



ADAPTED SKATING & HOCKEY MANUAL



**CENTRE DE RESSOURCES
ET DE FORMATION
RESOURCE AND
TRAINING CENTRE**

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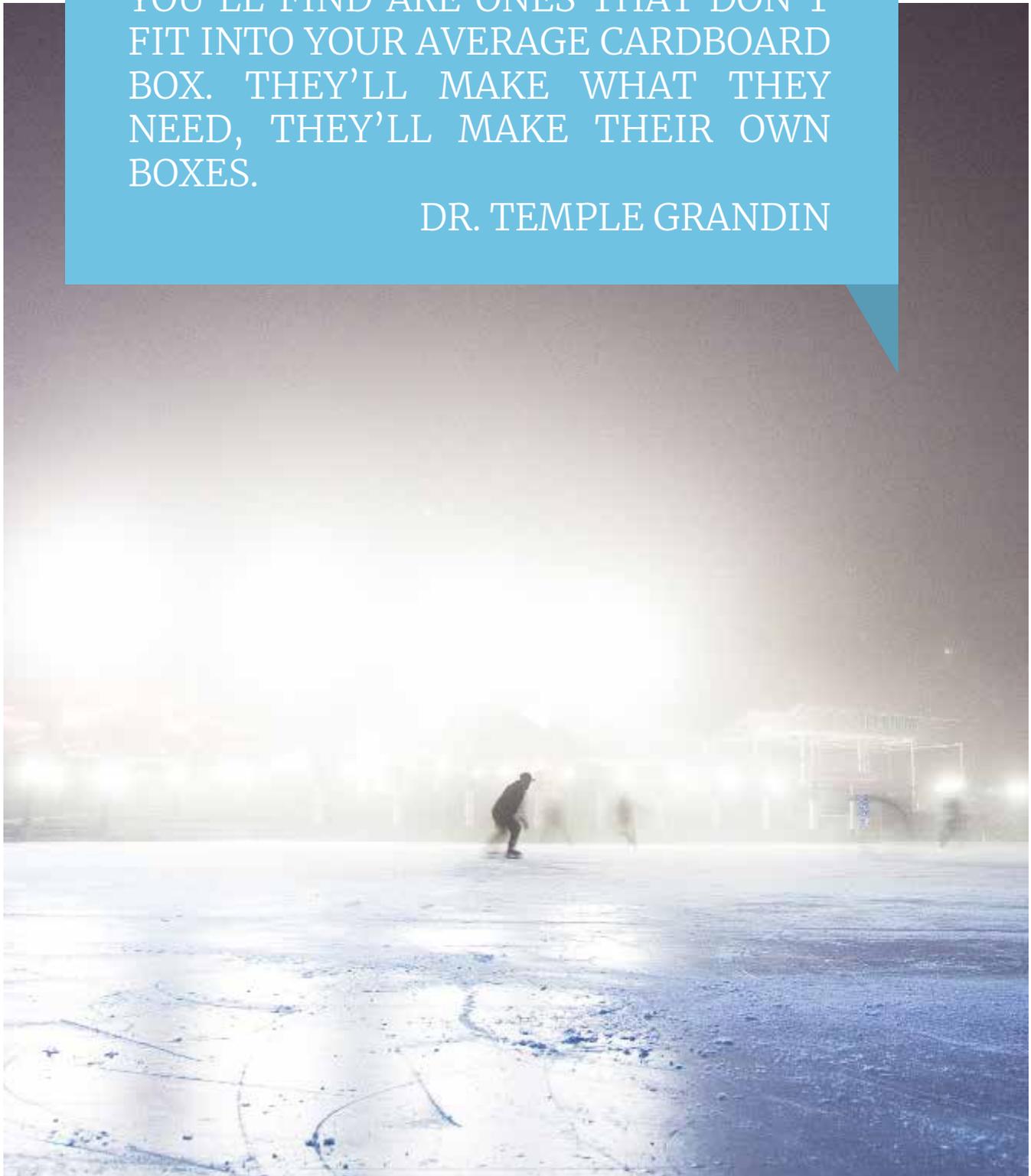


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THE MOST INTERESTING PEOPLE YOU'LL FIND ARE ONES THAT DON'T FIT INTO YOUR AVERAGE CARDBOARD BOX. THEY'LL MAKE WHAT THEY NEED, THEY'LL MAKE THEIR OWN BOXES.

DR. TEMPLE GRANDIN



INTRODUCTION

The adapted skating and hockey program for children with Autism Spectrum Disorder (ASD) was conceived by a group of people at Giant Steps School that have a passion for the game. We are parents, teachers, coaches, hockey players and figure skaters. Together we have developed a manual to help you teach our future skating stars.

This manual is a compliment to the basic skills manuals that will help you teach individuals with autism while respecting their specific needs in sensory integration, social interaction, communication, behaviour and gross motor abilities. Our primary goal is to teach this wonderful game in a fun and safe way to children desiring to play recreational hockey. Providing opportunities to move and engage in physical activity to promote optimal health is our secondary goal.

It is known that team sports are a great way to get exercise, make friends and be part of a team. However, team sports are often not adapted to the needs and strengths of the autism community. Team sports demand social interaction, observation and imitation learning. It is very difficult for people on the spectrum to learn in that way. Indeed, hockey is an excellent sport for overall fitness.

We all know the benefits of skating in improving motor coordination, physical endurance and balance. By teaching hockey coaches how to coach children with autism, we will make this wonderful Canadian winter sport more autism inclusive.

Our Giant Steps Adapted Skating and Hockey Coaches and collaborators:

- Rosemary Maratta, OT
- Matthew Schmidt
- Richard Paré
- Marla Cable
- Jenny Haines
- Tracy Pennimpede
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IF THEY CAN'T LEARN THE WAY WE
TEACH, WE TEACH THE WAY THEY
LEARN.
-O. IVAR LOVAAS



ABOUT AUTISM

What is Autism?

Autism spectrum disorder is a neurological condition that affects communication, social interactions, sensory integration and behaviour. As autism is a spectrum disorder the range of abilities and challenges go from severe to gifted. While some may live completely, or nearly completely, independently others require full time care. While there are no physical indicators that identify autism, there are several behaviours and characteristics you might observe.

A person with an ASD may:

- Not respond when their name is called
- Be nonverbal or have difficulties expressing themselves
- Avoid making eye contact
- Avoid physical contact
- Have difficulty understanding certain gestures
- Have difficulty understanding facial expressions
- Interpret humour and figures of speech literally
- Use irregular pitch or intonation when speaking
- Repeat a word or phrase (this is known as Echolalia)
- Have difficulty interpreting body language
- Engage in some form of repetitive behaviour (hand flapping, rocking, jumping, etc.)
- Demonstrate a strong preference or interest in a particular object or subject.

AUTISM AND HOCKEY

The Sensory System and Autism

People on the autism spectrum often experience hypersensitive (very sensitive) or hyposensitive (little to no feeling) when it comes to the seven parts of our sensory system. Our sensory system consists of the Olfactory system (smell), Tactile system (touch), Auditory system (hearing), Proprioceptive system (sense of one's body), Vestibular system (balance/orientation), Visual system (Our vision) and Gustatory system (taste).

When someone experiences too much of one or more of their systems, they may become overstimulated and be put in 'fight', 'flight' or 'freeze' mode. Or they may not get enough information through their systems and seek out information. This means that the person can either shut down or become aggressive. There are many strategies to accommodate a person's sensory needs.

Being in an average hockey arena, while learning to play hockey, has many circumstances that can overload a person's sensory needs. Here are some examples:

AUDITORY

- The buzzer;
- The goal siren;
- Yelling, screaming, crying, coughing, shouting of other participants/people;
- Babies crying or whining;
- The unavoidable echo;
- The sound of the puck being hit by stick/board/goal post;
- Spectators banging chairs, pounding their feet, banging on the glass surrounding the arena;
- Players banging the sides of the arena with sticks;
- Even the sound of the skates on the ice as they push off and brake.

Possible strategies to accommodate needs:

- Person can wear ear buds or noise reducing headsets to reduce auditory intake;
- Teach the person when to expect the loud music/buzzer/siren, so it's not startling;
- Have a self regulation technique they can do when overwhelmed;
- Have a device to listen to music through headsets;
- Have a stress ball to squeeze.

PROPRIOCEPTION

- Skating requires a lot of movement that can be very difficult for an unprepared person with poor proprioception needs;
- People on the autism spectrum can sometimes lose feeling in parts of their body, or they may feel the need to exert energy from specific muscles;
- Difficulty with balance;
- Difficulty wearing the skates/helmet/pads.

Possible strategies to accommodate needs:

There are many therapeutic massages that target the proprioceptive system and helps the person regain feeling in their muscles or body parts.

A mouth guard may be too difficult to keep in mouth. Adjust thickness/ softness. It can also be helpful for participants to bite down on when experiencing anxiety or stress.

OLFACTORY

- When inhaling through the nose in a hockey arena, you get a sharp cold numb feeling. For a person with hypersensitive olfactory needs, it can be very uncomfortable.
- Smell of clothes/cafeteria food smells/ perfume / perspiration of self and others.

Possible strategies to accommodate needs:

- Be in the arena in small increments. Give the person an option to take breaks so they can breathe outside.
- The person can put a nose blocker on if the sensation is too much for them to regulate.
- Encourage participants to administer deodorant, wash equipment after each practice and use low scented perfume spray.

GUSTATORY

If the person's gustatory system is hyposensitive the person may seek objects to put in their mouth. Being in a hockey arena, it is important to have appropriate objects for the person to keep in their mouth.

Possible strategies to accommodate needs:

A mouth guard may be helpful to keep the person stimulated.

After being approved by an occupational therapist, the person may need to have a therapeutic 'chew toy' to self-regulate.

VISUAL

- The bright lights;
- Red flashing light;
- Lights reflecting on the ice.

Possible strategies to accommodate needs:

- If possible, dim the lights.
- Person can wear special glasses that diminish bright lights.
- Can teach the person when to expect the red flashing red light, therefore, they won't be startled.

VESTIBULAR

- Skating and using a hockey stick requires a lot of balance;
- Balancing on skates/gliding/braking;
- Moving from the floor to the ice and vice versa.

Possible strategies to accommodate needs:

Provide physical support where necessary.

TACTILE

- Wearing any type of clothing can be very irritating on the skin for people with autism, heavy equipment can be even worse and more overwhelming;
- Tight straps on skin can be very irritating and uncomfortable;
- Helmets can be overwhelming when strapped and too tight to the participant's head;
- Tight skates on feet can be helpful for someone who is hyposensitive but can be very uncomfortable for someone who is hypersensitive;
- Being touched can be difficult for some individuals.

Possible strategies to accommodate needs:

If a person is hypersensitive (doesn't like the feeling) to the equipment that is required to play hockey, the person can:

- Loosen equipment. (keep in mind safety);
- Wear long underwear underneath equipment to soften the feeling of the straps;
- Wear their favorite clothes underneath the equipment;
- Wear nothing under equipment and put soft cloths around straps;
- Wear a soft head cap underneath helmet;

If person is hyposensitive (needs tight/heavy clothing) person can:

- Wear tight and thick underwear underneath equipment.
- Wear the equipment tight (keep in mind of safety and blood flow)



COMMUNICATION

Communication difficulties vary greatly for individuals on the spectrum. Their body language or tone of voice may not necessarily communicate what they are thinking or feeling. In order to provide as many opportunities for yourself and the person with autism to understand each other, you will want to adapt or modify your methods of communication.

Communication Tips

- Speak slowly and calmly;
- Use short and clear sentences;
- Avoid the use of sarcasm or popular expressions;
- Give the individual with autism step-by-step instructions;
- Give them with plenty of time to respond;
- Use gestures;
- Model the instruction or behaviour you are expecting from the person;
- Consider the use of pictures.

COMMUNICATION WITH PARENTS

It is important to keep a strong communication line with the parents to learn about their child:

- Interests (what they like to talk about and things to use for rewards);
- Skills (things they are good at);
- Barriers (it's important to know if there are skills or events the participant is struggling with that can impede their success.)
- Triggers (things that can make participant overwhelmed, anxious, nervous, angry);
- Warning signs (signs that the participant is becoming anxious, angry or aggressive. Can be verbal cues (humming, grunting) verbal expressions (repetition of words / sentences);
- Changes that are occurring at home/ at school.



BEHAVIORS

“Always look at ways to reduce stressors in your child’s environment. Be gentle, give your child space and then find a calming place or activity that is socially acceptable in public. Give them water, it will help de-escalate their behavioural outburst. Provide clear directions, use simple language, offer visual supports, set clear limits and provide a calm down routine. Praise any attempt to self-regulate and use effective strategies such as deep breathing.”

– Rosemary Maratta, Occupational Therapist

THINGS THAT ARE HELPFUL TO HAVE WHEN A PARTICIPANT IS IN CRISIS

White Board

- Write down very clearly what is expected of participant.
Ex: writing schedule and checking off what they have done. Adding a break may reduce stress.
- Help them find the words to tell you their problem.
Ex: writing I feel..., I want...and letting them say or write how they feel.
- Drawn first..., then... scenario.

Pictograms:

- Have a set of pictograms to communicate with the participant without using words. Ex: having; break, quiet, I need help, finished, feelings (sad, angry, scared, hurt..)
- Visual schedules so participant can see what is expected of him/her.
- First..., then... pictograms so participant can see that they will get a break, reward or be finished with activity.
- Water
- Comforting objects (anything a participant may use to self-regulate. Can be headphones to reduce auditory intake, a stuffed animal, a picture...)



HOW TO SUPPORT LEARNING

- Modeling (Showing the person how to perform what has been requested of him/her.
- Video modeling (showing the participant(s) how to perform the task beforehand on video).
- Visually show (photos) concrete step by step schedule of session.
- Communication
- Use positive reinforcement (*Good work! Nice try! Amazing! Keep going! Also give positive feedback to what they are doing well - You did a great stop, I like how you waited, you listened well*)
- Quiet (person holding finger to mouth)

MOTIVATIONAL TECHNIQUES

- First-Then schedules (First – Skate for 15 minutes, then game).
- Detailed schedule of session. This helps the participant anticipate what is expected of him/herself.
- Visual timers. This reassures the participant(s) there is an ending to the work.
- Token economy system (Tokens are given upon task completion, get 10 tokens for reward).

HELPFUL RESOURCES

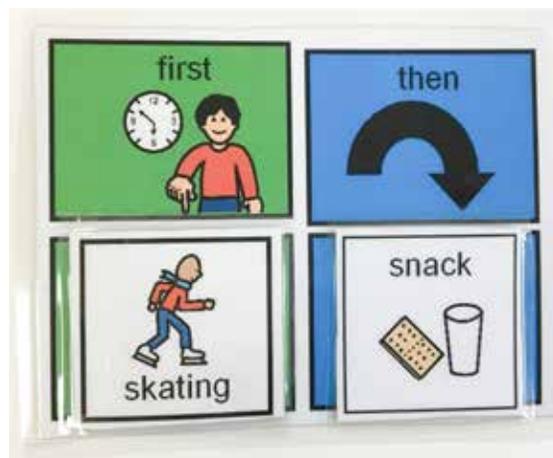
Token economy system

Give meaning to the star. It can signify one task or a 10-minute interval. Once participant has achieved three stars, they get a reward. It's important that the participant chooses the reward, they will be more motivated.



First, Then - Schedule

This schedule simplifies what is expected of participant and shows them what will occur after the present activity. Activity for 'then' can also derive from the participants' choice of reward from their token economy system.



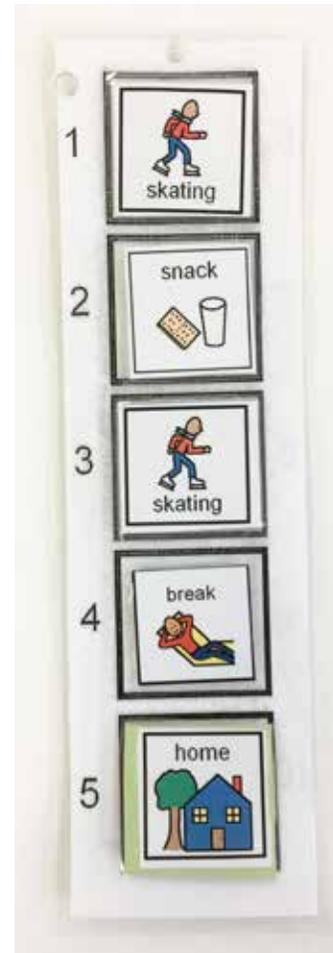
I want - Visual support

This visual can be very helpful for a non-verbal, or verbal person who is unable to verbally express their wants in the moment. Giving the participant multiple options on a 'choice board' is ideal so they seek what they truly desire.



Visual schedule

The visual schedule lets the participant anticipate each step of the session. Having 'play' visually present will diminish possible stress stemming from the difficulty of learning how to skate.



Choice board

A choice board is a board with multiple options for a break. The options should be relevant to the participants' interests.



REFERENCES

The Zones of Regulation: A curriculum Designed to foster Self-regulation and emotional control book.

www.Zonesofregulation.com

Autism speaks family services Challenging Behaviors Tool kit

www.autismspeaks.org

Resource guide to working with and living with people on the autism spectrum

<http://www.orplibrary.com/disorders/autism>

Autism Speaks Canada - Information about autism

<https://www.autismspeaks.ca/>



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