



Encounter

Learning Outcomes:

Accept stimuli

- Acceptance of different stimuli to senses.

Reflexive response to stimuli

- Responses that are reflex to stimuli

Teaching Activities/ advice/ enabling environments

Resource examples

Flo Longhorn – Sensology work out book reference

Les Stave s-A very sensory maths curriculum

ANY RESOURCES MAY SUPPORT THE LEARNING OUTCOMES FOR THAT SECTIONS – THE RESOURCES ARE NOT RESTRICTED TO ONE OUTCOME BUT ARE TO BE USED FLEXIBLY.

Most children at the earliest stage will need to have stimuli presented to them in either a dark or quiet area so that they can focus on a specific stimulus. Presentation close to the child is required initially. Use all the available senses and check whether children can have tastes of food.

Use a range of stimuli that cover all the senses but choose a small number to keep repeating.

Start with bright flashing lights and clear sounds, materials to touch and things to smell and taste. Make the differences great at this stage. Use one stimulus at a time. DON'T overload.

Look very carefully at the ways in which children may show they are aware of stimuli e.g.: by stilling, moving limbs, blinking eyes.

Gradually increase the range and variety of stimuli but still present things that provide contrast e.g.: wet and dry/ hot and cold/ sweet and sour/ sharp and dull sounds/ different colours.

Consult with specialist teachers/ therapists on the best stimuli to use with individual children or any that are not considered safe for them. Get advice on how to work with children with visual, hearing and physical impairments.



Cognition

Pre-Formal Scheme of Work



Understanding and enjoyment of stimulation:

- Touch , massage, tactile stimuli, items or media placed in hands, gentle and firm touch,
- Gross movement of limbs, physiotherapy, physical literacy
- Visual stimuli of lights, colours, patterns, faces etc static and moving
- Olfactory stimuli of a wide range.
- Gustatory stimuli of a wide range, from bland to strong tastes.(as appropriate for an individual who can take orally)
- Auditory stimuli, varying in volume, pitch, tone, speed, duration etc
- Environmental changes,
- A small and consistent, but varied number of adults to work with.

Sensory communication packs
Tac Pac/ sequential touch activities
Dance Massage
Foot spa/ vibrating cushion/ massage oils/ bubbles
Natural objects/ Treasure Basket / pots and pans
Messy art/ sand and water/ lemons/ onions/
oranges/ sparkly wigs/ floaty material/ heavy and
light objects/ space blanket
Colander/ water toys/ Balls/ squidgies/ koosh balls
Rhythmic clapping of hands

Bucket swing/ hoist or blanket for swinging/
trampoline/ swimming pool/ wheelchair roundabout

Flashing lights/ UV light on white objects/ sparkly
material/ rough objects/ soapy smells/ chocolate/
vinegar/ bells and drums/
iPad and apps (see appendix)
Sound beam
Increasing and decreasing stimuli- light, sound,
quantity, weight, volume touch, pressure motion,
time/ duration

Resonance boards/ Soundbeam/ musical instruments

Hydrotherapy pool, sensory room, outside
environments and weathers, and inside classroom
environments, hall and large spaces, other smaller
cosy spaces. Events

Key worker, class team members, key lunch time
person



Awareness

Learning Outcomes:

Accept stimuli for an increasing amount of time

- Acceptance of different stimuli to senses.

Recognising and reacting to stimuli (might be reflex)

- Recognise an obvious change happening very close to self
- Recognise when a stimulus starts and stops

Responding to stimuli deliberately (not a reflex)

- Respond to a widening range of stimuli, developing an awareness of position.
- Respond to a range of stimuli that are quieter/ less obvious

Anticipating stimuli

- Anticipate stimuli that occur over and over again

Attending to stimuli that are less obvious/ further away

- Attend to a moving stimuli in a classroom

Transferring attention from one stimulus to another

- Move attention to a new focus when presented

Locating stimuli in busy classroom

Locate a specific stimulus to develop an awareness of direction

Teaching Activities/ advice/ enabling environments

Resource examples

Most children at the earliest stage will need to have stimuli presented to them in a dark/ quiet area so that they can focus on a specific stimulus. Use all the available senses and check whether children can have tastes of food.

Use a range of stimuli that cover all the senses but choose a small number to keep repeating. Start with bright flashing lights and clear sounds, materials to touch and things to smell and taste. Make the differences great at this stage. Use one stimulus at a time. DON'T overload.

DON'T just stimulate! We want the children to recognise, react and deliberately respond to stimuli. Look very carefully at the ways in which children show they are aware of stimuli e.g.: by stilling, moving limbs, blinking eyes.

As children become more aware, increase the range and variety of stimuli but still present things that provide contrast e.g.: wet and dry/ hot and cold/ sweet and sour/ sharp and dull sounds/ different colours. Look for more specific responses that indicate they are beginning to show different levels of response e.g.: quite like the flashing ball (looking at



Cognition Pre-Formal Scheme of Work



it) but really likes the survival blanket (looks at it but also smiles)

Consult with specialist teachers/ therapists on the best stimuli to use with individual children or any that are not considered safe for them. Get advice on how to work with children with visual, hearing and physical impairments.

DON'T just stimulate! Use burst-pause (a burst of a stimulus followed by a pause for children to respond) and record their responses. Build up a record of responses that indicate likes and dislikes e.g.: opening eyes or smiling when the stimulus is liked and pulling a face or turning away when the stimulus is disliked. NB this is showing a preference and is not yet a choice.

Burst-pause also encourages children to show anticipation of repeated stimuli. Choose a favourite stimulus and play game with it so that you repeat it several times. Once the game is established build anticipation time into the game perhaps with an open mouth and inward gasp of breath before repeating the stimulus e.g.: 'I'm coming to get you' games or swing the child in a blanket a few times and then stop and use the open mouth technique to encourage some kind of response which might indicate anticipation of continued swinging. (Hiding and revealing games)

- Acceptance of different stimuli to senses.
- Recognise an obvious change happening very close to self
- Recognise when a stimulus starts and stops
- Respond to a widening range of stimuli, developing an awareness of position.
- Attend to a moving stimuli in a classroom
- Anticipate stimuli that occur over and over again
- Locate a specific stimulus to develop an awareness of direction
- Respond to a range of stimuli that are quieter/ less obvious
- Move attention to a new focus when presented

Flashing lights/ UV light on white objects/ sparkly material/ rough objects/ soapy smells/ chocolate/ vinegar/ bells and drums/ pots and pans
 Balls/ squidgies/ koosh balls /Colander/ water toys
 Resonance boards/ Soundbeam/ musical instruments/
 Songs and rhymes
 Tac Pac
 Dance Massage
 Bucket swing/ hoist or blanket for swinging/ trampoline/ swimming pool/ wheelchair roundabout
 Messy art/ sand and water/ lemons/ onions/ oranges/ sparkly wigs/ floaty material/ heavy and light objects/ space blanket
 Natural objects/ Treasure Basket
 Foot spa/ vibrating cushion/ massage oils/ bubbles



Exploration

Learning Outcomes:

Actively noticing familiar stimuli

- Locate moving stimuli
- Use their senses to register interesting events and activities

Locating interesting stimuli e.g.: moving eyes, turning head

- Turns to objects and sounds that are activated but in one place

Making things happen with random movements

- Make things happen when they move randomly

Activating toys that give interesting effects

- Activate toys that provide an interesting effect randomly and without connecting the cause to the effect

Teaching Activities/ advice/ enabling environments

Resource examples

Use the resources listed above but add objects that do interesting things when touched randomly.

Refer to Richard Hirstwood website.

Initially exploration happens by mistake as children start to 'do' things with objects and realise that interesting things can happen. They are not yet connecting cause and effect.

Use the stimuli that individual children particularly like to encourage them to look, listen, touch, smell and taste actively. Encourage them to touch or hold objects even briefly e.g.: put the sand tray just below the child's hand and wait for the arm to relax and drop into the sand

Make the children work a bit harder for their favourite stimuli e.g.: move the flashing ball to side to encourage eye or head movement or hold the tinsel just out of reach to encourage arm movement or play the bells to one side to encourage turning

Position child in different ways to access resources.

Play games with favourite objects/ stimuli e.g.: roll a ball towards children and encourage them to notice it coming and /or even touch it. Make the game interesting with anticipation built in e.g.: ready, steady, go or open mouth & gasp of breath



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Pre-Formal Scheme of Work

Use tempting objects that are noisy and bright and do something interesting when touched. Make sure the effect can be got with random movement.

Use comments in interaction: do you like it/do you want it?

- Use their senses to register interesting events and activities within their environment, using different senses
- Locate moving stimuli, a sight, sound or smell.
- Turns head to objects and sounds that are activated but in one place
- Make things happen when they move randomly
- Activate toys that provide an interesting effect randomly and without connecting the cause to the effect

coloured scarves/ ribbon balls/
Use the Ipad with a reverse camera mode.
Things that squish through the fingers/
slinky/songs and rhymes
Ipad, instrument, person, light, music , wind
chimes
Use Soundbeam – make sure it is pointing at the
part/s of the body the child can move
voluntarily
Hang sparkly and noisy objects on the activity
arch or in a Be Active box/ tent environment or
umbrella so children's random movements
have interesting effects. Hang things where you
see the most movement.
Use IWB/Ipad/ touch screen computer with the
simplest programmes so that a single touch has
a big effect/SENSWITCHER(NGFL)
Cause and effect software – Intro to Cause and
Effect, Big Bang, Attention Getter, the simplest
Poisson Rouge games, Ameba
rattles/ baby toys with different textures and
sounds/ things that squeak/ things that scrunch
and twirl/ mirrors/ things to knock over/
keyboard/ Jack-in-the-box/ pop up toys/ things
that roll/ beads and bangles/ Mirror
Chimeabout/ water wheel/ ocean drum/ seed
shaker/ hanging chimes
rocking top/ wobble board/ balls in ball pool/



Cognition

Pre-Formal Scheme of Work



	things that float/ crackly tunnel/ fibre optics/ spinning torch/ floor keyboard/ twinkling tube/ bubble wrap/
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Control

Learning Outcomes:

Activating toys deliberately– knowing that their actions have an effect (contingency responding)

- Make things move deliberately with gross movement
- Make things move deliberately with finer movements

Operating toys with a single action

- Press a range of buttons or switches to make toy work

Using different actions for different toys

- Activate toys deliberately, using different movements for different toys e.g. shaking, banging, rolling

Persisting in activating toys and making things happen (contingency awareness)

- Persist in making simple toys do something repeatedly

Shifting attention from doing one kind of action to another

- Shift attention between different objects/ actions within 1 piece of equipment

Manipulating objects purposefully (and increasingly according to function)

- Operate a toy that requires a single action
- Use objects and materials according to their function
- Manipulate objects purposely (e.g.: empty and fill containers, stacking and building blocks)

Looking for hidden objects under 'screens' (saw them being hidden)

- Look for favourite objects when sees them hidden

Looking in containers to find objects

- Look for favourite objects in a box of similar items (not deliberately hidden)

Opening containers to find objects (lifting lids and pulling off material)

- Open containers to find objects, lift, press, pull

Teaching Activities/ advice/ enabling environments

Resource examples

Use the resources listed above but add objects that do interesting things when touched randomly.
Les Staves, Working towards playfulness.



Cognition Pre-Formal Scheme of Work

As children increase their repertoire of deliberate actions, they need plenty of interesting toys to practice them on. Choose toys to encourage intact senses but also encourage residual vision or hearing. For physically disabled children choose toys that work with the smallest movement and/ or use a single switch. Children need to be able to control the toys to develop their thinking.

Provide bright, noisy, moving toys that activate easily – buttons to press, things to poke, shake and bash

Play 'your turn, my turn' to encourage the children to try for themselves.

Start off the movement and then encourage the children to finish it – making sure they are successful in making the toy work.

If children intentionally discard toys more than play with them, try toys that are attached to their chair trays or the wall.

Use soft toys that can be thrown safely – but make sure the toy does something interesting e.g.: makes a crackly sound when picked up or flashes when touched. Ease of activity will enable the children to make one thing work before throwing it.

Encourage children to become more accurate with their throwing by catching the toys in containers. This might also help them to notice where the toys have gone.

Cordon off a small area or make a large cardboard box into a 'little room' so that when the child throws toys they don't go far.

Encourage physically disabled children to move about as much as they can – especially on the floor. Put tempting toys just out of reach so they have to move a little. Encourage rolling from side to side with interesting toys wherever they roll.

Prop children up with cushions so they can move their arms a little. Try side lying with their arms positioned so their hands can come together around a toy.

Put children under the activity arch and if they can't move any part of the body voluntarily activate the toys yourself encouraging them to look and listen. Vary the position of where you want them to look and listen. Give them time to respond and be guided by the strength of the response.

For children who have even the smallest voluntary movement, use a single switch to activate interesting toys. Choose a



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Pre-Formal Scheme of Work



range of different effects.

Provide toys that demand different kinds of movement to make them work and demand they put their hands in different places (left, right, up, down, in front of the toy)

Use messy play to encourage a range of whole hand and finger movements.

Toys for dogs can be very robust for children who chew and pull toys apart!

When children have established favourite toys, encourage them to become more accurate when they play. Encourage them to reach for their favourites and provide new toys that are quite close in attraction but enable children to move on in their exploration. Make sure toys encourage them to make different movements with their hands

Make it more difficult for children to get their favourite toys by putting them inside containers or covering them with cloths. Make sure they see the object being hidden and to begin with, leave a bit of the toy visible to tempt them to pull them out.

Put the containers in different orientations so putting toys in and taking them out can be done from different angles. Vary the size of container and the aperture. Use noisy toys that are rewarding when put into containers. Children are more likely to take things out of containers before putting them in. Encourage both.

- Make things move deliberately with gross movement
- Make things move deliberately with finer movements
- Persist in making simple toys do something (e.g.: keep swiping wobble toys or pressing a switch to keep the toy active)
- Operate a toy that requires a single action button on
- Activate toys deliberately, using different movements for different toys (e.g.: shaking bells and banging drum)
- Shift attention between different objects/ actions /textures/items
- Manipulate objects purposely (e.g.: empty and fill containers, stacking and building blocks)
- Press buttons to make toy work (e.g.: keyboard, musical toys)
- Look for favourite objects when sees them hidden (e.g.: toy in box, under material)
- Look for favourite objects in a box of similar items (not deliberately hidden)
- Open containers to find objects (e.g.: lift lid, press buttons, pull top

Activity centres, baby toys e.g.: Lamaze, VTech, Fisher-Price, Galt, sensory umbrella activities
Toys that can be attached to an activity arch, child's tray, wall
Soft toys that make interesting sounds, light up or feel interesting/ containers for catching them. Treasure or heuristic baskets
Messy play stuff to get hands moving e.g.: sand, cornflour, gloop, paint
Mirrors, kitchen utensils, plastic containers with objects to rattle and roll about
Jack-in-the-box, switch for bubble tube
Toys that 'do' something e.g.: noisy vehicles, squeaky soft toys, push / pull along toys, Activity centres, fantastic finger resources , treasure baskets



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Pre-Formal Scheme of Work



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- Use objects and materials according to their function (e.g.: brush for hair, shoes on feet, paint on paper)

Musical instruments that need a little more accuracy to work e.g.: drum with beater or cabasa that requires twisting
Board books with buttons to press, flaps to open, lights and sounds. Fantastic fingers books and boards.
Switch activated toys with strong rewards e.g.: tumbling dog, disco lights, train, car
Computer software where greater accuracy is required to get the effect e.g.: Build It!/ Poisson Rouge games, Touch Here, Press it Now, Look Here/ SENSWITCHER (NGFL)/
Whiteboardroom.org
Containers for putting toys in and out and hiding toys e.g.: boxes, bags, baskets (big, small, deep, shallow, top and side loading, post box slits, round holes (no corners yet)
Containers with lids that are easy to remove (lift up or pull off) e.g. basket with cloth over it or box with a flap
Toys for playing in the water and sand e.g." colander, spades, buckets, water wheel, jugs, different shaped containers, water toys that float and move across the water



Sequence and pattern

Learning Outcomes:

Turn taking (regulated by an adult)

- Take turns in repetitive games where adult stops to wait for a response (e.g.: Intensive Interaction, action songs)

Anticipating repeated activities

- Anticipate routine events – that is see a pattern in the event (e.g.: action songs, eating, being hoisted)

Recognising familiar places and events

- Recognise familiar places (e.g.: look up at the lights in sensory room, go straight to a favourite object in the hall)
- Explore objects that are used in familiar routines (e.g.: spoon, cup, hair brush, drum)

Turn taking actively

- Take turns actively (e.g.: rolling ball to partner, passing objects backwards and forwards)

Choosing between objects

- Choose between two or more motivating toys
- Select preferred objects from a mixture of objects (e.g.: in a box)

Selecting familiar objects for familiar routines

- Respond to object cue (e.g.: sits down for a drink when sees the cup)
- Select appropriate resources for a familiar routine (e.g.: spoon for eating, ball for game, shoe after soft play)
- Assist in putting away resources used in a familiar routine

Operating toys that need more than one action

- Operate toys that require more than one action to complete (e.g.: bubble tube controlled by latched switch, CD player knobs)
- Operate toys that need to be pulled apart and put together (e.g.: stickle bricks, Duplo)

Object permanence

- Follow objects that move within the toy (e.g.: cars down a slope, balls in a tube)
- Look at the bottom of a sliding/ tumbling toy for the object to appear when it can't be seen travelling down)

Putting toys in and out of containers

- Put objects into a container one at a time (e.g.: balls down a tube or helter skelter)

Solving simple problems with toys and familiar activities

- Use objects that require two or more actions to complete (e.g.: posting shapes or simple form boards)

Solving problems with persistence – keep trying if they don't work the first time they try.

- Use early problem solving for a familiar event (e.g.: selecting a car or ball to roll down the slope rather than a piece of material or paper)



Cognition

Pre-Formal Scheme of Work



- Solve simple problems where understanding the pattern is important (e.g.: when there are 4 pegs to a toy and 3 are in place, look for the fourth if out of sight)

Teaching Activities/ advice/ enabling environments

Resource examples

Use the resources listed above but add objects that do interesting things when touched randomly.
Les Staves, Working towards playfulness.

Learning that the world is made up of predictable patterns is important for developing understanding. Provide a wide range of objects and activities as soon as basic anticipation of routines is established. It is very hard for children who cannot use their hands to show their true level of understanding.

Use burst-pause to get children turn-taking e.g.: massage children's hands for a few seconds and then stop, waiting for the child's turn (which can be anything from moving hands to looking at you or your hands to smiling or vocalising). Start massaging again as soon as the child's turn has responded in some way. Use a range of activities this way e.g.: whole body movements such as rocking from side to side, rolling, sliding or sensory stimulation such as shaking bells, moving bright lights, interesting smells – anything where you can give stimulation and then stop and wait for the child's turn.

Play games that you repeat many times e.g.: make up a little clapping song (Clap your hands, clap your hands, clap your hands together – pause to wait for the child to show enjoyment and then resume. Look for anticipation of the little game beginning again

Play games that include turn-taking e.g.: Row your Boat or Where are you or Peek-a-boo

Play games with favourite objects that involve taking it in turns e.g.: hold your hand out for the child to give you an object and when you get the object hand it back.

Set up two toys on jelly bean switches and take turns to make your toy work.

Build a tower of bricks so the child can knock them down. Try to get the child to do the game the other way round. He builds and you knock down.



Cognition Pre-Formal Scheme of Work



Put objects in and out of containers one after each other. This can extend to patterns of two – I put two in, you put two in.

Vary it by having an object yourself which you hand over as you take the child's. Or take turns to move an object on the table or push a ball backwards and forwards between you. Have a BigMack switch between you and take it in turns to press it so it makes a funny noise.

Play patterns on a drum e.g.: two bangs each or a long shake of the bells followed by a short one each. It helps to keep the turn taking in so you can encourage imitation. If the children can't imitate you then you imitate them, turning it into a pattern.

When beginning choices play games where you make the choice to match what the child is doing e.g.: have two instruments the same and after the child has picked up one then you pick up the other and use it in the same way as the child

Offer choices of objects, starting with a favourite and something in which they have no interest. Gradually move toward a genuine choice between two things they like. Usually at this stage the choice is going to be between objects but maybe with pictures/ symbols depending on the child's interest.

Choice can be extended by beginning to demand some thinking e.g.: matching objects or choosing objects that go together or are required for a particular activity e.g.: choice of hairbrush or brick when standing at the mirror waiting to brush hair. Or give the child a bowl of pudding and offer a choice between a spoon and a toy car (be prepared for the car choice!!). Or you have a sparkly wig which you put on. The child has a sparkly wig and a shoe and you encourage the child to put the wig on like you.

Start getting children to do more than one action one after another by hiding favourite toys under cloths, in bags, boxes so they have to get the toy and then use it. After that use toys that demand two actions e.g.: pick up shapes and post them in the box or press down the top before pressing the lever of the jack-in-the-box or take balls out of a box and put them onto a ramp for them to slide down.

Any little objects/toys e.g.: vehicles/ building bricks/ cutlery, hats can be put into and taken out of containers. Choose containers that have different sized openings and need things put in the top, the side, the front, the back and as soon as the game is clear, challenge children by getting them to open a clasp or press a button before they get the objects.

Other problems that can be solved include putting objects in cupboards which the children have to open or putting a



Cognition Pre-Formal Scheme of Work

favourite toy in sight but behind objects that need to be moved. Set up an obstacle course the children need to negotiate to get to something they want. Get children to select items they want from a box of toys so they need to spot the toy they want in amongst lots of others.

Generally make children work for what they want. If they love clapping games then hide your hands in your pockets or under your clothes or their clothes so they have to get them out before getting you to clap your hands.

Sabotage favourite toys so they need to try several times before they work or give them toys that are a little difficult so they have to be persistent to make them work.

- Take turns in repetitive games where adult stops to wait for a response
- Anticipate routine events – that is see a pattern in the event
- Recognise familiar places
- Explore objects that are used in familiar routines
- Take turns actively
- Choose between two or more motivating toys
- Respond to object cue (e.g.: sits down for a drink when sees the cup)
- Select appropriate resources for a familiar routine (e.g.: spoon for eating, ball for game, shoe after soft play)
- Assist in putting away resources used in a familiar routine
- Operate toys that require more than one action to complete (e.g.: bubble tube controlled by latched switch, CD player knobs)
- Operate toys that need to be pulled apart and put together (e.g.: stickle bricks, Duplo)
- Follow objects that move within the toy (e.g.: cars down a slop, balls in a tube)
- Put objects into a container one at a time (e.g.: balls down a tube or helter skelter)
- Select preferred objects from a mixture of objects (e.g.: in a box)
- Look at the bottom of a sliding/ tumbling toy for the object to appear when it can't be seen travelling down)
- Use objects that require two or more actions to complete

Intensive Interaction, action songs
Massage oils
action songs, eating, being hoisted
look for lights in sensory room, go straight to a favourite object in the hall
Basket of items for everyday situations
Balls, cars, switches
Food smells and tastes
Swing/ hoist/ blanket for sliding/ mats for rolling/ balls for pushing
Musical instruments such as bells/ drums/ maracas
Bright lights and flashing balls/ fibre optics and shiny objects
Jelly bean switches attached to interesting toys
Carol Ouvry's drama games
Song and rhyme books
Flo Longhorn's sensory books
BigMack switch with funny noises
Tubes and tunnels, toy garage
Heuristic or treasure baskets.



Cognition

Pre-Formal Scheme of Work



- Use early problem solving for a familiar event (e.g.: selecting a car or ball to roll down the slope rather than a piece of material or paper)
- Solve simple problems where understanding the pattern is important (e.g.: when there are 4 pegs to a toy and 3 are in place, look for the fourth if out of sight)

Posting boxes, form boards
Building bricks/ stacking cups/ peg
board toys