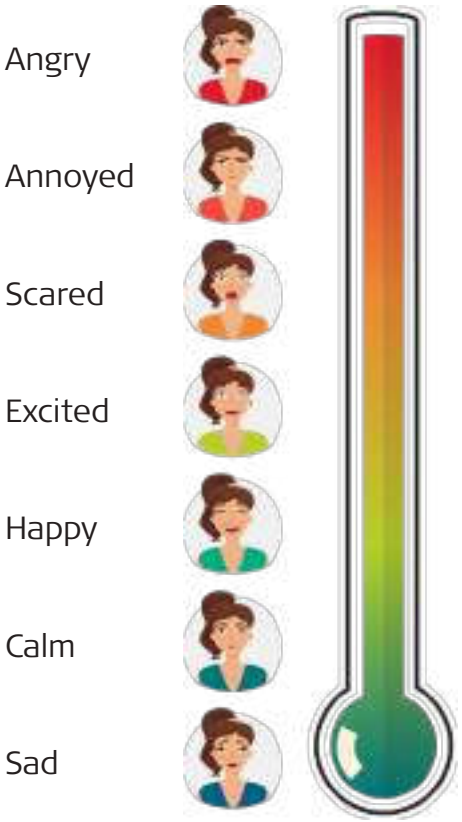
For example, you might say out loud so that your child can hear:

- "I can see you sucking on your hand and looking at my lunch box, you must be really hungry and wondering what is for your lunch."
- "Yesterday I forgot to buy milk and could not have any tea. I felt really thirsty and disappointed because I like to dip my biscuits in my tea."
- "Wow! I can see you have the 'player of the day' trophy from football club. I think you must be feeling really proud of yourself. Am I right? Did you know you were getting it or was it a surprise?"
- "I've just remembered that I have new stickers in my magic box. I have one for you and one for Susan. I am guessing that your favourite will be the bumble bee. What do you think Susan's favourite will be?"
- "I am so irritated. I have lost my mobile phone. It should be somewhere in the room, but I can't recall where. Could you help me think what I could do? I am really worried I won't find it."

Emotional vocabulary: Lifting a lid on your thoughts

Include a large variety of emotional vocabulary (affective mental state words) that is not just about feeling happy, sad, or fed up, but include more complex vocabulary, such as disappointed, enthusiastic, fragile, proud, and thrilled. When children are very young they may not understand these words to begin with, but hearing them from a young age will increase the likelihood of using them as they get older.

A useful tool is thinking of the range of emotions on a feelings thermometer:



Link your feelings to the reason you are feeling them

When sharing books, point out the characters' emotions and explain why they are feeling that way.

- Daddy is happy because the cake is nearly ready.
- Mummy feels tired because she did not sleep well.
- Henry is crying because he dropped his ice cream.

Linking your feelings to the reason behind them helps to develop the concepts of cause and effect (e.g., *Sam is crying because he does not want to leave the park.*) Interpret emotions for children, adding your thoughts on whether you think the emotions are accurate or mixed and how they link to events. This practice helps build an understanding of both, emotions and concepts, such as *false belief*. Encourage the children you work with to move beyond recognizing feelings in themselves and others, to interpreting why they are there and what they mean. Find ways of including issues related to their hearing loss as part of these discussions.

ACTIVITY: THE FEELINGS GAME

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Try out the activity "The Feelings Game" in Appendix 4.
The whole series is available for free on the MED-EL Professionals Blog https://blog.medel.pro

1.c Language of Humour

Humour can start with very young children and is rooted in pretend play, as we laugh at taking on other characters and begin to understand what is real and what is make-believe. The development of humour is linked to Theory of Mind, as we learn to perceive what we find funny and how it compares with what others find funny. It is through Theory of Mind that we learn how to joke, tease, and playfully deceive. Setting up playful situations with groups of children will encourage talking about these skills. Talking about funny situations and highlighting the specific things that made us laugh will reveal the thinking behind humour (e.g., maybe mishearing something that was funny or going to the pet shop, and asking for a parrot, and receiving a carrot instead). Other ideas include:

- Using simple knock-knock jokes and puns
- Saying aloud when we find things funny (e.g., *I thought that was very funny. Look, that clown is trying to be funny.*)
- Watching clips from TV programmes that have practical jokes, such as *Rank the Prank* or *You've been Framed* and discussing the thinking behind the situation

As children learn more language, there will be more opportunities to talk about humour in ways they understand.

Discussions about jokes and playful teasing should include recognizing when people

- do not find a joke funny or
- have had enough of the joke (*It was funny the first two times.*)

Especially as children get older, it is important to know what subjects are appropriate to joke about, when a joke is getting irritating, or when it's upsetting someone. Recognizing whether certain types of humour are acceptable in a given situation and adjusting behaviour accordingly are key Theory of Mind skills.

2. The Role of Listening

a. Well-managed technology and a quiet environment

b. Indirect learning

c. Whole-body listening

Well-managed technology and a quiet environment:

The link between language development and Theory of Mind means that for children with cochlear implants, being given access to as much rich and meaningful spoken language and communication as early as possible is vital. Well-managed technology used in quiet environments will facilitate rich communication. Following are some strategies that need to be in place to get the most out of the everyday interactions that help to shape Theory of Mind skills. Professionals and parents need to

- ensure the technology is correctly set up and consistently working,
- encourage optimal access to conversations, especially those at soft levels,
- understand the importance of reducing background noise in the environment, giving every opportunity to better hear and overhear the spoken conversations around them,
- ensure the child is close to the person they are listening to,
- and know what types of technology (e.g., FM systems) and what types of listening environments (e.g., small group in quieter room during school and dinner times) help to optimize listening situations.

How can we as professionals promote overhearing or eavesdropping opportunities where children can overhear others (e.g., people, characters on tape) discussing the mental states of someone else?

Indirect learning: overhearing, overseeing, and recapping conversations

Even with the most optimal listening conditions, children will not always be directly involved in the conversations happening around them. So, to ensure that they do not miss out on the learning opportunities that these chats hold, think of ways of bringing these conversations to them.

Facilitate times to have different kinds of conversations that typically happen between different people in varied situations. These conversations will open opportunities to be exposed to different Theory of Mind concepts, such as empathy, inference, and critical thinking, growing the child's understanding of the way language is used:

- The negotiation happening between siblings over which toy to play with or TV programme to watch
- The cooperation of a group trying to plan a game of tag together
- The guessing game of an ice cream seller trying to work out which ice cream somebody wants
- The retelling of an argument that happened on the playground
- The planning of a surprise birthday party for someone's best friend
- A tearful conversation full of emotions needs careful listening to know how to respond
- A misunderstanding as someone sits in the wrong seat or eats the wrong lunch

> *"Learning is a result of listening, which in turn leads to even better listening and attentiveness to the other person. In other words, to learn from the child, we must have empathy, and empathy grows as we learn."*
>
> Alice Miller

Whole-body listening:

Staying focussed on what someone is saying and having the cognitive capacity to pick up other cues, such as body language, inflection of voice, and facial expressions are all part of Theory of Mind and social competence. Children with hearing loss spend vast amounts of time and energy actively processing the main message; the need to also pay attention to nonverbal cues places more cognitive load on their brains. It is tiring to listen, so having tips for listening well can help lessen the load.

Do children know what good listening looks like? It is sometimes referred to as whole-body listening. An example is, keeping our bodies still and the importance of our eyes when listening. Maintaining eye contact is not only expected in social interaction, but looking at someone also

- keeps our minds focussed on what they are saying,
- lessens the cognitive load, especially if lip-reading,
- sends the speaker signals that we are interested in what they are saying (shows empathy),
- and helps us work out what the speaker is thinking.

There are many ready-made online activities for whole-body listening.

3. Using everyday routines at nursery, school, and home

Professionals link with the child's family and make sure they feel confident about encouraging these skills in their everyday routines and weaving them into the fabric of daily life and play. Following are some practical ideas for using everyday routines:

> *"The best teachers are those who show you where to look, but don't tell you what to see."*
>
> Alexandra K. Trenfor

Link Concrete Objects with Mental State Words

Go beyond just talking about things and objects and draw direct connections between the objects and mental state words. Following are some suggestions:

- Bring together a few different objects (e.g., toys, books, clothes) and pick one that you like and explain why you like it.
- Encourage children to choose an object that they like and give reasons why they like it. Then have them guess which one their sibling or other parent might like and follow by asking the sibling or other parent which one they like. Are the answers the same?
- Take opportunities to make surprise birthday cards, plan surprise treats for siblings, and then make it obvious that we need to keep it a secret or it won't be a surprise. Talk about how the sibling or parent doesn't know that there's a surprise waiting. Then when the sibling or parent comes home, ask them if they knew about the surprise. When they say no, it will highlight to your child that we can know or believe something that another person might not.
- Use ToM-rich language:
  - *What do you think John is thinking? Should we ask him? What do you think, John?*
  - *What do you think Sam might like to eat? Why don't you ask him? Sam, what would you like to eat?*
  - *We'll have to guess what colour Amy might like.*
  - *Dan is laughing; I wonder what he has found so funny—he looks very happy.*
- When discussing the thoughts and feelings of others, make it obvious that we don't actually know what Sam, Amy, or Dan are thinking. We might have a guess; but to know, we need to ask them. Sometimes their thoughts and feelings will be different from your own and what you guessed they were.

"I would like to plan a visit to Grandma tomorrow. She likes it when we visit in the afternoon. I think we should bake her a cake. What type of cake do you think Grandma might like? We can decide what ingredients we will need. We could bake her an apple cake. Or we could bake her a carrot cake. Do you remember what type of cake Grandma likes best?"

Talk About Past Experiences

Talk about events that happened earlier in the day, week, month, or year, while incorporating mental state words. Highlight perspectives, thoughts, feelings, and motives of other people who were involved with these experiences:

"Remember when we wanted to do something special for James, for his birthday? We knew he liked going to the zoo and we bought him that T-shirt with animals all over it as a clue. I remember we all played that game to see if we could guess which his favourite animal was. He was so excited when we guessed right; it's a lion."

Talk About Upcoming Events

Talk about events that will happen in the future, giving reasons why you participate in the events in the way you do. Asking questions that relate to mental states can help children understand these concepts through direct interaction and engagement in conversation. Following are some examples of what you can say:

"I would like to plan a visit to Grandma tomorrow. She likes it when we visit in the afternoon. I think we should bake her a cake. What type of cake do you think Grandma might like? We can decide what ingredients we will need. We could bake her an apple cake. Or we could bake her a carrot cake. Do you remember what type of cake Grandma likes best?"

"It is a dress-up day at school next week and everyone has to wear their favourite outfit. What would you like to wear? What do you think Molly will wear?"

Choosing ToM friendly topics

There are certain conversation topics that are particularly good for stimulating discussions around Theory of Mind because they highlight the fact that

- people have different thoughts and feelings from each other,
- people can have entirely different perspectives and beliefs about the same situation,
- people can act according to false information,
- thoughts impact feelings and in turn influence behaviour,
- seeing is believing, but you can't believe everything you see,
- it's important to try and see another person's point of view.

Some of these topics include talking about:

- Misunderstandings
- Mistakes
- Times when people were bluffing or tricking
- Teasing
- People unintentionally offending someone else or hurting their feelings
- Secrets
- Surprises
- Predictions

> *"People's behaviour makes sense if you think about it in terms of their goals, needs, and motives."*
>
> Thomas Mann

Let's think about birthdays, a good source of Theory of Mind discussions. Practise recognizing the skills involved in Theory of Mind using the following examples:

- Guessing: John is trying to imagine and guess what his mum and Tim would have chosen for him.
- Understanding perspective taking/putting ourselves in someone else's shoes
- False Belief: John thinks he is getting boring LEGO®.
- Keeping a secret: Tim knows it's important that he does not tell John what is in the box.
- Empathy with how someone is feeling by recognizing their facial expressions

BOOKS:

Murat's Birthday Present

Murat's Birthday Present is a storybook from the Murat Reader Series with activities and games for young children with hearing loss.

Check out Appendix 5
to get a glimpse of the inside of the book.

The storybooks are free downloads on the MED-EL website: www.medel.com

Supporting the development of Theory of Mind in schools

As professionals supporting primary-aged children, think how you can give practical ideas for using the topics being taught to develop all aspects of Theory of Mind. How could you take a topic like *The Caveman*, *The Great Fire of London*, or *The Titanic*, and talk about mental state words? Think about taking the perspective of the characters in the stories and reason what they might be experiencing, thinking, feeling, and believing.

Using social stories for everyday issues related to hearing loss

Include discussions and topics about thoughts and feelings around issues that resonate with children with hearing loss. Take time to think about the situations children with hearing loss find themselves in and discuss the thoughts and feelings of all the characters involved. Making social stories about these different situations can be a good starting point for discussions. Children can hear different views, thoughts, and feelings about the same situation from different children.

For example:

- Having to follow a conversation with your friends in a noisy dinner hall
- Playing football with your friends on a windy day with the wind blowing in your microphone
- Not hearing the teacher's instructions
- Losing your cochlear implant and asking friends to help find it

Games, instructions, and directions

Giving instructions and directions is another good way of developing Theory of Mind skills. Use games and activities as opportunities for children to predict the outcome of an event, and then compare their predictions to what actually happens. For example, during a game of *Guess Who*, "I thought you had chosen the card with the man with the glasses, but it was actually the lady with the green hat."

ACTIVITY: BARRIER GAME

MED-EL Lesson Kits series

provides many activities to encourage the development of mental states words. This activity is available in Lesson Kits 03 "Transport".
Many more activities to encourage the development of Theory of Mind skills for different ages and levels are found in all our Lesson Kits.

Try out the activity "Barrier Game" in Appendix 6.

The whole series is available for free on the MED-EL Professionals Blog.
https://blog.medel.pro

Make cupcakes or a sandwich together

Let the child take the lead. Children need to plan what they will need. You could have a bag of things you had prepared earlier and encourage them to imagine and guess what you might have put in it and what you may have forgotten. Can they tell you the individual steps well enough for you to successfully make the sandwich or cupcakes? Deliberately sabotage or be silly if their directions are not accurate enough (e.g., "Put butter on." You could reply, "OK, I will put butter on my head.") This response lets the child know you need more information, and that you cannot see what they are thinking unless they tell you.

Play a game of snakes and ladders

Pretend that you have not played it for a long time and the child needs to remind you how to play it. This strategy will require the child to think carefully about the information you may know and what information they will need to give (e.g., what snakes do as opposed to what ladders do in the game, and what you might know something about; for example, how to throw dice). Playing as a group is perfect as you will need to negotiate who will go first and next and you can model empathic language as unexpected things happen, such as going down a really long snake (e.g., *I think you must be really cross to have got so far, and then had to slide down.*) Other children might need help regulating emotions (e.g., *Well done for not giving up on the game and shouting when you went down that snake. I'm sure there will be a chance to go up a ladder again soon.*) Press an imaginary pause button during the game and imagine what each player is thinking and feeling. But don't do this too much or it might get irritating!

Fun barrier games

When one person has to draw what the other person can see (e.g., a snowman), they will need to rely on being given accurate instructions and will require an awareness that what they can see is very different from what you can see. You could try the "funny monster" version which involves:

a. Child drawing a monster without you seeing it
b. Child telling you how to draw the monster without showing it to you
c. Together comparing pictures, which are invariably different and funny

The 21 questions game

This is a good game to practise "mind-reading" skills. One player thinks about something (e.g., a fruit). "Which fruit am I thinking about?" Other players can ask 21 questions that can be answered with *yes* or *no*. For example, "Is the fruit you are thinking of yellow? Does it have a prickly skin?" Not only does this model and encourage complex vocabulary, it also works on memory skills (another area linked to Theory of Mind) and it requires thinking about and predicting what the other person might have chosen. The players have opportunities to use their social knowledge, what they know about the person and what they might like (e.g., maybe they always choose their favourite fruit). This game can be played on any topic.

4. Books and ToM

Book sharing brings many huge advantages to children's overall language, thinking, and social development. When it comes to Theory of Mind, we have research to back up how important parents sharing books with their young children is. Discussion of mental states has been found to occur during joint reading of a wordless storybook (Ruffman, Slade, & Crowe, 2002;). Such conversation occurs in this context at a higher frequency than during everyday conversation (Bartsch & Wellman, 1995; Dyer, Schatz & Wellman, 2000).

Using books from infancy onwards is a fantastic way of promoting Theory of Mind skills. As young children participate in joint attention, knowing that you can focus and enjoy a book together, try to point things out in books that you may both be interested in. Sharing books encourages not only joint attention skills but also gives prime opportunities to learn the language that goes hand in glove with Theory of Mind skills.

A conversational approach to book sharing and storytelling that incorporates references to beliefs, thoughts, and emotions of the characters will help to have a better understanding of dual mental representations (Stanzione & Schick, 2014). Book sharing needs to be a time of calm, quiet, closeness, and fun. Allow it to be a time where the child takes the lead in showing you what they are interested in. Weave the type of language that promotes the development of Theory of Mind into this sharing time in a natural way (e.g., *Look! The girl is thrilled. I think the caterpillar is hungry and is looking for more food. Let's imagine what will happen next.*) Choose books with surprises, mistakes, and secrets; invite children to see things from a different point of view. Many traditional fairy tales and fiction books, such as *Little Red Riding Hood, Goldilocks and the Three Bears*, and *The Three Little* Pigs are good (Beazley & Chilton, 2015).

Following are some other good examples of books to choose:

All the Pip and Posy books by Axel Scheffler deal with toddler themes and Theory of Mind. Examples include:

- Pip and Posy: The Big Balloon
- Pip and Posy: The Little Puddle
- Pip and Posy: The New Friend
- Pip and Posy: The Scary Monster

Julia Donaldson's books:

- The Gruffalo
- Tabby McTatt
- Monkey Puzzle
- Freddie the Fairy (includes themes about hearing loss)
- The Troll
- The Snail and the Whale

Books about feelings:

- When I'm Feeling books by Trace Moroney
- Today I Feel Silly: And Other Moods That Make My Day by Jamie Lee Curtis
- In My Heart: A Book of Feelings by Jo Witek
- Ruby's Worry and Perfectly Norman by Tom Percival
- Stuck and the Day the Crayons Quit by Oliver Jeffers
- The Bog Baby and the Boa's Birthday by Jeanne Willis

ToM and hearing loss books:

- Violet's Story by Frances Clark
- Freddie the Fairy (themes about hearing loss)

Make-believe stories help children relate their own thoughts to a character's and develop thoughts that reflect the likes, dislikes, emotions, and beliefs of the character. If these likes and dislikes reflect the likes and dislikes of the child, you could highlight it by saying, "Oh, that's just like you! I know how you would wish for a parrot." It also helps children make predictions (e.g., *What do you think Freddy is going to wish for next?*)

Ideas to do with the books you choose

Use lift-the-flap or peek-a-boo books. You can guess what is under a specific flap or talk about knowing what's under the flap if you're rereading the book. Following are some example sentences you could use:

- "Let's guess what's under the flap."
- "I know what's under there, do you? We saw it the last time, so we know what's hiding there!"
- "I haven't read this book before, so I don't know what is under there."
- "I think it might be a rabbit. What do you think it could be?"
- "Can you remember what's under the flap? I've forgotten!"

Choose books that have familiar routines or objects, like activities or foods. This type of book will allow you to relate what's in the story to what's common in the child's daily life. Bring up which routines or objects they like or dislike and compare their preferences to yours and those of other children:

- "He's eating an apple for breakfast. Your big brother also likes apples. Do you like apples?"
- "That boy is riding his bicycle. You like riding your bike on the weekend, too."
- "I don't like the taste of onion."

Read books that talk about emotions and talk about the different emotions children experience in their daily life, as well as the ones in the stories.

- Identify the emotions and discuss why the characters might be feeling these emotions. This kind of discussion helps children begin thinking about the emotions that others might be feeling and reasons for why they might be feeling that way.
- Point out that different characters in the story might have differing emotions at the same time, showing how different people can perceive the same thing in different ways.
- "That little girl is crying. I think she feels disappointed because her brother won't share his toys with her. What do you think? Her brother looks like he might be feeling frightened. He might not want to share his toys with his little sister. I wonder if they might like to play a new game together instead."

BOOKS:
Murat Reader Series

MED-EL provides 4 storybooks in the Murat Reader Series with activities and games to encourage ToM skills for young children.

The storybooks are free downloads on the MED-EL website: www.medel.com

Older primary-aged children and books

ToM impacts on many aspects of literacy and is associated with reading ability (e.g., Kim, 2015), indicating that more advanced readers are accessing text in such a way that grows Theory of Mind skills. For primary-aged children and teenagers, the types of books we choose are important for encouraging Theory of Mind. Literature that involves characters with different life experiences, thoughts, and views from the reader all encourage empathy by offering new perspectives (e.g., the complex characters in the Harry Potter series).

Reading should be followed up with discussions, not only about the plot but also about the varied characters, social conundrums, and wider social issues. This kind of discussion will promote perspective taking, critical thinking, and problem solving, all important for developing more advanced Theory of Mind. Find ways to feed back to parents about how they can encourage book sharing with incisive questions about the characters' thoughts, feelings, and perspectives.

Conversations about mental states in the context of joint reading is associated with social understanding (e.g., understanding emotions Garner, Carlson Jones, Gaddy, & Rennie, 1997), particularly if these conversations are initiated by the parent (Symons, Peterson, Slaughter, Roche, & Doyle, 2005). Therefore, finding the right books and talking about story characters and their desires, beliefs, and emotions appear to guide a child's growing understanding that people possess different mental states.

Some examples of these types of books are:

- Harry Potter series
- Why the Whales Came
- Charlotte's Web
- Boy in a Dress
- Gangsta Granny
- Oliver Twist

5. Imaginative play, pretend play, and small toy play

There is a strong link between pretend/imaginative play and the development of Theory of Mind, as well as for cognitive flexibility and, ultimately, creativity. When children use toys to introduce possible scenarios or friends, the acting out of multiple perspectives occurs naturally. Taking on different roles allows children the unique opportunity to learn social, skills such as communication, problem solving, and empathy (Russ, 2004; Singer & Singer, 2005).

Consider a make-believe game between Tom and Molly as they have the dress-up box out and various objects to play with. They will demonstrate a number of Theory of Mind skills:

- Understanding of other people's perspectives being different from one's own (e.g., *How do I behave and think when I am being a fireman?*)
- Ability to handle multiple points of view and think simultaneously about the world in at least two ways (e.g., holding a pool noodle and pretending it's a fireman's hose or pretending a spoon is a thermometer)
- Understanding what's going on in the minds of others (e.g., *Rosie would rather be a nurse than a fireman.*)

Practical ways of encouraging pretend play

Provide open ended toys: Collect dress-up clothes and household items (e.g., old boxes, crafts, building blocks, and any other items that will need the child's input to bring them to life).

Know when to demonstrate how to extend play and when to take a supportive role: Take opportunities to show the children you work with how you play imaginatively. Pick up a bear and stick stickers all over it and pretend it has chicken pox, remembering to say your thoughts aloud as you play. Now wait, and watch, and see what they are interested in.

Use small world play: Using items from LEGO® or Playmobil® for slightly older children is a manageable way of engaging in imaginative scenarios and social stories that they need to solve, think about, and see the different characters' viewpoints.

Pretend to be animals: This activity is good for young children with limited language.

Pretend to do everyday activities: Supply the props and let the children take the lead.

Pretend play provides opportunities to put into practice the mental-state language that children hear.

> *"Imagination is a place where all the important answers live."*
>
> Joe Meno

PRETEND PLAY AND EVERYDAY ACTIVITIES:

LittlEARS® Diary Activities

MED-EL LittlEARS Diary Activities includes many games and activities to encourage pretend play and the development of ToM skills in everyday situations.

Find the activity
"Bathing Baby Doll" in Appendix 8
and start playing with the child!

6. Using TV shows and movies for developing Theory of Mind

As children get older, you may need to think of different ways of keeping them engaged in activities that can be used as a springboard for developing Theory of Mind. One of the ways it can be achieved is using popular movies. There are great online video resources that are specifically designed for working on perspective taking, recognizing emotions, and thinking socially.

Some popular movies for primary-aged children that have many opportunities for discussing Theory of Mind include:

- Finding Nemo
- Ice Age series
- Inside Out
- Finding Dory
- Sing
- Paddington

Mar, Oatley and Peterson (2009) found that the prediction of Theory of Mind abilities extends to children's movies, which increased prediction of Theory of Mind scores by 33% beyond other indicators. The same, however, could not be said of children's television.

For teenagers, taking a short clip of any movie and turning it into a cartoon strip with thought and speech bubbles for them to fill in can generate interesting Theory of Mind and social-thinking discussions. Another technique is watching a short clip from a movie as a discussion point and then asking the teenagers to generate their own role play stories that include clues as to what characters are thinking and feeling.

Shining a light on the world children inhabit, whether through conversations, games, books, or movies will highlight what people are doing, thinking, and feeling and why. This world knowledge helps children of all ages to practise the skills needed for Theory of Mind and thinking socially. This practice leads to embedded knowledge and wisdom.

> *"Knowledge is knowing tomato is a fruit. Wisdom is knowing not to put it in a fruit salad."*
>
> Miles Kington

APPENDIX 1

Feelings Charades

PREPARATION

Print 2 copies of the resource.
Cut one copy into cards, then place the cards in a pile face down.

RESOURCES

- Emotions/Feelings cards
- Scissors
- A pen or pencil

1. One-by-one, talk about each card before you show the picture, and then label the emotion and discuss what might cause a person to feel that way.
2. Show the picture, and then write the label of the emotion at the bottom.
3. Shuffle the cards and place them back in a pile, face down.
4. Take a card. Without showing the picture or talking, act it out. The others in the game guess the emotion.
5. Swap roles.

EXPECTED OUTCOMES

- Repeats emotion words from descriptions
- Identifies causes of emotions
- Guesses an emotion from a story

KEY STRATEGY

LISTENING FIRST: Take the time to talk about each card one-by-one before you show the picture. The primary goal of this activity is to develop the child's understanding and recognition of emotions. However, it is important to continue to stimulate the auditory area of the child's brain. Set an expectation that your child will listen for and repeat the emotion word before you share the picture. Then you can talk about what might make a person feel that way together. For older children you might ask the child to listen to a made-up short story and guess what the emotion is before showing the card.

EXPECTED OUTCOMES

- Identifies and labels emotions
- Explains reasoning (e.g., *You are surprised because your eyes are wide.*)

KEY STRATEGY

TALK, TALK, TALK: Take turns to act out the emotion cards so that you can model the language required to explain the reasoning behind your guess. For each emotion try to think of one physical descriptive clue that is unique to that feeling. This will develop the child's ability to recognize emotions in others in real situations, in addition to building vocabulary and sentence structures skills. *I think you must be feeling exhausted because your shoulders are slumped.*

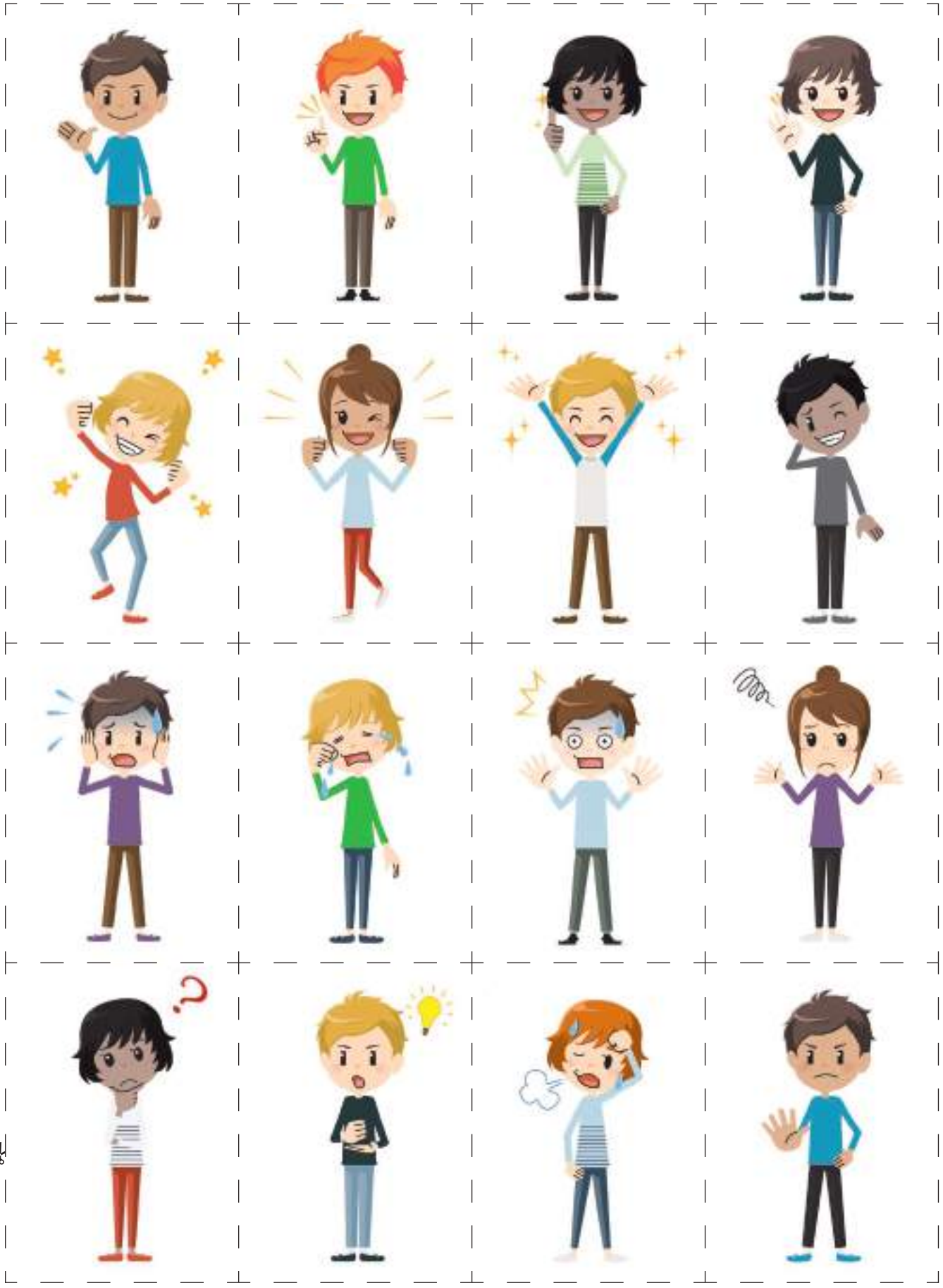
EXPECTED OUTCOME

- Makes connections between a person's physical presentation and emotion

KEY STRATEGY

USE CHOICES: Guessing how a person is feeling is a difficult but important skill. As adults we continue to strive to improve this ability and may still make incorrect assumptions. Explain and model this by using choices in your guesses. *You know what? I am really not sure... I can see your mouth is smiling but your eyebrows are wobbly. I am not sure if you are happy or a bit anxious.*

Emotions/Feelings cards



1. Feelings Charades

The activities included in this lesson plan encourage the child to recognize thoughts, feelings and emotions of characters from cards or described scenarios. Some of them are activities to act out and guess the feelings, others are based on characters and scenarios from Harry Potter books series (Rowling, 1998). They are suitable for children at Level 3 listening and language abilities, but they can be adapted also for younger children using scenarios from other storybooks and emotion cards appropriate to the child's age and language level (e.g., happy, sad, tired, sick). Further ideas of activities to develop Theory of Mind skills are also comprised.

Level 3 abilities

- The child is a proficient listener, learning to attend to 3 units of information. Spoken language is presented in a variety of complex sentences and Acoustic Highlighting techniques are utilized to encourage the child to attend to grammatical elements in the sentence.
- The child is producing 3- to 5-word sentences and questions, has a vocabulary of more than 2000 words, and is using a variety of grammatical markers.

2. Feelings Charades: Extended Version

Now introduce the cards with short scenarios from Harry Potter (Rowling, 1998). Print out and use the pictures of the characters, use cards provided on page 31 or make your own. Players must guess the emotion cards that go with each scenario; more than one may apply. Discuss how the characters might feel.

A. Harry Potter does not know the truth about his parents or that he is a wizard. He is made to live in a tiny room under the stairs. The family he lives with, the Dursleys are not kind to him and their son Dudley teases Harry a lot.

B. Harry Potter is visited by a giant from Hogwarts School who explains to him that he is actually a wizard. He tells him he is a famous wizard and that he is going to attend a wonderful, magical school.

C. Harry Potter has his first lesson learning to fly on a broomstick and finds out he is brilliant at flying.

D. It is the summer holidays and Harry is at home with the Dursleys. It is Harry Potter's birthday but the Dursely's have forgotten all about it and have not got him even a card. He has also not received any letters from his friends, Ron and Hermione, from Hogwarts School.

E. Dobby, the house elf, is a character from the Harry Potter stories. He has found out a secret. He finds out that someone is going to try to harm Harry if he goes back to Hogwarts school. So, Dobby decided to steal all Harry's letters and birthday cards from his friends. He does this so Harry will think his friends have forgotten him, and then he won't want to go back to Hogwarts school.

F. Harry finds out that he has been given a pet owl.

Other activities

Leaving Invisible Thoughts

Making and using Invisible Ink

Using the directions and follow the instructions, make some invisible ink.

Invisible ink ingredients

- Baking soda
- Paper
- Water
- Light bulb (heat source)
- Paintbrush or swab
- Measuring cup
- Purple grape juice (optional)

Make and use the ink

1. Mix equal parts water and baking soda.
2. Use a cotton swab, toothpick, or paintbrush to write a message onto white paper, in the thought bubbles. Use the baking soda solution as ink.
3. Allow the ink to dry.
4. Make invisible ink to write invisible messages to your classmates.
5. Guess what the hidden thought might be...
6. Switch papers with your neighbour and reveal the message.
7. To reveal the hidden messages, hold the paper up to a heat source, such as a light bulb. The baking soda will cause the writing on the paper to turn brown.
8. Another method to read the message is to paint over the paper with purple grape juice. The message will appear in a different colour. The grape juice reacts with the sodium bicarbonate in the baking soda.

Create a "Spell for Friendship"

Imagine for a moment you are not yourself but one of your friends. What sort of things would they put into a friendship spell (e.g., kindness, fun, being a good listener)?

Create magic spells—think about what other people might like (e.g., *Your mum or dad might like a spell that tidies your bedroom, cleans the car, or allows them to be invisible.*)

Think of some others:

A spell your best friend would love?

A spell your pet might like?

A spell your teacher would like?

APPENDIX 2

Extract from the resource A Child's Journey; MED-EL

A Child's Journey is designed to be used as a tool by professionals for monitoring the acquisition of skills in children that are necessary for listening, spoken language and communication, which in turn facilitates learning. It may also be used for providing information about current levels of functioning and progress, identifying areas of concern, selecting appropriate goals for ongoing development, and aid in counseling families. It covers eight developmental domains, including:

Audition	Audition refers to the ability to perceive sound through the hearing sense and the development of listening skills.
Receptive Language	Receptive language refers to the ability to understand information that is communicated by others through words, sentences and their meaning.
Expressive Language	Expressive language refers to the ability to express thoughts, wants and needs in words and sentences that are syntactically and grammatically accurate.
Speech Articulation	Speech articulation refers to the ability to produce vocal behaviours and speech sounds.
Play	Play refers to the activity of enjoyment conducted by children for learning about and experiencing the world.
Cognition	Cognition refers to the process of developing knowledge through experience, the senses and thought.
Pragmatics	Pragmatics refers to the social use of language to convey or understand meaning during interactions with others.
Literacy	Literacy refers to the ability to interact with written texts, including the ability to read and write.

Specific skills are based on developmental milestones for typically hearing and typically developing children from birth to 6 years of age (72 months). The content within this guideline has been based on child development in the English language. For children exposed to languages other than English, developmental milestones within the language the child is learning should be considered when monitoring communication skill development and progress.

For children with a hearing loss who have optimal access to the sounds of speech, skill development would be expected to occur in the same developmental hierarchy as typically hearing children; that is, one skill lays the foundation for another to build upon. A Child's Journey provides a guide of typical developmental hierarchies across the included skill domains.

There is an interrelationship between the developmental domains for communication. In typical development, skills across developmental domains would be expected to progress concurrently, and there may be significant correspondence or overlap between skills in differing domains. Where this occurs, the most prominent feature of the skill dictates which domain it is classified in within this resource. For some skills, an identifier has been marked in all capitals (e.g. THEORY OF MIND). This defines a subset of common skills within the domain.

A Child's Journey is not a standardised assessment tool and should not be used to diagnose disorders or delays. If areas of concern are observed, onward referral to specialised professionals for standardised assessment may be required.

PRAGMATICS

	Goal	Emerging	Mastery	Date
36-42 MONTHS				
Expresses preferences when choosing food, clothing or activities	X	X		
Begins to share				
42-48 MONTHS				
Suggests taking turns but often bossy in directing others				
Routinely shares				
36-48 MONTHS				
Shows affection for familiar playmate	X	X		
Uses more fillers to acknowledge other's message (e.g. "Uh-huh", "OK", "Yeah")				
Recognises when listener has not understood and will repeat message				
Understands turn-taking and sharing				
Begins code switching when talking to younger children (e.g. uses simpler language)				
Requests permission				
Begins to have a clearer sense of time and wants to know what will happen next				
Talks about what others think and know – THEORY OF MIND				
Talks about more advanced emotional states (e.g. scared, surprised, worried) – THEORY OF MIND				
Talks about thoughts and beliefs and uses these to explain emotions and actions of others – THEORY OF MIND				
Recognises that others have minds and their minds may hold different information (e.g. Dad is very knowledgeable about football) – THEORY OF MIND				

CONTINUED FROM PREVIOUS PAGE

APPENDIX 3

"5 Senses" Activity from Lesson Kits 08, Faces and Hands; MED-EL

PREPARATION

Print the resources on to light weight card. Print one players' mat for each player.
Cut out the spinner circle and arrow.
Assemble spinner by pushing the split pin through the arrow and the centre of the spinner circle then separate the legs of the pin and press flat at the back
Cut the 5 senses picture cards into rows.

You are going match up picture cards to the senses spinner and complete the player's mat .

1. Spin the arrow on the 5 senses spinner circle.
2. Talk about where the arrow stops and identify the sense.
3. Find the row of pictures that best matches that sense, choose one and cut it from the row.
4. Place the picture card on your player's mat above the matching 'sense' picture.
5. Take turns with the child and their parent/caregiver spinning and choosing.
6. If you spin a sense that you already have completed on your player's mat you may not choose a card.
7. First to complete the players' mat wins the game.

RESOURCES

- Faces and Hands L1 L2 L3 A2
- Faces and Hands L1 L2 L3 A2 spinner
- Faces and Hands L1 L2 L3 player's mat
- Scissors and a split pin

EXPECTED OUTCOMES

- Understands verbs associated with 5 senses; e.g. see, hear, smell, touch, taste.

KEY STRATEGIES

THE SAME THINKING PLACE: The child will be interested in the spinner and how it works. Add simple language to match what you think the child is thinking about. *Watch me give it a spin. See how I flick. It goes around. Then stops.*

AUDITORY SANDWICH: Say the verb that goes with the picture the arrow stops on. Use listening first and then provide support to facilitate comprehension by calling the child's attention to a gesture or mime of that verb. Then repeat the verb through listening alone.

EXPECTED OUTCOMES

- Uses verbs: see, hear, smell, touch, taste.

KEY STRATEGIES

ACOUSTIC HIGHLIGHTING: Help the child give directions to their parent/caregiver by acoustic highlighting the verb. Model using the verb at the end of a short sentence and encourage the parent/caregiver to wait until the child has vocalised before they act. *Tell mum to **spin**. Look where it has stopped. Mum needs to find something we can **hear**. Tell mum: Find something we can **hear.***

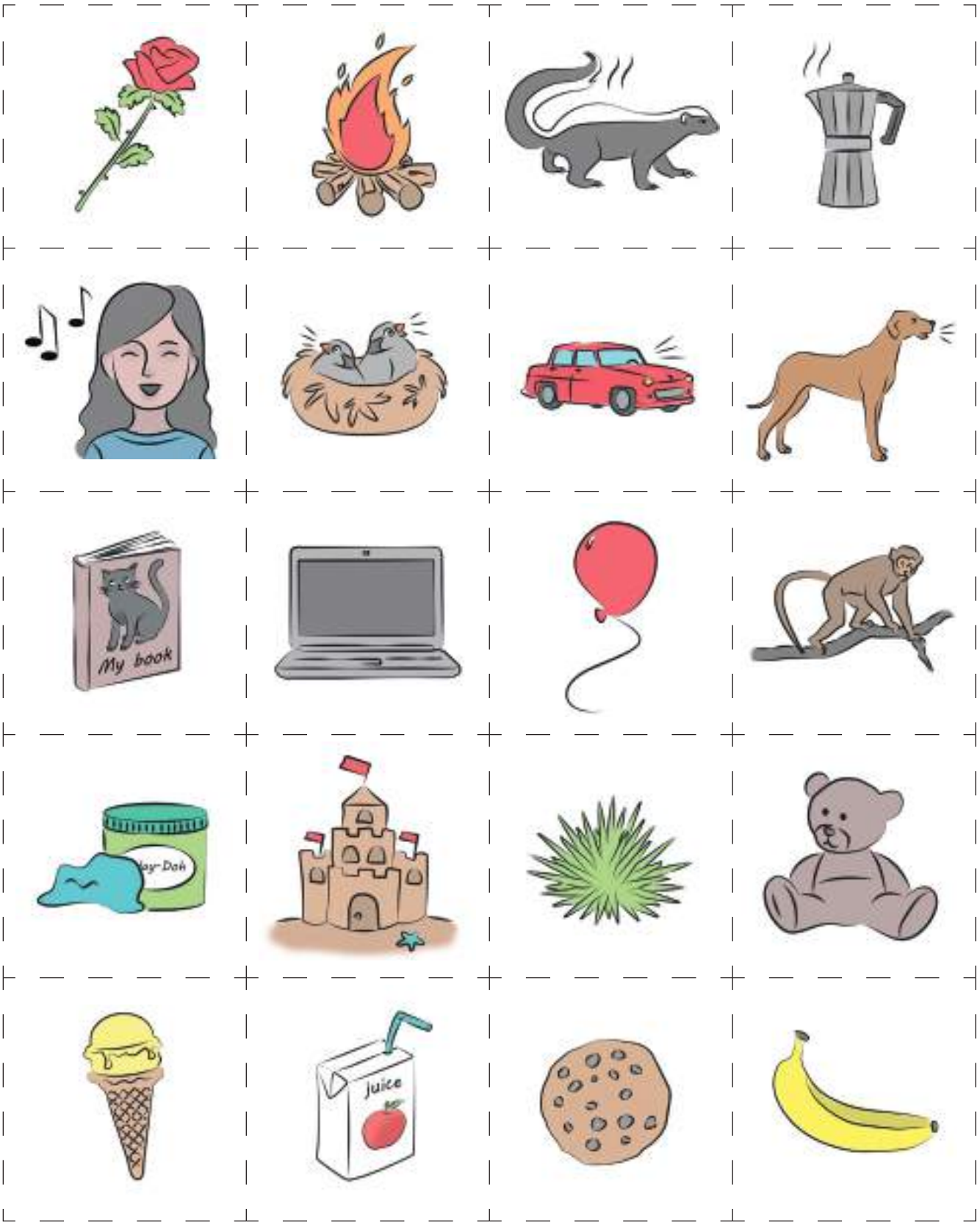
EXPECTED OUTCOMES

- Understands associations between words: 5 senses verbs and objects.

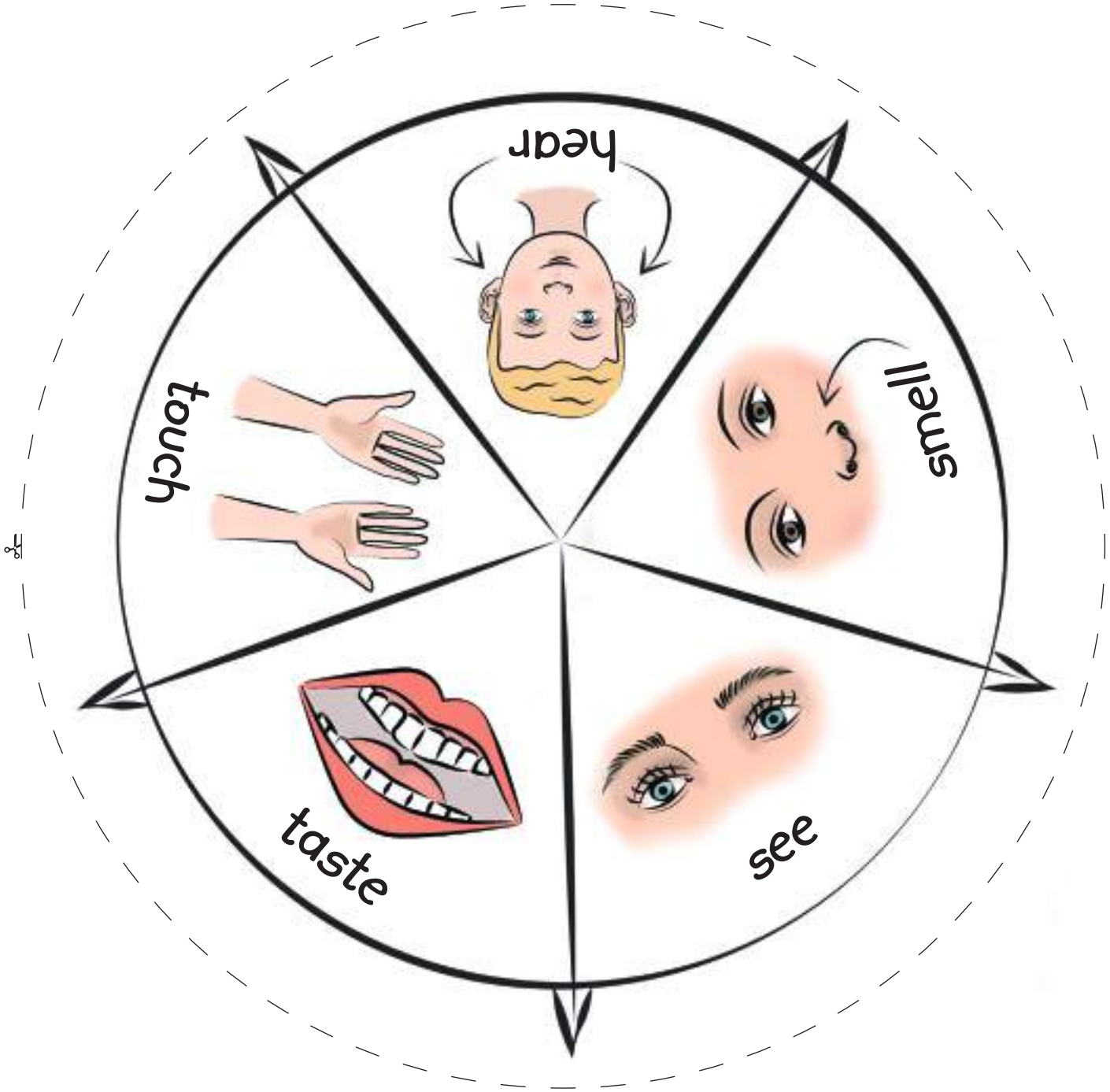
KEY STRATEGY

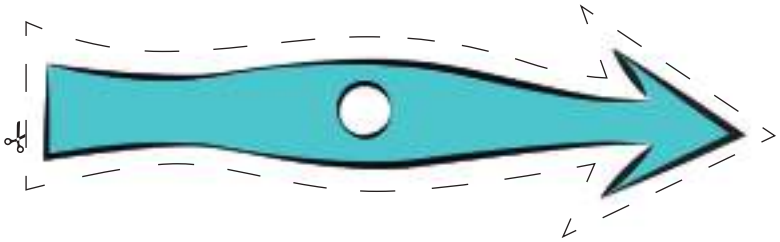
TALK TALK TALK: Helping the child understand relationships between words makes it easier for them to store words in their memory. *I will choose the flower. That's something we can smell. Mmmm. Flowers have a nice smell. We use our nose to smell.*

2. 5 Senses



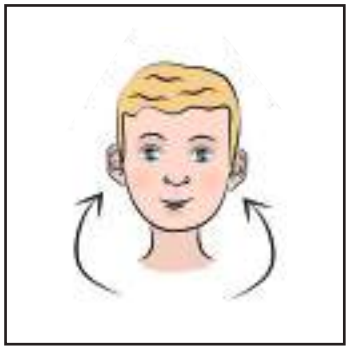
2. 5 Senses

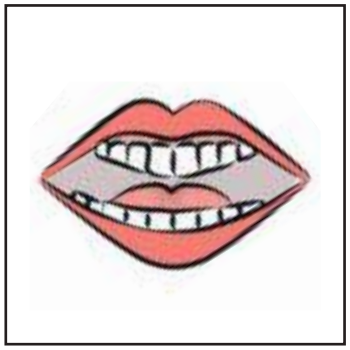




2. 5 Senses

Fold





APPENDIX 4

"The Feelings Game" Activity from Lesson Kits 08, Faces and Hands; MED-EL

PREPARATION

Print resources onto lightweight card.
Assemble dice if required.

You are going to play a simple board game.

1. Each player chooses a marker that they will move long the game path.
2. All players put their markers on the green square to start.
3. Demonstrate how to roll the dice, count the dots and move your marker along that many places.
4. Talk about the face that you stop on. How the boy is feeling and why you know that.
5. Take turns rolling the dice, moving your markers and talking about the faces and how they are feeling until all players have finished the game.

RESOURCES

- Faces and Hands L2 L3 A3
- Faces and Hands L2 L3 A3 dice (optional)
- A dice and markers to move around the game board

EXPECTED OUTCOMES

- Follows rules of a simple game; e.g.: start at the green square.
- Understands 2 units of information: feeling + behaviour; e.g. happy + smiling.

KEY STRATEGIES

TALK TALK TALK: How we identify emotions from facial expressions is a very complex skill and requires a lot of experience. As adults we can still get this wrong. Help the child understand that this sometimes tricky and teach them what to look out for in trying to work out how somebody is feeling. *I am not sure. I think this one might be feeling scared. Look his eyes are wide and his mouth is open. I think he might have had a fright.*

AUDITORY SANDWICH: When we learn about words that describe feelings we take a lot of cues from body language. Help the child begin to attend to the specific body language cues that go with feeling words by role playing the emotion. *Look at me, I'm going to pretend to be scared. See my shoulder go up.* Remember to put the focus back on listening. *Yes that boy looks scared.*

EXPECTED OUTCOMES

- Uses copular verb: is
- Forms word combinations to explain feelings.
- Counts up to six.

KEY STRATEGIES

USE CHOICE: If the child is unable to spontaneously label the feeling word you could give them a choice. Say the correct one last. *Do you think the boy is tired or do you think the boy is sad?*

EXPANSION AND EXTENSION: Use acoustic highlighting to call the child's attention to any grammatical elements missing from their 'sentence' e.g.: Yes, I do think **the** boy **is** sad. Then provide the child with some new information to provide an extended language model. *Maybe he **fell over** and **hurt himself**. Maybe that's why **he's sad**.*

EXPECTED OUTCOMES

- Identifies feelings in others from facial expression and understands triggers.

KEY STRATEGY

TALK TALK TALK: Help the child understand and interpret facial expressions and body language by talking more about what you see. *Yes, this boy is really angry. See her eyebrows. I can do that. Look. These eyebrows make me look angry. Watch mum. She can look angry. Wow. Look at her eyebrows. Mum what makes you feel angry?*

3. The Feelings Game

Start


Happy


Sad


Tired


Angry


Hungry


Thirsty


Scared


Sick


Excited


Dizzy

Finish

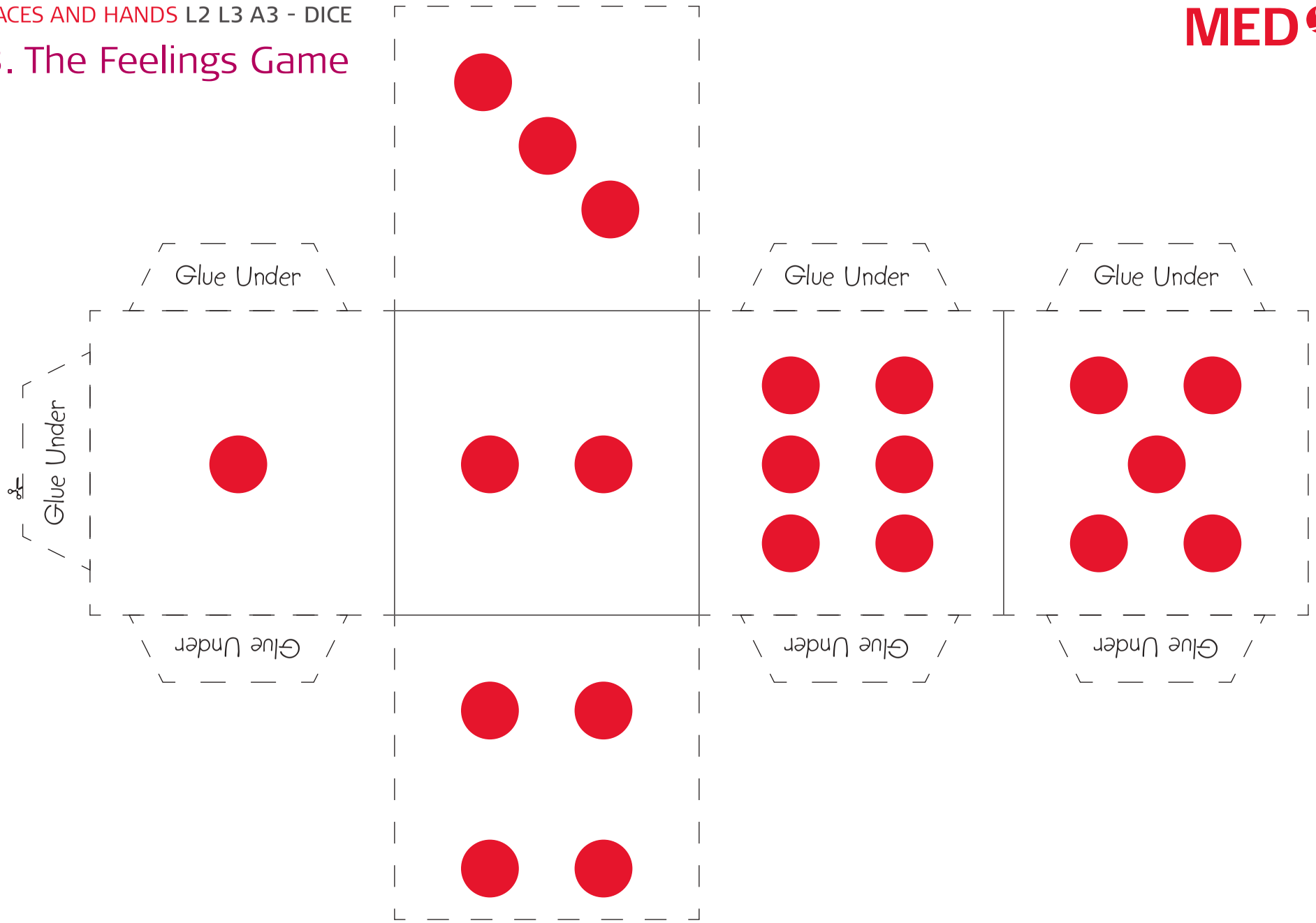

Proud


Serious


Sneaky


Silly

3. The Feelings Game



Rehab at Home

Rehab At Home is a series of rehabilitation videos showing families easy activities they can do at home. From craft activities to board games, Rehab At Home provides many fun ways for families to support their child's listening and spoken language development.

Each video provides a simple explanation of key strategies or activities from a specialist speech and language therapist, then children using hearing implants and their parents give a demonstration.

Check out all of the videos on our blog at BLOG.MEDEL.COM/TIPS-AND-TRICKS/!

APPENDIX 5

Extract from the storybook, Murat's Birthday Present; MED-EL

Talk about

- What Murat is doing – getting dressed, buttoning his shirt. (has your child got buttons? Talk about colour, shape, number – undo and fasten buttons)
- What Murat is thinking. Why he is going to get presents – it being his birthday. (refer back to pictures on title page)
- The birthday cards. Why Murat has birthday cards Who might have sent these. What Meddy Rabbit is doing
- The calendar. Why the 4th has a star on it
- The schoolbag. Where Murat is going to go – school
- What might happen at school – a birthday party
- What might be happening on the next page – Murat might be at school

Activities:

- Make a birthday card: Worksheet 7. Find out who has a birthday soon. Make a birthday card for this friend or relative. Remember to put the card in an envelope, address it, stick on a stamp and go to the post office together. If this is not possible, involve your child in sending an e.card.
- Make a calendar: Worksheet 4, 5 and 6. You will need to make names of days, names of months, date and activity cards. You can personalize this calendar by making cards of the activities your child is involved in. You may even picture your child during routine activities and use photos instead of picture cards. Talking to your child each day while changing the calendar will provide your child with many language learning opportunities.
- Pretend Play: With young, less able children focus on the fact that Murat is getting dressed and going to school. Have your child put on a shirt, pack a school bag together. Pretend to go to school.
- Colour in set B card: No.1
- Play: Listen, repeat, point to correct object, change roles. Sit beside your child rather than directly in front. Only choose objects and names your child is familiar with (e.g., calendar, school bag, birthday card, toys, Murat, Meddy Rabbit). Place the cards and characters you are going to use in front of your child. Say the names of these items a few times. Then using a carrier phrase (e.g., "Show me the calendar" or "Where's the school bus?") ask your child to listen, repeat what he/she hears and point to the relevant object. Such games will help your child to recognize key words in connected speech. Remember to change roles so that your child has a turn to recall phrases.
- More complex listening:
  1. After reading the text together, make up sentences (e.g., Murat would like a robot; Murat would like some lego; Murat would like a school bus). Say any one of these sentences. Ask your child to repeat. Encourage your child to talk just like you – same speed, same rhythm. Remember to change roles. If your child can do this easily, then expand the sentences (e.g., Murat would like a yellow school bus; Murat would like a big, yellow school bus; Murat would like a big, yellow school bus for his birthday; Murat would like a big, yellow, school bus for his birthday on Monday).

  2. Listen to and repeat names of days / months / dates / activities from the calendar (e.g., Today is _____. (Monday, etc.)

  Today is ___ the _____ (Monday, the 22nd,)

  Today is ___ the _____ of _____ (Monday, 22nd, April)

  Today is ___ the _____ of _____. I'm going to _____.

  (Monday, 22nd, April, school / go swimming / stay at home etc.)

  Remember to change roles to give the child a chance to lead.

Child

Today is Murat's birthday. He is six years old. He is getting dressed quickly. Murat is very excited because he's going to have a party at school! He wonders what presents he will get. He would like a robot or some lego or a toy bus. What would you like? Can you see Murat's birthday cards? Meddy Rabbit is reading one. Who do you think it is from?

APPENDIX 6

"Barrier Game" Activity from Lesson Kits 03, Transport; MED-EL

PREPARATION

Print 2 copies of Transport L3 A2 onto light weight card and give one to each player. This is the grid.
Print 2 copies of Transport L2 L3 A2 onto card, cut them up and give one set to each player.
Place the barrier between the players so they cannot see each other's grids.

RESOURCES

- Transport L2 L3 A2
- Transport L3 A2
- A barrier (a folder or book or board to place between players)
- Scissors

You are going play "Matching grids".

1. Explain to the child that without looking at each other's grids, they and their parent/caregiver have to fill their grid up with pictures so they match.
2. Each player spreads their cards out beside their grid.
3. The first player chooses a card and says where to put it (eg. *Put the train in the middle of the bottom row.*)
4. The other player repeats the direction and then places card on grid.
5. Players take turns selecting the cards and giving instructions.
6. When all squares on the grid are full, remove the barrier and compare grids.

EXPECTED OUTCOMES

- Follows directions containing a noun and a 2 part location phrase; eg. Put the train in the middle of the bottom row.

KEY STRATEGIES

BUILD AUDITORY MEMORY: To help the child attend to all the information in the direction, pause at the end of each part of the instruction and add stress and intonations changes to pull the child's attention to the important parts. If they miss one part of the instruction, give a clue or prompt then repeat the whole instruction. *It's an animal and it goes in the bottom row. Listen again; Put the **mouse first** in the **bottom** row.*

EXPECTED OUTCOMES

- Gives directions containing a nouns and a 2 part location phrase; eg. Put the train in the middle of the bottom row.

KEY STRATEGIES

AUDITORY HOOKS: When it is the child's turn to give a clue you will need a big auditory hook. ***WAIT!** Don't show dad what it is. He has to listen. Tell him what to find and then tell him where to put it.*

USE CHOICES : Learning how to give directions containing 3 pieces of information is tricky because there is a lot to remember and probably some new words to describe the position. Provide the child with the language as suggestions. *You might say, **Put the boat last on the top row** or maybe **Put the boat first on the top row.***

EXPECTED OUTCOMES

- Understands concepts:
  - first/last, odd one out, all but one, row/column.

KEY STRATEGY

TALK TALK TALK: Make observations about the positions or patterns of pictures as the grid is coming together to help the child understand these concepts *Hey look, **all** the picture in the first column are animals. **All but one** of the pictures is a vehicle. Can you see the **odd one out**.*

2. Barrier Game


cat


dog


squirrel


mouse


deer


cow


pig


horse


goat


fox


car


bus


plane


train


boat


motorbike

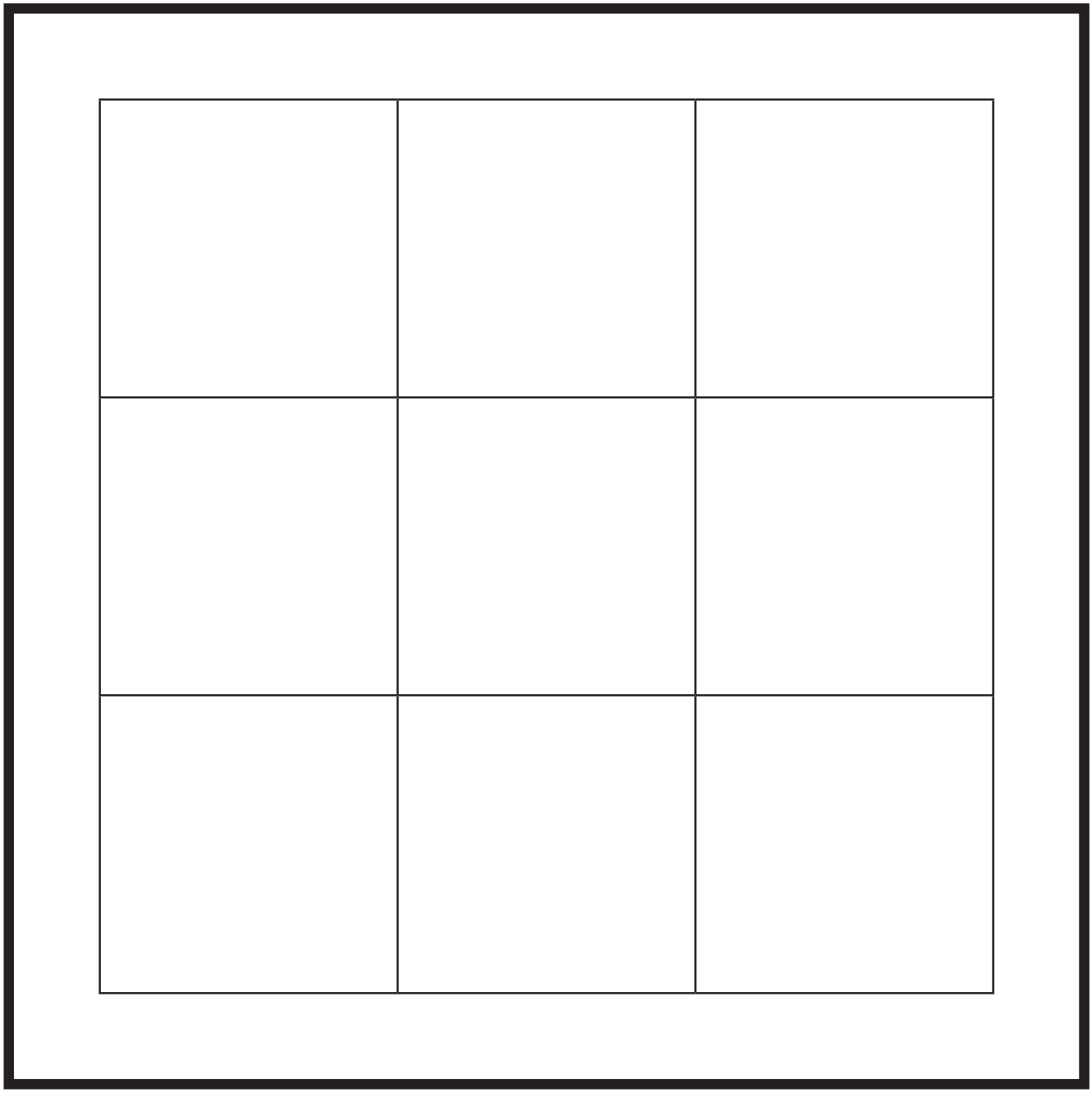

helicopter


truck


ship


firetruck

2. Barrier Game



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APPENDIX 7

Extract from the storybook, Murat Goes Shopping; MED-EL

Can you find all the things
that are wrong or different in this picture?

APPENDIX 8

"Bathing Baby Doll" Extract from LittlEARS® Diary Activies; MED-EL

LittlEARS® Diary Activities

Week 11

Date: ____/ ____/ ____

Circle participants

Mother

Father

Sibling

Other

Hearing age of child: _____

Notes:

(Problems with listening devices, sickness, poor attendance, family problems affecting child care, etc.)

_____

_____

_____

_____

_____

_____

Materials

Two changes of clothes:

Plastic sheet to spread on floor to protect carpet.

Plastic doll with hair

Dirty set of clothes

T-shirt, pants and socks

Clean set of clothes

Pajamas
Warm water in plastic jug
Small cup
Plastic bowl
Soap
Shampoo
Towel
Bottle

Activity

Bathing baby doll:

- Draw the child's attention to the doll dressed in dirty clothes by making the doll pop in and out from behind a box of materials saying, 'peek a boo!'
- Encourage the child to catch the doll.
- Allow the child to handle the doll.
- Smell the doll and indicate that it is dirty and smelly.
- Show the child and talk about a picture of a baby having a bath, pasted on one side of the material box.
- Let the child peek into the material box.
- Talk about bathing your doll.
- Allow the child to take out and explore materials (except water).
- Talk about what the child is interested in.
- Some infants may just put the washing bowl over their heads or try to get into the bowl, etc.
- Try to prompt the child to move on by modeling activities or introducing new items at opportune moments, e.g. introduce the water, encourage the child to hold out their hand or a small cup to catch water.
- Allow the child to open the lid and pour some shampoo out or soap the cloth etc.
- Help the child roll up their sleeves and carefully wash the dirty doll, encouraging them to do their best to keep the water in the sink or washing area.

The MED-EL Blog

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APPENDIX 9

Social Communication Skills
The Pragmatics Checklist

Child's Name: Date: Completed by:

Parent: These social communication skills develop over time. Read the behaviours below and place an X in the appropriate column that describes how your child uses words/language, no words (gestures – preverbal) or does not yet show a behaviour.

Pragmatic Objective	Not Present	Uses NO Words (Gestures - Preverbal)	Uses 1-3 Words	Uses Complex Language
INSTRUMENTAL – States needs (I want...)				
1. Makes polite requests				
2. Makes choices				
3. Gives description of an object wanted				
4. Expresses a specific personal need				
5. Requests help REGULATORY - Gives commands (Do as I tell you...)				
6. Gives directions to play a game				
7. Gives directions to make something				
8. Changes the style of commands or requests depending on who the child is speaking to and what the child wants				
PERSONAL – Expresses feelings				
9. Identifies feelings (*I'm happy.*)				
10. Explains feelings (*I'm happy because it's my birthday.*)				
11. Provides excuses or reasons				
12. Offers an opinion with support				
13. Complains				
14. Blames others				
15. Provides pertinent information on request (2 or 3 of the following: name, address, phone, birthdate)				
INTERACTIONAL - Me and You...				
16. Interacts with others in a polite manner				
17. Uses appropriate social rules such as greetings, farewells, thank you, getting attention				
18. Attends to the speaker				
19. Revises/repairs an incomplete message				
20. Initiates a topic of conversation (doesn't just start talking in the middle of a topic)				

Pragmatic Objective	Not Present	Uses NO Words (Gestures - Preverbal)	Uses 1-3 Words	Uses Complex Language
21. Maintains a conversation (able to keep it going)				
22. Ends a conversation (doesn't just walk away)				
23. Interjects appropriately into an already established conversation with others				
24. Makes apologies or gives explanations of behavior				
25. Requests clarification				
26. States a problem				
27. Criticizes others				
28. Disagrees with others				
29. Compliments others				
30. Makes promises				
WANTS EXPLANATIONS - Tell me Why...				
31. Asks questions to get more information				
32. Asks questions to systematically gather information as in "Twenty Questions"				
33. Asks questions because of curiosity				
34. Asks questions to problem solve (What should I do? How do I know?)				
35. Asks questions to make predictions (What will happen if...?)				
SHARES KNOWLEDGE & IMAGINATIONS - I've got something to tell you...				
36. Role plays as/with different characters				
37. Role plays with props (e.g., banana as phone)				
38. Provides a description of a situation which describes the main events				
39. Correctly retells a story which has been told to them				
40. Relates the content of a 4-6 frame picture story using correct events for each frame				
41. Creates an original story with a beginning, several logical events, and an end				
42. Explains the relationship between two objects, actions or situations				
43. Compares and contrasts qualities of two objects, actions or situations				
44. Tells a lie				
45. Expresses humour/sarcasm				
TOTAL FOR EACH COLUMN				

AUTHOR OF CHECKLIST: Goberis, D. (1999) Pragmatics Checklist (adapted from Simon, C.S., 1984).
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Useful Resources

MED-EL provides a wide range of online and paper-based resources to support your listening and spoken language development. These include information booklets, activity resources to practise listening in everyday life situations, and apps for your phone or tablet.

For further information please go to our website at www.medel.com

Tiffany L. Hutchins & Patricia A. Prelock (2016) at Vancouver university have developed a Theory of Mind Atlas, based on the Theory of Mind screening tool which breaks down the component skills of TOM into a set of distinct items in separate subscales. These subscales include an early, basic, and advanced subscale. www.theoryofmindinventory.com/

www.socialthinking.com provides research and practice content dedicated to helping individuals who have social learning challenges. Michelle Garcia Winner is the founder and CEO of Social Thinking®.

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