

Early Education Pack

Keeko is focused on learning outcomes relevant to all children, but particularly pertinent to children diagnosed (or in the process of being diagnosed) on the autism spectrum.

Autism has been described as a disorder of context – not always a lack of skills as much a lack of ability to apply particular skills in the correct context.

Popular behavioural intervention for children on the spectrum aims to break down life situations into manageable chunks, drilling neurotypical choices until they become natural responses.

At the same time, a child on the spectrum, biologically used to being challenged in many situations often has the ability to see things differently to typical children. This gives them the ability to offer very effective solutions, despite the fact these solutions may not occur immediately to someone else.

Because of this, there is much to be gained from scaffolding interaction of children with developmental disabilities and neurotypical children – so each can learn from the other.

To the majority of children on the spectrum, the fundamental building blocks of friendship and interaction are mystifying at best. While typical children learn easily from observation, trial and error and observation, a child on the spectrum may be overwhelmed by sensory input or intrinsic impulses in the same situation.

The skills that may need scaffolding include receptive language (what is understood), expressive language (what is said), processing speed, sensory processing, easy interpretation of non-verbal signals, flexibility in fine and gross motor skills.

Keeko breaks down these skills in short outcomes based episodes:

Episode 1 - Co-operating

Episode 2 - Sharing

Episode 3 - Losing

Episode 4 - Feeling

Episode 5 - Joining

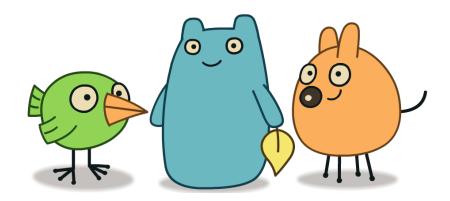
Episode 6 - Greeting

Episode 7 - Listening

Episode 8 - Answering

Episode 9 - Playing

Episode 10 - Connecting





Framework

Each episode begins and ends in the same way, providing an affirming scaffold for viewers, setting Keeko's world as one of safety and predictability.

The use of progressive levels of expressive and receptive language strategies in Keeko is deliberate.

Non-word based language is a key foundation of language development and expression. Sounds express intent in a non-figurative manner, allowing children who struggle with forming words to express themselves effectively. Keeko learns to mimic the sounds of Bird, Dog and Narrator, cementing expression without the need for actual words. At the same time, effective word based prompts and signals from Narrator and non-word based expressions from Bird and Dog give Keeko immediate understanding.

Furthermore, by embracing the process of echolalia (immediate or delayed repetition of heard sounds/words), Keeko models the language development of a child with disordered language development.

While Keeko embraces the developmental process of young children with autism and related conditions, it is worth acknowledging that the social and emotional development of typical children can also be assisted by these strategies. Research shows that a broad range of contemporary children are losing social/emotional skills in a world that prioritises academic learning above less concrete skills.

There is less and less time for free play, less opportunity for kinaesthetic learning in the life of a modern child. This can impair the biological development of innate social/emotional skills in children, deflecting their connections with others and the environment towards checklists and measurable outcomes.

Keeko embraces the framework that overtly attempts to rebuild typical developmental frameworks in those whose development is impaired. This framework is not just applicable to those with a diagnosis. Moreover, depictions of child-like characters who are engaged in instances of scaffolded free play have the potential to engage a broad range of young children.

References

- https://www.autismspeaks.org/autism-diagnosis-criteria-dsm-5
- https://kidscreen.com/2020/09/10/kids-are-losing-their-sense-of-self/
- https://www.washingtonpost.com/news/answer-sheet/wp/2015/09/01/the-decline-of-play-in-preschoolers-and-the-rise-in-sensory-issues/



Characters



Keeko

Keeko represents the challenged child – often the most exuberant or paradoxically the quietest child in the room.

Keeko has the same curiosity as typical children, but may lack the ability to make the appropriate choice to solve a problem.

Keeko is quick to withdraw, to respond emotionally and be overwhelmed by a situation.

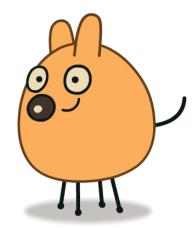
Keeko responds best to closed ended prompts, either a direct suggestion or a pair of options to choose from.

Dog

Dog represents the laissez faire child – the go with the flow, give anything a shot, not fussed about outcomes kid.

Dog will give most things a go, or at the very least a good hard lick.

Dog is more inclined to throw in a left field suggestion, simply because that's what came to mind.





Bird

Bird represents the very high functioning typical child – the top of the class, the one with their hand in the air first, the eventual school captain kind of kid.

Bird is a concrete thinker, cautious physically and intellectually.

Bird gives the impression of always knowing the answer, though that may not always be the reality.

The Narrator

The Narrator is what it says on the box, though specifically Narrator works in the realm of observation, suggestive questioning and options giving.

The Narrator prompts, reflects and speculates. The Narrator is heard by all characters, the difference is Keeko often needs Narrator's input, where the others could probably get to a solution without assistance.

Narrator gives Dog and Bird open ended prompts, where the majority of suggestions to Keeko are closed ended (with the expectation of a yes/no response) or a choice of two options.

Narrator is gentle, encouraging and not prescriptive.



From Screen to Real Life

One of the keys to the development of children with developmental challenges is the understanding of their peers. Systemic strategies like inclusion and integration can only go so far without the tacit engagement of all the children involved.

There are many academic ways to explain differences like autism, sensory processing disorder and ADHD to typically developing children, but experience is undeniably the best.

This song, Through my Eyes, created for the opening of the Asia Pacific Autism Conference in Sydney in 2009 may assist as an ice breaker: https://youtu.be/0HwDXoHnVxY

Keeko is aiming to include the sorts of behavioural challenges that young children may observe in their peers who are on a different learning trajectory. In reality, almost all children experience challenges in the areas Keeko does, just maybe not the majority of them at once!

As children view the episodes, it might be helpful to engage them in activities that address the challenges and learning journeys depicted on screen.

The following information, looks at the episodic learning issues, giving it context and providing activities that may assist peers, parents and carers to scaffold the development of new understanding.





Episodes

Episode 1 : Co-operating

Aim: To highlight the importance of cooperative strategies in child interactions.

Outcome: Understanding of targeted questioning, joint attention, steps towards achievement of a shared outcome, intrinsic and extrinsic motivation.

Cooperation is a foundation of positive social and emotional behaviour. And it's a complex concept – it needs breaking down into its component parts before it can be taught.

Who am I – a child needs a solid self concept to begin the process of understanding why they need to cooperate

What am I doing – a child needs to be developmentally able to understand the context in which they are expected to cooperate



Who am I with – cooperating with peers is very different to cooperating with adults, older kids or animals. Of particular concern is the language (receptive, expressive and gestural) skills required to effectively cooperate.

Why am I here – context is all when it comes to cooperating. The expectations during a structured game are different to a meal, a party or a formal occasion.

If a child is living with communication, sensory and/or social challenges then it becomes even more important to establish explicit answers to the questions above. As developmental age/stage skills may not match expectations, specific care needs to be taken to work with the strengths the child has (as opposed to focusing on what's not there). Language needs to be sparse and specific, giving two options to choose from as opposed to open ended questions when trying to change behaviours.

Simple group games are the best way to encourage cooperation in a group of children of differing capacities.

Further Resources

- https://www.teachthought.com/pedagogy/10-team-building-games-that-promote-critical-thinking/
- https://extension.psu.edu/programs/betterkidcare/early-care/tip-pages/all/teaching-children-to-cooperate
- https://www.scholastic.com/teachers/articles/teaching-content/ages-stages-learning-cooperate/
- https://raisingchildren.net.au/autism/behaviour/understanding-behaviour/cooperative-behaviour-asd#:~:tex-t=Cooperation%20involves%20several%20important%20skills,others%20in%20most%20social%20situations.



Episode 2 : Sharing

Aim: To build understanding of the value of sharing attention and possessions.

Outcome: An augmented understanding of joint attention, safety and security, overcoming intrinsic emotion, equalising ownership of ideas and possessions.

Negotiating safe physical distance has become important to everyone in recent times, but for children (and specifically children with developmental challenges) it is a deeply important issue.

These children may demand to stay distant from their peers for play and learning and yet invade everyone's space when it's not welcome. It's challenging for typically developing peers to get a handle on why these things are happening and this can lead to exclusion.



Space gives us safety, it gives us room for expression and it gives us agency. Joining someone else's space gives us connection, but that connection is not always welcome. No wonder young children struggle with this particular negotiation.

Fortunately, this is one element that can be explored through fun, stimulating and kid friendly activities. The same rules that mandate personal safety in structured PDHPE physical games can be used to reinforce personal safety.

The first step is understanding one's own body. Traditional song games like the hokey pokey assist with this.

Secondly, the concept of body language is key. Like any language, reading body language requires fluency. This can be enhanced by puppet play, construction and manipulation of bodies built in pliable material and adaptation of games like statues.

Lastly, literature and screen media exploring the nature of personal space and our responsibilities can be helpful to depersonalise what can be a massive issue for children.

Further Resources

- https://bookroo.com/books/topics/personal-space
- https://iancommunity.org/ssc/personal-space-autism
- https://www.youtube.com/watch?v=ZacqrtwQ-aM
- https://sociallyskilledkids.com/personal-space/
- https://catherinefaherty.com/the-personal-space-game/



Episode 3: Losing

Aim: To broaden the definition of losing in a win/loss context.

Outcome: Understanding of aims vs goals, balancing emotion and interaction, valuing the joy of involvement.

A lot of us are motivated to win. A lot of us are encouraged to win. But not all of us can win.

Most children need some scaffolding when it comes to reconciling the idea that they can't always be number one. Ambition and aspiration are very important, however an acceptance that participation and even losing are important is crucial to social development.

Strategies to improve understanding about winning and losing can work exceedingly well with children with communication and social challenges. This is because doing things like:

- writing out rules (in words or symbols)
- making the measures of success and failure clear visually
- modelling positive behaviour are all common strategies
- ... are all common strategies used in therapeutic and domestic settings.



- https://www.abc.net.au/life/how-to-help-kids-be-good-winners-and-losers/10503728
- https://www.stanfordchildrens.org/en/topic/default?id=teaching-children-good-sportsmanship-1-4524





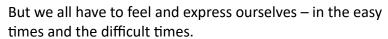
Episode 4 : Feeling

Aim: To deconstruct the impact of emotional reaction in social interactions.

Outcome: Building understanding of primary and secondary emotions, innovating emotional strategies, embracing emotional development as an individualised quality.

Emotions are hard for everyone. They come from no-where, they can be hard to control and they can be difficult to understand.

Imagine feeling all the feelings and not having words easily accessible to explain them. That is the position many children on the autism spectrum, living with sensory challenges or with ADHD find themselves in. No wonder their behaviour is inexplicable sometimes.





The following poem may be useful to contextualize the way children on the spectrum might be feeling in 'normal' times, just dealing with everyday environments. It could be read aloud during quiet time, it could be acted out or illustrated individually or in small groups to aid understanding.

Imagine if you had a bee buzzing around your head, and someone asked you to say the alphabet backwards.

Imagine if you were in the middle of a really loud rock concert and someone wanted you to name all your Aunts and Uncles.

Imagine if you were wearing three pairs of gloves and someone told you to eat a box of raisins one by one.....

This is what things are like for me, a lot of the time. I have Autism......

Your brain is like the inside of a computer, full of connections and wires. With messages to your body whizzing around telling you what to do. My brain looks the same as yours, except some connections work really well, and some work really differently. And my brain wires can get crossed really easily.

So, if I'm doing something a bit funny looking...try not to laugh at me. It's just one of my brain connections clearing itself out.



And if I tell you something over and over, just ask me to stop repeating. It's just one of my wires plugged into the wrong socket.

And, if I freak out at some sound that you think is really normal... maybe help me get away from the sound. It's just because my ears have their own unique volume control.

And, if you think I'm ignoring you, I'm not. I'm probably just focused on something else, like a tiny spider on the ceiling on the other side of the room.

Autism is a different way of seeing the world. And seeing things the way I see them is awesome, but it makes me really tired sometimes. So, I might not always understand what's going on.

And, I might need time by myself to think things through. Or, I might crash or jump or swing for a while to straighten myself out. Don't worry if I don't always do things the way you do.

Try to imagine what it's like inside my head, then you'll see. I'm not being rude.
I'm not being naughty.
I'm not sick.
I have Autism.....and I'm just being me.

~By Valerie Foley

Further Resources

https://kidshelpline.com.au/parents/issues/helping-kids-identify-and-express-feelings?gclid=CjwKCA-jw74b7BRA_EiwAF8yHFHEvodptblTAmZeoytNu3N9J-HWyZ_TrqbrLLz7cDsxg981BmxrahBoCD8UQA-vD_BwE



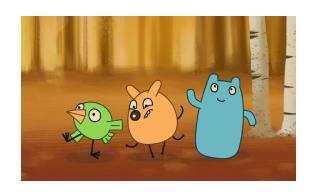
Episode 5: Joining

Aim: Enhancing acceptance of rules and social strategies.

Outcome: Increased joint attention, acceptance of frameworks and rules, acceptance of rules of play as a communication strategy.

There's a reason why traditional childhood games have lasted as long as they have. Not only are they fun, they contain elemental lessons for children to build the skills they need to interact effectively through their lives.

Games build on the skills and understandings that underpin many aspects of interpersonal communication and understanding, specifically shared context, joint attention, understanding rules and expectations, turn taking and emotional/ physical regulation.



For children with communication challenges, the 'safe zone' of a game is a potentially effective place where they can practice their skills without the pressure of a looser, less structured interaction. In reality, games serve the exact same purpose for all children.

It's important to understand that modelling is the key to an acceptance of the importance of rules and structure. All children will learn from example in a domestic setting, in educational environments and in society.

Further Resources

For examples and a more thorough explanation:

- https://www.unicef.org/tdad/AddMaterialsGamesAndExercisesUNICEF98.pdf
- https://www.cdc.gov/parents/essentials/structure/rules.html
- https://childmind.org/article/making-games-work-for-kids-of-all-ages-and-needs/



Episode 6 : Greeting

Aim: To augment understanding of the value of greeting in social interactions.

Outcome: Added language and habitual strategies for greetings, understanding the consequences of avoiding acknowledgement of others, adding to the suite of verbal and non verbal greeting strategies.

Greeting is a common and effective social transaction, and it's one that many people struggle with. Luckily, popular culture, literature and media are full of great models of the fundamentals of greeting.

Additionally, this is a situation where the common behaviour (among people on the spectrum) called 'echolalia' can be used to everyone's communication advantage. Also known as 'scripting', echolalia can be immediate or delayed. It involves the repetition of words and phrases either directly after they are heard (immediate) or separate from the initial hearing



(delayed). Echolalia can seem like a dysfunctional behaviour, however, close listening can reveal that the phrase (or script) the person is repeating is actually linked emotionally or in syntax, to the emotion the person is feeling at that time. Thus, in some cases, it can be used to build a real-life script that can accompany communication behaviour.

Try building a script that reflects appropriate greeting behaviour in a situation of interpersonal game play, or with puppets or toys. Repeat this script/game often and accompany it with appropriate gross and fine motor gestures. It can assist a child struggling with a social communication like greeting, to integrate that script into their everyday interactions.

Further Resources

Some strategies to build functional scripts can be found here:

- https://www.emergepediatrictherapy.com/echolalia-a-stepping-stone-to-functional-communication/
- https://autismclassroomresources.com/teach-social-greetings/
- https://sielearning.tafensw.edu.au/toolboxes/Cybertots v2/cybertots1211/toolbox12_11/shared/resources/html/res_com_comchild_greet.htm



Episode 7: Listening

Aim: To highlight the importance of listening skills.

Outcome: Augmenting the cues for listening, building understanding of the importance of listening, linking the concept of listening to everyday behaviours.

Listening can be a real challenge for children with impaired sensory regulation. Part of the challenge is because sensory systems within that individual are easily overwhelmed by normal social activities.

Activities to correct sensory regulation can assist all children (and adults) but can be a really effective shared activity for children of all abilities.

In essence, gross motor activities like swinging, jumping, massage and skin brushing will all assist different children in different ways.



In general terms, listening skills are crucial to learning, to social development and to positive mental health outcomes in all children. Enhancement of these skills in all settings can never be underestimated.

Further Resources

Specific details and explanation can be found here:

- https://www.sensorysmarts.com/sensory_diet_activities.html
- https://www.additudemag.com/how-to-improve-listening-skills-in-children-with-adhd/
- https://readingeggs.com.au/articles/2015/07/08/listening-for-kids/



Episode 8: Answering

Aim: Normalising the concept of answering a social cue.

Outcome: Learning to prioritise the needs of others over personal impulses, deconstructing social cues, highlighting the value of connected interaction with others.

Understanding and responding appropriately to social cues can be a challenge for many children, and this is particularly common in children on the autism spectrum.

People challenged by interpreting social cues may:

- Not respond, or take longer to respond, to verbal communication by other people
- find eye contact uncomfortable
- Rarely use nonverbal gestures to communicate (for example, nodding their head or gesturing with their hands)



- Not take social cues from other people's actions (for example lining up in a queue, stop talking when the teacher enters the room). People on the autism spectrum may need these "hidden" social rules to be explicitly taught
- Echo words they hear they may repeat patterns of words without attaching any apparent meaning to them. They may be exceptional at mimicry and use this effectively to fit in socially.
- Have difficulty effectively communicating their own wants and needs. This often leads to frustration.
- Display a reduced tendency to share their interests with others, or the sharing is unequal (for example, the person may talk excessively about their own interests without referencing to see if the other person is interested).

From: https://www.autismtas.org.au/about-autism/key-areas-of-difference/social-communication-differences/

One really effective strategy to address social skill challenges is video modelling. This involves videoing normal social then viewing and talking about them. It can be very effective in a pre-school/school situation, with the consent of all participants.

Further Resources

Some resources and instructions can be found here:

- https://raisingchildren.net.au/autism/communicating-relationships/connecting/social-skills-for-children-with-asd
- https://ahrc.eq.edu.au/services/fba-tool/help/video-modelling



Episode 9 : Playing

Aim: To build understanding of play as a social and interactive process.

Outcome: Increased understanding of the value of joint play, balancing intrinsic needs with the needs of others, highlighting play as a social language.

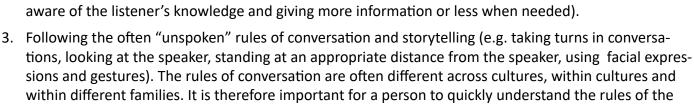
Social communication or pragmatics refers to the way in which children use language within social situations.

It has three components including:

 The ability to use language for different purposes (e.g. to greet, inform people about things, demand, command, request).

person with whom they are communicating.

2. The ability to adapt language to meet the needs of the listener or situation (e.g. talking differently to a baby versus an adult, talking louder when there is lots of noise, being aware of the listener's knowledge and giving more information or less when needed).



Children with a diagnosis of an Autism Spectrum Disorder (ASD, including Asperger's Syndrome) and Pervasive Developmental Disorder (Not Otherwise Specified) have difficulties with social communication (pragmatic skills).

From: https://childdevelopment.com.au/areas-of-concern/play-and-social-skills/social-communication-pragmatics/

Communication requires understanding (receptive language), expression (expressive language), mastery of pre-language skills (facial expressions, gestures, imitation, joint attention, executive functioning (higher order thinking skills) and the ability to regulate.

In an effort to build these skills in children with communication and sensory challenges, it is often effective to use visuals, simple movements and archetypes. Sometimes, playing an easily understandable role is easier than the complexity of just being a simple human. That complexity is a huge contributor to overwhelm, meltdowns and dysregulated behaviour.





The following activities, can assist

- **Role play:** Use toys and simple costumes in pretend play activities like familiar domestic situations (family meals, playing games, going shopping).
- **Turn-taking games:** play simple board and card games and simple gross motor activities (races, follow the leader) to build the social transactions that underpin communication.
- **Facial expressions:** Use mirrors and cards (eg. https://thebehaviorbuzz.home.blog/2019/09/03/facial-expression-pieces-free-printables/) to name and interpret changes in facial expression.
- Miming: Use mime games to explore behaviour without words.
- **Describing activities:** go through magazines and cut out pictures showing simple social situations. Make books of these pictures and 'read' them like traditional picture books.
- **Puppets:** The abstraction of a puppet can ease communication challenges. Puppets can enact simple but potentially challenging situations like catching a bus, visiting family or eating meals.
- **Comic strips:** Apps and hand drawn cartoons can explain social situations and break down the associated language.
- **Social stories:** These stories are personalised, specifically formatted ways to contextualise relevant social situations.(eg. https://www.autismspeaks.org/templates-personalized-teaching-stories)

Further Resources

- https://www.icommunicatetherapy.com/wp-content/uploads/2012/09/The-importance-of-play-and-speech-and-language-development.pdf
- <a href="https://raisingchildren.net.au/autism/development/language-de



Episode 10: Connecting

Aim: To highlight the joy of connection.

Outcome: Augmented understanding of joint attention, strategies to increase engagement with others, decoding the journey from intrinsic to extrinsic expression.

Joint attention is a key to effective and ongoing functional interaction between individuals with sensory challenges and those without. It can be mystifying to neurotypical children that others don't naturally interact.

It is worth reinforcing that to a child with sensory challenges, eye contact and sharing physical space can be so overwhelming as to make any approach to play seem threatening.

Below are some simple principles that will assist in building the foundations of joint attention. It can be amazing how effective they can be in establishing effective play.



- **Observe** simply sit in the same space as your peer and watch what they are doing. Initially resist the urge to join in, just see what it is the child is doing, what sustains their attention, how they orient their body to others and the objects that are interested in.
- **Join in** at eye to eye level, preferably on the same plane (both sitting, both standing), look for a way to playfully join in. Perhaps have a similar toy and mirror what the child is doing, thereby valuing their choices. Over time, experiment with offering your toy, or swapping toys.
- **Follow their lead** allow the child to be the expert in the moment. Copy what they do, alter your play to what they do. Slowly and simply add language that reinforces what's happening, while avoiding the temptation to ask a lot of questions. Reflect, rather than challenge the child's experience.
- **Repeat the experience** take time over consecutive days to repeat the experience, in an effort to build a habit of positive and productive interaction.

Following these principles will slowly create a space where true engagement can build. It will take time, and outcomes will happen in small, manageable steps.

Further Resources

- http://www.hanen.org/Helpful-Info/Articles/Encouraging-Joint-Engagement-with-Children-with-AS.aspx
- https://reg.abcsignup.com/files/%7B07D0901F-86B6-4CD0-B7A2-908BF5F49EB0%7D_59/autismteach-ingspecificskills.pdf

Educational Materials compiled by Valerie Foley & Blue Rocket Productions

