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1. Foreword

If you are new to Interoception and are only starting to implement the approach, please read Interception 101 which is located on the Department for Education’s website.

The Interoception 101 Activity Guide will provide you with an in-depth theory of Interoception and beginning exercises.

The Interoception 201 Activity Guide is to be used when you have exhausted the beginning activities and are looking for new activities.

2. Introduction to interoception

2.1 Interoception is our eighth sense

<table>
<thead>
<tr>
<th>1. Sight</th>
<th>5. Hearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Smell</td>
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2.2 What is interoception?

Interoceptive awareness can be broadly defined as the conscious perception of an internal bodily state, for example, one’s heart beating and breathing. These senses are related to emotional experiences. Awareness of both biological and emotional internal body cues are impacted in individuals who are affected by trauma, including intergenerational trauma, and neurodevelopmental disabilities including the autism spectrum (Schauder, Mash, Bryant, & Cascio, 2015, Mahler, 2016).

2.3 Benefits of teaching interoception

- To help children/students connect to and learn to understand their own bodies and emotions.
- It is a pre-requisite skill for self-management and self-regulation. It provides children/students with the tools to know when they are developing emotional reactions and the skills to be in control of those reactions.
- Without interoception, social skills are just the application of rules and not a meaningful way of interacting – it enables students to develop a sense of belonging.
- Classrooms where interoception is being taught have decreasing behavioural challenges over the school year and those where it is not have static or increasing behavioural challenges (school wide behaviour reporting analysis)
2.4 Models of interoception for Department for Education sites

Please note that interoception is a complement to quality differentiated teaching and does not replace this.

1. In class teaching for individual classes
2. In class teaching across whole school
3. In class teaching across whole school with specific groups of intensive interoception
4. In class teaching across whole school plus use of an interoception room

2.5 Models of interoception for in class teaching

(These do not require any additional resourcing as they are implemented as part of quality differentiated teaching practice)

- Two to three short sessions a day, each session covering one or two interoception activities. Activities are done twice. After the first time students are asked where they felt the difference or what they felt. They are then guided where/what to feel and asked to focus on that for the second time the activity is done. Sessions are most beneficial after breaks, so 2/3 of first thing in the morning, after recess, after lunch.

- Multiple short sessions a day, each session covering one or two interoception activities. Activities are done twice. After the first time students are asked where they felt the difference or what they felt. They are then guided where/what to feel and asked to focus on that for the second time the activity is done. Sessions are after every transition and/or whenever the students require refocusing.

- One or two long sessions a day, each session lasting 15-20 minutes. Usually chosen for use in specific classrooms where children/students arrive dysregulated and struggle all day. Interoception activities are presented as a sequence of movements and actions with directions to focus on specific muscles or other aspects of interoceptive awareness.

2.6 What is an interoception activity?

An interoceptive activity focuses on creating and noticing a change in some aspect of one’s internal self, such as muscular system, breathing, temperature, pulse or touch. People with atypical Interoception are not able to identify the physiological changes that signal mood changes or bodily self-regulation needs. Interoception activities teach us to connect with these.
2.7 Structure of an interoception activity?
An interoception activity focuses on a particular part of the body for at least 30 seconds.

- It enables a change to occur in one’s body state while labelling the movement and part of the body involved (e.g. toes, stretch and curl up or curl under)
- **Repeat the same activity for a second time**
- The individual is encouraged to identify a change in their body state (e.g. hot-cold, soft-hard, stretch-relax) and where they felt that change (arch or ball of foot, on top).

2.8 Interoception research
Department for Education research indicates that the act of interoception - noticing aspects of one’s body:

**Within 8-10 weeks**

- Decreases heart rate during the interoception activity
- Decreases externalising challenging behaviours
- Increases engagement in learning
- Increases prosocial behaviours—kindness, helpfulness, connections to others

**Over 16+ weeks**

- Decrease stress
- Can help manage anxiety
- Promotes caring and empathy

3. Interoception activities
The following pages provide practical application of interoception.
Interoception activity

Wall Squat

Find a clear space of wall to lean against.

Press your back against the wall and slide down the wall and bend your knees, your knees should be at a 90 degrees angle.

Hold that position for 30 seconds.

Where did you feel it in your body when we were in the squat position?

We are going to repeat the activity again, but this time we are going to focus on our thigh muscles.

How did your thigh muscles feel while holding that stretch?

Can we extend the time limit for 60 seconds next time? Then 90 seconds?
Interoception activity

Core muscles

Sit down on the floor.

With your bottom on the floor, you are going to raise your legs into the air.

If you need, you can put your hands on the floor to support you.

We are going to hold our legs in the air for 30 seconds.

**Where did you feel it in your body when we had our legs in the air?**

We are going to repeat the activity again, but this time we are going to focus on our core muscles.

**How did your core muscles feel while holding that stretch?**

**What do we use our core muscles for?**
Interoception activity

**Cat/Cow stretch**

Start on all fours. Your back should be flat like a tabletop.

Eyes should like straight down to the ground.

Breathe in through your nose, drop your belly down and slowly lift the head/neck up.

When you exhale through your mouth, lift the belly and spine up so the back is arched like a cat.

Alternate 5 – 10 cow to cat stretches.

*Where did you feel it in your body when we were stretching?*

We are going to repeat the activity again, but this time we are going to focus on our back muscles.

*How did your back muscles feel while completing that stretch?*
Interoception activity

Knee to Chest stretch

Lie on your back.

Pull one knee into your chest, while keeping the other leg straight and your lower back pressed into the floor.

Hold for 30 seconds.

Swap legs.

*Where did you feel it in your body when we were completing the stretch?*

We are going to repeat the activity again, but this time we are going to focus on our hamstring muscles.

*How did your hamstring muscles feel while completing that stretch?*
Interoception activity

Shoulder strength

Start by grabbing two books.
Lift your arms up while holding the books in your hand.
Hold this pose for 30 seconds.

*Where did you feel it in your body when we were stretching?*

We are going to repeat the activity again, but this time we are going to focus on our shoulders.

*How did your shoulders feel while completing that stretch?*
**Interoception activity**

**Butterfly wings**

In a seated position, place the soles of your feet together and hold them with your hands.

The legs are now forming the ‘butterfly wings’.

Your elbows can be between your legs or resting on your knees.

Gently press the knees down to increase the stretch.

To add a spine stretch, bend forward from the upper back and reach forward towards your feet.

*Where did you feel it in your body when we pushed down on our knees?*

We are going to repeat the activity again, but this time we are going to focus on our inner thigh muscles.

*How did your inner thigh muscles feel while holding that stretch?*
Interoception activity

Surfing stretch

Start by standing up.
Put your left leg forward and your right foot back and squat slightly.
Lift your arms out and hold them out straight to your sides.
Hold this pose for 30 seconds.

*Where did you feel it in your body when we were in this squat position?*

We are going to repeat the activity again, but this time we are going to focus on our thigh muscles.

*How did your thigh muscles feel while holding that stretch?*
Interoception activity

The knuckle cracker

Start by standing up.
Put your hands out in front of you and lock your fingers together.
Push your hands out and flip your hands over.
Hold this pose for 30 seconds.

*Where did you feel it in your body?*

We are going to repeat the activity again, but this time we are going to focus on our knuckles.

*How did your knuckles feel while holding that stretch?*
Interoception activity

The plank

Start by lying flat on your stomach.
Plant your hands under your shoulders.
Ground your toes into the floor.
Hold the body in that position for 30 seconds.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our core muscles.

How did your core muscles feel while holding that stretch?

Next time, can we hold the plank for 45 seconds, then onto 1 minute?
Interoception activity

The star

Stand tall, head up high and pull your belly button in.
Spread your arms and legs into a star shape.
Breathe air in through your nose as you slowly stretch one arm over your head.
Slide your other arm down your leg.
Slowly tilt your star to the other side and breathe out through your mouth.
Repeat both sides.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our shoulders.

How did your upper arm muscles feel while holding that stretch?
The floss

Start by standing up with your hands by your side.
Place both hands to the left side of your body.
Swing your left hand behind your back and your right in front of you.
Swing them back out and across your body.
Swing your right hand behind your body and your left in front of you.
Repeat this movement for 30 seconds.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our arms.

How did your arm muscles feel while moving?
Interoception activity

Giraffe stretch

Find your own space in the room and stand up tall.
Put both arms up and reach up as far as you can.
Pretend you are a giraffe, stretching your long neck up to the sky.
Keep holding the stretch for 30 seconds.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our arm muscles.

How did your arm muscles feel while stretching?
Interoception activity

Rocking bug

Find your own space in the room and sit on the floor.
Link your hands under your knees.
Lean backwards and rock forwards and backwards.
Keep gently rocking for 30 seconds.

Where did you feel your body touching the floor? Point to that part of your body.

We are going to repeat the activity again, but this time we are going to rock sideways.
Does it feel different?

Where did you notice it this time when we were rocking sideways?
Interoception activity

Meerkat look-out

For this activity you can either stand up or sit in a chair.

First, slowly tilt your head side to side 3 times.

Tilt it to one side of your body and then slowly tilt it to the other side of your body.

Now we are going to turn our head from side to side 3 times.

Slowly turn your head to the left, then back to the middle, then turn your head to the right.

Repeat 3 times.

Where can you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our neck muscles.

What could you notice about your neck muscles?
Row, row, row your boat

Find a partner and sit on the ground facing your partner.

Start singing the lyrics to the don with your partner to row, row, row your boat

Row, row, row your boat
gently down the stream,
Merrily, merrily, merrily, merrily
Life is but a dream

As you are singing the song, put your hands up against your partners hand, have your knees slightly bent.

Push your hands against your partners as you rock backwards and forwards in a ‘rowing motion’.

*Where did you feel it in your body?*

We are going to repeat the activity again, but this time we are going to focus on our wrists.

*How did your wrists feel while moving?*
Interoception activity

Progressive muscle focus

Start by laying down on the floor with your hands by your side.

Focus on tensing and relaxing each muscle group for 2 to 3 seconds, all while maintaining deep, slow breaths through your nose and out through your mouth.

- Start with your feet and toes. Tense then relax.
- Move up to your knees and thighs. Tense then relax.
- Move up to your stomach. Tense then relax.
- Focus on clenching your hands. Tense then relax.
- Move up to your arms. Tense then relax.
- Move up to your shoulders. Tense then relax.
- Move up to your face. Tense then relax.

We are going to repeat the activity again, but this time we are going to focus on our breathing in through our nose and out through our mouth.

What did you notice in your body after focusing on your breathing?
Emperor Penguin breathing

Start by laying down on the floor or sitting on a chair.
Place your hands on your belly.
Breathe in through your nose for a long breath.
Then a long breath out of your mouth.
When we breathe in our belly expands like the belly of an Emperor Penguin!

We are going to repeat the activity again, but this time we are going to focus on our belly expanding in and out.

What change did you notice in your body after focusing on your breathing?
Interoception activity

Rainbow breathing

Start by standing up with your hands by your sides.

Take a deep breath in through your nose, as you do raise your arms up over your head making a rainbow shape.

When you breathe out through your mouth, move your arms back down to your side.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our breathing in through our nose and out through our mouth.

What change did you notice in your body after focusing on your breathing?
Interoception activity

Balloon breathing

Start by sitting cross-legged on the floor or sitting on a chair.

Start by cupping your hands around your mouth.

Take a deep breath in through your nose and slowly start to blow out through your mouth.

With your hands, extend them out as if you were blowing up a balloon.

**Where did you feel it in your body?**

We are going to repeat the activity again, but this time we are going to focus on our breathing in through our nose and out through our mouth.

**What change did you notice in your body after focusing on your breathing?**
Interoception activity

Back to back breathing

Find a partner and sit on the floor back to back.

Sit up tall and close your eyes if needed.

Start to breathe in through your nose and out through your mouth.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on our syncing our breath with our partner by feeling the movement in your partners back.

What change did you notice in your body after focusing on your breathing?
Interoception activity

10 steps breathing

Find a space in the room and stand tall.

Take a deep breath in through your nose and out through your mouth.

Once you have done this, take 1 big step forward.

Repeat 10 times.

Where did you feel it in your body?

We are going to repeat the activity again, but this time we are going to focus on breathing in through our nose and out through your mouth.

What change did you notice in your body after focusing on your breathing?
Interoception activity

Mountain climbers

In a standing or sitting position find your pulse on your neck or wrist. Record your pulse for 1 minute.

Start in a plank position.

Pull your knee into your chest, while staying in the plank position.

Continue to switch knees. Pull the knees in right, left, right, so it creates a ‘running’ motion.

Complete the mountain climbing for 1 minute.

Stand up and find your pulse on your neck or wrist. Record your pulse for 1 minute.

What did you notice about your pulse after completing the mountain climbing activity compared to your pulse before the activity?
Interoception activity

Frog Squat Jump

In a standing or sitting positioning find your pulse on your neck or wrist. Record your pulse for 1 minute.

Stand tall with your feet a little wider than hip width and your feet slightly turned out.
Squat down into a frog position and place your hands on the ground between your legs.
Spring off your bent legs, throwing your arms into the air.
Repeat this squat and jump for 30 seconds.

Stand up and find your pulse on your neck or wrist. Record your pulse for 1 minute.

What did you notice about your pulse after completing the frog squat jump activity compared to your pulse before the activity?
Interoception activity

Jumping Jacks

*In a standing or sitting position find your pulse on your neck or wrist. Record your pulse for 1 minute.*

Stand with your feet together, knees slightly bent and arms at your side.
Jump while raising your arms and separating legs to sides.
Land on forefoot with legs apart and arms overhead.
Complete the Jumping Jacks for 30 seconds.

*Stand up and find your pulse on your neck or wrist. Record your pulse for 1 minute.*

*What did you notice about your pulse after completing the Jumping Jacks compared to your pulse before the activity?*
Regulating body temperature

Trace a student on paper, or have a blank body drawn on a piece of paper.

After coming inside from play, ask the students to sit and notice where inside their bodies they feel heat.

Ask each student to circle on the paper body where they are noticing heat.

Example, they could feel that their face feels hot, or their underarms feel hot and sweaty.

Ask the students to share where they noticed the heat.

Discuss strategies they can use to cool down.

Example, take their jumper off; have a drink of water; turn on the air conditioner.

It may be useful to use a mirror to show students their body cues.

Example, use a mirror to show students that their face is red, they are puffing and they are sweating.

These body cues show the body is hot and needs to cool down.
Hydration

Discuss with students ‘how do they know when they are thirsty, what are the body signals?’

These signals could include

- Dry mouth
- Fatigue
- Headache
- Dizziness

Discuss with students that our urine is a very important way that our body shows our hydration levels.

Ask the students:

- What do you think the colour of urine should be?
- What do you think urine should smell like?

When you are hydrated your urine should be clear and have no smell.

Show students the visual hydration chart (on the next page) and discuss that we need to ensure that when we are dehydrated we hydrate by drinking water.
Rehydration

Use this urine colour chart to give yourself an idea of whether you are drinking enough water or if you are dehydrated.

- **Extremely Dehydrated**
  - Drink a large bottle of water.

- **Dehydrated**
  - Drink 2–3 glasses of water.

- **Mildly Dehydrated**
  - Drink a large glass of water.

- **Hydrated**
  - You are drinking enough.
  - Keep drinking at the same time.

**IMPORTANT:**

Vitamin and multivitamin supplements may change the colour urine, making it bright yellow or discoloured.
Discuss with students ‘how do they know when they are constipated, what does our body tell us?’

These signals could include

- Passing fewer than 3 stools a week
- Having lumpy or hard stools
- Straining to have bowel movements

Discuss and show student the Bristol Stool Chart (on the next page)

Health poo should be (blobs, thin snakes, or soft-serve ice-cream) and formed poo (pellets, logs, and ‘thick and bumpy sausage’) may indicate signs of constipation.

**Dehydration** is one of the most common causes of constipation.

The food you eat makes its way from your stomach to the large intestine, or colon. If you don’t have enough water in your body already the large intestine will soak up water from your food waste.
# Bristol Stool Chart

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Separate hard lumps, like nuts (hard to pass)</td>
</tr>
<tr>
<td>2</td>
<td>Sausage-shaped but lumpy</td>
</tr>
<tr>
<td>3</td>
<td>Like a sausage but with cracks on its surface</td>
</tr>
<tr>
<td>4</td>
<td>Like a sausage or snake, smooth and soft</td>
</tr>
<tr>
<td>5</td>
<td>Soft blobs with clear-cut edges (passed easily)</td>
</tr>
<tr>
<td>6</td>
<td>Fluffy pieces with ragged edges, a mushy stool</td>
</tr>
<tr>
<td>7</td>
<td>Watery, no solid pieces. Entirely Liquid</td>
</tr>
</tbody>
</table>
4. References


Davies, Catherine, Di Rodd, Kerry Parsons, and Emma Goodall. "The 8 th Sense: Interoception." DECD, Adelaide


5. Department forms and resources

The Department for Education public neurodiversity website has the following resources available that are recommended to be used to support children and young people in education and care services and will assist educators and support staff to develop individualised strategies to support children and young people to develop interoception.

The neurodiversity webpages also provide additional information for education staff and parents including how we support children in education and care services with atypical neurodiversity, educational implications and suggested educational adjustments; as well as further resources and external services that can support education and care staff, parents and children and young people.

5.1 Interoception support plan (HSP421)

An interoception support plan is completed by the education or care service, family and the child or young person (where possible) to provide a detailed understanding of the interoception issues and support the development of individualised strategies to increase interoception.

5.2 Interoception activity plan (HSP422)

An interoception activity plan can be used as a template by education staff to plan for the inclusion of interoception activities into daily class activities.

5.3 Personal best tracking sheet (HSP423)

A personal best tracking sheet can be used by children and young people to record their personal bests for different interoception activities. Education staff can also use to record for children and young people.

5.4 Interoception in the Australian Curriculum

Interoception in the Australian Curriculum provides detailed information for education staff on how interoception can be incorporated into the curriculum to support children and young people’s learning.

5.5 Sensory overview support plan (HSP431)

A sensory overview support plan is developed by the education or care service, family and the child or young person (where possible) to provide a detailed understanding of the sensory issues and support the development of strategies to minimise sensory seeking or avoidance.
5.6 Regulation scale (HSP432)

The regulation scale is a tool that can be used for any child or young person to identify what is happening around them that is impacting on their mood change, what signals their body is giving them, and ways to respond to their body’s signals that will help them manage the change in mood.

5.7 Understanding behaviour template (HSP433)

The understanding behaviour template is a useful tool to assist in determining the reason behaviour is occurring and to plan and implement replacement behaviour. This worksheet is used for a single behaviour and works most effectively when education staff, families and the child or young person work together to develop.

5.8 Emotional wellbeing care plan (HSP400)

An emotional wellbeing care plan is completed by a health professional in consultation with parents or legal guardians for children and young people requiring additional care or support for their mental health and emotional wellbeing.

5.9 Autism spectrum support plan (HSP430)

An autism spectrum support plan is completed by education and care services in collaboration with the child or young person and their family. The plan includes a description of the child or young person’s interests, strengths, skills and support needs from the perspective of the child, family and education or care service.

5.10 Constipation and dehydration

To support wellbeing in education and care services the department promotes free access to water and encourages the display and discussion of the urine colour chart and bristol stool chart.