

Care and Development of Infants and Toddlers

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About this Book

The *Care and Development of Infants and Toddlers* is a new **open textbook** created by remixing and adapting chapters from multiple open textbooks and adding new resources specific to early childhood work in Nova Scotia. It is shared under a [CC BY-NC-SA](#) license.

- See the [Versioning History chapter](#) for a complete mapping plan for the creation of this new open textbook.
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COVER

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 *Creativity is allowing yourself to make mistakes. Art is knowing which ones to keep.* – Scott Adams

Thank you to artist and creative Olivia Conrad for sharing your cover artwork not only with us, but the world. Art is a language of its own which speaks on an emotional level that provides deeply personal experiences. Through your artistry, you have complimented the content of this work and your talent is inspiring.

PART I

DAILY CARE

UNIT 1

Nutrition

Chapter Objectives

After this chapter you should be able to:

- Explain developmental considerations when feeding infants.
- Describe feeding tips for infants.
- Explain upcoming emerging skills for toddlers.

INTERESTING FACTS

Globally, an estimated 43 million preschool children were overweight or obese in 2010, a 60% increase since 1990.

¹

- Models for healthy behaviour are early educators as 75 % of children spend time in child care.
- Children who are overweight or obese are at increased risk for health and socio-emotional problems.
- Being overweight in the preschool years is highly predictive of being overweight later in childhood.
- Overweight children are more likely than their peers to develop cardiovascular disease, type-2 diabetes, liver disease, sleep apnea, high cholesterol, and asthma.
- Food insecurity is associated with children's greater risk for being overweight.
- Shared mealtimes are associated with a number of benefits such as increased vocabulary and exposure to a wider variety of foods that may result in healthier eating habits.
- Research suggests that having a television on during mealtimes may promote unhealthy eating.

The Harvard School of Public Health asserts that childhood is a critical time for obesity prevention because children develop taste preferences and physical skills, as well as imitate healthy and unhealthy behaviours of caregivers. Children's early-life experiences, such as bottle feeding, too little sleep, and too much television can increase the risk of obesity later in life.

1. National Resource Center for Health and Safety in Child Care and Early Education, University of Colorado Denver. (2011). *Achieving a State of Healthy Weight: A National Assessment of Obesity Prevention Terminology in Child Care Regulations*. https://nrckids.org/files/regulations_report_2010.pdf

Inadequate food intake in children is associated with a number of serious health, behaviour, and cognitive deficits. Children who are food insecure are in poorer health than children who are in food secure households with higher rates of hospitalization, iron deficiency anemia, and chronic health conditions. As you can see the factor of nutrition impacts all developmental domain.

DEVELOPMENTAL CONSIDERATIONS

Infants

In your work with infants and toddlers and their families, you will likely hear about the Women, Infants, and Children (WIC) program. WIC's mission is to safeguard the health of low-income women, infants, and children up to age 5 who are at nutrition risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care. Delivering high quality nutrition services is essential in not only carrying out this mission, but also ensuring that WIC continues to be the premiere national public health nutrition program.

Resources to Explore

- [Stanford University Infant Feeding Guide](#): Guidance for appropriate and healthy feeding of an infant during the first year of life.

Don't give solid foods unless your baby's health care provider advises you to do so. Solid foods shouldn't be started for infants younger than age 4 months for the following reasons:

- Breast milk or formula provides your baby all the nutrients that are needed to grow.
- Your baby isn't physically developed enough to eat solid food from a spoon.
- Feeding your baby solid food too early may lead to overfeeding and being overweight.
- As a general rule, solid foods don't help babies sleep through the night.

Guide for formula feeding (0 to 5 months)

Age	Amount of formula per feeding	Number of feedings per 24 Hours
1 month	2 to 4 ounces	6 to 8 times
2 months	5 to 6 ounces	5 to 6 times
3 to 5 months	6 to 7 ounces	5 to 6 times

FEEDING TIPS FOR INFANTS AFTER 4-6 MONTHS

- When starting solid foods, offer one new food at a time—not mixtures like cereal and fruit or meat dinners. Give the new food for two to three days before adding another new food. This way you can tell what foods an infant may be allergic to or can't tolerate.
- Begin with small amounts of new solid foods—a teaspoon at first and slowly increase to a tablespoon.
- There are no strict rules about the order in which you should give different foods in. Many people start with an infant cereal and gradually add fruits, vegetables, and proteins.

- Don't use salt or sugar when making homemade baby foods. Also, avoid feeding homemade spinach, beets, green beans, squash, and carrots for infants younger than age 6 months because of the risk for methemoglobinemia, a blood disorder that can interfere with oxygen delivery in the blood, due to high concentration of nitrates. Canned foods may contain large amounts of salt and sugar and shouldn't be used for baby food. Always wash and peel fruits and vegetables and remove seeds or pits. Take special care with fruits and vegetables that come into contact with the ground. They may contain botulism spores that cause food poisoning.
- Cow's milk shouldn't be added to the diet until the baby is age 12 months. Cow's milk doesn't provide the right nutrients for an infant.
- Limit fruit juice without sugar to a maximum of 4 to 6 ounces daily when the infant is able to drink from a cup (around age 6 months or older). Whole fruits and vegetables are a much healthier option.
- Feed all foods with a spoon. Your baby needs to learn to eat from a spoon. Only formula and water should go into the bottle.
- Expect a smaller and pickier appetite as the baby's growth rate slows around age one.
- Once an infant is taking solids, offer sips of water.
- Offer a wide variety of foods early to develop good eating habits later.

TODDLERS

The list is useful in understand what to expect from toddlers²

Young toddlers may begin to:

- Want to feed themselves.
- Eagerly participate in snacks and mealtimes.
- Bite, chew, and swallow soft food smoothly.
- Show interest in many types of food and no interest in other foods.
- Eat inconsistently (eat a lot at one meal and little at the next, be too busy playing to eat).
- Ask for food when hungry or accept food when offered.
- Be willing to try new foods.

Older toddlers may begin to:

- Enjoy helping with meal and snack routines (set table, wash hands, throw away trash).
- Bite and chew solid food more easily.
- Accept or refuse food depending on their appetite and interest.
- Notice and talk about food textures, temperatures, and tastes (crunchy crackers, warm soup, sweet apples).
- Understand that some foods are good for them (fresh fruits, vegetables, milk) and some are not very healthy (potato chips, soda).

2. North Carolina Division of Child Development. (2008). *Health and physical development*. https://ncchildcare.ncdhhs.gov/Portals/0/documents/pdf/D/dcd_infant_toddler_health_physical_development.pdf

CHAPTER ATTRIBUTION

Chapter adapted from [Nutrition](#) in [Infant and Toddler Education and Care](#) by Susan Eliason, [CC BY-NC-SA](#).

UNIT 2

Diapering

Chapter Objectives

After this chapter you should:

- Know how to prepare a child for diapering.
- Be able to create transition strategies for routine diapering.
- Understand how to reduce distractions and celebrate successes.



Illustration by Sarah I. Perez

For many families, changing a child's diaper becomes a major battle. This routine is one that is often not as scheduled or predictable as other activities. It is often unpleasant for adults and not an activity that the young child enjoys. As your child grows older and becomes more mobile and interested in interacting with his world, diaper changing might become even more difficult. While it can be challenging, it is also an opportunity for building a positive, nurturing and responsive relationship with your child. Several proven strategies can help to make diapering a positive and relationship building experience for both of you.

PREPARE CHILD

Prepare the child for the diaper change. Develop a predictable routine for diapering that can change as the child grows and becomes more mobile and independent. A routine helps the child understand what will happen and what to expect. While changing your child, give your child your undivided and unrushed attention. The calmness in your voice and manner will most likely calm him and encourage his cooperation. Respond to his sounds and interactions with gentle touch, nuzzles with your nose under his chin, eye contact, soothing sounds and words. Respond in soothing ways that you know comfort him and you both enjoy. Babies and toddlers thrive on predictability and learn from repetition. They like and need to know what is going to happen next. The following are strategies that will help your child learn to cooperate with the diaper changing routine.

PROVIDE A TRANSITION WARNING

Most young children need help in transitioning from one activity to another especially if they are engaged in an activity that is enjoyable. It's difficult for a child to move from an activity he really enjoys to one that he does not like.

- You might try giving him a verbal warning and say, "Tommy, I think it is time to change your diaper. We'll change it in five minutes. Okay?"
- Another transition strategy is to set a timer and when the timer rings, it's time to change the diaper. For example, you can set the timer for 5 minutes and warn your child when the bell rings it will be time to change his diaper. Remind him as the time gets closer. You might say, "Look, Mason, 2 more minutes, then we change your diaper." You can use a kitchen timer to help your child or purchase a visual timer that shows the time counting down (your child's teacher or therapist would be able to tell you more about where to purchase a visual timer).
- You might use a countdown or count up strategy and make a game of the transition. You might say, "Hmm, someone has a poopy diaper. Who can it be? I think it is Sammy. Let's change your diaper. 5, 4, 3, 2, 1. Diaper change."

PROVIDE CHOICES

Provide Choices Whenever Possible. Providing limited choices to your child is a powerful strategy for the prevention of challenging behaviour. Limited choices that can be offered during diaper change might be about what toy to bring to the changing table, where to do the diaper change, turning the lamp on or off. This gives your child a feeling of control, supports your child's communication, and encourages your child to cooperate with your requests. Offering limited choices (2 or 3) versus many prevents your child from engaging in a game where you keep offering different things and your child keeps saying "not that one." Your child could choose who might change him (Daddy or Nana), where to be changed (on the floor or on the couch), or what to hold (diaper, wipe, or pacifier). You can communicate the choices for your child with words, pictures, or by showing your child an object. When you offer choices by presenting objects, pictures, or using sign language, say what the options are in addition to showing the child the choices (even if your child has a hearing loss).

EMPATHIZE

Empathize with your child's feelings. If your child pouts, says "not now, Mommy," ignores you, screams, or runs away, provide a label for how he might be feeling and follow through with the diapering. You might say, "You look

sad (angry). I know you want to go out and play. Here, hold your blanket. First, change your diaper. Then we can go out and play.” Your empathy will help your child understand that you respect how he feels but that it is still necessary to change his diaper.

- Use or allow your child to choose (with limited options) a transition object.
- This is something (e.g., diaper, book, blanket, bottle, etc.,) that the child can take with him and hold or suck (e.g., pacifier, bottle) during the diapering process.

SMOOTH TRANSITIONS

Ensure that the transition is smooth and encourage your child’s cooperation by letting him know what will happen after you change his diaper with the use of a “First..., Then...” statement. You might say, “First we change Micah’s diaper. Then we can go outside to play.”

Many parents have found success with using a picture for each step of the routine using photos or clip art. The steps might look something like what is listed below for changing Micah’s diaper. For each step, the underlined word would be represented with a photo or picture. Not only does this explain the process for your child, but it also ensures that others (e.g., grandparents, babysitters, etc.) will conduct the routine in a similar and predictable way. For children who can’t see a picture, you might use an object or your words to guide your child through each step.

CHILD AS HELPER

Encourage your child to be a helper in the routine. Active participation in the process builds your child’s self confidence, independence, and problem solving abilities. You might say, “Shelby, time to change your diaper. Please help me find what we need. Hmm. Where do we keep the diapers? (wait) Oh yeah. Thank you. Now we need the wipes. You are such a big helper. Thank you.”

MINIMIZE UNWANTED MOVEMENT.

Some children become very active during diaper changing. When they wiggle around or resist, it places them at danger of falling off the changing table and it makes it difficult for the adult to complete the routine. The following strategies are suggested for keeping your child from wiggling all over the place.

- Reduce distractions in the diapering area. A pet or others running around the child only makes him want to get up and join the fun.
- Describe what you are doing in a fun way. You could do this in song. You might sing, “This is the way we take off your diaper” (to the tune of “This is the way we wash the clothes”) or use some other melody that’s bouncy. You could use “First...Then” statements. You could say, “First we take off you overalls. Then I take off the wet diaper...” and so on.
- Let your child help as much as possible. You can ask your child to help such as “Can you hold your legs up high? Hold the diaper for Mommy? Open the powder for me?”
- Use interesting distractions. Laugh and comment on these as you are diapering your child.
 - You might play peek-a-boo, sing his favourite song or a do favourite finger play (e.g., “itsy, bitsy, spider”).

- Use a toy (e.g., binoculars, stuffed animal, etc.).
- Use stickers – one on each of the child's hands.
- Plan a preferred activity or event to follow diapering.

CELEBRATE SUCCESSES

Celebrate you and your child's successes along the way. Children need to hear in concrete ways what they have done well. You might say, "Thanks for being such a 'big boy.' You really helped me diaper you." or "No more poopy diaper. We did it!" For older children, use natural consequences, such as, "Now your bottom will be clean and not feel sore!" Or "Now you can put on pants and go outside, because you are all dry!"

DIAPERING SUMMARY

1. Prepare your child for the diaper change.
 - Use a transition warning (verbal, timer, count downs or count ups).
 - Provide choices (who, where, when).
 - Empathize with your child's feelings.
 - Provide a transition object.
 - Use "First..., Then..." statements.
 - Use step by step pictures.
 - Encourage your child to be a helper.
2. Change the diaper.
 - Reduce distractions in the room.
 - Describe what you are doing in a fun way (e.g., sing, make up a rhyme).
 - Let your child help.
 - Use "First..., Then" statements.
 - Use interesting distractions (toy, stickers, book, etc.).
 - Say "all done" to end the process.
 - Plan something your child and you will enjoy when finished.

Celebrate your child's successes along the way!

CHAPTER ATTRIBUTION

This page is adapted from [Making Life Easier: Diapering](#) by Pamelazita Buschbacher, illustrations by Sarah I. Perez. The resources is in the open domain, published on The National Center for Pyramid Model Innovations (NCPMI) [website](#).

UNIT 3

Bedtime and Naptime

Chapter Objectives

After this chapter you should be able to:

- Explain the importance of establishing good sleep habits.
- Describe strategies to establish healthy routines for bedtime and naptime.
- Communicate transition strategies for bedtime and naptime routines.
- Explain how the environment affects bedtime and naptime routines.
- Identify signs of sleepiness and fears.

Many families find bedtime and naptime to be a challenge for them and their children. It is estimated that 43% of all children and as many as 86% of children with developmental delays experience some type of sleep difficulty. Sleep problems can make infants and young children moody, short tempered and unable to engage well in interactions with others. Sleep problems can also impact learning. When a young child is sleeping, her body is busy developing new brain cells needed for her physical, mental and emotional development. Parents also need to feel rested in order to be nurturing and responsive to their growing and active young children. Here are a few proven tips for making bedtimes and naptimes easier for parents and children.

ESTABLISH GOOD SLEEP HABITS

Develop a regular time for going to bed and taking naps, and a regular time to wake up. Young children require about 10-12 hours of sleep a day (see the box on the last page that provides information on how much sleep a child needs). Sleep can be any combination of naps and night time sleep.

- Make sure your child has outside time and physical activity daily, but not within the hour before naptime or bedtime.
- Give your child your undivided and unrushed attention as you prepare her for bedtime or a nap. This will help to calm her and let her know how important this time is for you and



Illustration by Sarah I. Perez

her.

Routines

Develop a bedtime and naptime routine. Help your child be ready for sleep. Babies and young children thrive on predictability and learn from repetition. They like and need to know what is happening next. It is important to establish a routine that both you and your child understand and find calming and relaxing. Bedtime routines usually involve undressing, bathing, dressing in pajamas, brushing teeth, toileting for older toddlers and preschoolers, story and/or prayers (for children developmentally older than six months). The order and content will be different for each family depending on the developmental age of your child, the traditions of your family, and the needs of your child's specific disability.

- Do and say the same things before naps and bedtime. This helps your child transition from active play to sleep.
- Establish a predictable place for sleeping. If you want your child to sleep in his own bed, put him down in his own bed. If you would like your child to nap in her room, guide her to sleep in her room. If you begin the bedtime routine in another location (e.g., the rocking chair) and then move the child when sleeping, your child is likely to wake up during a light sleep cycle and become confused about her surroundings.
- Help your child understand the steps in the napping and bedtime routines.
- First..., then... statements help your child understand and predict what will happen next. You might say, "Sara, it's time to take a nap. First, let's find teddy. Then we can pick a book to read. Then we can climb into bed and cuddle."
- Your child might benefit from a picture schedule or a picture book (photos, clipart, objects) of the steps in her napping or bedtime. This can help her understand the steps and expectations of the routine. It can also help other adults and babysitters put her to bed in a similar manner. Supporting others who put your child to sleep in a way that you have found works will be very reassuring and calming for your child and for them.

Waking Up

Tell your child what might happen when she wakes up. The day might have been so much fun that your child does not want to take a break for a nap or go to bed for the night. Follow your calming routine, reassuring your child that the fun will continue when she wakes up. You might want to talk with her about what will happen when she wakes. You might want to show her a picture of what is going to happen after she sleeps. For example, you might say, "First, sleep. Then wake up and we go to the park." You might use pictures of sleep and park to help your child understand.

Transition Objects

Carry a favorite transition object to bed (e.g., a teddy bear, a blankie, a book). A transition object becomes another signal to the child that it is time to go to sleep. Some children prefer an object that is soothing to touch or cuddle while resting.

Provide your child with calming, rest-inducing activities, sounds or objects in the routine. Avoid activities that might excite your child in the hour before bedtime or nap. It is not a time for rough-housing, tickle games, or active play. It is not a time for DVDs or computer games. In fact, you might have an easier time with the naptime/bedtime transition if your child is not engaged in a favourite activity when it is time to start the naptime or bedtime routine. It is important that your routine helps your child prepare for resting and sleeping. Some possible soothing items and activities include sucking a pacifier, hugging a blankie or soft animal, looking through or reading a favourite book, soft music on the CD player, being rocked, a back rub, or singing a lullaby to your child. Reducing the noise and light in the room and nearby rooms is rest-inducing for many young children.



Illustration by Sarah I. Perez

Leave while Awake

Put your baby or child down for sleep while she is still awake. Say “good night” and leave the room. By putting your baby/child down before she’s asleep, she learns to go to sleep on her own, an important skill for the rest of her life. If she falls asleep routinely in your arms or a rocking device, she might get disoriented or scared when waking up in her crib or bed, rather than cozy and comfortable in your arms. She will not have learned how to put herself back to sleep without your help. When placing your child in her bed, you can provide her with soothing sleep aids such as her security blanket, a stuffed animal, a pacifier, or quiet music. Tell your child that you will be back to check on her shortly and then be sure to return in a few minutes. She might cry for a few minutes. If so, you can help her settle down again and then leave the room. You can return to her room on regular intervals to offer comfort, but you should not take your child out of bed.

Eating & Drinking

Avoid certain foods and drinks six hours before sleep (e.g., sodas, chocolate, fatty foods). A little tummy that is digesting sugary, caffeinated or fatty foods can keep a child alert and awake.

Try breast feeding or offering a warm bottle just before bed. Milk can induce a deep sleep. However, if your child is being potty trained, avoid milk three hours before sleep because it may cause them to have an accident during the night. Remember that a child should never be put to bed with a bottle as that causes serious tooth decay. You want to also remember to help your child brush his teeth after any snack or drink that is given prior to sleeping.

Choices

Provide choices whenever possible. Providing choices for your child has proven to be a powerful strategy in preventing challenging behaviours. Choices you offer at bedtime could be whether the night light stays on or off,

what toy the child takes to bed, the story you will read, or if the door is open or shut. This gives your child a feeling of control and helps your child cooperate with your requests. When offering choices, make them concrete and limited (only 2 or 3 choices). For example, you could let your child choose which pajamas to wear (given 2 choices), when to go potty (e.g., before or after brushing teeth), who will give her a bath (e.g., mommy or grandma), or what book to read (given 3 choices), etc.

Reduce Noise

Reduce noise and distractions in and near her room. You want to help your child fall asleep by reducing the distractions or things that make her stay awake. For example, if your child would rather stay up and watch television, turn it off until she is asleep. If it is still light outside, consider shades or curtains that darken the room. If adults or other children are talking or playing, consider asking them to move away from the child's room. When an infant or a young child sleeps in a room with the television on or loud conversation happening, she comes to rely on these to fall asleep but doesn't truly get the restful sleep she needs. If it is not possible to keep the environment quiet, consider playing soothing music near the child to block out other sounds (a ticking clock, fish tank, or fan might also work).

Reduce Light

Reduce light in the room. While you want to darken the room, your child might find it reassuring to have a small light on in the room or her bedroom door open slightly and a light on in the hall.

Ensure Comfort

Make sure your child is comfortable. Check the temperature; what is comfortable for you might be chilly or too warm for your child. Your child might need the security of pajamas that are snug fitting or an extra blanket. She might feel cold even when you think the room is just right. She might need the fan on or off.

Sleep Diaries

Consider keeping a sleep diary for a week. Some children are erratic in their sleep patterns. You might feel at a loss for predicting how much and when she sleeps. A sleep diary is a written log of when your child falls asleep, when your child wakes up, and a calculation of the total amount of sleep for each day. You might also want to write comments about any events that happen that day that could be related to your child's sleep cycles. The sleep diary might help you see relationships between napping and sleeping at night or the consistency of bed- and naptimes. If your child has challenging behaviour related to going to bed; you can also write down information that describes the behaviour challenges and how you responded. This behaviour log could provide you with information about when behaviour challenges are likely to occur and what you or others might be doing to reinforce (i.e., pay off) the behaviours. This will help you get a clearer picture of what works and doesn't work in helping your child fall asleep and sleep well.

Signs of Sleepiness

Look for the signs of sleepiness. There are always signs that your child is getting tired. Think about how your child shows you that she is getting tired. Share these observations with others who help put her to sleep. When your child is sleepy, you should assist him in taking a nap or at bedtime. Signs of sleepiness in infants and toddlers

might include yawning, difficulty focusing, turning her face away from objects or people, rubbing her eyes or nose or pulling her ears, falling down or having difficulty pulling to a stand, and losing interest in play. A sleepy baby might arch her back and lean backwards when you hold her. A preschooler might also show the same signs or might have trouble playing with others, complain of a tummy ache, refuse to follow directions or eat, or become aggressive with others (e.g., pushing, hitting, biting, etc.). Some children become more active when they are tired in an effort to stay awake. Your child might just get “grumpy.”

Talk About Fears

Talk with your child about his fears. For a young child, there really are monsters in the room. Your child might tell you he is scared or he might not yet be able to tell you this. See your child’s room as a two year old or a four year old does. In the darkness of his room, shadows of toys or furniture might seem frightening. If your child expresses fear, let your child know that you understand his fears (e.g., “you are feeling scared.”) and then provide reassurance or comfort (e.g., “That is your toy box making a scary shadow, let me move it so it won’t look like a ghost.”). Then provide her with a soft toy to hug and other calming activities and/or items suggested earlier.

Relock the window, pull down the shade or pull the curtains shut. Check in the closet and under the bed. If your child is afraid of the dark, put a dimmer switch on the light. Start with the light on and gradually dim the light over several weeks. Let your child know that you are nearby and that you will make sure she is safe. Your child might need to know where you will be when she is sleeping, even if you need to use a photo/picture. If you need to remain in the room for your child’s safety, keep the light off or dimmed, remain quiet, and avoid interaction.

If your child cries or gets out of bed, be supportive and let her know you understand her fears. You might say, “I miss you, too. I’ll be in the living room. You’ll be fine. We’ll have fun in the morning.” Calmly return her to bed, make sure that she still has her calming items, reassure her, kiss her good-night, and leave the room.

Celebrate Successes

Celebrate the little successes along the way! You might say, “You are getting to be such a big girl, sleeping in your bed with your teddy.” Your child’s restful sleep makes for a restful you. Then you are both ready for shared days of family fun and learning.

Recommended Sleep

Age	Nighttime	Daytime
1 – 3 months	8½ hrs – 10 hours	3 naps (total of 5 – 7 more hours)
6 – 9 months	11 hours	2 naps (total of 3 – 3.5 hours)
12 – 18 months	11¼ hours	1 or 2 naps (total of 2 – 2.5 hours)
2 years	11 hours	1 nap (90 minutes – 2 hours)
3 years	10½ hours	1 nap (90 minutes – 2 hours)

BEDTIME & NAPTIME SUMMARY

- Make sure your child gets plenty of exercise during the day.
- Develop regular times for bed and naps and stick with them.
- Your child will probably transition out of naps between 2-5 years of age.
- Develop a bedtime and naptime routine.

- Do and say the same things before naps and bedtime.
 - Establish a predictable place for sleeping.
 - Help your child understand the steps in the routines (e.g., use “first, then” statements, picture schedule).
 - Tell your child what might happen when she wakes up.
 - Let your child carry a favorite transition object to bed.
 - Provide your child with calming and rest inducing activities, sounds, or objects in the routine.
 - Put your baby or child down for sleep while she is still awake. Say, “Good night.” and leave the room.
- Give your child your undivided and unrushed attention.
 - Avoid certain foods and drinks six hours before sleep (i.e., sodas, chocolate, fatty foods).
 - Try breast feeding or offering a warm bottle just before bed.
 - Provide choices whenever possible.
 - Reduce noise, light, and distractions in and near your child’s room.
 - Keep a sleep diary so you will know what’s working (or not).
 - Celebrate the little successes along the way.

CHAPTER ATTRIBUTION

This page is adapted from [Making Life Easier: Bedtime and Naptime](#) by Pamelazita Buschbacher, illustrations by Sarah I. Perez. The resources is in the open domain, published on The National Center for Pyramid Model Innovations (NCPMI) [website](#).

UNIT 4

Behavioural Expectations of Infants

Chapter Objectives

After this chapter you should be able to:

- Understand behavioural expectations for infants birth to 12 months.
- Be able to identify strategies for supporting infant behaviour including building attachments and relationships, crying, feeding, diapering, interacting with objects, sleeping and bathing.

Understanding of behavioural expectations of infants is essential when thinking about or using behaviour strategies for infants. Make sure:

- Your expectations are appropriate to the age and developmental level of the infant
- You keep your expectations clear and reasonable
- You tell children what to do instead of what not to do to give clear guidance on you expect

Remember all children develop skills at different rates and at different times. When deciding which strategy will work best with a child, take into account what they can do as well as what new skills they will learn.

BEHAVIOURAL EXPECTATIONS

Infants from Birth-6 months

- Develops own rhythm in feeding, sleeping, and eliminating.
- Gains early control of eye movement.
- Develops motor control in orderly sequence: balances head, rolls over, pulls self to sitting position and sits alone momentarily.
- Begins to grasp objects.
- Learns through senses.
- Coos and vocalizes spontaneously. Babbles in syllables.
- Discriminates primary caregiver (usually mother) from others; is more responsive to this person.

- Imitates movements. Gazes at faces. Smiles to be friendly.
- Likes to be held, played with, tickled, and jostled.
- Shows excitement through waving arms, kicking, wiggling.
- Shows pleasure in anticipation of being fed or picked up. o Cries in different ways when cold, wet, hungry.
- Fears loud or unexpected noise, strange objects, situations or persons, sudden movements, and pain.

Infants from 6 months to 12 months

- Learns through the senses, especially the mouth.
- Likes to put things in and take things out of mouth, cupboards, boxes, etc.
- Likes to repeat the same behaviour, but also likes to see novel things.
- Likes to hear objects named. Begins to understand such familiar words as eat,
- Mama, bye-bye, doggie.
- Finds mother or mother substitute extremely important.
- Will talk to you, using babbling sounds.
- Will start to imitate behaviours of others.
- Eating is a major source of interaction.
- Will not “play nicely” with other infants; will poke, pull, push, instead. This is because the child doesn’t distinguish others as equal beings.
- Needs to feel sure that someone will take care of him/her.
- Becomes unhappy when mother or primary caregiver leaves.
- Draws away from strangers.
- Needs to be held and cuddled with warmth and love.

STRATEGIES FOR SUPPORT

Infant Behaviour Birth to 12 months

- Adapt schedule to Baby’s rhythms as much as possible.
- Supply adequate food.
- Change baby’s position frequently; hold and cuddle often.
- Exercise baby’s arms and legs during bathing and changing.
- Supply visual stimuli, such as mobiles and bright colors.
- Let baby grasp fingers as you pull him/her up
- Provide objects to see, hear, and grasp, e.g., rattles.
- Talk and sing to child a great deal, repeating many words, not just sounds.

- Play pat-a-cake and peek-a-boo. Show facial expressions of smiling in response to child's anticipation.
- Learn to "read" the different cries. Respond to crying consistently.
- Don't be afraid of spoiling the infant – crying is the only way an infant has to express needs.
- Respond to the child's fears by talking in a calm manner and by picking up and cuddling the child.
- Bounce the child gently on your knees, gently rock, carry, gently pat on back.
- Let child play "dropping things" since this helps in understanding the world.
- Provide child with opportunity to use hands and fingers, e.g., finger foods, water play, toys.
- Be especially patient with child's crankiness; provide things to chew on when teething.
- Provide toys and games that involve all five senses.
- Repeat words and activities and introduce child to new activities, e.g., take the child grocery shopping.
- Say the names of objects as the child sees or uses them. Begin to look at very simple picture books with the child.
- Talk to the child.
- Do the things you want the child to do.
- Don't expect the child to play well with others, because other children appear as play objects, like toys.
- Always meet the child's needs related to hunger, cleanliness, warmth, holding, sensory stimulation, and interaction with an adult

Table 1: Building Attachments and Relationships

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant does not look at caregiver or objects	Talk and sing to an infant, repeating many words, not just sounds, interact with them closely.	Hold your infant to give comfort, closeness and warmth.	Teach your infant that you will be there to comfort and support them.
	Have a brightly colored, visually attractive or black/white contrast toy or object to interact with your infant. Hold your infant to give comfort, closeness and warmth.	Talk and interact with infant.	Teach infant how to interact with the environment.
	Respect your infant's cues, he/she might need a break from interactions.	Change your infant's position, so it easier for them to look toward you.	
	Make sure all other needs (diapering, and sleep) are met.	Try doing one comforting action at a time. The infant might be over stimulated by more.	
Your infant is crying	Hold your infant to give comfort, closeness and warmth.	Hold your infant to give comfort, closeness and warmth.	Teach your infant that you will be there to comfort and support them.
	Talk or sing quietly to infant (figure out what sounds sooth them the best....usually the caregiver's voice).	Talk, sing and interact quietly with infant.	Teach them that you will respond when they cry.
	Make sure all other needs (food, diapering, and sleep).	Change your infant's position, hold a different way.	Teach infant about a comforting item (pacifier, blanket, stuffed animal).
	Give child a preferred object such as a pacifier, blanket or stuffed toy (depending on age) to hold.	Swaddle Infant in a blanket to make them feel secure.	Begin to establish routines so infant learns hat to expect.
	Use your infant's preferred method of calming (try one at a time, more may be over stimulating).	Try doing one comforting action at a time. The infant might be over stimulated by more.	
	Make sure the environment is not over stimulating for your infant (it needs to be calm, soothing, lighting dimmed), remove object or the infant if it is too overwhelming.	Remove infant from over stimulating environment.	
Your infant doesn't like to be held, played with, tickled, and jostled	Make sure the environment is not over stimulating for your infant (it needs to be calm, soothing, lighting dimmed).	Make sure all other needs (food, diapering, and sleep) are met.	Teach your infant that you will be there to comfort and support them.
	Find less physical activities the child might enjoy (listen to music, a visual stimulus to look at).	Remove your infant from over stimulating environment.	
	Talk and comfort infant.	Allow infant to lie safely alone, they might have need to self-calm.	
	Make physical contact with infant, touching, patting or rubbing.		

Your infant doesn't like you to leave	Stay and play or interact with infant before leaving.	Hold your infant give comfort and reassurance.	Teach your infant that the place where you leave them is safe by modeling positive interactions with the childcare provider.
	Smile and talk with childcare provider (or person you are leaving the infant with, so the child knows they are a safe and trusting person).	Talk and interact with infant.	Teach an older infant about the schedule of the day and when you will return, "I will be back after you play outside."
	As the infant gets older, use a visual schedule to show him/her when you will return after play, singing, snack or playground.	For an older infant, give him/her a picture of yourself.	Teach your infant that you will be there to comfort and keep them safe.
	Give a picture of yourself to the childcare provider to share with your child while you are gone.	For an older infant, talk through the days schedule and tell him/her when you will return.	
	Don't sneak out, make sure you say goodbye (this gives the infant reassurance you will come back).	Give childcare provider a favorite toy or object that he/she can use with your infant.	
Your infant is fearful of other people	Introduce new people to your infant from the safety of your arms.	Make sure all other needs (food, diapering, and sleep) are met.	Teach your infant that you will be there to comfort and keep them safe.
	Give new person a favorite toy or book to engage with your infant.	Remove infant from the situation or hold them in your arms.	
	Watch for over stimulating situations, where there might be too many strangers for the infant or lots of other distractions.	Reassure your infant knows that you are there and will not leave them.	
	Introduce new people in calm quiet environment.		

Table 2: Feeding

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant refuses to eat or falls asleep after eating a small amount or infant fusses when feeding	Adapted schedule according to your baby's rhythms.	Make sure all other needs (diapering, and sleep) are met.	Teach your infant that you will be there to comfort and keep them safe.
	Try a different feeding position.	Adapted to your infant's schedule and feed him/her when she is interested and/or not sleepy or fussy.	Teach older infant, to use sign language to tell you when they are hungry or full.
	For an older infant, give a choice of what to eat.	Move your infant to a less stimulating place (quiet, low light, and/or quiet music).	
	Allow the infant to sleep, they will wake when hungry.		
	Make sure the environment is not over stimulating for the infant.		

Table 3: Diapering

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant fusses and cries when getting changed	Change your baby's position.	Pick infant up and comfort and calm.	Teach the infant that you will be there to comfort and support them.
	Use visual stimuli, such as mobiles and bright colors to distract your infant.	Talk or sing quietly.	Teach the infant the routine by talking through your actions each time you change them.
	Talk and sing to child while changing.	Move infant to a different spot or change position to make him/her comfortable.	
	Cuddle your infant before placing on table to change.	Have everything ready and do a quick change so you can hold and calm infant.	
Your infant wiggles and moves about when changing	Use visual stimuli, such as mobiles and bright colors to distract infant.	Give older infant something to hold (helping you change the diaper).	Teach the infant the routine by describing your actions each time you change to the infant.
	Narrate what you are doing and praise infant for being still.	Move infant to a different spot or change position to make him/her comfortable.	Teach an older infant that first you do this and then you can choose what to do next.
	If child can sit up or stand on own, offer to allow him/her to stand but have them help with the change.	Distract infant with a mobile or visually interesting toy.	
	Talk to older infant, tell him/her that first we stay still to change the diaper then we will (plan fun activity).		

Table 4: Interaction with Toys or Other Objects

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant seems fearful of toy or object	Introduce new objects/toys slowly.	Make sure all other needs (food, diapering, and sleep) are met.	Teach the infant that you will be there to comfort and keep them safe.
	If the objects/toy make a sound turn volume down.	Be there to comfort and make them feel safe.	Teach infant that you can explore his/her environment together.
	If object/toy makes a sound and it startles the infant, talk and hold them and reassure them that they are safe.	Remove toy/object and give child a preferred toy/object to play with.	
	Select objects/toys for infant by following the infant's preference (quiet toys, toys that move, bright color toys, contrasting color toys etc).		

Table 5: Bedtime/Sleeping/Napping

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant won't like to nap/sleep	Hold, cuddle, rock or sing quiet music for your infant.	Calm and sooth infant by holding, rocking or swaddling.	Teach the infant that you will be there to comfort and support them.
	Play soothing music.	Make sure all other needs food and diapering are met.	
	Try to darken the room or your child's sleep area.		
	Use a favorite sleep item, e.g., stuffed animal, pillow, blanket.		
Your child wants adult attention	Read a simple story about nap/bedtime		
	Rock, cuddle with infant until sleeping.	Offer choice of "comfort item".	Teach the infant that you will be there to comfort and support them.
	Sing quietly to infant.	Calm, sooth infant by rocking, cuddling, or rubbing back.	
	Provide a doll, stuffed animal, or a comfort item to sleep with.	Make sure all other needs food and diapering are met.	
Your child has a hard time settling down or soothing self to sleep	Have infant positioned with minimal distractions (darken room, quiet, calm space a preferred position in your arms).	Offer choice of comfort item.	Teach the infant that you will be there to comfort and support them.
	Put on quiet music.	Make sure all other needs food and diapering are met.	
	Hold, rock, rub infants back or sing to infant.		

Table 6: Taking a Bath

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant does not like water/soap in his/her eyes so struggles with washing hair	Use cloth instead of putting in the bath, gradually start to pour water over arms and legs at a safe temperature then start with short bath experience.	Calm and sooth infant, gradually work to bath.	Teach your infant a bath time routine and go through steps slowly and use the steps every time.
	Develop bath time routine and go through steps slowly.		Teach the infant that you will be there to comfort and support them.
	Sing or talk to the infant while giving a bath.		
Your infant does not like bath time and wants to get out	Use cloth instead of putting in the bath, gradually start to pour water over arms and legs at a safe temperature then start with short bath experiences.	Calm and Sooth infant, gradually work to bath.	Teach your infant a bath time routine and go through steps slowly and use the steps every time.
	Get a book about taking a bath.	Use cloth instead of putting in the bath	Teach the infant that you will be there to comfort and support them
	Move through washing your child quickly so that your child is not in the water long.	Make sure all other needs (food, diapering, and sleep) are met.	
	Sing a silly song, or play a game with your child to make bath time more fun.		

Table 7: Transitions: Going From One Place/Activity to Another

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant doesn't want to leave parent to go to childcare/preschool	Comfort and reassure infant that someone, mommy or daddy, will pick him/her up after school.	Redirect infant with a comfort item or preferred toy.	Show infant by holding, rocking and talking to them that you will return.
	Bring a comfort item from home and for them to hold it during day.	Hold and sooth infant and interact with caregiver so hand-off will be easier.	
	Allow older infant to keep photo of parent in cubby or pocket.	Make sure all other needs (food, diapering, and sleep) are met.	
	Stay a brief amount of time with child, first play/interact with child then start moving away, maybe talking to caregiver then leaving.		

Table 8: Riding in the Car

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant does not want to get in the car	Get and read a book about cleaning up	Hold and sooth infant and when calm place in seat.	Teach infant that you are there to make them feel safe and secure by talking to them, calming them.
	Have favorite blanket to place over car seat once buckled in	Make sure all other needs (food, diapering, and sleep) are met.	
	Give your infant a visual toy to use as a distraction		
Your car is too hot, and your infant is uncomfortable	Cool the car off – If at home, run the air conditioner in the car for a bit before getting in.	Offer a drink.	Teach infant that you are there to make them comfortable and secure by talking to them, calming them and cooling off the car.
	Cool the seat: put an ice pack with a towel over it on the seat of the car seat, or place a towel over the seat if ice is unavailable. Store the ice pack in a small cooler.	Make sure air conditioner is cooling the back seat.	Teach older infant and toddler to sign the motion for hot to tell you what they need.
	Quench his/her thirst – have a drink available for the car ride.	Remove a layer of clothing if possible.	
Your car is too cold, and your infant doesn't like being cold	Warm the car up – If at home, run the heater in the car for a bit before getting in.	Make sure the heater is warming the back seat.	Teach infant that you are there to make them comfortable and secure by talking to them, calming them and cooling off the car.
	Warm the seat – put a blanket over the seat as the car warms up.	Have a blanket to put over the infant, after he/she is securely in the car seat.	Teach older infant and toddler to sign the motion for hot to tell you what they need.
	Warm up – allow him/her wear mittens and a hat.		
Infant seeks attention and reassurance	Put a warm blanket over the car seat.		
	Calm and sooth infant by holding, rocking or singing to them.	Give infant an blanket, toy or visual object (such as a mobile).	Teach infant that you are there to make them feel safe and secure by talking to them, calming them.
	Have sibling or another adult sit next to the infant in the car seat.	Make sure all other needs (food, diapering, and sleep) are met.	
	Talk or sing and entertain infant as you drive.		
	Play soothing, calming music in the car.		

Table 9: Going to Doctor

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Infant needs attention and calming support	Make sure the infant is not hungry.	Make sure all other needs (food, diapering, and sleep) are met.	Teach the infant that you will be there to comfort and support them.
	Bring infant in car seat/child carrier to be able to rock child.	Hold child and rub back, sing to them or walk around with them.	
	Hold child and rub back, sing to them or walk around with them.	Distract the infant with a toy.	
	Bring a "comfort item" to the doctor's visit, such as a soft stuffed animal, favorite small toy, or a blanket.	Give the infant a blanket or stuffed animal to hold.	

Table 10: Shopping

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant is fussing and restless	Plan shopping when your infant is well-rested and not hungry.	Calm, sooth and pay attention to infants cues.	Teach the infant that you will be there to comfort and support them.
	Make shopping time short, and slowly increase time to 30 minutes. If needed, start at 5 minutes, and slowly increase time shopping.	Make sure all other needs (food, diapering, and sleep) are met.	
	Play a game while shopping – look for something red, look for something that begins with “A”, look for something that you drink, etc.	Shorten the shopping trip.	
	Give child something from home to hold for comfort and security.		
	Continually talk to infant while shopping, you can narrate what you are doing.		
Your infant does not like riding in the cart/stroller/car seat.	Limit your expectations – reduce the length of the trip to match your child's tolerance level.		
	Distract – If the infant must ride in a cart/stroller, give him/her a choice of something small to hold in the cart, e.g., juice cup, goldfish crackers, small car, small baby or stuffed animal.	Calm & sooth infant with closeness.	Teach the infant that you will be there to comfort and support them.
	Encourage success – praise your infant the moment that he/she rides appropriately.	Make sure all other needs (food, diapering, and sleep) are met.	
	Continually talk to infant while shopping, you can narrate what you are doing.	Shorten the shopping trip.	
	Avoid shopping when your infant is tired or hungry. Make sure he/she is well rested and well-fed prior to shopping.		

Table 11: Restaurants

Why might my child be doing this?	What can I do to prevent the problem behaviour?	What can I do if the problem behaviour occurs?	What new skills should I teach?
Your infant wants attention	Bring toys to interact with infant or a comforting blanket or stuffed animal for infant to hold.	Make sure all other needs (food, diapering, and sleep) are met.	Teach the infant that you will be there to comfort and support them.
	Make sitting fun – talk with your infant, play simple games, give your infant positive attention when sitting.	Hold and calm infant.	Teach your infant that you will have food, toys etc...and that you will pay/attention to them.
	Bring food (snack) for child to eat, while waiting.	While waiting, walk around with infant.	
Your child wants an adult to play or pay attention to him/her.	Get and read a book about eating in restaurants	Make sure all other needs (food, diapering, and sleep) are met.	Teach your child that you will have food, toys etc...and that you will pay/attention to them.
	Bring toys to interact with infant or a comforting blanket or stuffed animal for infant to hold.	Hold and calm infant.	Teach the infant that you will be there to comfort and support them.
	Make sitting fun – talk with your child, play simple games, give your child positive attention when sitting.	While waiting, walk around with infant.	
	Encourage success – praise your child for sitting and eating.		
	Bring food (snack) for child to eat while waiting.		

CHAPTER ATTRIBUTION

Chapter adapted from: Vorhaus, E. (2012.) *Family Routine Based Support Guide: Building Relationships with Infants*. Team Tennessee/Pyramid Model State Partnership. https://challengingbehaviour.org/docs/RoutineSupportGuide_family_relationships-infants.pdf

Family Routine Based Support Guide: Building Relationships with Infants is adapted from: Lentini, R., Vaughn, B. J., Fox, L., & Kwang-Sun Blair (2009). *Creating teaching tools for young children with challenging behaviour* (3rd edition). Tampa, Florida: University of South Florida.

PART II

OBSERVING

UNIT 5

Observation and Documentation

Chapter Objectives

In this chapter you will be learn:

- The role of observation.
- How to improve observation skills.
- Planned vs. Spontaneous observations.
- The role of documentation.
- Objective vs. Subjective evidence.
- Recognizing your biases and ethical documentation.

THE KEY TO INTENTIONAL TEACHING

To provide children with a safe and nurturing learning environment and to maintain program effectiveness, teachers must incorporate observation, documentation and assessment into their daily routines. To truly be effective, teachers must develop skills and strategies that are grounded in **best practices**. In this chapter you will be presented with information that highlights how observation and documentation can be used as a key strategy to ensure intentional teaching. You will examine the initial steps to take to becoming a skilled observer, and you will reflect on how to objectively document the interactions that you see and the conversations that you hear. It is important to note that becoming a skilled observer takes time and practice, and that learning how to incorporate observation, documentation and assessment into your regular routines and daily duties requires some thoughtful consideration.

THE ROLE OF OBSERVATION

Observations are conducted every day in early childhood classroom environments. Teachers are constantly surveying the environment and completing safety checks to make sure the equipment and materials are safe for the children to use. Teachers also perform daily health screenings to ensure their children are healthy enough to participate in program activities. Beyond the standard safety check and health screening, teachers have many other important tasks and duties that they must do in order to maintain a copasetic classroom environment. Intentional teachers use their observations to plan and implement curriculum, set up engaging

learning environments, monitor the children’s social interactions, track behaviours, communicate with families, and assess each child’s progress and development. Essentially, observations help teachers be more accountable. By conducting regular observations intentional teachers can:

- Evaluate program effectiveness
- Evaluate teacher effectiveness
- Make improvements to ensure quality practices
- Plan and implement developmentally appropriate curriculum
- Measure and assess a child’s development
- Develop respectful family partnerships
- Understand the cultural practices and family structure
- Select effective learning strategies to support and accommodate the diverse needs of children
- Ensure ethical conduct and professional standards of practice
- Teach with confidence

Objective
Build
Strengthen
Engage
Reflect
Verify
Aware
Tweak
Inform
Ongoing
Notes

Key Takeaway

Observation is defined as “the process of gathering information about objects and events using senses of sight, smell, sound, touch and taste, noticing specific details or phenomena that ordinarily might be overlooked”¹

1. California Department of Education. (2016). *Best Practices for Planning Curriculum for Young Children: The Integrated Nature of Learning* (p. 64). <https://www.cde.ca.gov/sp/cd/re/documents/intnatureoflearning2016.pdf> Used with permission

If we want to understand children, we must first watch them and listen to them. Then, we must try to make sense of what we observed and give it meaning. The role of observation is to provide teachers with information and evidence that they will need to make informed decisions on how to best support the children in their care. With each observation, you will get a glimpse into a child's developing mind. Not only will you see a child's personality emerge, you will be able to see what a child can do. As you watch your children, you will see how they problem solve when conflicts arise and how they cope with the stress from being in a group setting. You will learn about their individual needs and their cultural practices. When you watch children closely, their interests and abilities are revealed. With each observation, you will gain useful insight that will help you become an intentional teacher.

BECOMING A SKILLED OBSERVER

To truly observe a child, you must be present, knowledgeable, inquisitive and intentional. With every observation, you will sharpen your skills as you learn how to effectively gather objective evidence and detailed data.

Be present: To capture all the individual mannerisms, subtle social nuances, non-verbal body language and dynamic conversations that occur throughout the day you must be attentive, focused and ready to go at any given moment. Children move fast. When we blink, we are bound to miss some little detail or precious moment, that's a given. Being present takes considerable effort and careful planning.

Be knowledgeable: Understanding the core concepts of early childhood education is extremely important if you are to set reasonable expectations and plan developmentally appropriate learning experiences. Familiarizing yourself with child development theories will help you understand and appreciate why children do what they do. Learning about the key principles in early care and education will provide you with a solid foundation and a wide range of instructional strategies to support a child's development.

Be inquisitive: Think of yourself as a researcher. Your primary mission is to investigate the children in your care by routinely gathering evidence, using a variety of observation methods and tools. As a good researcher you will need to ask some thoughtful questions. These questions will guide you as you plan purposeful observations and as you select your method of observation. Here are some sample questions you may ask yourself: *What activities interest Max? How many times did Stevie hit today? What skills did Hazel master today with this activity, and what skills need further support? How long did Zoey stay engaged while playing in the sandbox? What milestones will this activity support?* By asking thoughtful questions, you will learn more about the children in your care and you will do a better job at supporting each child's individual needs. Rather than fixating on a child's behaviour, in time you will begin using focused observations to try and figure out the reasons why a child acts the way they do.

Be intentional: As you organize learning experiences, set up the classroom and outside environment, assess children's developmental progress, engage in activities, and interact with your children and families – you must have a thoughtful plan of action in place. "Intentional teaching means that everything you do as a teacher has a specific goal and purpose".² Even as spontaneous situations arise, intentional teachers must make the most of teachable moments. Intentional teachers conduct regular observations and gather objective documentation data to be accountable for the actions they take, the plans they generate and the assessments they make.

SPONTANEOUS OBSERVATIONS

Observations can be Spontaneous or Planned. **Spontaneous observations** occur all the time. Whether teachers are actively engaged with their children during an activity or in the background cleaning up after an activity, teachers have numerous opportunities to see and hear some wonderful developments as they randomly occur.

2. Gordon, A. & Browne, K.W. (2016). *Beginnings & Beyond: Foundations in Early Childhood Education*. Cengage Learning.

According to Piaget, children require long uninterrupted periods of play and exploration so that they can discover things for themselves. If we truly believe that children are capable of socializing, problem solving, and creating complex systems with rules, then we can successfully use spontaneous observations to capture a child's development as it unfolds naturally.

As intentional teachers, we can also appreciate when teachable moments arise unexpectedly. These golden moments are noteworthy as well. For example, as we witness a child attempting to master a milestone, we may provide some verbal support or guidance to scaffold the child's learning. For example, when Abraham is becoming frustrated with not being able to get a piece of his puzzle to fit, a teacher might ask, "What happens when you turn the piece around?" During spontaneous situations, we must remember to simultaneously make mental notes so that we can later write down and reflect on a more formal plan of action that can be later used to help the child achieve their developmental goals.

Advantages

- Being in the moment allows you to enjoy your children, and children appreciate your presence.
- When you are present, you can celebrate a child's success or provide positive reinforcements to help them master major milestones.
- While being spontaneous, you can focus on the child's interests and pose thoughtful questions to extend and enrich their learning experience.
- When a teacher keeps a low profile, a child is less likely to be self-conscious or nervous.

Disadvantages

- The longer you wait to document your spontaneous observation evidence, the harder it will be to remain objective and recall the vital details which is important when tracking behaviours or assessing development.
- The more time that passes, the more difficult it will be to access accurate data.
- Not documenting the children's dialogue or capturing their key quotes in a timely manner makes it difficult to remember their actual word choices and use of vocabulary which is essential for assessing a child's expressive language development.

PLANNED OBSERVATIONS

Becoming a skilled observer takes practice. At first you may be slightly overwhelmed with trying to incorporate an official observation time into your already busy schedule. You may struggle with finding that delicate balance between knowing when to interact with your children and realizing when to step back and observe. Once you do observe, you might be surprised by the amount of evidence you have collected on each child. What's more, you will have to sift through all the evidence, and that can be both time consuming and exhausting. Since your time is limited and you cannot possibly observe everything, incorporating a planned observation will help you navigate through your busy day and you will be able to gather more specific evidence³

3. Grouland, G. & James, M. (2013). *Focused Observations: How to Observe Young Children for Assessment and Curriculum Planning, Second Edition*. Redleaf Press.

OBSERVATION PLANNING QUESTIONS

When should I observe?

From the moment a child walks into their classroom until the time they leave, opportunities to learn are occurring. Some observations will happen spontaneously, while others will be scheduled. To see a child's full potential, you will need to observe at various times throughout the day. For example, some children are slow-to-warm and it may take them some time to get acclimated before they can fully engage and interact with others. If a child is slow-to-warm, the morning drop-off may not be the best time to document their social development. You will want to track them throughout the day, at various times (including transition times and snack/meal times), to get a full picture of who they are and what they can do.

Where should I observe?

Many times, observations are centered around structured, teacher-directed activities. This is, in fact, a perfect time to witness what major milestones a child has mastered. However, observing a child while they are exploring in the dramatic play area (**inside**) or while they are in the sandbox area (**outside**) can prove to be just as enlightening. During child-directed play or open exploration, you will no doubt be able to document many of the developmental skills as suggested in the DRDP or Rating Scales, especially how they communicate, cooperate, solve dilemmas and create. Because children can play and learn differently while they are inside as compared to when they are outside, it is necessary to observe in both environments. Likewise, it is important to observe in all activity areas and play spaces.

What observation method should I use?

Use a variety of methods to record and document your children. You will want to "try out" several tools and techniques to find your "go to" method. Because each tool has a specific purpose or focus, using a variety of methods will provide you with sound documentation data to better understand the whole child's development. **Note:** In the next chapter, you will examine the various tools and techniques more closely.

Who should I observe?

You will want to observe each child as individuals, and you will want to track group interactions. Becoming aware of who is in your class is necessary if you are going to create a caring classroom community and respectful learning environment. *Look for those who are the leaders in your group; find out who needs more one-to-one support and who are your helpers; watch for who plays with who.* This insight can help you organize peer scaffolding opportunities which can free up some of your time. As a gentle reminder, sometimes we connect with certain children for one reason or another, and other times a child may challenge us. Either way we need to regularly observe each child with an open mind and an open heart, and we need to look at children with a clear lens that is free of bias. Each child needs your attention; each child has unique gifts; and each child needs your support.

What is the focus of my observation ... what am I looking for?

With focused observations, there usually is a specific goal in mind. For example, you might want to know what milestones a child has mastered. For that, you would use a developmental checklist to "check-off" all the skills the child was observed doing. Maybe you want to learn what the child's interests are and what they like to

play with. For that, you can use a frequency count to tally up all the areas and activities the child used during that observation. Keep in mind that you can observe several skills and competencies across multiple domains during one observation. For example, one day you might set out a math activity and the children are expected to create patterns using colorful beads and pipe cleaners. While they work and play, you can listen to the children's conversations as they describe the patterns they are making; and you can note their fine motor development based on how well they string the beads onto the pipe cleaner; you can also see how they shared space and materials with their peers. Although this was a math activity, many other areas of development can be observed.

THE ROLE OF DOCUMENTATION

One of the cornerstones of a high-quality early care and education program is the practice of observing, documenting and assessing children's development. In order to make formative decisions that will guide what goes on in the classroom, there needs to be an organized system in place to collect information. When we record our observations and collect data, we "hold in memory the actions, nonverbal communication, or comments that seem to be significant to children's thinking."⁴ When we document children's learning and collect key artifacts, we create tangible evidence that we can share with the children and their families, along with administrators and stakeholders. There are many ways you can record and document children's learning. In fact, you should attempt to utilize several methods as part of your regular observation routines.

To collect and record data you can use the following methods:

- running records
- anecdotal notes
- checklists
- frequency counts
- learning stories
- time or event samples
- work samples
- taking photos, videotaping, or audio recordings

STORING DOCUMENTATION

To safely store your collected data, you will need to have an organized system in place. Portfolios are a popular strategy used by intentional teachers. To create a portfolio, you can use a binder or notebook, a file or accordion-style folder, or a cardboard box. As you collect observation evidence for each child, it is vital that you date everything so you can organize it chronologically. This will help you track each child's progress throughout the school year more efficiently. Portfolios help you construct a well-rounded and authentic picture of each child in your class. Knowing the "whole child" you are better equipped to build on each child's individual interests, and you are more apt to plan developmentally appropriate activities.

Each child should have their own portfolio. A well-organized portfolio will contain observations and artifacts of children's work that are collected at different time periods throughout the school year. It is recommended that you include some type of documentation that highlights each developmental domain. For example:

4. California Department of Education. (2015). *California Preschool Program Guidelines*. <https://www.cde.ca.gov/sp/cd/re/documents/preschoolprogdlns2015.pdf>.

- **Gross Motor:** Take photographs of your child while they are engaged in outside activities like running, jumping, climbing, riding a bike or playing in the sandbox.
- **Fine Motor:** Keep a checklist of when your child learns to button, zip, and tie his shoes. Include work samples of their cutting, coloring, painting, and samples of emergent writing
- **Social-Emotional:** Write anecdotal notes when your child engages in open-ended, child-directed play. Take note of how they share and cooperate with others. Do a frequency count to see which centers your child chooses to spend their time in and tally their play patterns to see if they prefer to play alone or with others.
- **Cognitive:** Chart a science experiment and take photos. Photograph a completed puzzle. Use a video camera to record a child as she builds a block bridge. And, as she explains her process and she had to figure out all the steps to take so that the bridge wouldn't fall down – be sure to record that too.
- **Literacy and Oral language:** Save writing examples to track how the child writes her name. Include illustrations of stories they love and the stories they write themselves. Write down quotes in your running record or make audiotapes of conversations during circle time.
- **Creative expression:** Videotape your child while playing in the dramatic play area or while performing a dance during music and movement. Photograph a clay creation, painting or block tower.

To be clear, it isn't the amount of documentation you collect for each portfolio that matters, it's the quality of information you gather. Portfolios tell a story of the whole child. There should be a beginning, middle, and an end. Each work sample, anecdotal note, checklist, frequency count and learning story should be used to showcase how a child processes information, develops relationships, and learns while playing.

DOCUMENT CHILDREN'S LEARNING

Whether you collect evidence through spontaneous or planned observations, you will use your documentation to ultimately assess a child's learning, growth, and development. With well-organized documentation, intentional teachers can effectively communicate with a child's family, using the evidence and artifacts they have collected over time. Families appreciate being able to see their child's progression and how they interact with others. Families also enjoy seeing the types of activities their child engages in during a typical day at school. Here are a few ways documentation can be used to showcase a child's learning, growth and development:

- rating scales and formal developmental assessments
- daily progress reports
- documentation boards

Key Takeaway

Teacher Tips When Gathering your Documentation

- Date – this is key in tracking development over time
- Time – start time and end time
- Setting – note the location (indoor or outdoor; center or play area)
- Purpose – what is the intended goal
- Note the child (or children) who are involved in the activity
- Record only the facts – Write down exactly what you see and hear
- Be as concise (to the point) as you can
- Record the facts in the order as they occur
- Be descriptive and provide vivid details -create a visual picture so others can “see” what is happening
- Be specific and avoid vague or general terms – this is helpful when you go back to review your data

OBJECTIVE VERSUS SUBJECTIVE OBSERVATION EVIDENCE

Objective Observations

- Intentional teachers must learn how to write objective observations. As you observe, it is best to write down all that you see and hear, and report just the facts. It takes practice to learn how to separate facts from opinions. Here are some helpful tips for you to review:
 - Objective observations are based on what we observed using our senses, we record exactly what we see, hear, taste, touch, and smell.
 - Objective information is based on the facts we gather. If we don't see it, we don't report it. We report only details and provide vivid descriptions.
 - Results are more likely to be valid and reliable from child to child.
 - Objective terms that can be used: seems to be, appears to.

Subjective Observations

- Subjective observations are often influenced by our past events, personal experiences and opinions, and can be biased based on our cultural backgrounds
- Subjective information is based on our opinions, assumptions, personal beliefs, prejudice feelings or can be based on suspicions, rumors and guesses
- Results are often inconsistent and vary from child to child
- Subjective words to avoid: just; because; but; always, never; can't; I think; happy, smart, helpful, pretty, angry, shy, likes, loves, hates, sad.

RECOGNIZING YOUR BIASES

Google the word bias and this is what pops up: “prejudice in favour of or against one thing, person, or group compared with another, usually in a way considered to be unfair.”

Biases, we all have them. Biases stem from our upbringing. Every interaction and every experience we have had has shaped who we are. To some degree, our biases influence our beliefs and behaviours, they sway our attitudes, and they affect our personalities. Because our biases are so ingrained into who we are, it would be unrealistic to simply say “ignore your bias.” Therefore, a valuable exercise might be to do a self-check and examine your own biases. Look for those biases that are “triggers.” More specifically, think about the behaviours, temperamental traits, and moods that make you feel uncomfortable, frustrated, or annoyed.

It is important to note, that we might not be fully aware of all our biases. For example, when a child says, “give me some milk!” Our first response might be “Ummm, how do you ask?” We might not realize that manners (or lack of them) can make us react in a judgmental way. What’s important to recognize is that how we feel about the child’s behaviour can taint how we see them. What’s more, our biases can influence how we gather our observation evidence. As intentional teachers we have to recognize our biases so we can treat all children with the respect that they deserve.

We shall not participate in practices that discriminate against children by denying benefits, giving special advantages, or excluding them from programs or activities on the basis of their sex, race, national origin, immigration status, preferred home language, religious beliefs, medical condition, disability, or the marital status/family structure, sexual orientation, or religious beliefs or other affiliations of their families.⁵

So as not to lose our objectivity, it is important to keep an open heart, an open mind, and a clear lens. Rather than letting a child’s behaviour trigger you, look beyond their behaviour, look beyond your bias. Focus on collecting objective observation evidence and use that data to reflect on what might be causing that behaviour. Consider ways that you can support the child through redirection, modeling, scaffolding or positive reinforcements. As intentional teachers, one of our primary roles is to empower children, and to build meaningful relationships by creating warm, caring environments.

Key Takeaway

Common Mistakes to Avoid When Writing Observation Evidence

- **Making Conclusions:** Billie can’t do anything by himself **because** he is the youngest in a large family and they do everything for him; Sharon’s parents are getting a divorce, **so she is sad**
- **Making Assumptions:** Annie **never** shares; Denise **always** hits Thomas
- **Labeling:** Rosie **is mean**; Jeff is such a **good boy**
- **Comparing:** Tommy **can’t** ride the bike **as well as** Sam; Zoey was **the best** listener at circle time
- **Focusing on Feelings or Emotions:** Max looks so **sad** today; Jax looks so **happy** as he slides down the slide
- **Adding Opinions:** Martha **really likes** playing dress up, she is in the dramatic play area every day; Suki **is shy** and never says anything during circle time.

5. NAEYC. (May 2011). *Code of Ethical Conduct and Statement of Commitment*. https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/Ethics%20Position%20Statement2011_09202013update.pdf

ETHICAL GUIDELINES WHEN OBSERVING CHILDREN

Every day, teachers observe, record and capture essential moments in a child's development. The evidence and artifacts that are gathered are then used to plan curriculum and assess development. Although we have highlighted the importance of gathering work samples and observation evidence as a key element to be an intentional teacher, we must also consider the perspective of the child. In the article "Who is Watching? Thinking Ethically about Observing Children" the authors highlight some of the ethical tensions that can arise within early childhood settings when trying to balance the rights of children, the responsibilities of teachers and the role of a student who is training to be a future teacher.

In most classrooms, a typical day includes teachers grabbing their cameras to take snapshots of the children in their care so that they will have ample documentation. Consider this – does the teacher's presence change the context of the child's experience? Does the thought of being monitored make the child behave any differently? How does the child feel about having their picture taken? Are teachers becoming overly concerned about capturing children in precious moments, rather than being engaged in teachable moments? As a "student" who is learning to observe and document a child's development it is important for you to consider the following guidelines when observing children:

- Take every precaution to maintain confidentiality and to ensure privacy
- Remember to ask if it is OK to take photographs of children and their work
- Understand that children have the right not to take part in activities
- Be respectful and keep a reasonable amount of space between you and the child so as not to interfere with their play and learning
- Be attuned to children's body language, temperament and styles of communication
- See each child as a unique individual who has their own perspective, set of feelings, interests, and way of socializing, along with their own cultural context, belief system, and values
- Be upfront and inform children about the purpose of your observation visit if you are approached
- Share information with the child about what you have observed when appropriate
- Write quotes down just as they were said without adding context, or trying to rationalize what the child may have meant
- Be aware that photos and observation data should be collected in a non-intrusive manner
- Ensure that observation evidence and photos are used only for the purposes intended
- Handle photos and data with care and sensitivity, and always store information securely
- Realize that a child's reactions, behaviours and conversations may not be what you expect and therefore you should refrain from being judgmental or tainted by your cultural biases

By following these guidelines, you are providing the children you observe with the respect they deserve while ensuring their dignity and safety. The centers and programs where you are observing are trusting you to act with integrity while you are at their site observing their children. Lastly, families will appreciate that you have their child's best interest at heart.



Observing the world through a different lens. Credit: Andrew Seaman

OBSERVATION AND DOCUMENTATION DOS AND DON'TS

Whether performing a planned or spontaneous observation here are some helpful tips to ensure you are recording quality evidence:

Do

1. Note the date, time, setting,
2. Note the child (or children) involved
3. Record only the facts – in a concise (to the point) manner
4. Record the facts in the order as they occur and exactly as you see it
5. Collect vivid details and quotes
6. Use a variety of Observation Methods
7. Observe with an open heart, an open mind and a clear lens, free of bias
8. Be attentive and alert, and use all your senses
9. Note what the child CAN DO rather than what he cannot do
10. Keep a low profile and respect the children's space while they are playing

Don't

1. Do not interfere or pressure the children to perform
2. Do not assume or state your opinion while recording evidence

3. Do not record anything you do not see
4. Do not label behaviours, actions or feelings
5. Avoid using subjective, bias or judgmental terms
6. Avoid using exaggerations and conditional words
7. Do not summarize information
8. Avoid using generalizations or vague terms

CONCLUSION

To become a skilled observer takes time and practice. You will need to figure out your rhythm so that you can incorporate observation and documentation into your regular routine. As an intentional teacher, you will want to plan systematic observations so that you can document each child's unique qualities, interests, developmental strengths and needs, as well as uncover their cultural practices, approaches to learning and play preferences throughout the school year. As you gather evidence you will want to be as objective as you can be, and you will have to recognize your biases. As you collect your documentation on each child, you will want to organize it in a chronological manner and store it safely. Lastly, be sure to observe every child in your class, be aware that some children may catch your attention more than others for one reason or another. In the next chapter, we will examine several observation tools and techniques that you will want to use as part of your regular observation routine to ensure high-quality practices.

IMAGE CREDITS:

Seaman A. (n.d.) Observing the world through a different lens. Unsplash. <https://unsplash.com/@amseaman>

CHAPTER ATTRIBUTION

Adapted from [Chapter 7: Observation and Documentation: The Key to Intentional Teaching](#) by Gina Peterson and Emily Elam in [Infant & Toddler Development](#) published by Northeast Wisconsin Technical College under a [CC BY](#) License.

UNIT 6

Developmental Milestones

Chapter Objectives

In this chapter you will learn:

- Developmental milestones for infants across developmental domains for children 2 months to 3 years of age.

TWO MONTHS

Cognitive

- Pays attention to faces
- Begins to follow things with eyes and recognize people at a distance
- Begins to act bored (cries, fussy) if activity doesn't change

Fine Motor

- Grasps reflexively
- Does not reach for objects
- Holds hands in fist

Gross Motor

- Can hold head up and begins to push up when lying on tummy
- Makes smoother movements with arms and legs

Language

- Coos, makes gurgling sounds
- Turns head toward sounds

Social and Emotional

- Begins to smile at people
- Can briefly calm himself (may bring hands to mouth and suck on hand)
- Tries to look at parent

FOUR MONTHS

Cognitive

- Lets you know if she is happy or sad
- Responds to affection
- Reaches for toy with one hand
- Uses hands and eyes together, such as seeing a toy and reaching for it
- Follows moving things with eyes from side to side
- Watches faces closely and recognizes familiar people and things at a distance

Fine Motor

- Brings hands to mouth
- Uses hands and eyes together, such as seeing a toy and reaching for it
- Follows moving things with eyes from side to side
- Can hold a toy with whole hand (palmar grasp) and shake it and swing at dangling toys

Gross Motor

- Holds head steady, unsupported
- Pushes down on legs when feet are on a hard surface
- Maybe able to roll over from tummy to back
- Brings hands to mouth
- When lying on stomach, pushes up to elbows

Language

- Begins to babble
- Babbles with expression and copies sounds he hears
- Cries in different ways to show hunger, pain, or being tired

Social and Emotional

- Smiles spontaneously, especially at people
- Likes to play with people and might cry when playing stops
- Copies some movements and facial expressions, like smiling or frowning

SIX MONTHS

Cognitive

- Looks around at things nearby
- Brings things to mouth
- Shows curiosity about things and tries to get things that are out of reach
- Begins to pass things from one hand to the other
- Looks for partially hidden object
- Looks for fallen toys

Fine Motor

- Reaches with both arms
- Brings things to mouth
- Begins to pass things from one hand to the other

Gross Motor

- Rolls over in both directions (front to back, back to front)
- Begins to sit without support
- When standing, supports weight on legs and might bounce
- Rocks back and forth, sometimes crawling backward before moving forward

Language

- Responds to sounds by making sounds
- Strings vowels together when babbling (“ah,” “eh,” “oh”) and likes taking turns with parent while making sounds
- Responds to own name
- Makes sounds to show joy and displeasure
- Begins to say consonant sounds (jabbering with “m,” “b”)

Social and Emotional

- Knows familiar faces and begins to know if someone is a stranger
- Likes to play with others, especially parents
- Responds to other people's emotions and often seems happy
- Likes to look at self in a mirror

NINE MONTHS

Cognitive

- Watches the path of something as it falls
- Looks for things he sees you hide
- Plays peek-a-boo
- Puts things in her mouth
- Moves things smoothly from one hand to the other
- Picks up things like cereal o's between thumb and index finger

Fine Motor

- Puts things in her mouth
- Moves things smoothly from one hand to the other
- Picks up things between thumb and index finger (pincer grip)

Gross Motor

- Stands, holding on
- Can get into sitting position
- Sits without support
- Pulls to stand
- Crawls

Language

- Understands "no"
- Makes a lot of different sounds like "mamamama" and "bababababa"
- Copies sounds and gestures of others
- Uses fingers to point at things

Social and Emotional

- May be afraid of strangers
- May be clingy with familiar adults
- Has favorite toys

ONE YEAR

Cognitive

- Explores things in different ways, like shaking, banging, throwing
- Finds hidden things easily
- Looks at the right picture or thing when it's named
- Imitates gestures
- Starts to use things correctly; for example, drinks from a cup, brushes hair
- Bangs two things together

Fine Motor

- Reaches with one hand
- Bangs two things together
- Puts things in a container, takes things out of a container
- Lets things go without help
- Pokes with index (pointer) finger

Gross Motor

- Gets to a sitting position without help
- Pulls up to stand, walks holding on to furniture ("cruising")
- May take a few steps without holding on
- May stand alone

Language

- Responds to simple spoken requests
- Uses simple gestures, like shaking head "no" or waving "bye-bye"
- Makes sounds with changes in tone (sounds more like speech)
- Says "mama" and "dada" and exclamations like "uh-oh!"
- Tries to say words you say

Social and Emotional

- Is shy or nervous with strangers
- Cries when mom or dad leaves
- Has favorite things and people
- Shows fear in some situations
- Hands you a book when he wants to hear a story
- Repeats sounds or actions to get attention
- Puts out arm or leg to help with dressing
- Plays games such as “peek-a-boo” and “pat-a-cake”

18 MONTHS

Cognitive

- Knows what ordinary things are for; for example, telephone, brush, spoon
- Points to get the attention of others
- Shows interest in a doll or stuffed animal by pretending to feed
- Points to one body part
- Scribbles on his own
- Can follow 1-step verbal commands without any gestures



Fine Motor

- Scribbles on his own
- Can help undress herself
- Drinks from a cup
- Eats with a spoon with some accuracy
- Stacks 2-4 objects

18 months old. Credit: Lilly Greg.

Gross Motor

- Walks alone
- Walks up stairs holding for support
- May run
- Carries and pulls toys while walking

- Can help undress herself
- Climbs onto and down from furniture

Language

- Says several words
- Say and shakes head “no”
- Points to show someone what is wanted
- Uses two word sentences
- Repeats words overheard in conversation

Social and Emotional

- Likes to hand things to others as play
- May have temper tantrums
- May be afraid of strangers
- Shows affection to familiar people
- Plays simple pretend, such as feeding a doll
- May cling to caregivers in new situations
- Points to show others something interesting
- Explores alone but with parent close by.

TWO YEARS

Cognitive

- Begins to sort shapes and colors
- Completes sentences and rhymes in familiar books
- Plays simple make-believe games
- Follows two-step instructions such as “Pick up your shoes and put them in the closet.”
- Names items in a picture book such as a cat, bird, or dog
- Matches object to picture in book

Fine Motor

- Builds towers of 4 or more blocks
- Might use one hand more than the other
- Makes copies of straight lines and circles
- Enjoys pouring and filling

- Unbuttons large buttons
- Unzips large zippers
- Drinks and feeds self with more accuracy

Gross Motor

- Stands on tiptoe
- Kicks a ball
- Begins to run
- Climbs onto and down from furniture without help
- Walks up and down stairs holding on
- Throws ball overhand

Language

- Points to things or pictures when they are named
- Knows names of familiar people and body parts
- Says sentences with 2 to 4 words
- Follows simple instructions
- Repeats words overheard in conversation
- Points to things in a book

Social and Emotional

- Copies others, especially adults and older children
- Gets excited when with other children
- Shows more and more independence
- Shows defiant behaviour (doing what he has been told not to)
- Plays mainly beside other children, but is beginning to include other children, such as in chase games

THREE YEARS

Cognitive

- Can work toys with buttons, levers, and moving parts
- Plays make-believe with dolls, animals, and people
- Does puzzles with 3 or 4 pieces
- Understands what “two” means

Fine Motor

- Copies a circle with pencil or crayon
- Turns book pages one at a time
- Builds towers of more than 6 blocks
- Screws and unscrews jar lids or turns door handle

Gross Motor

- Climbs well
- Runs easily
- Pedals a tricycle (3-wheeled bike)
- Walks up and down stairs, one foot on each step
- Kicks ball forward
- Throws ball overhand

Language

- Follows instructions with 2 or 3 steps
- Can name most familiar things
- Understands words like “in,” “on,” and “under”
- Says first name, age, and sex
- Names a friend
- Says words like “I,” “me,” “we,” and “you” and some plurals (cars, dogs, cats)
- Talks well enough for strangers to understand most of the time
- Carries on a conversation using 2 to 3 sentences

Social and Emotional

- Copies adults and friends
- Shows affection for friends without prompting
- Takes turns in games
- Shows concern for a crying friend
- Understands the idea of “mine” and “his” or “hers”
- Shows a wide range of emotions
- Separates easily from mom and dad
- May get upset with major changes in routine
- Dresses and undresses self

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ATTRIBUTION

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UNIT 7

Infant Development

Chapter Objectives

In this chapter you will be learn:

- Developmentally Appropriate Practice (DAP) in an infant room.
- Developmental considerations for infant care.
- Infant temperaments.
- States of consciousness and safe sleep practices.

Children reach milestones in how they play, learn, speak, behave, and move (like crawling, walking, or jumping) and development proceeds in a predictable sequence. For example, infants crawl before they walk, babble before they talk, and so on. Remember that each child achieves the developmental milestones at an individual rate.

IMPORTANCE OF DEVELOPMENTAL MILESTONES

Awareness of the developmental milestones in infancy is important for several reasons. **First**, an understanding of child development is critical to developmentally appropriate practice. The three core considerations of Developmentally Appropriate Practice (DAP) are:

- **Age-appropriateness** which means recognizing what is typical at each age and stage of development. Milestones are determined by research.
- **Individual-appropriateness** as each child's rate of development is different.
- **Social and cultural appropriateness** so that the curriculum is meaningful, relevant, and respectful for each child and family.

As an educator, you identify goals for learning and development that are achievable and challenging. Achievable goals are age-appropriate as defined by developmental milestones. By recognizing milestones you support individualized and **intentional** curriculum planning to meet each child's developmental needs.

1. National Association for the Education of Young Children. (2009). Developmentally Appropriate Practice (DAP). <https://www.naeyc.org/resources/developmentally-appropriate-practice>

Recognizing developmental milestones allows you to know when referrals should be made to Early Intervention or to other professionals. As an educator you will likely use screening tools to get a quick look at major developmental milestones across domains, to determine if the child's development appears to be progressing typically. If a screening shows that a child has not achieved the milestones or indicators typical for her age, these results indicate that further assessment is needed. The primary purpose of screening is to identify any potential concerns.

DAP in an Infant Room

At mealtime, Jill notices that 11-month-old Ryan grabs for a spoon during feedings. According to developmental milestones, Ryan isn't old enough to feed himself, however, he is determined to try. As the chart shows below this is a skill typical of 12-14-month-old children. She allows him to hold and try using the spoon even though it is doubtful he will achieve the goal of self-feeding. To challenge him, later in the day, Jill gets Ryan a spoon and a bowl to play with to practice the skill. Jill selects materials with Ryan's specific interests and developmental progress in mind.

Guidelines for the Development of Self-Feeding Skills ²

Age	Milestone
6 to 9 months	Wants to help with feeding. Starts holding and mouthing large crackers/cookies. Plays with spoon; grabs/bangs spoon; puts both ends in mouth.
9 to 13 months	Finger feeds soft foods and foods that melt quickly Enjoys finger feeding
12 to 14 months	Dips spoon in food Moves spoon to mouth but is messy and spills
15 to 18 months	Scoops food with a spoon and feeds self
18 to 24 months	Wants to feed himself/herself
2 to 3 years	Stabs food with fork Uses spoon without spilling
3 to 5 years	Eats by himself/herself

FREE online training

View [Watch Me! Celebrating Milestones and Sharing Concerns](#), developed by the U.S. Centers for Disease Control and Prevention's [Learn the Signs. Act Early program](#).

2. Mielke, K. (2008). *Guidelines for the Development of Self-Feeding Skills*. https://www.handyhandouts.com/viewHandout.aspx?hh_number=156&nfp_title=Guidelines+for+the+Development+of+Self-Feeding+Skills

DEVELOPMENTAL CONSIDERATIONS FOR INFANT CARE

The earliest years are all about relationships. Infants seek out and develop attachments to the special people in their lives. Depending on how families, early educators, and others treat them, babies develop expectations about people and themselves. Some of the tasks for social and emotional development during infancy include:

- Young infants (0 to 9 months) seek **security**.
- Mobile infants (8 to 15 months) are eager to **explore**.

To develop relationships with infants while promoting social and emotional development; educators should consider factors that will assist caregivers in determining what kind and how much support to provide so that the infant feels secure and explores. The factors are:

1. Infant temperament
2. States
3. Reflexes and cues
4. Feeding

Infant Temperament

There are many theories of child temperament, most of these theories agree that temperament refers to stable, early appearing individual differences in behavioural tendencies that have an inborn or biological basis that continue throughout life.

Classic child development research identified **9 temperamental traits**³:

- **Activity Level:** This is the child's "idle speed or how active the child is generally. Does the infant always wiggle, more squirm? Is the infant difficult to diaper because of this? Is the infant content to sit and quietly watch? Does the child have difficulty sitting still? Is the child always on the go? Or, does the child prefer sedentary quiet activities? Highly active children may channel such extra energy into success in sports; they may perform well in high-energy careers and may be able to keep up with many different responsibilities.
- **Distractibility:** The degree of concentration and paying attention displayed when a child is not particularly interested in an activity. This trait refers to the ease with which external stimuli interfere with ongoing behaviour. Is the infant easily distracted by sounds or sights while drinking a bottle? Is the infant easily soothed when upset by being offered alternate activity? Does the child become sidetracked easily when attempting to follow a routine or working on some activity? High distractibility is seen as positive when it is easy to divert a child from an undesirable behaviour but seen as negative when it prevents the child from finishing schoolwork.
- **Intensity:** The energy level of a response whether positive or negative. Does the infant react strongly and loudly to everything, even relatively minor events? Does the child show pleasure or upset strongly and dramatically? Or does the child just get quiet when upset? Intense children are more likely to have their needs met and may have depth and delight of emotion rarely experienced by others. These children may be gifted in dramatic arts. Intense children tend to be exhausting to live with.
- **Regularity:** The trait refers to the predictability of biological functions like appetite and sleep. Does the

3. Thomas, A. & Chess, S. (1977). *Temperament and Development*. Bruner/Mazel.

child get hungry or tired at predictable times? Or, is the child unpredictable in terms of hunger and tiredness? As grown-ups, irregular individuals may do better than others with traveling as well as be likely to adapt to careers with unusual working hours.

- **Sensory Threshold:** Related to how sensitive this child is to physical stimuli. It is the amount of stimulation (sounds, tastes, touch, temperature changes) needed to produce a response in the child. Does the child react positively or negatively to particular sounds? Does the child startle easily to sounds? Is the child a picky eater or will he eat almost anything? Does the child respond positively or negatively to the feel of clothing? Highly sensitive individuals are more likely to be artistic and creative.
- **Approach/Withdrawal:** Refers to the child's characteristic response to a new situation or strangers. Does the child eagerly approach new situations or people? Or does the child seem hesitant and resistant when faced with new situations, people or things? Slow-to-warm up children tend to think before they act. They are less likely to act impulsively during adolescence.
- **Adaptability:** Related to how easily the child adapts to transitions and changes, like switching to a new activity. Does the child have difficulty with changes in routines, or with transitions from one activity to another? Does the child take a long time to become comfortable to new situations? A slow-to-adapt child is less likely to rush into dangerous situations, and may be less influenced by peer pressure.
- **Persistence:** This is the length of time a child continues in activities in the face of obstacles. Does the child continue to work on a puzzle when he has difficulty with it or does he just move on to another activity? Is the child able to wait to have his needs met? Does the child react strongly when interrupted in an activity? When a child persists in an activity he is asked to stop, he is labeled as stubborn. When a child stays with a tough puzzle he is seen as being patient. The highly persistent child is more likely to succeed in reaching goals. A child with low persistence may develop strong social skills because he realizes other people can help.
- **Mood:** This is the tendency to react to the world primarily in a positive or negative way. Does the child see the glass as half full? Does he focus on the positive aspects of life? Is the child generally in a happy mood? Or, does the child see the glass as half empty and tend to focus on the negative aspects of life? Is the child generally serious? Serious children tend to be analytical and evaluate situations carefully.

There are three main clusters of temperament in infants:

- **Easy infant:** Mild-mannered. Demonstrates regular sleeping and eating patterns, positive response to new situations (approachable), high adaptability to change, and positive mood.
- **Difficult infant:** Intense. Demonstrates irregular sleeping and eating patterns, negative response to new situations (withdrawal), difficulty adapting to change, irritability, and negative mood.
- **Slow-to-warm-up infant:** Mild-mannered. Demonstrates slow adaptability after several attempts and negative mood.

Key Takeaway

The most important aspect of examining temperament as a critical factor in the care of infants is the concept of “Goodness of Fit”. The goodness of fit, as used in psychology and parenting, describes the compatibility of a person’s temperament with the features of their particular social environment. A behaviour one caregiver might interpret as positive may be perceived negatively by another. For example, Taylor might perceive an infant who resists cuddling as “strong and feisty,” while Jamie interprets this infant as difficult and that the baby is rejecting them. All environments have differing characteristics and demands.

The goodness of fit is an important component in the emotional adjustment of an individual. Children with difficult temperaments, or temperaments that are at variance with their caregivers, and grow up with caregivers who are rejecting or inconsistent, have more difficulty with adjustment and development than children with supportive and consistent caregivers. For children with emotional challenges “goodness of fit” is an important component in how well they will adjust and adapt to different situations in the future. Assessing your perceptions and beliefs is important when responding to cross-cultural differences regarding infant temperament and behaviour.

Read and Answer

To learn more about temperament read:

- [Understanding Temperament in Infants and Toddlers](#) by Lindsey T. Allard and Amy Hunter, Center on the Social and Emotional Foundations for Early Learning.

How will you apply what you read about temperament to promote positive social and emotional development and behaviour?

STATES OF CONSCIOUSNESS

A critical task of infant caregivers is to learn to correctly interpret the infant’s behaviours and understand their newborn’s style. There are [6 states of consciousness](#) summarized in the table below. The states eventually evolve into a child’s pattern of crying, sleeping, eating, and playing as the nervous system develops.

State	Description	Infant Behaviour
State 1	Deep Sleep	Lies quietly without moving
State 2	Light Sleep	Moves while sleeping; startles at noises
State 3	Drowsiness	Eyes start to close; may doze
State 4	Quiet Alert	Eyes open wide, the face is bright; the body is quiet
State 5	Active Alert	Face and body move actively
State 6	Crying	Cries, perhaps screams; body moves in a very disorganized way

SLEEP

As a caregiver, it is essential you understand safe sleep practices. All educators, families, volunteers and others who care for infants in the childcare setting should follow these required safe sleep practices as recommended by the American Academy of Pediatrics (AAP) in conjunction with The Consumer Product Safety Commission and the National Institute of Child Health and Human Development:⁴

1. Infants up to 12 months should be placed for sleep wholly on their back for every nap or sleep time unless the infant's primary care provider has completed a signed waiver indicating that the child requires an alternate sleep position.
2. Infants should be placed for sleep in safe sleep environments; which includes: a firm crib mattress covered by a tight-fitting sheet in a safety-approved crib (the crib should meet the standards and guidelines reviewed/approved by the U.S. Consumer Product Safety Commission [CPSC] and ASTM International [ASTM]), no monitors or positioning devices should be used unless required by the child's primary care provider, and no other items should be in a crib occupied by an infant except for a pacifier.
3. Infants should not nap or sleep in a car safety seat, bean bag chair, bouncy seat, infant seat, swing, jumping chair, play pen or play yard, highchair, chair, futon, or any other type of furniture/equipment that is not a safety-approved crib (that is in compliance with the CPSC and ASTM safety standards).
4. If an infant arrives at the facility asleep in a car safety seat, the family member or educator should immediately remove the sleeping infant from this seat and place them in the supine position in a safe sleep environment (i.e., the infant's assigned crib).
5. If an infant falls asleep in any place that is not a safe sleep environment, educators should immediately move the infant and place them on their back in their crib.
6. Only one infant should be placed in each crib (stackable cribs are not recommended).
7. Soft or loose bedding should be kept away from sleeping infants and out of safe sleep environments. These include, but are not limited to: bumper pads, pillows, quilts, comforters, sleep positioning devices, sheepskins, blankets, flat sheets, cloth diapers, bibs, etc. Also, blankets/items should not be hung on the sides of cribs. Swaddling infants when they are in a crib is not necessary or recommended, but rather one-piece sleepers should be used.
8. Toys, including mobiles and other types of play equipment that are designed to be attached to any part of the crib should be kept away from sleeping infants and out of safe sleep environments.
9. When caregivers/teachers place infants in their crib for sleep, they should check to ensure that the temperature in the room is comfortable for a lightly clothed adult, check the infants to ensure that they are comfortably clothed (not overheated or sweaty), and that bibs, necklaces, and garments with ties or hoods are removed (clothing sacks or other clothing designed for sleep can be used in lieu of blankets).
10. Infants should be directly observed by sight and sound at all times, including when they are going to sleep, are sleeping, or are in the process of waking up.
11. Bedding should be changed between children, and if mats are used, they should be cleaned between uses. The lighting in the room must allow the educator to see each infant's face, to view the color of the infant's skin, and to check on the infant's breathing and placement of the pacifier (if used).

4. American Academy of Pediatrics [AAP]. (2023). *Safe Sleep*. <https://www.aap.org/en/patient-care/safe-sleep/>

An educator trained in safe sleep practices and approved to care for infants should be present in each room at all times where there is an infant. This educator should remain alert and should actively supervise sleeping infants in an ongoing manner and should check to ensure that the infant's head remains uncovered and re-adjust clothing as needed.

The construction and use of sleeping rooms for infants separate from the infant group room is not recommended due to the need for direct supervision. In situations where there are existing facilities with separate sleeping rooms, facilities should develop a plan to modify room assignments and/or practices to eliminate placing infants to sleep in separate rooms.

Resources

The following resources have information about safe sleep environment and sleep positions:

- [Caring for Kids](#) website – a resource created for parents by the Canadian Paediatric Society.
- [Safe Sleep for Babies](#) – Canadian Paediatric Society
- [Safe Sleep for Your Baby](#) – Government of Canada

Reflection Exercise

In your experience, **how do you see safe sleep practices implemented in childcare settings?**

What could be improved and why?

REFLEXES AND CUES

When caregivers understand the various states of infant alertness; they are better able to interpret infants' behaviours. There are many individual differences, and infants respond according to the state in which they are at any given moment. An understanding of and sensitivity to state and to an infant's unique characteristics and capabilities form the beginning of mutual trust.

Understanding their infant's behaviour and cues encourage attachment as caregivers and newborns learn that they can rely on each other to respond appropriately and consistently.

Comprehension Check



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://pressbooks.nsc.ca/eceinfantcare/?p=122#h5p-1>

CHAPTER ATTRIBUTION

Chapter adapted from [Chapter 1: Infant Development](#) in [Infant and Toddler Education and Care](#) by Susan Eliason, [CC BY-NC-SA](#).

UNIT 8

Toddler Development

Chapter Objectives

In this chapter you will learn:

- Developmentally Appropriate Practice (DAP) in an toddler room.
- Developmental considerations for toddler care.
- The role of the physical environment for toddler development and how it affects peer relationships.
- Caregivers and continuity of care.

Here are some facts about toddlers for you to consider prior to learning more about their development.¹

1. Toddlers are often nicer to strangers than adults presumably for safety until trust is established, while adults lose tolerance for personality traits they don't like
2. Toddlers' vocabulary grows faster than yours
3. Toddlers are born ambidextrous
4. A toddler is in the most physically active phase of their life
5. A toddler's hearing is super-sensitive
6. Brain activity reaches a life-time high during toddler years
7. Frequent colds may hinder physical growth in toddlers

Important milestones in toddler development include walking without help, playing interactive games like patty-cake, and rolling a ball back and forth, sitting down from a standing position, squatting, pushing or pulling toys around the house, waving goodbye, turning pages in a book, and stacking several blocks.

DAP IN A TODDLER ROOM

Physically, a toddler practices coordinating large and small muscles. They are moving from involuntary, reflexive behaviours of infancy to deliberate, voluntary activity. Their locomotion promotes curiosity and discovery. And

1. Jeff Hayward. (2016). *7 Toddler Development Facts you Probably Didn't Know*. <https://activebeat.com/your-health/children/7-toddler-development-facts-you-probably-didnt-know/>

sensory input helps toddlers learn how the world works. Changing body size coupled with increased coordination, balance, and stamina requires changes in play, sleep, eating, and elimination routines and patterns.

A toddler will try to copy words, and you may hear him babbling away as if he's having a real conversation. He'll even practice speech sounds, raising his tone when asking a question. He might say "Up-py?" when asking to be carried, for example. During the ages of 18-24 months, a toddler understands simple commands and questions and uses nouns that designate objects in her daily life, such as "spoon" and "car." Starting around 24 months most toddlers can use two- to four-word sentences and sing simple tunes. Between ages 2 and 3, the toddler likely has a working vocabulary of more than 200 words and can string nouns and verbs together to form complete but simple sentences, such as "I eat now."

Toddlers' emotional and social development grows as well. There are likely issues with sharing and biting, complying with requests and throwing tantrums.

DEVELOPMENTALLY APPROPRIATE PRACTICES IN A TODDLER ROOM²

Offer choices to encourage independence and autonomy.

Initiate conversations to build vocabulary and communication skills. In conversations with toddlers, always attempt to convey meaning clearly (with short, direct sentences), and include appropriately challenging words to support the explosion of a toddler's vocabulary.

Use positive guidance techniques such as careful supervision, anticipating likely behaviours, positive encouragement and feedback, and redirecting a toddler's attention to acceptable activities.

Prepare the environment by providing duplicate equipment, checking to ensure safety, and providing props that encourage toddlers to explore primary emotions. Create indoor and outdoor spaces for flexibility, safe sensory exploration, and physical development.

Work with families. Establish open and honest communication with toddlers' families. Cooperation and coordination with families will provide toddlers with an added level of security and consistency as they dance between autonomy and independence.

Resources to Explore

- [Your child's development: What to expect](#) – information for parents published by the Canadian Paediatric Society.
- [Importance of early childhood development](#) – published on the website Encyclopedia on Early Childhood Development.
- [Zero to Three website](#) – designed for educators and families. There are many useful and helpful links to explore and discover.

2. Adapted from Mills, H. (2013). Developmentally appropriate practices in infant and toddler classrooms. *Texas Child Care Quarterly*, 37, (3). http://www.childcarequarterly.com/pdf/winter13_dap.pdf

DEVELOPMENTAL CONSIDERATIONS FOR TODDLER CARE

The earliest years are all about relationships and supporting the tasks for social and emotional development during toddlerhood include:

- Mobile younger toddlers (12 to 18 months) are eager to **explore**.
- Toddlers (16 to 36 months) are working on their **identity**; they want to know who they are and who's in charge.

Six key components of early group experience essential to toddler development:³ group size; quality of the physical environment; primary caregiving assignments; continuity of care; cultural and familial continuity; and meeting the needs of the individual within the group context.

THE ENVIRONMENT

The physical environment supports or hinders relationships. Research suggests that in safe environments caregivers smiled more, encouraged exploration, and gave fewer negative comments. Additionally, the environment affects educators and family relationships. A comfortable place for adults within the children's environment can encourage families to visit throughout the day. A place for adults to sit comfortably for a moment at the end of the day acknowledges their needs and encourages conversation.

The environment affects peer relationships. The amount and arrangement of space and the choice and abundance of play materials can either increase the chances that young children will interact positively with each other or increase the likelihood of biting, fighting over toys, and wandering.

To promote health, easy access to the outdoors is desirable as it will accommodate the daily rhythms of toddlers. In many centers, time on the playground is rigidly scheduled and may not accommodate the needs of toddlers. Access to a playground as needed would allow teachers to respond to a child's changing needs. Additionally, toddlers need small amounts of food and drink throughout the day to support their emotional, social, and physical well-being. A small refrigerator will allow educators to offer snacks to toddlers frequently.

Use the questions below to assess the appropriateness of a physical environment for toddlers.

Safety – Are all the electrical outlets covered? Is there adequate padding under climbing equipment in case of a child falling? Are the walkways clear and unobstructed? Is the play area fenced in? Are there first aid supplies available?

Health – Is the diapering area kept separate from the food preparation and feeding areas? Are the food preparation, feeding, and toileting areas cleaned and sanitized daily and after each use. Do the children get fresh air every day?

Comfort – Is there soft furniture accessible to the children? Are there safe, comfortable, adequate sleeping arrangements? Is there furniture that is both child-sized and adult-sized in the rooms? Can toddlers sit and stand as they choose?

Convenience – Is there easy access to sinks for adults and children? Are the materials and supplies stored near routines and activities?

3. J. Ronald Lally, J. R., Torres, Y. L., Phelps, P. C. (2010). *How to Care for Infants and Toddlers in Groups*. Adapted from a plenary presentation at ZERO TO THREE's 1993 National Training Institute. <https://www.zerotothree.org/resources/77-how-to-care-for-infants-and-toddlers-in-groups>

Encourages Movement – Do toddlers have enough space to crawl, roll, pull up, walk, climb, run, jump and explore when both indoors and outdoors?

Allows for Choice – Are the toddlers offered choices at mealtimes and during activities?

Ensures accessibility – Are the toys out at the children's level? Can toddlers reach toys and materials independently? Are there spaces for both quiet and active play? Are there toys to represent imaginative play, constructive play, sensory play and literacy? Are toddlers allowed to play with sand, water, dress up clothes, etc.?

PRIMARY CAREGIVER

The assignment of a primary educator means the child's family, the administrator, and educator know who is principally responsible for that child. Primary caregiving does not mean that one person cares for an infant or toddler exclusively, all of the time as there will be team teaching. Primary caregiving ensures that the toddler can build an intimate relationship with at least one educator.

THE WAY IT SHOULD BE

Tim and his mother had visited the center twice in the last week. They had spent time with Mindy, who told them she would be Tim's primary caregiver. Both Tim and his mother felt comfortable with Mindy. She was interested in them, wanted to talk regularly about Tim's progress, and seemed to understand how Tim's mother felt about leaving Tim to go to work. To Tim, today felt much the same, but his mother knew she was going to leave him for several hours and had told him so. Mindy met them at the door, squatted down to speak to Tim, who smiled shyly, remembering her, and then walked with mother and child to the small rocking horse that Tim had so enjoyed the last time. A small boy rushed by and bumped Tim quite hard. Mindy caught the little boy and talked quietly to him, introduced him to Tim, and sent him on his way. Tim got on the horse and Mindy sat nearby where a somewhat bigger girl was building with blocks and a boy was working with large puzzle pieces. Mindy attended to all of them in turn as they wanted her attention or help. These were her three, and she always kept a special eye on them.

When it was time for her to go, Tim's mother reminded him she was leaving today. He looked surprised and climbed off the horse. Mindy picked him up and said, "Let's go to the door and say good-bye to your mother." Tim wanted to go with his mother. But his mother really seemed to be going to leave him, so he clung closer to Mindy, who cuddled him and talked quietly. Then his mother was gone. It was like everyone in the world was holding their breath at the same time, but Mindy held him and patted him and talked quietly, and then everyone began to breathe again. Tim could see the toys and children, but mostly he liked hearing Mindy's voice. Ten minutes later, Tim was on his horse. He wasn't as wholly confident as 20 minutes before, but he could still ride, and Mindy was close by and always noticed when he looked at her.

Two weeks later: After his mother kissed him, Tim waved good-bye and then he said, "Hi" again to Mindy, who ruffled his hair. Tim made a beeline for the block area, but when he got there Wong Chen had corralled all of the red blocks Tim wanted. Tim squatted down and watched Wong Chen. In a minute, Mindy came over and squatted down too, and they both watched him. Then Mindy said, "Tim likes those blocks too, Wong Chen; would you let him play?" Wong Chen looked at the floor, and then he looked up and frowned at Mindy and then at Tim. Mindy said, "OK, Wong Chen, then Tim can use them later." And then to Tim, while pointing to some bristle blocks, "Maybe you'd like these? I don't think anyone has those." As Tim started to walk away, Wong Chen handed him one red block and Mindy said, "Thank you, Wong Chen, we'll use that."

...Later, Tim started to build a big car with red blocks, a car like his mother's red car. His mother was working. She would come later. "Mommy later," Tim said. Mindy heard him. "She will, Tim," said Mindy. "She'll come after your nap." "After nap," said Tim, and then he said, "See my car?"

Tim is learning a lot in this center. He feels important, heard, understood, and protected. Mindy helps him negotiate the difficult things with peers. He is learning to cooperate and to pay attention to what other children need and want. There is enough space, there are enough providers, just enough children, and abundant affection for everyone.

CONTINUITY OF CARE

Having one caregiver over an extended period of time rather than switching every 6-9 months is important to the child's development.

Resources to Explore

[*Looping and Attachment in Early Childhood Education: How the Applications of Epigenetics Demand a Change*](#). The author reviews the literature on looping and reports the benefits and challenges of the practice. She conducted a research study in a preschool Montessori program. She reported these findings which list some of the challenges of looping.

Review Questions

- What do you think about the practice of looping?
- How might it work in a childcare program you observed or worked in?

Specific Benefits	Specific Challenges
Teacher develops strong relationships with children over time and development, which has social-emotional and learning implications.	Practicality in schools with high staff turnover.
Consistency of relationships allow for open communication about stress at home	A good fit between teacher and child or persistence of negative relationships over time.
Behaviour problems are minimal because teachers know what to expect from the children.	The child's ability to transition and adapt to a new teacher/school after spending so long with a familiar teacher.
Extended learning time for older students who do not need transitional time at the beginning of the year.	The teacher's ability to adapt to new age groups and the challenges each present.
Teachers have opportunities for extended learning by having to be innovative over the years and adapt to different age groups.	
Parents develop bonds with the teacher over time, leading to more investment in the school, volunteering, and support of learning at home.	

CULTURAL AND FAMILIAL CONTINUITY

Childcare should be in harmony with what goes on at home, following the form and style of what is familiar to the child. Self-reflection is key to culturally sensitive care, and we will explore this more as the course progresses.

No matter what routine you perform, your values about it are shaped by your childhood, education, and cultural influences. It is essential to recognize these values and understand that you are transmitting them to children. To provide cultural and familial continuity, childcare centres should employ culturally representative educators who speak the same language as the children.

Review Question

What are your experiences with culturally representative educators in the programs you observed in or worked in?

MEETING THE NEEDS OF THE INDIVIDUAL IN A GROUP

An intimate setting recognizes toddlers' individual needs to explore, assert autonomy, and periodically reconnect with the secure base their caregiver provides. Nutritious snacks are available (often the focus of spontaneous socializing), potty training occurs as the individual child is ready, and ways are found for the toddler to re-visit her old crib if that is important. In an intimate setting, a child with special needs can be accommodated.

DEVELOPMENT IN THE DOMAINS

Social-Emotional Development

Social development is defined as the child's ability to relate to and interact with people. Toddlers are scientists, experimenting with interactions that occur between themselves and the people around them. Be mindful that you are a role model of behaviour and culture for the toddler.⁴

Emotional development is defined as understanding the self, feelings, and regulation of behaviour. Emotional development is based on attachment. Emotional development is supported through consistent, responsive and caring relationships and routine.

What skills do children develop? The ability to:

- relate to, trust, and develop an attachment to caregivers
- interact with peers
- experience and express a range of emotions
- self-regulation
- the positive sense of self
- initiative

Remember

- Social and emotional development impacts all other areas of development and is the foundation for all future development.
- Toddlers will carry inside the impact of the relationships with caregivers at this stage of life; setting the

4. The Massachusetts Department of Early Education and Care [EEC]. (2010). *Massachusetts Early Learning Guidelines for Infants and Toddlers*. <https://www.mass.gov/doc/massachusetts-early-learning-guidelines-for-infants-and-toddlers/download>

foundation for school readiness and lifelong success. When caregivers are loving, responsive and consistent, toddlers learn they are valued and the world is primarily satisfying and predictable.

- Research shows that children who have healthy social and emotional skills tend to learn better, are more likely to stay in school, and will be better able to make and keep lifelong friends.

Reflection Questions

- How will you promote secure relationships with toddlers?
- How will you encourage toddlers to experience, regulate, and express emotions?

LANGUAGE AND COMMUNICATION DEVELOPMENT

By around 12 months many toddlers can say one or two words with meaning and can comply with simple requests, such as get your jacket or respond to questions like where is your blanket? The toddler points to pictures in a book when you name them, and can point to a few body parts. They listen to simple stories and enjoy hearing songs or rhymes. In fact, often they will want the same story, rhyme or game repeated often. Expect the toddler to add words every month. Soon you may see them use telegraphic speech, where 2 words convey the meaning of a sentence. Such as "Where ball?" "What's that?" "More 'nana?" "Kitty go". Words become clearer as more initial consonants are used.

Between 2 to 3 years of age, toddlers will likely develop the ability to follow two-part instructions ("Get your hat and put it on the chair") and use 2-3 word sentences. They notice sounds like the telephone or doorbell ringing and may point or become excited, get you to answer, or attempt to answer themselves.

As toddlers develop, expect to see:

- An understanding of spoken (or signed) language (receptive language)
- Use of expressive language
- Participation in social communication
- Asking questions and telling stories (narratives)
- Increased ability to produce sounds accurately and put words together to make meaning (phonology and syntax)
- An interest in books and listening to stories
- Beginning to use writing tools

Resources to Explore

[*Your Child's Cues from Birth to Age 2*](#) by the Center for the Social and Emotional Foundations for Early Learning, Vanderbilt University.

[*Development of infants and toddlers who are dual language learners*](#) by Fuligni, A. S., Hoff, E., Zepeda, M., & Mangione, P. published by the Frank Porter Graham Child Development Institute at UNC-Chapel Hill.

[*Understanding Children's Developmental Milestones*](#). To review the milestones take about 15 minutes and complete an online training course.

TODDLER'S COGNITIVE DEVELOPMENT

In order to plan and work with toddlers, we need to understand how they think. Still, in an early stage of cognitive development, **toddlers think in fundamentally different ways from older children and adults**. Toddlers' brains are partially developed. As a result, toddlers think in fundamentally different ways from adults. Interpreting toddler behaviour according to adult logic is pointless – and it sometimes leads us to draw conclusions that aren't always helpful. Toddlers make much more sense if you step inside their heads and try and see the world from their level of development.

[Anita Cleare](#), a Parenting specialist, provides an insight into how toddlers' brains work so that we can interpret toddler behaviour accurately. Here are some scenarios to further explain toddler thinking.

Educator: "The purpose of this walk is to get to the park."

Educator thinks: **Why can't she walk from A to B without being distracted by a leaf?**

Toddler: "Wow, look at that shiny wrapper blowing along the ground!"

The part of the brain that enables adults to focus on a task and resist distractions is called the pre-frontal cortex. The pre-frontal cortex is involved in thinking, planning, and focusing and it isn't well developed in toddlers' brains. In fact, the pre-frontal cortex isn't fully functioning until the teenage years. In essence, toddlers lack the wiring in the brain that inhibits distractions.

Educator: "Stop being so obsessive, the blue cup is in the dishwasher."

Educator thinks: **Why isn't the green cup as good as the blue cup?**

Toddler: "No green!"

The cognitive ability to understand that the same amount of juice is the same amount of juice no matter which cup it is in (a thought process called "conservation") does not develop until age 6 or 7. If you pour a drink from a short wide cup to a tall thin cup a toddler will believe there is more drink in the tall wide cup even if she watched you pour it from one cup to another. Toddlers' brains simply can't compute that different shapes and sizes of containers can hold the same amount of drink. And the juice in the green cup really is different from the juice in

the blue cup because it looks different. It will take a few more years of water play and repetitively pouring water from one container to another for her to grasp the abstract concepts of volume, size, and transferability.

Educator: "No thank you, you can't take toys from the other children."

Educator thinks: **Why can't toddlers share?**

Toddler: "It's mine."

Toddlers are intrinsically selfish and egocentric. This isn't a moral judgment, it is simply that toddlers' brains have not yet developed the cognitive sophistication to understand that other people exist in their own right and that other people have thoughts and feelings that might be different from their own. They don't yet have a 'theory of mind' that enables them to put themselves in someone else's shoes. In a toddler's head, if he knows, thinks, or feels something then everyone else also knows, thinks, or feels it at the same time. When he takes the toy, it isn't an act of aggression, it is simply the logical fulfillment of a desire.

Educator: "You got hurt, there is no blood so no Band-Aid, I'll kiss your boo-boo."

Educator thinks: **What a drama queen!**

Toddler: "Need a Band-Aid!!!"

The toddler thinks: Help! I'm broken! Fix me!

Toddlers make no distinction between the physical, mental, or emotional "me," so every little mark, real or imagined, is an insult to self. That's why a 2-year-old will sob over every hangnail. Band-Aids offer concrete comfort. "They're a tangible way of saying, 'I know that you have been wronged, your body has been wronged, here's something that will make it better.'" Your best bet: Skip the reasoning, stock up on an ample supply of bandages, and take advantage while you can of their miraculous tear-stopping powers.

Educator: "It's time to get your jacket on so we can go outdoors."

Educator thinks: We only have 20 minutes left of outdoor time, by the time she finishes outdoor time is over.

Toddler: "**Me do it!**"

The toddler thinks: I know I can do it!

Toddlers will test their autonomy. We want the toddler to be self-sufficient, even though at the moment you want to get them out the door. Remember that everything takes longer with a toddler and start earlier. Also, let the toddler do the parts they can do and help with what they can't.

Other cognitive characteristics for toddlers are magical thinking and living in the present. Magical thinking means they're unable to distinguish the real from the imaginary and frequently attribute living characteristics to inanimate objects: The moon follows them, trees wave to them, the car "sleeps" in the garage, and the bathtub drain swallows whole tubs of water — so why not them too? Toddlers exist entirely in the present, they don't have a concept of three, never mind three days from now. Because toddlers exist in a "timeless" universe means they're as reluctant to hurry as they are to wait.

Resources to Explore

[*Sensorimotor development: Hands-on activities for infants and toddlers*](#) by Louise Parks

[Young Toddlers Think In Terms Of The Whole Object, Not Just Parts.](#)

PHYSICAL HEALTH AND WELL BEING

The physical health and well-being domain focuses on how toddlers learn about their bodies. During the toddler years, children are learning to use and control objects and do things for themselves. Physical health and well being include many components:

- Motor development (large and small muscles or gross and fine motor)
- Use of the senses to guide and integrate interactions
- Skills for healthy life practices
 - Eating
 - Sleeping
 - Toileting
 - Hygiene practices

Nutrition⁵

Young toddlers may begin to:

- Want to feed themselves.
- Eagerly participate in snacks and mealtimes.
- Bite, chew and swallow soft food smoothly.
- Show interest in many types of food and no interest in other foods.
- Eat inconsistently (eat a lot at one meal and little at the next, be too busy playing to eat).
- Ask for food when hungry or accept food when offered.
- Be willing to try new foods.

Older toddlers may begin to:

- Enjoy helping with meal and snack routines (set table, wash hands, throw away trash).
- Bite and chew solid food more easily.
- Accept or refuse food depending on their appetite and interest.
- Notice and talk about food textures, temperatures, and tastes (crunchy crackers, warm soup, sweet

5. North Carolina Infant and Toddler Early Learning Guidelines Task Force. (2007). *Infant–Toddler Foundations: Guidelines for development and learning for North Carolina’s infants and toddlers (birth to 36 months)*. http://ncchildcare.dhhs.state.nc.us/pdf_forms/dcd_infant_toddler_health_physical_development.pdf

apples).

- Understand that some foods are good for them (fresh fruits, vegetables, milk) and some are not very healthy (potato chips, soda).

Sleep

Young toddlers may begin to:

- Show they know when it is time to sleep (points at the bed, get blanket).
- Cooperate with sleep routines (choose a book, get preferred sleep toy).
- Use simple sounds, gestures, or words to show they are tired.

Older toddlers may begin to:

- Use words for being tired.
- Initiate and participate in sleep routines (wash hands after lunch, get blanket, lie down on bed or mat).
- Fall asleep on their own.

Physical Activity

Young toddlers may begin to:

- Anticipate and ask for outdoor play (points at door and say “Out!”; resist coming indoors).
- Engage in regular and sustained movement (rides toy all around the play yard, go up and down the slide over and over).
- Develop strength and stamina as they use large muscles and participate in physical activity for longer periods of time.
- Enjoy active play and seek to be physically active (choose to play often on the climber, laugh and squeal while running).

Older toddlers may begin to:

- Engage in lively movements by choice for long periods of time indoors and outdoors.
- Enjoy more complex movement activities (running, jumping, and skipping).
- Match body movements to rhythm (move slowly to slow music, dance in time with the music).
- Show pride in new skills and strengths (ask others to watch them, say “I’m big and strong!”).

Self Care

- Use simple sign language, facial expressions, sounds or words to tell you what they need.
- Cooperate and help with care routines (mouth-care, hand-washing, diapering, dressing, bathing).
- Drink from a cup and feed themselves with their fingers or a spoon.
- Protect personal objects and space from others.

- Help with clean-up routines.
- Show excitement at completing self-care tasks (show teeth after brushing, hold up hands after washing).
- Cooperate with medical care, positioning, and use of adaptive equipment.
- Identify and use objects and follow routines that are comforting (get their blanket and lie down where they usually sleep, pick out a favorite books to be read before lunch).

Older toddlers may begin to:

- Use words or sign language to ask for the things they need (food when hungry, drink when thirsty, go outdoors when they need to be physically active).
- Soothe themselves when needed (find a quiet area for alone time, look at a book before nap).
- Increase independence with basic self-help skills (pull up pants, put on socks, shoes, and hat).
- Remember and imitate details of self-care routines (talk through steps while washing hands; tell doll how to brush teeth during pretend play).
- Start self-care routines and complete some steps independently (undressing, hand washing, brushing teeth).
- Understand the role of people who help children stay healthy (doctors, nurses, dentists).
- Show appreciation for possessions (put toys away, handle materials carefully).
- Use adaptive equipment, ask for help with positioning and movement, or participate in medical care routines as needed.

Safety Awareness

Young toddlers may begin to:

- Experience cause and effect (going downhill fast cause falls; turning the TV up too loud hurts ears).
- Show some caution on uneven ground and heights.
- Notice and imitate adult reactions to dangerous people and situations.
- Respond to warnings and directions from others.
- Understand the difference between what should be eaten and what should not.

Older toddlers may begin to:

- Remember cause and effect experiences and apply their experiences to future situations (avoid touching cold railing, walk slowly downhill where fall happened).
- Increase self-control over their impulses.
- Recognize and avoid situations that might be unsafe.
- Understand what their bodies can do and understand their limits.
- Watch for adult reactions to unfamiliar things or situations that might be dangerous.
- Understand and follow basic health and safety rules. They still require close supervision from caregivers

to follow these health and safety rules consistently.

- Feel proud when they follow safety rules and ashamed when they do not (say, “Look, I waited!” at a corner; hang head after trying to reach forbidden item).

Health

When toddlers visit their paediatrician, the doctor will check the toddler’s developmental progress. Doctors may give a screening test to help identify developmental delays and autism at the 24- or 30-month visit. Child safety is another topic likely discussed at well-child visits. The doctor may talk about the importance of using car seats, closely watching children around swimming pools, preventing poisoning, not smoking around children, using sunscreen, and gun safety.

Did you know that toddlers have an average of 6 to 8 colds a year, several bouts of diarrhea and vomiting, as well as ear infection?. Sleep problems and behavioural challenges are very common at this age and can be frustrating for caregivers.

Resources to Explore

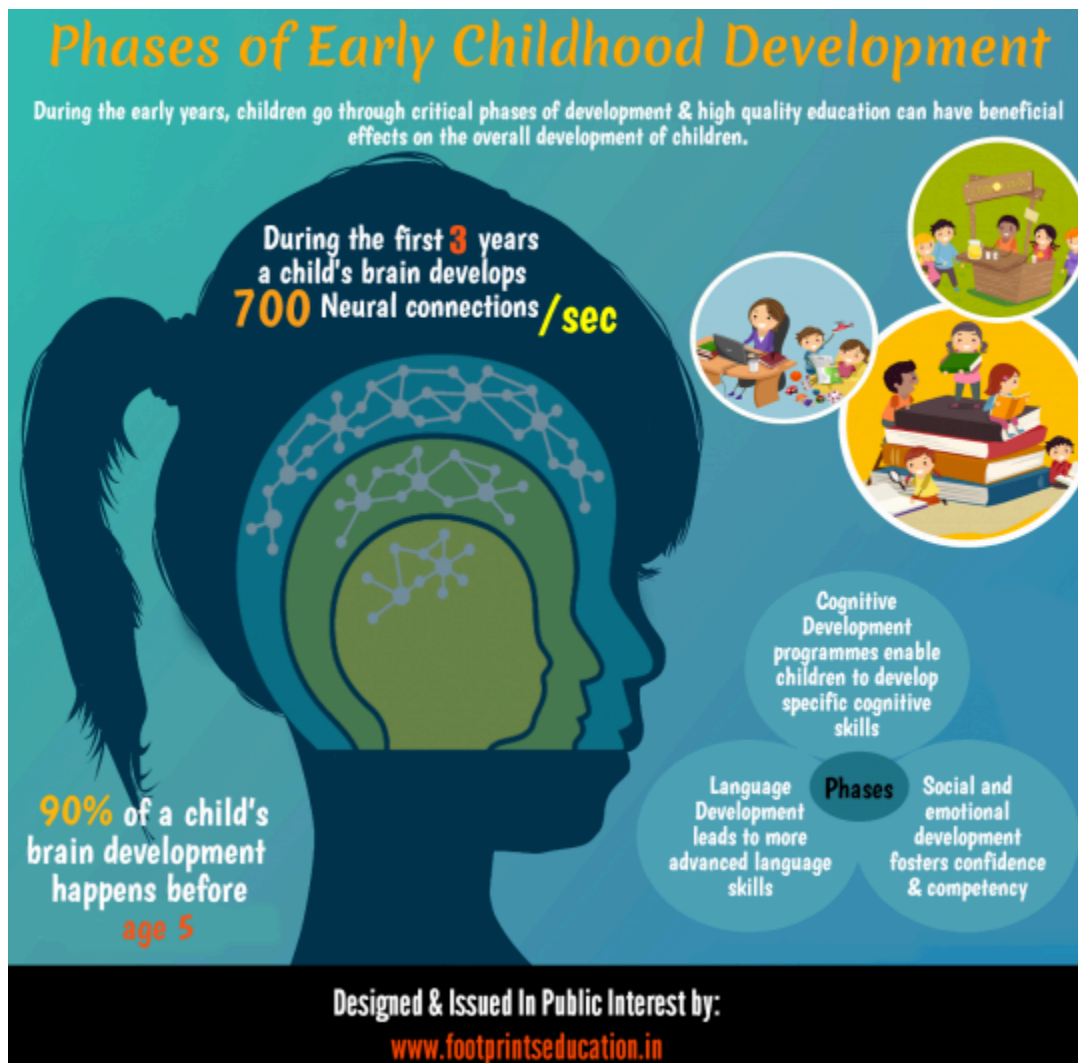
[MedlinePlus](#) web site: explore resources related to the health of toddlers.

Key Takeaways

It took me many years to see **caring as the core** of curriculum excellence. The deep assumption about caring is that it is something anyone can do, but we do not take care of human beings the same way we take care of a house or a lawn. In childhood, the sensations of the body are the pathways to the child’s intellect and emotions.

Caring routines involve engagement around bodily functions (elimination, cleaning, eating, sleeping) and therefore they hold the most intimate importance. The way we touch children increases or diminishes their self-worth. Our care of children’s bodies is directly connected to the care of their minds.⁶

6. Murray, C. G. (2017). *The Invisible Curriculum of Care*. https://www.earlychildhoodwebinars.com/wp-content/uploads/2021/02/curriculum_of_care-murray.pdf



Infographic to illustrate early childhood development. Credit: Footprints.

APPROACHES TO LEARNING

Infants develop attention, curiosity, and gather information. Toddlers build on these skills and this section will focus on memory, persistence, and problem-solving. When playing either in structured or unstructured activities throughout the day gives the toddler an opportunity to develop, learn and practice new skills.

Play allows children to make choices; make decisions; solve problems, interact with others; pursue their interest; build language and literacy skills; discover mathematical concepts; and experience themselves as capable, competent, successful learners.⁷

Expect toddlers to be eager and curious as a learner. If given opportunities to explore and experiment, they will likely become intentional and persistent in their learning and discovery.

7. Dodger, D. T., Rudick, S., & Berke, K. (2006). *The Creative Curriculum for Infants, Toddlers and Twos*. Teaching Strategies.

Remember

- A 28-month-old can reliably remember events, even up to 3 months after they happen⁸ The components of memory require different abilities: the ability to hold objects and people in mind even when they cannot be seen (object permanence), to keep recent information in mind in order to perform a task (working memory), and to remember events from the past (long-term memory).
- Persistence is the ability to work toward a specific goal despite challenges or feelings of frustration.
- Problem-solving is how we figure things out. Remember that toddlers usually create their own “problems” to solve with the goals they have in mind.

Reflection Questions

- Remember a time when you learned something new. How did memory, persistence, and problem-solving help you learn?
- Persistence and problem-solving skills can vary widely from child to child depending on temperament. How do you support children who have different natural abilities in these areas?
- How might temperament affect “persistence through frustration?”

IMAGE CREDITS

Footprints. (n.d.). *Infographic to illustrate early childhood development*. <https://www.footprintseducation.in/>

CHAPTER ATTRIBUTION

Chapter adapted from [section 2 Toddler Development](#) in [Infant and Toddler Education and Care](#) by Susan Eliason, [CC BY-NC-SA](#).

8. Fivush, R., & Hamond, N. R. (1989). Time and again: Effects of repetition and retention interval on 2-year-olds' event recall. *Journal of Experimental Child Psychology*, 47(2), 259-273

PART III

CURRICULUM PLANNING

UNIT 9

Program Planning

Chapter Objectives

In this chapter you will learn:

- Program planning and the early learning framework.
- Tips for writing lesson plans for infants and toddlers.
- How to evaluate your lesson plans.

Developmentally appropriate programming is a cornerstone of any great early learning program. Your programming puts your philosophy into practice and showcases the intent and skill your teachers bring to their work.

A quick internet search will yield various free resources and ideas for programming and lesson planning. Some of these tools might be great, while others might be mediocre or misguided. Unfortunately, many off-shelf program products are not financially feasible, and it's unlikely that a mass-produced lesson plan will apply to all classrooms.

Instead, you'll need to focus on building out a lesson plan that best fits your classroom values and your children's capabilities. In this guide, we'll share a few tips to remember when building lesson plans for infants, toddlers, and preschoolers to meet their individual needs and set them up for developmental success.

MAKE LEARNING THE FOUNDATION

You should always relate high-quality lesson plans to specific learning goals, so it's best to use lessons that detail what, why, and how children will learn.

Your lesson plans should outline daily lessons, activities, and goals with a focus on:

- Key learning objectives
- Necessary and available resources
- Method of introducing new lessons and concepts
- Assessment of outcomes and comprehension
- Engagement

Here are a few ways to ensure you're building a programming that supports learning and growth:

CONSULT YOUR EARLY LEARNING FRAMEWORK

Before building out your lesson plan, it's a good idea to consult your early learning framework. This framework is a roadmap of the skills and knowledge children should develop throughout their time in childcare and preschool.

The early learning framework is one of the places you can source the "why" and the "what" behind your planning. Your lesson plans should cover all aspects of a child's development and connect to your age group's developmentally appropriate learning goals.

You'll also want to familiarize yourself with your local early learning framework to ensure your children prepare for the next step, whether preschool, kindergarten or another track.

DEVELOPMENTAL ASSESSMENT

Ongoing child assessment has many benefits for both educators and children. First, it provides a complete picture of each child's developmental stage so you can meet them where they are. It also provides feedback on your lesson plans so you can accurately address the needs of your class.

Finally, a child assessment is a helpful resource you can share with parents to keep them updated on their child's progress and how they can continue learning at home. Parents want to ensure their children are on track, and a comprehensive assessment is a great way to keep them informed.

Similar to your early learning framework, your developmental assessment outlines the different skills you should support in your children's development. While you could decide to use your framework as part of your observation and assessment, it might be simpler to pull your learning goals from a developmental assessment tool (such as the DRDP) instead.

Ultimately, you'll want to establish your framework for early learning so your programming can best support your children's development. Choose the system that works best for you and your children—you know them best!

WRITING LESSON PLANS

When planning your programming, you might ask yourself where to begin. You might be unsure of how many lessons to plan or if you need to include something just because it is popular or in season.

While planning tends to be a very personal process, it can be helpful to have some guidelines for how to get started. So here's an essential piece of lesson planning advice: start with your children and your community and what's most exciting and relevant to them.

There's no limit to what you could explore in your classroom, so narrow your options down by focusing on what your children are currently interested in.

If it's the beginning of the year and you're not sure what your children like yet, start with the standard "About Me" unit! This unit helps you to get to know your children while also helping them feel comfortable. Throughout that unit, you'll learn what topics your children are interested in so you can dive in more deeply in the future.

Another lesson planning tip is to use the skills and milestones outlined in your early learning framework when searching for activity ideas. For example, a quick internet search of “one-to-one correspondence activities for preschool” will provide a range of ideas. Use your best judgment to pick lessons you think will work well in your classroom.

Check out our free daily lesson plan template as a starting point and customize it to suit your teaching style and children’s needs.

INFANT LESSON PLANS

Your infant lesson plans will be the most individualized and grounded in developmental milestones compared to the programming for other age groups. Infants develop so rapidly that age differences of only a few weeks can translate into very different developmental goals. For example, an infant just working on rolling over will have other goals than an infant who is getting ready to crawl.

Don’t panic—you don’t need to write an entirely different lesson plan for each infant every week! Instead, think about lesson plans that apply to the whole group with a small section dedicated to each infant’s individual development.

For example, you can pick 1-3 developmental milestones for each infant to work on that week and plan related activities to support those goals. You’re likely already thinking about your infants’ developmental progress—document these details and share them with parents so they’re more connected with their infants’ progress.

Parents of infants will likely look to their teachers and care providers to be trusted experts on how their little one is developing. So the better you can speak to their infants’ current and upcoming milestones, the more at ease parents will feel.

TODDLER LESSON PLANS

When writing lesson plans for toddlers, prioritize flexibility. For example, toddlers may be happy doing the same activity repeatedly one day, only to tire of three different activities in a row the next day.

Use your lesson plans to capture the broad ideas of what you’re exploring together while leaving room for toddlers to take the programming in their direction. If it sounds like you need to have an infinite number of lesson plans, remember that your toddlers will also want repetition, so you may only need to plan two to three new activities for the week. You can repeat and adapt these activities daily (for example, by adding new materials). You’ll know when your toddlers lose interest, and it’s time to introduce something new.

EVALUATING LESSON PLANS

As an educator, it’s always a good idea to find ways to improve your instruction, programming, and skills. Evaluating your lesson plan helps you find new ways to improve your activities, instruction, materials, and the overall plan itself.

During your evaluation, identify any challenges you or your children faced regarding your instruction and their comprehension and engagement.

For many educators, our best ideas are spur-of-the-moment and often inspired by the children. For this reason, it's essential to ensure parents know your lesson plans operate as a guide and aren't set in stone.

Present your programming as living, breathing, and changing lesson plans while updating parents on what happens in the classroom daily. This will allow you to be an effective teacher for your preschoolers and an educator who parents can trust.

PROGRAMMING VISIBILITY & FAMILIES

You can meaningfully engage families by bringing visibility to what the children are learning daily. Share your weekly lesson plan and daily activities with families to partner and build strong home-to-school connections. With access to the weekly lesson plan, families will be better equipped to support their children's development at home.

Key Takeaway

The goal of any programming plan is to outline how your children will develop the skills they need to be successful learners today and moving forward. As you continue to build and adapt your lesson plans, you'll ensure your children receive a well-rounded education that supports each developmental stage.

CHAPTER ATTRIBUTION

Chapter adapted from Brightwheel. (2023, March 16). *Curriculum Planning 101: Lesson Plans for Infants, Toddlers, and Preschoolers*. [blog]. <https://blog.mybrightwheel.com/build-lesson-plans-infants-toddlers-preschoolers>

UNIT 10

Infant and Toddler Planning

Chapter Objectives

In this chapter you will be learn how to:

- Build caring relationships with infants and toddlers.
- Identify developmental tasks for each stage of infancy.



Credit: Child Care Technical Assistance Network.

Rapid development during the first 3 years of life requires adults to pay special attention to how they respond to and care for infants and toddlers. The short answer to the question, “What do infants and toddlers need in group care?” is that they need close, caring relationships. The longer, more complex answer is that infants and toddlers in group care need well-prepared teachers and environments that allow them to learn, rather than teachers who try to give them lessons to master or extra motivation to learn.

“During routine care, infants and toddlers have adults’ undivided attention as they focus on meeting children’s needs and getting to know them.”¹

1. Koralek, D., Dombro, A. L., & Dodge, D. T. (2005). *Caring for infants and toddlers* (2nd ed.). Teaching Strategies.

Planning for individual infants and toddlers in groups involves paying close attention and finding ways to tune in to individual children to learn from them what they need, think, and feel. This tuning in to each child within a group is the core of high-quality care. Connecting with families helps teachers build trust and understanding as well as learn about the family's culture and home language. Conscious preparing of the environment, engaging in responsive care routines, and providing opportunities for exploration based on young children's interests, curiosity, and motivation are all important pieces of high-quality infant and toddler group care.²

When teachers understand how infants and toddlers are different from older children in their needs and learning, they can more easily support their learning and development in daily interactions. So, you may wonder, what are the main areas in which infants differ from older children and how does this affect your role as a teacher?

The following section presents some key ideas for infant and toddler teachers to consider as they build close, caring relationships with each child in their care. The ideas are based on four main areas in which infants and toddlers differ from older children, as described by J. Ronald Lally and Peter Mangione.

FACILITATE LEARNING

Even with very different early experiences, across cultures and circumstances, human infants are born preprogrammed or naturally motivated to learn certain things, such as language and muscle control. Other areas in which babies are genetically wired to learn are seeking out human relationships for protection and learning from others about socially acceptable behaviour. Infants with disabilities or other special needs will develop these skills within their capabilities as well. What this means for you as a teacher is that the built-in learning agenda of infants and toddlers serves as a natural curriculum that needs facilitation, not direction. By carefully observing an infant, you can learn from the child what he or she is interested in and requires at any given time.

KEEP A WIDE LENS

Since infants learn things in a continuous, natural, and fluid way, mostly at the same time or holistically (rather than in separate lessons), there is no need to break down lessons for them. It is not until children are a bit older that they can tell the difference between subject areas, such as physical, emotional, intellectual, social, and language development. In other words, with infants and toddlers, there is no need to divide curriculum into segments such as blocks of learning about language or shapes. In fact, if you do that, you may get so stuck on the topic you want to teach that you miss what a child is learning. You may think children are learning about a triangle or other shape because that is what you are teaching them, when in fact they are learning more about how they feel being around you or all the new things they can see now that they are able to sit up on their own. It is best to stay away from a narrow focus and instead let infants absorb all there is to learn as they experience the environment and the people within it.

VIDEO: BABY TALK³



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=197#oembed-1>

2. Lally, J. R. & Mangione, P. L. (2006). The uniqueness of infancy demands a responsive approach to care. *Young Children*, 61(4), 14–20.

3. usgovACF. (2017, October 30). *Baby Talk*. YouTube. <https://youtu.be/AZA71eQIUgg>

Video Questions

This care teacher and baby have some extended one-on-one time to explore books before the other children arrive.

- How is the teacher showing her interest in the infant?
- What do you notice about the infant's and teacher's pace as they sit together?
- What kind of comments is the teacher making as the infant explores?

DEVELOPMENTAL TASKS

There are predictable stages of infancy in which children focus on a developmental task. Teachers can learn and anticipate these stages and use them to support growth and learning. The main stages are as follows:

- **Young infants:** During the first 6 to 8 months of life, most young infants focus on developing a sense of security—the feeling that they are safe and secure in the world.
- **Mobile infants:** As they grow toward 7 months of age, infants begin to turn their attention to exploration through movement, touching, and looking at things around them. Although mobile infants need and seek safety, they do so as their bodies explore.
- **Older infants:** Starting close to 16 months of age, infants change their focus to make the separation between themselves and others and to distinguish between what is good and not so good. While they still need to feel secure and are motivated to explore, older infants become almost preoccupied with defining themselves as independent beings, often by being contrary, saying “me do it” or “no.”

DEVELOPING “SENSE OF SELF”

During their first 2 years, infants learn about who they are through repeated experiences with their parents, and with you, as their teacher. They also learn through body experiences. Through relationships, infants learn their first ideas about whether they are listened to or not, whether what they choose to do is valued or not, whether how they express their emotions is accepted or is not, whether they can explore or not, and whether their needs are mostly met. In contrast, preschoolers and school-age children have a more developed image of who they are. It is important for teachers to know that although our sense of self develops throughout our lifetime, how we treat infants and what we allow and expect them to do and not do has a great influence on who they become.

Through responsive, individualized care, you can show respect for each child's family culture, home language, and individual learning style, which encourages overall healthy development.⁴ Care that is responsive to individual needs supports the development of a strong sense of self, social skills, and overall well-being.⁵ Through individualized care, infants and toddlers can learn that they are important to you and that their needs will be met. They also learn that their choices, interests, and preferences will be respected.⁶

4. Virmani, E. A., & Mangione, P. L. (Eds.). (2013). *Infant/toddler caregiving: A guide to culturally sensitive care* (2nd ed.). California Department of Education.

5. Anhert, L., Pinquart, M., & Lamb, M. E. (2006). Security of children's relationships with nonparental care providers: A meta-analysis. *Child Development*, 77(3), 664–679.

6. Lally, J. R., & Mangione, P. L. (2006). The uniqueness of infancy demands a responsive approach to care. *Young Children*, 61(4), 14–20.

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UNIT 11

Additional Resources

[Ages & Stages of Numeracy Development](#) by the Canadian Child Care Federation By Gillian Hazan, Nathan Millar, Susan Garrow-Olive, Canadian Child Care Federation.

[Applied Puppetry as a Pedagogy for Early Learning and Child Care](#)

[How to Sing with Babies](#) by Lauren Lowry, The Hanen Centre

[How to Sing with Toddlers](#) by Lauren Lowry, The Hanen Centre

[How to Have Fun with Playdough and Toddlers](#) by Lauren Lowry, The Hanen Centre

[Sharing Books with Toddlers](#) by Lauren Lowry, The Hanen Centre

[Water Play with Toddlers](#) by Lauren Lowry, The Hanen Centre

UNIT 12

Assessment

Learning Objectives

- Be familiar with assessment criteria for child care centres.
- Understand what criteria are used to assess a toddler child care centre's programming.

CHILD CARE CENTRE ASSESSMENT CHECKLISTS

Daily and Visual Schedules

Does not meet expectations:

- Daily Schedule is not posted
- Daily Schedule does not balance between structure and flexibility
- Visual Schedule is not accessible

Meets expectations:

- Daily Schedule is posted that indicates time is planned for:
 - Outdoor play
 - Indoor play
 - Child and Staff initiated learning experiences
 - Time to meet children's physical needs
 - Photographs in Visual Schedule include children in the program

Exceeds expectations:

- Alternate arrangements are indicated on the Daily Schedule
- Daily Schedule is seasonally adjusted
- Visual Schedule is seasonally adjusted

- Daily Visual Schedule is referred to

Program Plan

Does not meet expectations:

- A current Program Plan is not posted
- Program Plan does not cover the entire time children are in attendance
- Each room does not have its own Program Plan

Meets expectations:

- The following learning areas are planned and/or documented:
 - One sensory daily
 - One art daily
 - One cognitive daily
 - One language and literacy daily
 - One science and nature weekly
 - One block weekly
 - One music and movement weekly
 - One pretend play weekly
 - Current Program Plan includes descriptions of the learning opportunities
 - Evidence that individual goals of children are incorporated into the Program Plan
 - External agencies/professionals attend meetings to plan appropriately for children with individual support needs
 - Children who do not nap or who wake early are provided with play materials which are documented

Exceeds expectations:

- Evidence of formal programming time given to staff
- Supervisor reviews Program Plans and signs them weekly
- Information is accessible to parents on curriculum model

Learning Experiences

Does not meet expectations:

- Learning experiences offered are not developmentally appropriate
- Learning experiences do not promote choice for children
- There is no current documentation which demonstrates that observations of children are used in the development of learning experiences

- The play environment is not arranged into learning areas that are open and accessible throughout the day

Meets expectations:

- Standardized Developmental Screening tool is completed for all children
- Evidence of opportunities to discuss developmental progress with families
- Photo documentation of learning experiences available
- Two or more educational play materials reflecting people with disabilities are accessible in two areas
- Two or more educational play materials reflecting diverse people/cultures are accessible in two areas

Exceeds expectations:

- Activity resources accessible for families
- Portfolios regarding each child's development are accessible to families
- Enrichment program, in addition to regular program, is included monthly
- Time is scheduled daily for staff to prepare materials in advance of learning experiences

Displays

Does not meet expectations:

- Less than two displays include cultures/races
- More than half of the children's art work is product-oriented, not process-oriented
- Less than three displays include children's own artwork as well as adult-made and/or commercial materials
- Displays are not:
 - Reflective of children's recent activities
 - Developmentally-appropriate
 - Culturally-appropriate and free of bias
 - Displays are not at child's eye level, as much as possible
 - Displays are arranged in a segregated manner

Meets expectations:

- Displays include children in the room participating in learning experiences
- Two or more displays include people with disabilities
- Displays promote inclusion in daily living

Exceeds expectations:

- Two or more displays are in more than one language
- Two or more displays include family structures

- Displays include family involvement in activities and/or events

Sensory, Science & Nature

Does not meet expectations:

- No materials for science and nature learning experiences
- No materials for sensory learning experiences
- Sensory opportunities are not available throughout the day

Meets expectations:

- Permanent sensory equipment is accessible to children in the play environment
- Three or more developmentally appropriate science and nature equipment and/or materials are accessible
- Opportunities to experience natural objects and/or events.

Exceeds expectations:

- Two or more planned and/or documented sensory learning experiences occur daily
- Sensory learning experiences are planned and/or documented weekly to reflect different senses
- Two or more science and nature learning experiences planned and/or documented weekly
- Science and nature learning experiences planned and/or documented daily

Art

Does not meet expectations:

- No equipment for art learning experiences
- No materials for art learning experiences
- Art opportunities not available throughout the day

Meets expectations:

- Fabric, collage, modelling materials and three or more drawing tools are accessible for independent use
- Three or more art materials include diverse skin tones.

Exceeds expectations:

- Two or more art learning experiences planned and/or documented daily
- Three or more art mediums are used in planned/or documented learning experiences

Language and Literacy Assessment

Does not meet expectations:

- Books are not accessible for independent use
- Books for rotation are not available
- Staff do not read to children daily
- Staff do not verbally label object and actions
- Area does not include soft seating and/or cushions for sitting
- Less than two language and literacy toys or puzzles are accessible
- Less than three books contain real images of people and/or objects

Meets expectations:

- Two or more developmentally appropriate books for each child enrolled are accessible
- Three or more books which include diverse people/cultures are accessible
- Language and literacy opportunities are integrated into one other area
- Two or more book accessories are accessible in the room
- Children have exposure to different languages
- Two or more books which include people with disabilities are accessible

Exceeds expectations:

- Homemade books are accessible
- Three or more books which include people with disabilities are accessible
- Toy bins and shelves are labelled with words and pictures
- Books are incorporated into three or more other learning areas

Music and Accessories

Does not meet expectations:

- Music is not appropriate for the age group
- Staff do not sing to children daily
- Audio playlists are not available
- Musical instruments are not in good condition
- Radio is played when children are present

Meets expectations:

- Three or more different types of music are available to be played to children
- Three or more different types of musical instruments are accessible to children

Exceeds expectations:

- Two or more music and movement learning experiences are planned and/or documented weekly

- Staff sing/play songs from different cultures
- Props are used to enhance music experiences

Physical Play Learning Experiences

Does not meet expectations:

- No planned and/or documented physical play learning experiences
- Staff are not engaged in planned and/or documented physical play learning experiences with the children
- No designated safe space for indoor physical play

Meets expectations:

- Physical play learning experiences are planned and/or documented for both the morning and afternoon
- Developmentally-appropriate physical play learning experiences are planned and/or documented to ensure all children are able to participate

Exceeds expectations:

- Children are given a choice of two or more planned and/or documented physical play learning experiences for both the morning and afternoon
- Two or more types of gross motor equipment are accessible to children in the room

Cognitive & Manipulative and Blocks & Construction

Does not meet expectations:

- Cognitive and manipulative materials are not accessible
- Block and construction materials are not accessible
- Block and construction accessories are not accessible
- Materials are not available for rotation.

Meets expectations:

- Three or more different types of developmentally-appropriate cognitive and manipulative materials are accessible
- Three or more developmentally appropriate block and construction materials are accessible
- Three or more developmentally appropriate block and construction accessories are accessible
- Two complete toys for each child enrolled are accessible

Exceeds expectations:

- One planned and/or documented cause and effect learning experience offered weekly
- One planned and/or documented learning experience offered weekly to enhance knowledge of math

concepts

- Block and construction materials include three or more textures
- Two or more block and construction learning experiences are planned and/or documented weekly

Pretend Play

Does not meet expectations:

- Insufficient accessories and equipment for the number of children enrolled
- Accessories and equipment are in poor condition
- Accessories and equipment are not developmentally appropriate

Meets expectations:

- Pretend play area includes real items that are developmentally appropriate
- Mirror is accessible in the pretend play area
- Accessories and equipment reflect cultural diversity
- Accessories and equipment encourage three or more pretend play possibilities that reflect the program plan focus

Exceeds expectations:

- Three or more accessories are culturally diverse
- Child's full body-length mirror is accessible in the room

Routine Care Practices

- Does not meet expectations:
- Daily information chart is not completed for each child
- Daily information chart is not reviewed with parent/guardian
- Children's individual schedules are not available
- Staff repeatedly do not follow children's physical cues

Meets expectations:

- Evidence of documentation for each child's interactions and/or learning experiences during the day
- Staff are following children's physical cues

Exceeds expectations:

- Daily information chart is available to be taken home
- Children's individual schedules are reviewed with parent/guardian based on the child's cues and stages of development
- Children's individual schedules are followed by staff

Toileting and Diapering Routines

Does not meet expectations:

- No change table
- Change table is not in good condition
- Children are not given notice of upcoming diaper change
- Washroom is not adapted for use by all children
- Separate covered garbage is not being used for sanitary disposal of soiled diapers

Meets expectations:

- Current Regional Public Health toileting routine is posted
- Current Regional Public Health diapering routine is posted
- Current Regional Public Health potty routine is posted
- Posted procedures for toileting/potty and diapering are followed by staff
- Washroom area includes a mirror at child's eye level
- Toileting and diapering is viewed as an opportunity to interact with children

Exceeds expectations:

- Child-size sink is accessible in the washroom
- Toileting and diapering is viewed as an opportunity to encourage self-help skills
- Picture symbol schedule depicting diapering and/or toileting routine is visually accessible at child's eye level

Meals and/or Snack Time

Does not meet expectations:

- Individual children's needs are not met during meal and/or snack times
- Children do not sit in small groups
- No conversations and/or interactions occur during meal and/or snack times
- Food is not served on dishes or napkins
- Food is used as a reward or punishment

Meets expectations:

- Meal and/or snack times are viewed as a time for socialization and conversation
- Equipment required for seating is appropriate for the size, ability and developmental level of the children
- Adult seating is accessible
- Staff serve food while sitting with children during meal and/or snack times

Exceeds expectations:

- Food preparation area in the room is not used for other uses ☐ Staff use meal and/or snack times as opportunities for enhanced language learning ☐ Children are encouraged to serve themselves

Cots and Bedding

Does not meet expectations:

- Extra bedding is not available
- Cots in poor condition
- Cot set-up interferes with the program

Meets expectations:

- Sheets are changed once a week or sooner if needed
- Cots are disinfected weekly
- Resting environment includes soft music and dimmed lighting
- Cots are designated

Exceeds expectations:

- Areas above cots are free of storage
- Cots are not used for storage

Health & Safety and Toys & Play Equipment Washing

Does not meet expectations:

- Schedule for toy washing does not meet Regional Public Health guidelines
- No schedule for toy washing
- Playground toys are not washed a minimum of two times a year
- First aid kit is not available in the room
- All areas are not kept in a state of good repair
- All areas are not maintained in a hygienic condition
- Play equipment, toys and materials are disorganized

Meets expectations:

- Health-related resources are accessible to families
- Toys and play equipment washing schedule is signed and/or initialled and dated by staff
- All areas are safe
- Toys and play equipment are washed as they become soiled.

- Floor space with suitable floor coverings is available
- Safe storage space available for equipment/toys and materials

Exceeds expectations:

- Safety-related resources are accessible to families
- Transitional toys used prior to meal and/or snack times are washed after each use
- Safety/health resources are accessible to families in their preferred language

Staff and Children's Hand Hygiene

Does not meet expectations:

- Current Regional Public Health hand-washing procedures are not posted
- Current Regional Public Health hand-washing procedures are not followed
- Sufficient supplies are not accessible to ensure hand-washing is conducted in a hygienic manner.

Meets expectations:

- Current Regional Public Health hand-sanitizing procedures are posted
- Evidence Supervisor reviews hand hygiene expectations with staff

Exceeds expectations:

- A sink is accessible in the room
- Child-size sink is accessible in the room
- Real photographs are used for visual hand-washing procedure

Transitions and Attendance Verification

Does not meet expectations:

- Staff are not the recorders of the children's arrival and departure times
- Children's arrival and departure times are not recorded on the Main Attendance Record
- Positive interactions do not occur between staff and children during transitions
- Extended waiting during transitions
- Staff do not prepare children prior to transitions

Meets expectations:

- Arrival and departure times are completed in pen
- Transitions are conducted in a smooth and seamless manner
- Attendance is verbally verified after staff transitions
- Portable attendance travels with each group

- Small groups of children who have left the room are reflected on the Main Attendance Record

Exceeds expectations:

- Written verification of attendance after each staff change
- Transition play materials are available

Positive Atmosphere Assessment

Does not meet expectations:

- Staff shout at children
- Staff use sarcasm, mocking or harsh words
- Staff are repeatedly not welcoming
- Staff repeatedly do not model appropriate positive social behavior.

Meets expectations:

- Staff maintain a positive tone of voice
- Staff are patient
- Staff direct positive attention to all children

Exceeds expectations:

- Staff model positive non-verbal communication skills
- Staff use teachable moments to further develop positive social behaviours
- Staff display empathy

Supervision of Children Assessment

Does not meet expectations:

- Staff unaware of the number of children in the room
- Staff unaware of the location of the children
- Staff are repeatedly unable to balance supervision with interactions
- Staff repeatedly position themselves with their back to the children

Meets expectations:

- Staff work as a team to position themselves so all children are supervised
- Staff anticipate situations to support children's interactions and activities
- Staff scan the room at all times

Exceeds expectations:

- Staff communicate with each other about the location of children
- Staff are seamlessly weaving from one learning experience to another, balancing support with monitoring and supervision
- Supervision is conducted in a non-disruptive manner

Foster Children's Independence Assessment

Does not meet expectations:

- Staff repeatedly do not provide time for children to complete tasks
- Staff repeatedly do not allow children to make their own decisions
- Staff repeatedly do not encourage developmentally appropriate self-help skills

Meets expectations:

- Children are provided with choices
- Staff consistently follow the children's cues

Exceeds expectations:

- Children are provided with choices within their interests
- Staff respond to children's interests
- Staff create opportunities for enhancing self-help skills through play

Supporting the Development of Self-Esteem Assessment

Does not meet expectations:

- Staff do not demonstrate inclusive practice
- Staff repeatedly give too many directions for a child to follow successfully
- Staff repeatedly do not acknowledge children's emotions appropriately
- Staff repeatedly do not focus encouragement on how the tasks are completed

Meets expectations:

- Staff demonstrate encouragement
- Staff role-model how to accomplish tasks
- Staff address children by their real name

Exceeds expectations:

- Staff assist children to process their own emotions
- Staff encourage children to identify the emotions of others

Behaviour Guidance Assessment

Does not meet expectations:

- Staff are physically abrupt with children
- Staff repeatedly do not explain consequences in a calm manner
- Staff repeatedly do not reinforce positive behaviour
- Staff repeatedly do not follow through with strategies

Meets expectations:

- Staff use appropriate behaviour guidance strategies
- Staff use developmentally appropriate re-direction strategies

Exceeds expectations:

- Staff respond to all children involved in an incident, to resolve the issue in a calm manner
- Staff model turn taking/sharing
- Staff adapt expectations based on the individual needs of the children

Supporting Communication and Extending Children's Learning Assessment

Does not meet expectations:

- Staff repeatedly solve the children's problems immediately
- Staff repeatedly miss opportunities to build children's knowledge
- Staff repeatedly do not support children to follow through with strategies

Meets expectations:

- Staff support the children's learning
- Staff extend verbal/non-verbal interactions with materials
- Staff are observed participating in play with children

Exceeds expectations:

- Staff recall past experiences to extend current learning opportunities
- Staff extend children's vocabulary

CHAPTER ATTRIBUTION

Chapter adapted from City of Toronto's Early Learning and Care Assessment for Quality Improvement Assessment lists under fair dealing.

PART IV

CULTURE AND DIVERSITY

UNIT 13

Diversity, Equity and Inclusion

Chapter Objectives

After this chapter, you should be able to:

- Define diversity, equity, and inclusion.
- Examine the importance of diversity.
- Distinguish the difference between equity and equality.
- Explain what inclusion means.
- Discuss some ways programs should be inclusive.

DIVERSITY

Let's begin by defining diversity and exploring its significance to working with children. The concept of diversity means understanding that each individual is unique, and recognizing our individual differences. These can be along the dimensions of race, ethnicity, gender, sexual orientation, socio-economic status, age, physical abilities, religious beliefs, political beliefs, or other ideologies. It is the exploration of these differences in a safe, positive, and nurturing environment. It is about understanding each other and moving beyond simple tolerance to embracing and celebrating the rich dimensions of diversity contained within each individual.



Diversity in early childhood education. Credit: California Department of Education.

Diversity is a reality created by individuals and groups from a broad spectrum of demographic and philosophical differences. It is extremely important to support and protect diversity, to value individuals and groups without prejudice, and foster a climate where equity and mutual respect are intrinsic.

Diversity means more than just acknowledging and/or tolerating difference. Diversity is a set of conscious practices that involve:¹

- Understanding and appreciating interdependence of humanity, cultures, and the natural environment.
- Practicing mutual respect for qualities and experiences that are different from our own.
- Understanding that diversity includes not only ways of being but also ways of knowing;
- Recognizing that personal, cultural and institutionalized discrimination creates and sustains privileges for some while creating and sustaining disadvantages for others;
- Building alliances across differences so that we can work together to eradicate all forms of discrimination.

Diversity includes, therefore, knowing how to relate to those qualities and conditions that are different from our own and outside the groups to which we belong, yet are present in other individuals and groups. These include but are not limited to age, ethnicity, class, gender, physical abilities/qualities, race, sexual orientation, as well as religious status, gender expression, educational background, geographical location, income, marital status, parental status, and work experiences. Finally, we acknowledge that categories of difference are not always fixed

1. Queensborough Community College. (2021). *Definition for Diversity*. <https://www.qcc.cuny.edu/diversity/definition.htm>

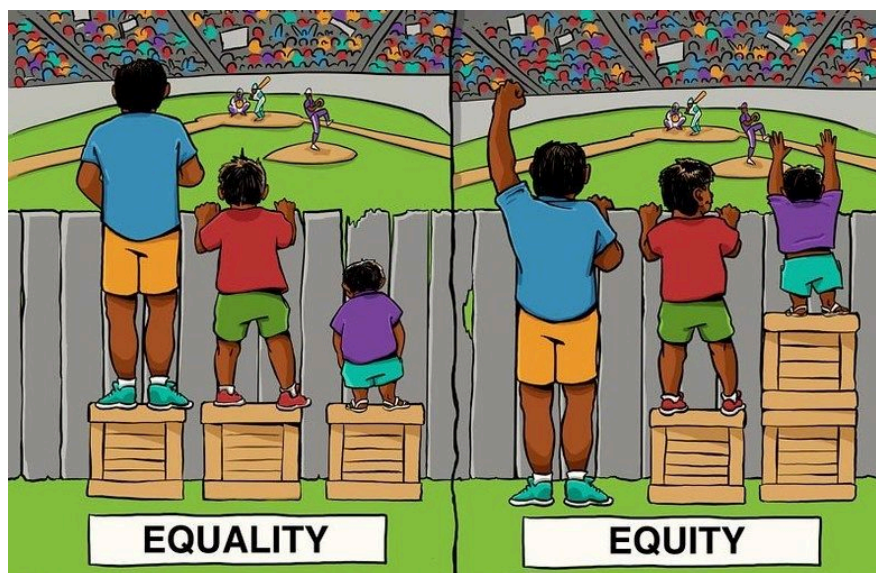
but also can be fluid, we respect individual rights to self-identification, and we recognize that no one culture is intrinsically superior to another”.²

EQUITY

In education, the term **equity** refers to the principle of **fairness**. While it is often used interchangeably with the related principle of **equality**, equity encompasses a wide variety of educational models, programs, and strategies that may be considered fair, but not necessarily equal.³ In other words, equity means making sure every student has the support they need to be successful.

Equity in education “requires putting systems in place to ensure that every child has an equal chance for success. That requires understanding the unique challenges and barriers faced by individual students or by populations of students and providing additional supports to help them overcome those barriers. While this in itself may not ensure **equal outcomes**, we all should strive to ensure that every child has **equal opportunity** for success.”⁴ Unlike equity, equality ignores the fact that different people begin with different resources and barriers, and therefore will need more or less support as a result.⁵

Following image a simplified visual of difference between equality (giving everyone the same thing) and equity (giving each person what they need).



A simplified visual of equality versus equity. Credit: Leigh Blackall.

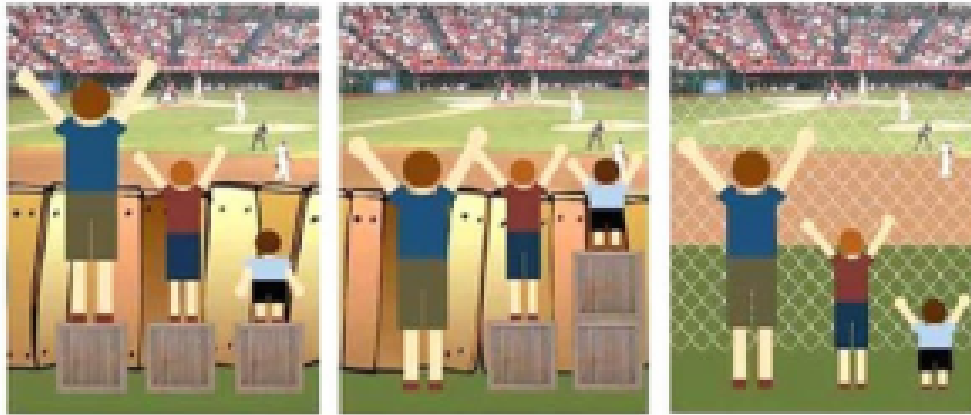
Other images have been created show that equity isn't quite that simple and often what is creating the inequity is not characteristics of the person (such as height as shown in the image), but in the system. Systemic oppression and unearned privilege are addressed in later chapters of this book.

2. Ibid

3. [The Glossary of Education Reform](#) by the [Great Schools Partnership](#) is licensed under [CC BY-NC-SA 4.0](#)

4. Thought Leaders. (2018). *Equity in Education: What it Is and Why it matters*. <https://www.thinkingmaps.com/equity-education-matters/>

5. [Diversity, Equity, and Inclusion](#) by Bethany Theme is licensed under [CC BY 4.0](#)



Equality versus equity. Credit: City for All Women Initiative (CAWI).

Why Does Educational Equity Matter?

When we think of a fair and just society one of the defining characteristics is likely to be that all individuals have equal opportunity to realize their potential, irrespective of the circumstances into which they are born. Education plays a critical role in determining whether or not individuals are given this opportunity. There are a range of reasons why good educational outcomes matter, from the individual; better health and longer life, to the societal; greater social cohesion, inclusion and trust; to the economic, productivity, economic growth, innovation, social wealth and reduced welfare costs. For a society or nation committed to 'creating a fair and egalitarian place in which opportunities exist for all', education is a key lever or vehicle through which this can occur.⁶



Making sure all children have equal opportunities is critical.
Credit: California Department of Education.

INCLUSION

When we talk about inclusive early childhood education, we are talking about programs that are designed for children and families from a wide range of backgrounds. A program can serve diverse families, but not be truly

6. [The Future of Education by ACT Government Education](#) is licensed under [Creative Commons Attribution 4.0 International](#) unless otherwise stated.

inclusive; you can have families from different backgrounds in your program, but do they feel welcome? Are you forcing them to adapt to a program that isn't designed for them or that doesn't take into consideration their social, cultural, and/or racial contexts? Designing an inclusive program translates to everything from physical space to how you interact with children and families.⁷

Inclusion and Children with Disabilities

Inclusion embodies the values, policies, and practices that support the right of every child and their family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society. The desired results of inclusive experiences for children with and without disabilities and their families include a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used to identify high quality early childhood programs and services are:

- Access – providing access to a wide range of learning opportunities, activities, settings, and environments.
- Participation – even if environments and programs are designed to facilitate access, some children will need additional individualized accommodations and supports to participate fully in play and learning activities with peers and adults.
- Supports – an infrastructure of systems-level supports must be afforded to those providing inclusive services to children and families.⁸



All children need to be able to fully participate in the early childhood education environment. Credit: California Department of Education.

7. [Diversity, Equity, and Inclusion](#) by Bethany Theme is licensed under [CC BY 4.0](#)

8. [Early Childhood Inclusion](#) by DEC/NAEYC—Permission to copy not required—distribution encouraged (page 2)

Children with disabilities and their families continue to face significant barriers to accessing inclusive high-quality early childhood programs and too many preschool children with disabilities are only offered the option of receiving special education services in settings separate from their peers without disabilities.⁹

Review Question

- Describe your understanding of how diversity, equity, and inclusion are related.

SUMMARY

Early childhood programs serve a diverse array of children and families. Recognizing the value of this diversity and creating relationships with families that provide the context of their culture, will allow early childhood education programs to be inclusive in a variety of different ways and provide educational equity for the children for whom they provide care and education.

IMAGE CREDITS

Blackall, L. (2016, November 2). *Equality/Equity*is. Flickr. [CC BY 2.0. https://flic.kr/p/NPgGni](https://flic.kr/p/NPgGni)

California Department of Education. (n.d.). Images from *A Guide to Culturally Sensitive Care*, used with permission.

City for All Women Initiative [CAWI]. (2015). Advancing Equity and Inclusion: A Guide for Municipalities. <https://www.cawi-ivtf.org/wp-content/uploads/advancing-equity-inclusion-en.pdf>

CHAPTER ATTRIBUTION

Adapted from [Unit 1.1 Diversity](#) by Krischa Esquivel, Emily Elam, Jennifer Paris, & Maricela Tafoya in [The Role of Equity and Diversity in Early Childhood Education](#) published in LibreText by College of the Canyons under a [CC BY](#) license.

9. [Policy Statement on Inclusion of Children with Disabilities in Early Childhood Programs](#) by the US Department of Health and Human Services & the US Department of Education is in the public domain (page 2)

UNIT 14

The Importance of Culture

Chapter Objectives

After this chapter, you should be able to:

1. Discuss what culture is and how it has been defined or described.
2. Describe how culture is passed.
3. Identify myths about culture.
4. Relate how culture affects development.
5. Explain the importance of being responsive to children and families' culture.

INTRODUCTION

Culture is a broad concept that refers to the customs, values, beliefs, and practices of a group of people. It incorporates family roles, rituals, communication styles, emotional expression, social interactions, and learned behaviour. Culture also refers to a shared way of life that includes social norms, rules, beliefs, and values that are transmitted across generations¹ Although cultural groups often share ethnic and linguistic backgrounds, these are not what define culture. Culture has been described as arising from “a dynamic system of social values, cognitive codes, of behavioural standards, worldviews, and beliefs used to give order and meaning to our lives” [footnote]Gay, G. (2000). *Culturally Responsive Teaching: Theory, Research, and Practice*. Teachers College Press.[/footnote]

Culture infuses and is reflected in routines of daily living. Culture is a primary source of beliefs, attitudes, language, and personal efficacy (belief that one has control over and is responsible for one's life), sense of time (whether time is thought of in large chunks such as hours and days rather than precisely in terms of minutes and seconds), and perceptions of personal space. Culture is the source of the symbols used to capture aspects of life such as important life transitions, relationships, status and power, achievement, group identity, and the meaning of life and death. Culture conveys a set of beliefs about how social relationships should be ordered and how the world operates.²

1. Hill, N. E., V. McBride-Murry, and V. D. Anderson. (2005). *Socio-cultural Contexts of African American Families*. In *African American Family Life: Ecological and Cultural Diversity*, edited by V. C. McLoyd, N. E. Hill, and K. A. Dodge, 21–44. Guilford Press

2. California Department of Education. (2016). *Best Practices For Planning Curriculum For Young Children*. <https://www.cde.ca.gov/sp/cd/re/documents/familypartnerships.pdf>

TERMINOLOGY AND DEFINITIONS³

A variety of definitions of culture are provided below. The purpose of providing these definitions is to invite us to review and discuss the various definitions of the term as a framework for further discussions.

CULTURE IS...

- The organized and common practices of particular communities.
- A shared organization of ideas that includes the intellectual, moral, and aesthetic standards prevalent in a community and the meaning of communicative actions.
- The complex processes of human social interaction and symbolic communication.
- A set of activities by which different groups produce collective memories, knowledge, social relationships, and values within historically controlled relations of power.
- An instrument people use as they struggle to survive in a social group.
- A framework that guides and bounds life practices.
- All that is done by people.
- The ways and manners people use to see, perceive, represent, interpret, and assign value and meaning to the reality they live or experience.
- The complex whole that includes knowledge, beliefs, art, morals, customs, and any other capabilities and habits acquired by man as a member of society.
- Shared understanding, as well as the public customs and artifacts that embody these understandings.
- Patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiments in artifacts.
- Not so much a matter of inert system in which people operate, but rather a historical construction by people that is always changing.

Culture is complex and is something we are exposed to from the day we are born. It is a process detailed in the following deep structures:

Culture is a set of rules for behaviour

Culture cannot be “seen” because the rules are invisible; one can see only the products of culture: the behaviours produced by the rules. Nevertheless, cultural rules do not cause behaviour; they influence people to behave similarly, in ways that help them to understand each other. It is by understanding a culture’s rules that one knows how to greet a person younger than oneself, older than oneself, a friend, or a stranger. Cultural rules help people to know how to hold a baby. Cultural rules shape food preferences and celebrations—determine whether the sun or the moon is celebrated; whether to wear a dress or pants, or nothing at all. These rules give meaning to all the events and experiences of life. The essence of culture is not these behaviours themselves, but the rules that produce the behaviours.

3. Adapted from Terminology and Definitions section. Early Head Start National Resource Center. (2008). *Revisiting and Updating Multicultural Principles for Head Start Programs Serving Children Ages Birth to Five*. https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/principles-01-10-revisiting-multicultural-principles-hs-english_0.pdf

Culture is characteristic of groups

The rules of a culture are shared by the group, not invented by the individual. The rules of the group, which are passed on from one generation to the next, form the core of the culture. Although one must remember that in addition to group cultural differences, there are individual differences. Each person develops a unique personality as a result of his or her personal history and, at the same time, develops in a cultural context with some behavioural characteristics that are shared by other members of the group.



Culture is not seen, but you can see the behaviours that result from acculturation.
Credit: California Department of Education.

Culture is Learned

No one is born acculturated; rather, each person is born with a biological capacity to learn. What each person learns depends upon the cultural rules of the people who raised them. Some rules are taught with words: “hold your fork in your right hand, and your knife in your left.” Other rules are demonstrated by actions—when to smile, how close to stand when talking to someone, and so on. Because culture is learned, it is a mistake to assume a person’s culture by the way she or he looks. Someone may be racially black and culturally Irish. A person can also become bicultural or multicultural by learning the rules of cultures other than his or her own primary group.

Cultural Embedment

Individuals are embedded, to different degrees, within a culture. Culture is learned and as children are acculturated, they usually learn the core rules of their culture, yet they may not always learn each cultural

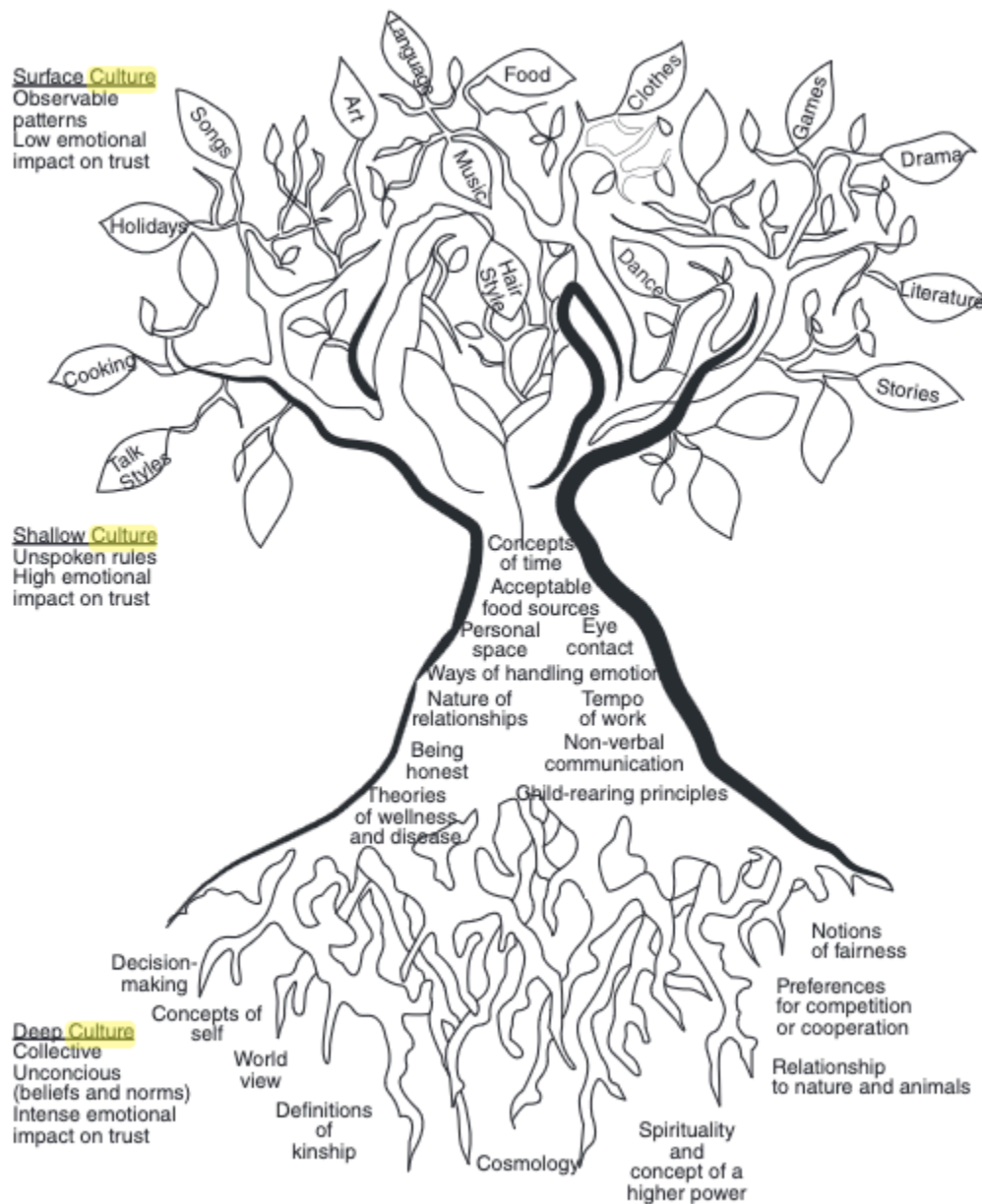
rule equally well. Some families are more bound to tradition, others less so. Further, even though families and individuals learn the cultural rules, they may not always behave according to what they have learned—some people are conformists; others are nonconformists. Consequently, the behaviour of members of a cultural group will vary, depending on how deeply embedded their experiences are within the core of a culture. Thinking about behavioural variations in this way helps those who work with individual families to understand why those from a similar culture do not share all culturally based behaviours.

Cultural Groups Borrow and Share Rules

Each cultural group has its own set of core behavioural rules and is therefore unique; yet some of the rules of Culture A may be the same as the rules of Culture B. This happens because cultural rules evolve and change over time, and sometimes when two groups have extensive contact with one another, they influence each other in some areas. Thus, two groups of people may speak the same language, yet have different rules about roles for women. Understanding of this concept helps to avoid confusion when a person from another culture is so much like the teacher in some ways, yet so different in other ways.

Ability to Describe Rules

Members of a cultural group may be proficient at cultural behaviour but unable to describe the rules. Acculturation is a natural process; as people become acculturated, they are not conscious that their ideas and behaviour are being shaped by a unique set of rules. Just as a four-year-old who is proficient with language cannot diagram a sentence or explain the rules of grammar if asked to do so, so also people may become thoroughly proficient with cultural behaviour without consciously knowing that they behave according to rules. In the same way, understanding acculturation explains why one cannot walk up to a person and ask him or her to explain their culture.



Culture Tree. Credit: Aliza Maynard

Cultivating openness about culture and development promotes a curiosity for the early childhood educator that helps with curtailing the two common assumptions that exist in society today. The first assumption is that there is one set of “best practices” and one set of universal developmental goals for all children and families. By avoiding this static view and looking instead at culture as a fluid set of practices organized to accomplish specific goals, one sees that each cultural community may have a unique set of “best practices” to promote socialization and developmental goals for its children. These practices and goals are situated within the broader community context that includes political, social, and economic history.

The second assumption is that culture is equivalent to one’s ethnic or linguistic background. Looking at culture as a set of practices rather than as a person’s background provides a more powerful way to understand variations

within ethnic and linguistic groups than simply comparing attributes across groups. As teachers, early care providers, and researchers often note, it is typical for more differences than similarities to appear among children from the same ethnic or linguistic backgrounds. Families from similar ethnic or linguistic backgrounds do not necessarily have the same routines, goals, or practices. Routines, goals, and practices are developed in the context of a family's history, including cultural and linguistic heritage, but they vary across regions and from country to country and are usually associated with the immediate and recent social, political, and economic goals of the community. The cultural practices, or routine ways of doing things, define the cultural context in which humans develop. Using this approach, practitioners and researchers can explore how culturally based practices with children drive developmental outcomes rather than focus exclusively on how developmental outcomes differ across ethnic and linguistic groups. The following vignette illustrates this concept.⁴

NAPTIME STRUGGLES



Children patterns vary based on home culture. Credit: California Department of Education.

4. California Department of Education and WestEd. (2013). *Infant/Toddler Caregiving: A Guide to Culturally Sensitive Care, Second Edition*. <https://wested.ent.box.com/s/4fcr0z3wpgoc6q4x459hxrnszy9amz02>

José is a 17-month-old child whose family lives in an apartment in a large city located close to the Mexican border. His family has recently moved to the United States and has been living with his aunt and her four children. José has been attending a local infant/toddler program for almost two months. His teachers report that naptime is particularly difficult for José. Although obviously very tired, José struggles to transition to his cot and often lies on the floor and cries, which disturbs the other children and often wakes them.

José's primary care teacher has tried carrying José to his cot and giving him a book or favourite toy to help him calm down; however, José rolls off the cot and onto the floor and continues to cry. When José finally does fall asleep, it is usually time for the children to get up and have a snack. The lead teacher, Carla, decides to bring up this issue to her supervisor during her next reflective supervision meeting.

When asked to describe how José's behaviour during naptime makes her feel, Carla shares that she feels sad for José because he is so obviously distressed and that she wishes she could do something to help him. She also feels that since José has been in the program for almost two months, he should be able to make the transition to nap-time more easily. When asked how José's behaviour makes her feel in her role as lead teacher, Carla shares that she feels ineffective as a teacher and worries about the effect that José's behaviour has on the other children. She also worries about how she and her assistant will get their lunch breaks since all children need to be asleep in order for one of them to leave the classroom.

Carla's supervisor suggests that she do a home visit to get to know the family better and learn more about the family's caregiving routines. During the home visit, Carla learns that José has slept with his mother since birth and that in José's country of origin, children typically sleep with a parent until another sibling is born, at which time they generally move to an older sibling's bed. When discussing this with her supervisor, Carla comes to understand that co-sleeping reflects a goal of José's cultural community, which is to foster interdependence.

As this vignette illustrates, the interdependence valued in José's home is dramatically different from the emphasis on self-reliance and autonomy found in his early care program. Researchers have reported that environments where sleep patterns are different from those of the home setting can lead to uncertainty for children⁵ and that sleep patterns are often among the final practices to change when a family moves to a new country⁶. José experiences very different practices in the early care program, which are based on the goal of independence, from those he experiences at home. By making a home visit to learn more about family practices, Carla has taken an important first step toward understanding José's behaviour and creating a sensitive and responsive classroom.

THE ROLE OF CULTURE IN DEVELOPMENT

Although the early childhood field has a long history of commitment to developing culturally appropriate approaches to educating young children ("multicultural education"), it still struggles with understanding the role of culture in the development of our youngest children⁷. To develop a culturally responsive approach, it is essential to understand that what children learn from families and teachers is an idea system that extends deep into the values of a group of people. Learning goes far beyond the things generally associated with culture, such as art, music, styles of dress, or holidays. As a child acquires cultural ways of being, these cultural rules for behaviour impact identity by giving children the tools to understand their family/community and be understood in it.

Acquiring the idea system of the group is so powerful that it gives children the ability to interact with the group. For example, babies are born with the capability to make sounds; however, those sounds become meaningful only as they communicate with their families. Through communication the sounds are shaped and organized into

5. Provence, S., A. Naylor, and J. Patterson. (1977). *The Challenge of Day Care*. Yale University Press

6. Farooqui, S. I., J. Perry, and D. G. Beevers. (1991). *Ethnic Differences in Sleeping Position and Risk of Cot Death*. *The Lancet* 338:1445.

7. Maschinot, B. (2008). *The Changing Face of the United States: The Influence of Culture on Child Development*. Zero to Three.

the words and sentences the babies' families use to share meaning. Thus, as children come to know the ideas that govern speech and language in their community, they gain the power to communicate and to represent themselves in the world.

So, when teachers treat culture with an almost exclusive emphasis on the celebrations, styles of dress, art, music, and food habits, they fail to appreciate the depth of cultural impact and the idea system at work in the process of development. Although a child's identity is impacted by participation in family cultural rituals, the focus neither starts nor ends there. Surrounding children with artifacts and customs that are a part of their history, homes, and communities is important. However, when that approach becomes the sole emphasis in attempts to embrace culture, it diverts attention from the more fundamental role that culture plays in the development of children's social, emotional, physical, and intellectual well-being. The challenge for teachers of young children is to understand the importance of culture to human development and to move beyond mere cultural appreciation and enrichment to cultural empowerment.



Children learn by being around others that are different than themselves. Credit: California Department of Education.

MYTHS ABOUT CULTURE

Myth 1

Essentialism: It is possible to learn all there is to know about a culture by studying its traditions, beliefs, practices, and attitudes.

Truth: It is nearly impossible to reduce the essential and distinguishing features of any culture or cultural group to descriptive statements or lists of characteristics

Myth 2

Overgeneralization: Cultural practices and beliefs apply in the same way to all members of a cultural group.

Truth: Cultures are dynamic and constantly evolving in response to such factors as environmental conditions, new challenges, technology, and acculturative pressures resulting from close encounters with other cultural groups. Cultures that are in proximity borrow from and are influenced by one another.

Myth 3

Assumption of stability: Cultures

Truth: The shared system of beliefs, morals, values, attitudes, practices, roles, artifacts, symbols, and language that make up a culture are adaptive, dynamic, and in constant flux in response to changes in the social context. Cultures change in response to strains, opportunities, and altered social landscapes. Learning and relearning must take place continually.

Myth 4

Single-culture assumption: Within a home and family, a single culture predominates.

Truth: Within in a single family there may be blending of several distinct cultures and ethnic identities. This means that individuals living with a single family may reflect not one, but several cultural traditions.

RESPONSIVENESS ENVIRONMENTS

Responsive environments create a climate of respect for each child's culture and language when teachers and other program staff partner and regularly communicate with family members. They work to get to know the cultural strengths each child brings to their early childhood education program. An essential part of being culturally and linguistically responsive is to value and support each child's use of home language, for continued use and development of the child's home language is beneficial, as is becoming multilingual (learning English in addition to any home languages).

NURTURING INTERACTIONS

Equally important are nurturing interactions with children and their families in which “. . . teachers attempt, as much as possible, to learn about the history, beliefs, and practices of the children & families they serve. . . .” In addition to being responsive to the cultural history, beliefs, values, ways of communicating, and practices of children and families, teachers create learning environments that include resources such as pictures, displays, and books that are culturally rich and supportive of a diverse population, particularly the cultures and languages of the children and families in their preschool setting. Community members add to the cultural richness of a preschool setting by sharing their art, music, dance, traditions, and stories.⁸

SUMMARY

Culture can be defined in many ways, is complex, and is continually developing. It affects the way children and their families behave, what they value, and their identities. It is critical that early childhood educators partner with families to understand, value, respect, and honor the individual cultures of the children in your early childhood education classroom.

8. California Department of Education. (2010). *California Preschool Curriculum Framework*. <https://www.cde.ca.gov/sp/cd/re/documents/psframeworkkv1.pdf>

IMAGE CREDITS

Culture Tree by Aliza Maynard in Zaretta Hammond. (2015). *Culturally Responsive Teaching and The Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students* (p.24). Corwin. Used under fair dealing.

CHAPTER ATTRIBUTION

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UNIT 15

Resolving Conflict

Chapter Objectives

After this chapter, you should be able to:

- Articulate the importance of celebrating diversity.
- Discuss why cultural differences may lead to conflict between families and programs.
- Explain how to develop relationships with families that are inclusive and supportive.
- Outline how to create practices and policies that respond to differences respectfully.
- Describe three steps to deal with cultural differences in early childhood education programs.

DIFFERENCES AND CONFLICT

Working in an early education setting, with children, family and coworkers from varying backgrounds, conflict is inevitable. However, if managed correctly, conflict can be a learning and growing experience for all.

In her book *Diversity in Early Care and Education: Honoring Differences*, Janet Gonzalez-Mena discusses the need to honor, learn about and explore not only other cultures different than ours, but acknowledge how our own beliefs play a role in our professional caretaking roles. She shares her own process, “They say we teach what we need most to learn. I am a good example. I’m working on my dialoguing skills. The problem is that when I have a strong reaction to something that doesn’t fit my system, I usually consider it a problem....My natural reaction is to become defensive and start arguing.” This is a common response for many because our upbringing has taught us that our way is the ‘right’ way, so anything different simply doesn’t feel right.

As professionals, it is imperative we build relationships with families and create a classroom of inclusiveness that celebrates diversity.

Preventing Conflict

Some conflict can be prevented when we build relationships with families based on a willingness to listen to hear about who they are and what they want for their children. Here are some cultural considerations to keep in mind as you work to understand the experiences and values families have and how you can best meet their needs:

- Many families are most comfortable keeping young children at home with a parent, relative, or friend, especially with families from the same cultural background. So, when they do rely on out-of-home child care, they may experience some discomfort and may not be aware of licensing requirements and restrictions.
- Some cultures may expect that the mother's primary role is taking care of children and the home. However, both parents may need to find work due to financial need and thus depend on out-of-home child care. This can create guilt, shame, fear, and discomfort.
- Families with limited English skills are likely to have difficulty gathering information about the varied early care and education options and may rely on word of mouth or recommendations from others within their ethnic or religious community.
- Families may seek reassurance that early care and education providers understand and respect their family's religion and will not inadvertently violate the family's religious practices (e.g., abstaining from pork products).
- Families of a child with a disability may not be aware of the legal educational requirements, learning possibilities, and school options for children with disabilities.
- Hiring staff from the same culture and language as families and providing opportunities for families from the same cultural or linguistic backgrounds to connect may encourage family engagement and mutual support.
- Some cultures show respect for teachers by not being intrusive and interfering with their job (e.g., not offering suggestions or sharing negative opinions). By American standards, this can look like lack of interest. Families may not know the expectations for family engagement in school.

We can start conversations that will help us understand where families are coming from and how we can effectively and respectfully engage and communicate with them. Questions to ask might include:

- What are some ways staff can learn more about your perspectives and needs?
- How would you like to communicate and partner with staff?
- Describe what school was like in your country of origin (if the family has immigrated or are refugees).¹

Navigating Cultural Differences

Cultural differences can lead to conflicts. For example, people may disagree on practices for handling a baby, responding to crying, or feeding. Home visit staff may be concerned over how and when to intervene in family arguments. Staff and families in early childhood education programs may differ about how programs should support children's home or native language. Given the wide range of cultural ideas, it is not surprising that adults can have differences that are rooted in the core of their being.

Gonzalez-Mena (1992, 2001, 2008) indicated that these disagreements may be when adults from different cultural backgrounds may find that their familiar ways of working with children are different or when adults within the same culture can disagree. In both of these situations of conflict between program staff and families, Gonzalez--Mena identified four possible outcomes:

- All sides gain understanding, negotiate, and/or compromise, leading to resolution of the conflict.

1. Office of Head Start National Center on Cultural and Linguistic Responsiveness. (n.d.). *Connecting to Early Care and Education: Family Engagement Tip Sheet*. <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/connecting-early-care-education-family-engagement-tipsheet.pdf>

- Program staff understand the families' perspective(s) and change their practices.
- Families take on the perspective of the program staff and change their practices.
- No resolution is reached (here, the conflict may continue or intensify; or both sides can cope with the differences).

Of course, conflicts can occur over numerous issues. To help program staff make progress, Gonzalez-Mena challenges them to question their own assumptions about child development practices (e.g., "My way of thinking about X is not the only way to think about it. My way of doing Practice Y is not the only way to work with the child."). Once this commitment to test one's own assumptions is in place, two goals for a conflict situation are:

1. to minimize (or eliminate) extreme differences in practices; and
2. to resolve the situation for the benefit of the child. Program staff are encouraged to take a child centered look at any situation of conflicting practices.²

The process for each varies greatly not only based on cultures, but even within similar cultures. These practices can often times go against program policy and best practice as we have been taught in the field.³

DIFFERENCES IN FEEDING PRACTICE

The following is a scenario from the NAEYC's publication, *Diversity and Infant/Toddler Caregiving*:

"Junior, who is new to the center, is excited when he sees a bowl of food. The baby makes happy sounds, kicks his legs, and waves his arms. But when Helen puts Junior in the high chair and places the bowl in front of him, he just sits there and makes no attempt to feed himself. He looks confused and becomes distressed. Finally he slumps over, a glazed look in his eyes.

His mother explains later that she has taught Junior not to touch his food. In fact, her son has never been in a high chair; he has always been fed on his mother's lap, wrapped up tightly in a blanket to discourage him from interfering with her."

Gonzalez-Mena and Bhavnagri suggest that when the family and program do not agree about a practice or policy, early childhood educators should ask themselves:

1. What is the family's cultural perspective on the issue?
2. How do the family's child care practices relate to their cultural perspective?
3. What are the family's goals for the child? How has the family's culture influenced these goals?
4. In review of these goals, is the family's practice in the child's best interest?
5. Is there any sound research that shows that the family's practice is doing actual harm?
6. Is the program's practice or policy universally applicable, or is it better suited to a particular culture?
7. Did the family choose the program because of its particular philosophy, even if it is based on a different culture from their own?
8. Have program staff members attempted to fully understand the family's rationale for its practices, the

2. Early Head Start National Resource Center. (2008). *Revisiting and Updating Multicultural Principles for Head Start Programs Serving Children Ages Birth to Five*. https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/principles-01-10-revisiting-multicultural-principles-hs-english_0.pdf.

3. Gonzalez-Mena, J. and Peshotan Bhavnagri, N. (2003). *Diversity and Infant/Toddler Caregiving*. https://www.providershelper.com/uploads/3/0/7/3/30737125/12-diversity_and_infant-toddler_caregiving.pdf

complexity of the issues, and other contributing factors?

9. Have staff members attempted to fully explain the rationale for program practices? Have they looked at how their own culture influences their perspective?
10. What are some creative resolutions that address the concerns of both partners and the program?

The point is to begin and continue to dialogue with families and to exchange information with the goal of resolving the conflict for the benefit of the child. The “bottom line” is really: What is in the best interest of the child? As stated in the National Association for the Education of Young Children’s *Code of Ethical Conduct*, our first and foremost ethical responsibility to children is to do no harm.

By learning more about the goals that families have for their children, and about the types of behaviours or practices that families prioritize and implement as they raise their children, program staff can more easily match the learning experiences of the classroom to those of the home. For example, if a teacher is concerned that a 3-year-old in her class is not skilled with using a fork, she should first find out if this is a goal of the family. Do they scoop their food at home using spoons? Do they use chopsticks? Do they feed the child or allow the child to self-feed? It is best for the teacher to check what the family practices and goals are before they misjudge what this child needs from them in terms of support and understanding.

According to National Association for the Education of Young Children’s developmentally appropriate practice one of the tenets is to be culturally responsive. In preparing an environment that supports children and families, we need to ensure that we have considered the beliefs, values, and needs of the family to deliver curriculum that addresses the child both individually and as a group.⁴

These exercises can be done individually and at a staff/team meeting. It’s important to involve the family and all caregivers as a way to ensure all perspectives are heard. Now that questions have been identified, having the conversation to gather the information is next; however, this comes with challenges. As you enter into the conversation, it’s important to put personal biases and beliefs aside and be ready to actively listen to hear and learn about the family and their point of view.⁵

DEALING WITH DIFFERENCES

The Program for Infant/Toddler Caregivers (PITC) has outlined three steps in their training *Dealing with Differences: Acknowledge, Ask, Adapt* that can be used in early childhood programs that serve children of all ages.

Step 1: Acknowledge

How does the caregiver recognize the need for communication with the family? How does the caregiver’s attitude convey sincere interest and response? What can the caregiver say to the family to communicate awareness that there is a problem they need to jointly solve?

- Take time to think about how you feel about this issue and get clarity on the reasons behind your feelings.
- Listen carefully to the other person’s concern. If you bring up the concern, do it respectfully with an attitude of wanting to understand the issues.

4. Early Head Start National Resource Center. (2008). *Revisiting and Updating Multicultural Principles for Head Start Programs Serving Children Ages Birth to Five*. https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/principles-01-10-revisiting-multicultural-principles-hs-english_0.pdf

5. Gonzalez-Mena, J. and Peshotan Bhavnagri, N. (2003). *Diversity and Infant/Toddler Caregiving*. Retrieved from https://www.providershelper.com/uploads/3/0/7/3/30737125/12-diversity_and_infant-toddler_caregiving.pdf

Step 2: Ask

What questions can the caregiver ask the families to get information that will help her or him understand more precisely the families' point of view?

- The next step is about data gathering, trying to get to the real sources of conflict or misunderstanding for the family, the child or you. Ask questions that seek to clarify (and allow families to ask questions to understand the program's point-of-view).
- Pay attention to verbal and nonverbal responses. Restate what you think is being said, take time to be sure you are meaning the same thing in the language you are using.

Step 3: Adapt

How does the caregiver work with the family to define the issues and boundaries of the problem? Does the caregiver seek "common ground" as the basis for negotiation? How does the caregiver open up a negotiation with the family about what to do?

- Once the issues have been defined, seek out the common ground by stating your areas of greatest importance to each other. Listen carefully for areas of common agreement.
- Negotiate around the areas of important agreement and boundaries. Come to a resolution that addresses the real/major issues. Sometimes we have to agree to disagree.⁶

While using this method is a great start to get the most desired results, there will be instances when it won't take place. A few outcomes to become familiar and comfortable with are different outcomes that may come during the conversation.

- Sometimes there may be a resolution through mutual understanding and negotiation. Both parties see the other's perspective which is where both parties give a little or a lot.
- There may be a resolution that takes place through gradual education and understanding of the caregiver and seeing the perspective of the family.
- There can also be a resolution through the process of family education. This happens when the family sees the caregiver's perspective and decides to change.
- Lastly, and it's common, there can be no resolution. When this happens, the professional should look at Community Care Licensing Regulations(CCL), as well as internal policies and procedures to ensure no laws or rules are being violated. There are times when internal processes are created, but can be adjusted to meet the individual needs to families. These discussions and determinations should be made with the assistance and input of the site administrators. In some circumstances, the program and family may come to a mutual decision that the program is not a good fit for the family's needs.

CONFLICTS AND DIVERSITY

Conflicts related to diversity are inevitable and should not be seen or approached in a negative way but rather with the goal of partnering to create the best environment for the child to thrive while in your care. The process

6. California Department of Education and WestEd. (2013). *Infant/Toddler Caregiving: A Guide to Culturally Sensitive Care, Second Edition*. <https://wested.ent.box.com/s/4fcr0z3wpgoc6q4x459hxrnsnzy9amz02>

of partnering takes time, mutual understanding and for at least one person to take the first, often uncomfortable step. Here are a few things to remember:

- All families want what's best for their child and are doing what they believe is best.
- Be curious: what are the expectations the family has from you? From the program and for their child? This will help guide any conversations and interactions.
- Become self-aware: what makes you uncomfortable? What are your personal beliefs?

Reflection Exercise

Think about a time you had conflict related to diversity with a child in your classroom or family member.

- How could you have used these tools to create an equitable outcome?

SUMMARY

We know that being respectful of difference is valuable in an early learning setting. As indicated, these differences can lead to conflicts between families, early childhood professionals, and the program their child is enrolled in. With strong relationships, some of that conflict can be prevented. Early childhood educators can be reflective when disagreements over practices and policies occur. And they can use the three steps outlined by PITC's *Dealing with Differences: Acknowledge, Ask, Adapt* training to help mitigate the conflict respectfully.

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UNIT 16

Diverse Family Structures

Chapter Objectives

In this chapter, you will learn about:

- Diverse family structures
- Terms that help to build a culture of exclusivity and equity

INTRODUCTION

In this chapter, we will explore diverse family structures and terms that will help build a culture of inclusivity and equity. It is important to consider two overarching premises regarding family structures. The first is that **Parents** refers to biological, adoptive, and step-parents as well as primary caregivers, such as grandparents, other adult family members, and foster parents. The second is that **Families** can be biological or non-biological, chosen, or circumstantial. They are connected through cultures, languages, traditions, shared experiences, emotional commitment, and mutual support.¹ You may notice that we have used families, often even when referring to parent/caregiver throughout this book in an attempt to be as inclusive as possible.



This is a family. Credit: SAMHSA.

A feeling of belonging is critical to every child and family's well-being. The drive to form relationships with others begins in infancy and continues throughout early childhood. These relationships help children fulfill their

1. National Center on Parent, Family and Community Engagement. (n.d.). *Family Engagement and Cultural Perspectives: Applying Strengths-based Attitudes*. <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/family-engagement-cultural-perspectives.pdf>

potential in all areas of development—physical, social, emotional, and cognitive. Quality early childhood programs can expand children’s experiences of forming relationships when the culture and core curriculum partners with families’ and communities’ central themes.

Many families have multiple identities and might include themselves in multiple family definitions. Most children see the caring adults who love and take care of them as their family and will refer to them in that way. It is important to recognize the complexity and variation amongst all families. It is recommended to connect with families to find out the language that they use to refer to their families to help respectfully answer questions that may arise.²

Understanding and conversations are important to gain insight into the structure of each family unit. It also assists in the individualization of the support offered to each child. Families come to an early childhood setting with distinct family structures and cultures that give meaning and direction to their lives. All families are complex and influenced by many factors: family traditions, countries of origin, geographic regions, ethnic identities, cultural groups, community norms, sexual orientation, gender identities, educational and other experiences, personal choices, and home languages.



Programs need to partner with all families. Credit: SAMHSA.

While every child and family are unique, many of our conversations with families involve common topics. We can anticipate that there will be discussions about learning and language, daily routines (such as sleeping, feeding, toileting), expectations, new skills, behaviour, discipline, and relationships with peers and adults. We also know that each family will bring unique perspectives to these discussions. Ultimately, it is understanding the perspectives of families and seeing them as the experts on their children that helps create the best care and learning environment for their child.³

Below is a list of terms and definitions, many from the [Welcoming Schools organization](http://www.welcomingschools.org), intended to be a starting point for important conversations about family diversity. Many families have multiple identities and might include themselves in multiple family definitions.

- Adoption: when adults bring children into their families and legally become the parents of those children.
- Adoptive parents: the parents of children who have joined the family through adoption.
- Birth parent: a biological parent. People may also use the terms birth mother or birth father. Most often

2. Welcoming Schools. (n.d.). *Family Diversity Definitions*. <http://www.welcomingschools.org/resources/definitions/family-diversity-definitions/>

3. National Center on Parent, Family and Community Engagement. (n.d.). *Family Engagement and Cultural Perspectives: Applying Strengths-based Attitudes*. <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/family-engagement-cultural-perspectives.pdf>

used in the context of adoption.

- Donor or surrogate: people who help other people have children.
- Blended family: two families who come together to form a new family. This may include step-parents and step-siblings.
- Chosen family: people who you care about and consider family, such as friends or neighbors.
- Conditionally separated family: a family separated for a specific period of time; having a family member in jail, prison, a mental health care facility, the hospital, etc.
- Divorce: when people legally separate and end a marriage.
- Extended family: all your relatives, including your grandparents, aunts, uncles and cousins. In some families, this can include neighbors, friends and chosen family.
- Foster parent: people—other than a child's first family—who take children into their homes and take care of them for as long as their family needs help. Sometimes children will return to their first family, sometimes foster parents go on to become adoptive parents or permanent guardians and sometimes children will be adopted by other families.
- Guardian: a person who has responsibility by law to care for a child; a person other than the biological parent who takes care of a child. The person may be biologically related to the child, such as a grandparent.
- Interfaith family: when people of different religious backgrounds are part of the same family. Some families choose to raise their children primarily in one faith, some choose to teach their children both faiths and others practice multiple faiths.
- Half-sister or half-brother: when siblings have one biological parent in common.
- LGBTQ family: a family in which some people are lesbian, gay, bisexual, transgender, non-binary or queer. This could include parents, guardians, foster parents, children, chosen family, siblings or grandparents who are lgbtq.
 - Lesbian: women who love women.
 - Gay: people who love people of the same gender, typically men who love men.
 - Bisexual: people who love people not exclusively of one particular gender.
 - Pansexual: people who love people regardless of their sex or gender.
 - Transgender: when your gender identity (how you feel) is different than what doctors/midwives assigned to you when you were born (girl/boy or sex assigned at birth).
 - Non-binary: people who do not feel like the words "girl" or "boy" fit. They may feel like both or neither. They sometimes use pronouns such as they, them, theirs.
 - Queer: people use this word as a way to identify with and celebrate people of all gender identities and all the ways people love each other. When used in a mean way, it is a word that hurts.
- Mixed family: when people of different racial and cultural backgrounds are part of the same family. People of different ethnic, religious or national backgrounds can also form families who are "mixed" in terms of culture, skin color, language and/or religious practices.
- Multigenerational family: when more than one generation of a family lives together.

- Multiracial family: when people of different racial backgrounds are part of the same family.
- Multilingual family: when people within a family speak more than one language.
- Sibling: children or adults who share a parent whether biologically or not.
- Single-parent family or solo-parent family: a family in which one parent cares for the child or children.
- Step-siblings: if a divorced or solo parent forms a family with a new person and that person already has children, those children can become step-siblings to their children.
- Stepparent: when a divorced or solo parent forms a family with a new person, the new partner might become a stepparent to their children.⁴
- Transnational family: a family residing in two different countries.

What Programs Can Do

The family compositions represented in the populations served by early childhood programs are quite diverse. Staff members typically develop strategies for accommodating this diversity. Sometimes problems arise for staff members because the children and families they serve have not yet acclimated to the social changes this diversity represents. The problems can sometimes emerge in the interactions among the children who are puzzled by and react negatively to the differences or the stigmatizing comments made by some parents about others. A situation in one program may be an example: Katie is overheard by staff members saying to Martin: “My mommy says I can’t play with you because you have two mommies living together at your house.” It is unclear whether Katie really understands what she is saying, but the situation represents a teachable moment for the children and the staff.

A series of books may be read in circle time that introduce children to different types of families and point out what is common to all (i.e., adoptive families, foster families, single-parent families, multigenerational families, and families led by a grandparent or a gay or lesbian couple). These families represent different ways that adults come together to take care of and love the children they have the responsibility to raise. For some families and staff members, this may represent a complex issue in which they are caught between creating a safe and supportive environment for children who have two mommies and respecting the concerns of parents who, for religious or other reasons, promote a different view at home. In such cases, staff members may need to check with families and meet with them before circumventing what is said at home.

TWO MOMMIES

This scenario involves an openly lesbian couple who enroll their child in an infant/toddler care program. It focuses on differences of beliefs and attitudes among staff members concerning the definition of a legitimate family unit. It opens up the thorny issue of a teacher judging a family as engaging in “wrong” or unacceptable behaviour because that behaviour contradicts the teacher’s personal beliefs. What do you think is the responsibility of a culturally responsive professional in such a situation?

4. Welcoming schools. (n.d.). *Family diversity definitions*. <http://www.welcomingschools.org/resources/definitions/family-diversity-definitions/>

THE SCENARIO

For the first time, a family consisting of two female parents—both of whom are open about being lesbians—joins the infant/toddler care center. During the intake session, both women make it clear that they want to be acknowledged as the parents of the infant. They cross out “father” on the admission form and substitute “mother,” so that there is a place for each woman to write down her name. They also ask permission to contribute a poster that shows “two-mommy families” and a few picture books with images of two-mommy and two-daddy families.

The center director consents to their requests. However, when she informs the staff about the family, conflicting responses to having openly lesbian parents in the program necessitates a staff discussion. Christine, the teacher in whose room the infant will be placed, is uncomfortable with the situation. She tells other staff members that she thinks it is wrong to encourage homosexuality, since she believes it is a sin. She wants the director to tell the family that only one parent can be considered the infant’s mother, and that person is the only family member who should interact with the program. She also refuses to use the poster or picture books the family wants to contribute.

Marie, an assistant teacher, agrees with Christine. She even suggests that, to avoid problems, the director not admit the family into the program. She explains that since homosexuals cannot properly raise a child, she does not think the program should encourage homosexuality by accepting the infant.

Rachel explains that she has no problem with a two-mommy family, but she is worried that admitting this family into the program will cause problems with other families. In the interests of keeping the peace, she reluctantly supports Christine’s suggestion to identify only one person as the infant’s mother and that no materials show two-mommy families.

Carrie disagrees with the others. She takes the position that, as professionals, they have a responsibility to support all families equally and to make sure that all the infants and toddlers have their family visible in the program. She reminds her colleagues that the family composition and members’ roles within families vary widely. Carrie further explains that she is not questioning her colleagues’ personal beliefs, but argues that professionals need to act according to professional ethics and not just according to their personal beliefs.

Sarah agrees with Carrie. She reminds her colleagues of the following excerpt from the California Early Childhood Educator Competencies publication: “Cultural perspectives of children, families, staff, and colleagues vary widely on issues such as differences in individual children’s learning, strengths, and abilities; gender identity and gender-specific roles; family composition and member roles”⁵

Sarah reminds staff that there was a time when many people considered all single mothers to be immoral and bad parents. Sarah further states that it is equally prejudicial to automatically assume that all two-mommy families are “bad.” Carrie adds to Sarah’s point, declaring that child-rearing problems arise in families of all kinds of cultural backgrounds and configurations.⁶

5. California Department of Education and First 5 California. (2011). *California Early Childhood Educator Competencies*. <https://www.cde.ca.gov/sp/cd/re/documents/eccecompetencies2011.pdf>

6. California Department of Education and WestEd. (2013). *Infant/Toddler Caregiving: A Guide to Culturally Sensitive Care, Second Edition*. <https://wested.ent.box.com/s/4fcr0z3wpgoc6q4x459hxrnszy9amz02>

Reflection Exercise

How is this scenario about cultural responsiveness?

How do you feel each of the staff (Christine, Marie, Rachel, Sarah, and Carrie) on their cultural responsiveness? Why?

SUMMARY

Educators need to be prepared to serve the diverse array of families they will encounter across their careers. Many types of family structures have been introduced in this chapter. Programs should implement policies that acknowledge and respect different structures of families. And teachers can get to know families and ensure that all children's families are recognized and authentically included in the classroom.

Reflection Exercise

What experiences do you have with diverse family structures?

Do you have a reaction to any of these definitions?

How might your experiences and feelings about diverse family structures affect how you care for children and interact with their families?

IMAGE CREDITS:

SAMHSA [n.d.]. *A Practitioner's resource Guide: Helping Families to Support Their LGBT Children*. <https://www.samhsa.gov/>

CHAPTER ATTRIBUTION

Adapted from [Unit 9 Diverse family Structures](#) by Krischa Esquivel, Emily Elam, Jennifer Paris, & Maricela Tafoya in [The Role of Equity and Diversity in Early Childhood Education](#) published in LibreText by College of the Canyons under a [CC BY](#) license.

PART V

CREATING ENVIRONMENTS

UNIT 17

Scheduling and Design

Chapter Objectives

In this chapter, you will be learning about:

- Safe and effective learning environment for an infant or toddler.
- Importance of a daily schedule for infants and toddlers.
- Various ways to create a sensitive and responsive schedule.

INTRODUCTION

The environment for an infant or toddler where they may spend up to 10 hours a day is critical. The physical characteristics of the environment play a major role. This chapter explores the building, classroom, and program as indicators of the quality of the physical environment that house the program.

The building that houses the program is as important as individual classrooms. Some programs are in buildings specifically designed for childcare. In my experience teaching and administering programs, I only had the opportunity once to work in a specifically designed building. Most of the buildings I worked in were redesigned spaces in churches, private schools, and one was originally a train station. The redesigned spaces were more challenging in terms of food preparation and toileting needs.

The classroom must be a safe and comfortable and the program should reflect developmentally appropriate practice, considering the age of the children, individual needs, and the social and cultural expectations of the family and community.

Safe, responsive, and nurturing environments are essential in supporting the learning and development of infants, toddlers, and preschoolers. As intentional teachers we must examine the space, materials, equipment, routines, and activities that can be altered to support growth and development in all domains. Well-designed environments:

- Support responsive caregiving
- Foster independence and feelings of competence
- Encourage educator productivity and efficiency

- Promote children's engagement with learning
- Decrease challenging behaviour
- Facilitate appropriate social interactions among children
- Provide structure and predictability

Resources to Explore

- [Early Childhood Environments: Designing Effective Classrooms](#). The module describes how to set up effective **inclusive** early childhood classroom environments for young children and provides details about the interrelated physical, social, and temporal components of those environments.
- [Great Places To Be a Baby: Infants' and Toddlers' Learning Environments](#).
- [Infant and Toddler Spaces](#): the possibilities for infant and toddler spaces.

SCHEDULING

To create effective learning environments for infants and toddlers, you will develop a daily schedule and in your weekly activity plan include activities that promote language and communication development. This section will examine how to schedule and plan so you can use interactions to enhance each child's development. Infant and toddler learning is dependent on relationships because the support and interactions of caregivers are critical to the growth and learning. Relationship-based practice is essential in infant and toddler education and care.

Scheduling the infant and toddler day can be challenging while considering infants and toddlers need stimulating, safe environments, time for outdoor play and fresh air, a variety of play choices that vary throughout the day, and warm, nurturing interactions with adults.

Schedules help to create a predictable routine for the children while being flexible and responsive to individual needs of the children. The schedule should provide time and support for transitions, include both indoor and outdoor experiences, and include times for rest and to be active. Teachers organize time and space on a daily basis to allow children to work or play individually and in pairs, to come together in small groups, and to engage as a whole group.

A typical daily schedule consists of arrival, child-directed learning, snack, child-directed learning, lunch, naptime, snack, child-directed learning, and departure. Diapering takes place when needed and diaper checks occur throughout the day. The children arrive and depart at different times, but the schedule of events remains consistent, providing a basic predictable framework for the day.

Video: Classroom Schedule Training for Infants, Toddlers and Twos¹



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=135#oembed-1>

1. Early Childhood Connection. (2014, November 26). *Classroom Schedule Training for Infants, Toddlers and Twos*. YouTube. <https://youtu.be/cGvz2k4eLrl>

This training focuses on the unique needs of this age group for daily scheduling. The pictorial schedule is featured as the recommend tool for creating a flexible schedule for young children.

Reading Exercise

Read the article, [Keys to quality infant/toddler care: Nurturing baby's life journey](#)² and answer the following questions:

- How will your schedule minimize stress and create rituals and routines?
- How will you stimulate language and literacy in everyday routines?

Reading Exercise

Read the article, [Group Times for Older Infants and Toddlers](#)³ and answer the following questions:

- Look for ways to Ways to Make Group Times More Flexible and Responsive to Children.
- What type of group time have you observed or held?
- Were the group times effective?
- Why or why not?
- How will you include the information in your daily schedule?

Remember that each child's temperament affects everything from sleeping and eating habits, to approaches to play and activity. You might want to add a note on your schedule where you state that you may adjust the daily schedule and environment because of individual differences so all children establish a healthy sense of self.

OVERALL DESIGN CONSIDERATIONS

Well-designed environments allow children to build strong relationships and encourage play. When designed right, the child can build a sense of security, exploring play areas that allow both independent play and play with others as they choose. Physical environments for infants and toddlers are different from preschool classrooms. For example, due to the different eating and sleep cycles of young infants room design and materials will need to be different.

InfoGraphic- [Importance of Playtime for Kids](#) by MomLovesBest

2. Honig, A. (2010). Keys to quality infant/toddler care: Nurturing baby's life journey. Syracuse University.

3. Post, J., Hohmann, M., Epstein, A. (n.d.). Group Times for Older Infants and Toddlers. *Highscope*, 26(6), 1-8.

Importance of Playtime for Kids

Did You Know?

The United Nations High Commission for Human Rights recognizes play as a right of every child because of its importance to optimal child development. Despite this:



Public schools throughout the United States continue to reduce the amount of time allotted to free play.



Children are given less time for free exploratory play as they are hurried to adapt into adult roles and prepare for their future at earlier ages.



There has been a significant increase in anxiety and depression over the last 50 years and many experts believe this can be linked to the decline of free play time.

Top 10 Benefits of Play

Boosts Your Child's Brain Power

Improves Creativity & Imagination

Builds Vocabulary and Language

Increases Happiness

Helps Children Cope With Stress

Leads To Better Physical Health

Helps Children Be More Socialable

Builds Self-Confidence

Allows Children to Express Their Emotions

Lets Them Explore Their Passions







NINE KEY CONCEPTS

There are nine key concepts to consider for caregiving environments:

- safety
- health
- comfort
- convenience
- child-sized
- flexibility
- encouraging movement
- allows for choice

- ensures accessibility

Environments for infants need to ensure their safety and promote health and comfort for both infants and caregivers. Caregivers must be able to access materials conveniently. Furnishings need to be child-sized, maximize flexibility, encourage movement, and allow for choice. As you read this week, think about your challenge to design an ideal classroom for either infants or toddlers. In addition to the articles, use the resources to help you create an effective classroom design.

Video: Preparation for Life: Montessori Infant-Toddler Communities⁴



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=135#oembed-2>

Resource to Explore

- [*Infant-Toddler Zone Handbook*](#)
Look for the nine key concepts to consider for caregiving environments: safety; health; comfort; convenience; child-sized; flexibility; encouraging movement, allows for choice and ensures accessibility.

CREATING A SECURE INFANT-TODDLER ENVIRONMENT

Arrangement

- Plan open spaces to see and hear all children at all times.
- Have infant and toddler areas separate from older children.
- Use approved gates or doors to close off dangerous areas.
- Have two exits from each room with one having direct access to the outdoors.
- Have adequate storage for all equipment and supplies.
- Position the diaper changing table so staff can see everyone and everywhere.

Hygiene

- Have hand washing sinks in diaper-changing, toileting and food preparation areas.
- Have child-sized toilets and low sinks.
- Provide area for cleaning, sanitizing and sterilizing toys and equipment.
- Provide separate sanitary space for food preparation and service.

Safety

- Remove all clutter.

4. Educational Video Publishing. (2009, October 12). Preparation for Life: Montessori Infant-Toddler Communities. YouTube. <https://youtu.be/y0-z7-8loGc>

- Secure or remove area or scatter rugs.
- Secure heavy pieces of furniture and equipment.
- Pad or remove furniture and cabinets with sharp edges or corners.
- Put safety locks on low cabinets, drawers and toilet lids.
- Put safety locks on medication and cleaning supply storage cabinets or containers.
- Shield children from air conditioners, heating vents, heaters, humidifiers and fans.
- Use safety plugs in all electrical outlets.
- Keep nightlights out of children's reach.
- Remove all electrical, phone or hanging cords and tablecloths from children's reach.
- Install guards on all windows and protective hinge guards on all doors.
- Use lead-free blinds, shades and window treatments with no hanging cords.
- Use unbreakable mirrors.

Maintenance

- Have lead-free walls, woodwork and floors that are easy to clean and sanitize.
- Allow no peeling, flaking or chalking paint on any walls, cabinets and surfaces.

Outdoors

- Have classroom space directly connect to outdoor play areas.

Take A Child's-Eye View

- Arrange equipment to make open spaces for babies to crawl and toddlers to toddle.
- Check all equipment and furniture placement for entrapment areas.
- Remove all rocking chairs and walkers.
- Use chair gliders with closed side panels. Have child-sized tables, chairs, shelves and cribs.
- Make all children secure in high chairs, strollers and on diaper changing tables.
- Remove all possible choking hazards.
- Have trash cans and diaper pails with secure lids, away from children's reach.

Toys

- Use low shelves for toy storage and display.
- Avoid using toy boxes with lids.
- Check toys for durability, size and age appropriateness.
- Remove toys with sharp edges, splinters, cracks, rips and other dangers.

- Make sure all materials are nontoxic and lead free.
- Have a daily schedule to clean all toys, equipment, and surfaces.
- Remove all mouthed toys until they have been cleaned, sanitized and air-dried.

Safe Places To Nap

- Have a crib, cot or mat for each child – no sharing.
- Never use chairs, sofas, adult-beds, waterbeds or beanbags for children's sleeping.
- Allow no soft bedding in cribs or playpens.
- Use cribs and playpens with slats spaced no more than 2 3/8" apart.
- Never use cribs or playpens with missing or cracked slats.
- Lock side rails in 'up' position on cribs and playpens when children are in them.
- Keep a distance of 18" to 36" between beds to reduce the spread of germs.
- Have evacuation crib(s) with wheels to transport a group of children in emergencies.

IMAGE CREDITS

MomLovesBest. (2021, November 13). The Benefits of Play for Children [infographic].<https://momlovesbest.com/playtime>

CHAPTER ATTRIBUTION

Chapter adapted from Scheduling and Overall Design Considerations in [Infant and Toddler Education and Care](#) by Susan Eliason, [CC BY-NC-SA](#).

UNIT 18

Social and Emotional Development

Chapter Objectives

In this chapter, you will be learn:

- Definition of Self-regulation, executive function, and scaffolding.
- Various ways to support self-regulation for children.
- How to promote social-emotional growth of infants and toddlers.

INTRODUCTION

Healthy social and emotional development refers to a child's developing capacity to experience, regulate, and express a full range of positive and negative emotions in socially and culturally appropriate ways; to form close and secure adult and peer relationships; and actively explore environments and learn.¹

Video: Infants & Toddlers and Their Emotions²



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=137>

The video, Infants & Toddlers and Their Emotions, is an example of supporting infants and toddlers learning about their emotions. You will see the teacher use a book and physical movement strategies to help children recognize, label and manage emotions.

As infants emotional responses become refined and manageable, with your support, they can begin to develop self-regulation skills, which are critical to gaining control of bodily functions, managing powerful emotions, and maintaining focus and attention. Because social-emotional development is influenced by biology (temperament and genetic influences), environment, and relationships, we need to consider infant's temperament and be willing to make accommodations can benefit the child in becoming more self-regulated.

1. The Massachusetts Department of Early Education and Care. (2011). Massachusetts Early Learning Guidelines for Infants and Toddlers. <https://www.mass.gov/doc/massachusetts-early-learning-guidelines-for-infants-and-toddlers/download>

2. FCPS Early Childhood Team. (2014, February 10). Infants & Toddlers and Their Emotions. YouTube. <https://youtu.be/eePIZD0gtsE>

SELF-REGULATION

Self-regulation is an essential skill for success in life. Various components or skills of self-regulation correlate with academic achievement. The self-regulation skills of paying attention, controlling impulsive behaviour, and staying on task are most important. One particular aspect of self-regulation, inhibitory control, is used in planning, problem solving, and goal directed activity. The skills listed are essential for executive functioning. Inhibitory control is predictive of all academic outcomes but was particularly associated with early ability in math.

EXECUTIVE FUNCTIONING

The executive functions are a set of processes that all have to do with managing oneself and one's resources in order to achieve a goal. It is an umbrella term for the neurologically-based skills involving mental control and self-regulation.

There are **developmental trends** in self-regulation. One is that "other" regulation develops BEFORE self-regulation. Other-regulation is being regulated by someone else. This is distinguished from self-regulation in which one regulates oneself".³ Other-regulation is the first step in self-regulation when the adult structures the task and then gradually lets the child take it over. We call this technique **scaffolding**.

Another developmental characteristic is that children are able to follow instructions to "do" something, before they can follow directions to "stop doing" something. It is not until the age of about 3 years that a child is able to voluntarily inhibit or stop a response. This makes it appear that they are finally "remembering" a rule, but it is really more about now being able to stop the behaviour.

"Behavioural inhibition is an executive process with a central role in self-regulation," and "...it is a prerequisite for all other executive functioning."⁴ Focus on inhibition first then move out to other skills.

SUPPORTING SELF-REGULATION

Guidance and activities to support self-regulation must be developmentally appropriate. Activities must be challenging enough so learning can occur, but not too challenging that they are overly stressful. Young children begin to construct the executive functions of the prefrontal cortex through their play. When children play, especially when they play with others, they are creating neural models of what they want to play, usually with words, since language builds models.

Goal directed play is when children:

1. Decide what to do, how to play, and with whom.
2. Organize and set it up.
3. Play in a way that supports or fits with the theme or game.
4. Sustain the play in accord with the intent or end the play early due to it not coming together as intended.

3. Bodrova, E. and Leong, D. J. (2007). *Tools of the Mind: The Vygotskian Approach to Early Childhood Education*. 2nd Ed. Pearson Education.

4. Bronson, M. B. (2000). *Self-Regulation in Early Childhood: Nature and Nurture*. The Guilford Press.

Remember you are a powerful role model for self-regulation and the executive functions.

- How do you model problem solving?
- In what types of situations do the infants and toddlers see you exhibit self-control?
- Planning?
- Setting goals?
- How do you model dealing with frustration? What tips or techniques could you teach toddlers?

Try to be “transparent” when you solve problems – big ones and little ones. Talk out loud about how you are thinking as you figure it out. They really ARE listening!

USING PREVENTATIVE TECHNIQUES

Use positive speech with infants and toddlers to guide their behaviour, telling them what “to” do, rather than what “not” to do. For example: “Keep the paint on the paper.” “Use two hands when you carry your plate to the sink.” An effective technique is to use redirection, giving the child an acceptable alternative or outlet for the unacceptable behaviour. “Jump over here where there is a big open space.” Redirection that is followed by a short explanation of “why” gives the child even more information that she can potentially use in a similar situation as she becomes more self-regulated. For example, “Keep the blocks over here by your building so no one will step on them as they walk by. Sometimes when people step on a block they can fall down and get hurt.”

Teaching Ideas

Here are ideas that could promote the social and emotional growth of infants and toddlers you will teach.

Dramatic play is a major support for self-regulation. When a child is pretending they are a cat, they cannot answer the phone! You must lap milk from a bowl, not drink it from a glass! Thus, the child must inhibit doing just anything – and stay within the role. If a child is playing injured, he must not move until the ambulance comes. Pretend play has inherent rules in it that must be followed, or you are “not playing right”!

Constructive play (like block building, painting, and drawing) provide scaffolding for self-regulation, especially when done in groups. Children have a goal, they decide who does what, and then they begin to put their plans to work, and they assess and evaluate their progress in relation to their goal.

Inhibiting movement is another important skill. For example, the drum game that requires children to move the way the drum tells you to move. Change the beat from very slow to very fast, and change it by pattern or rhythm also model moving to the beat. This is a terrific game for doing some very active, but controlled movement, and it also supports careful listening and paying attention.

Remind families to eliminate or minimize the amount of time a toddler watches television or other passive media. The recommendations for infant and toddlers are: ⁵

- For children younger than 18 months, avoid use of screen media other than video-chatting. Parents of children 18 to 24 months of age who want to introduce digital media should choose high-quality programming, and watch it with their children to help them understand what they’re seeing.

5. The American Academy of Pediatrics [AAP]. The American Academy of Pediatrics. (2023). *AAP Publications*. https://publications.aap.org/?_ga=2.55689260.606980673.1680265553-2030827321.1679334365

- Designate media-free times together, such as dinner or driving, as well as media-free locations at home, such as bedrooms.
- Have ongoing communication about online citizenship and safety, including treating others with respect online and offline.

Minimizing the amount of times a toddler hears “no” by creating a safe space for successful play and discovery.

Provide enough developmentally appropriate toys and materials for the number and ages of children in the group. Having two or three of items (same books, trucks, balls) promotes parallel play.

Create an environment that enhances learning, minimizes inappropriate behaviour and reinforces a toddler’s need for self-competence through:

- Appropriate spaces for specific activities. For example: an area that allows for easy cleanup for art, sand or water play, a quiet area for manipulative play, reading and literacy experiences. Active play such as gross motor should not be near the quiet area.
- Open and usable space for toddlers to move freely about during play.
- Spaces both indoors and outdoors that provides for both active play such as climbing and quiet play.
- Use of the outside for activities (art, science, math); physical activities, walks, connecting toddlers to the neighborhood.
- Spaces including group play areas, as well as semi-private spaces where toddlers can safely play away from the large group.
- Pictures and items from the child’s home and family to maintain a connection to family and reinforce a sense of belonging.
- Organize recyclables, paper and toddler-safe art media (waterproof, non-toxic tempera, washable markers, chunky crayons, playdough) that children can safely take out, use and put back.
- Encourage toddlers’ growing gender identity by allowing them to take on a variety of roles during imaginative play. Avoid gender-specific toys such as baby dolls only for girls or trucks only for boys, or primary colored toys for boys, pastels for girls, etc. These differences begin to socialize children into stereotypical gender roles and preferences, which could limit their understanding of social diversity.
- Show diverse cultures in displays or pictures. Toddlers need to see themselves and their families reflected in the environment.
- Develop a partnership with families so that care routines and family child rearing practices across home, school and cultural environments reinforce each other.

Resources to Explore

- [*What Is Executive Functioning?*](#)⁶
- [*The Science and Psychology of Infant-Toddler Care.*](#)⁷

6. Cooper-Kahn, J. & Diesel, L. (2023). [*What Is Executive Functioning?*](#) Woodbine House Publishers. LD OnLine.

7. Lally, J.R. (2009). [*The Science and Psychology of Infant-Toddler Care.*](#) Zero to Three.

Reflection Exercise

How will you create an environment, schedule, and plan to teach self-regulation, executive function, and scaffolding?

CHAPTER ATTRIBUTION

Chapter adapted from Enhance Social and Emotional Development in [Infant and Toddler Education and Care](#) by Susan Eliason, [CC BY-NC-SA](#).

UNIT 19

Physical Health and Well-Being

Chapter Objectives

In this chapter, you will learn:

- Ways to weave physical activity into early and education program.
- How to choose safe materials for infants and toddlers.
- Importance of physical health and wellbeing for young children.
- Ways to encourage different types of movement for young children.

INTRODUCTION

Research shows that there is a correlation between a child's physical wellbeing, health, and motor development to early development and learning. Physical health and well-being are essential to school readiness. In infants and toddlers, movement and sensory stimulation are the major contributors to brain development and are crucial to cognitive development.

MOVEMENT

The health problems associated with obesity not only impact adults but children as well. As an educator, you can and may be uniquely qualified to help children develop healthy eating, age-appropriate physical activity, and limited screen time viewing habits to help them avoid childhood obesity. The Motion Moments videos will show you simple ways to weave physical activity into your early care and education program.

Question to Consider While Reading

As you read the articles and watch the video consider:

- How do physical activity and movement promote learning in other developmental domains: Social, Emotional, Cognitive, Language, and Approaches to Learning?

Video: *Motion Moments: Toddlers*¹

One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=139#oembed-1>

SENSORI-MOTOR DEVELOPMENT

Small and large muscle development is closely linked to children's language, cognitive, social, and emotional development. For example:

- Babbling is connected to language development
- Grasping objects, dumping, and picking up is connected to cognitive development
- Smiling and eye contact is connected to social development
- Turning of the head toward familiar adult voices is connected to emotional development

Health and nutrition are necessary for physical and motor development. Besides, quality education and care, families need access to:

- Comprehensive health care (immunizations, well-baby checkups, and screenings)
- Safe and healthy environments (pesticide-free, safe homes, and neighborhoods, lead-free spaces, safe and adequate water and air quality)
- Healthy nutrition and food choices
- Healthy movement (to prevent childhood obesity)

Review Questions

- What community resources address these needs?
- How will you inform families of the community resources available?

TEACHING TIPS

The learning guidelines for physical health and wellbeing for **infants** are to:

- Develop the ability to move large muscles (gross motor).
- Develop an ability to control and refine small muscles (fine motor).
- Develop sensorimotor skills where children use their senses – sight, hearing, smell, taste, and touch – to guide and integrate their interactions.
- Develop skills that will develop into healthy practices for life.
- Gain control over their movements as they reach out, grasp, and release objects.

1. NRCKids. (2012, June 14). *Motion Moments: Toddlers*. YouTube. <https://youtu.be/k55liTC7sGI>

Physical Activity

To promote physical activity in an infant classroom make sure to provide an uncluttered floor space of at least 5 X 7 feet. The play space should be out of the educator's walking path. The play space should avoid being near shelving or objects that could fall, as well as rocking chairs or other potential hazards.

It is important to create an environment that is comfortable for educators to be on the floor level when interacting with infants. This will encourage you to sit with infants when you provide lots of tummy time. During tummy time encourage the infant to play, roll, scoot, crawl, and move about actively several times during the day.

You want to provide toys that are soft, large, and lightweight. Look for materials that encourage the infant to reach, grasp, and hold by providing materials such as blocks, stacking toys, nesting cups textured balls, and squeeze toys.

Avoid toys with small parts, such as buttons that can be removed to prevent choking. Check fabric toys for tight seams; make sure stuffing cannot be pulled out. Be aware and don't use toys with strings or cords.

Outdoor Time

Take infants outdoors each day, as weather permits even if for 5-10 minutes each time. Infants should avoid direct or reflected sunlight. While outdoors, talk to infants about new sights and sounds, such as green grass and birds singing. If you bring a large sheet or blanket and place it in a shady area on level ground free of rocks, sticks, or other objects such as insects you can have more tummy time!

The learning guidelines for physical health and wellbeing for **toddlers** are to:

- Develop the ability to move large muscles (gross motor)
- Develop the ability to control and refine small muscles (fine motor)
- Develop sensorimotor skills
- Develop skills that will develop into healthy practices for life

To encourage movement in a toddler classroom, make sure to provide equipment and materials for indoor and outdoor play such as:

- Pretend play tools (digging tools, small brooms)
- Child-sized musical instruments
- Pedal and non-pedaled riding and push toys
- Large, soft balls and toys
- Large blocks
- Objects to safely climb up, jump down, and crawl through
- Have two or more of each item because toddlers take what they want

To encourage different types of movement, securely tape a hula hoop or use tape to mark out a large circle on the floor. Let children practice stepping and then jumping in and out of the circle. Count jumps out loud to integrate number vocabulary. Vary activity by placing 2-3 hoops so they touch each other.

While playing music or singing, encourage children to stand with legs apart, knees bent, and rock left to right with the rhythm. Sway and dance to the music.

Set up a simple obstacle course, both indoors and outdoors. The course should encourage children to climb over, under, through, around, in, and out. Toddlers can:

- Crawl over large cushions
- Crawl through tunnels made of sheets or large cardboard boxes
- Step into and out of a hula hoop laid flat on the ground
- Walk over squares of different surfaces such as grass, carpet squares, sand, and pea gravel

Use balls for catching and throwing. Sit across from the toddler with legs spread apart. Say “Here comes the ball” and roll a large ball toward the child. The child will trap the ball with his legs, arms, and chest. Encourage the child to roll the ball back to you. As skill develops, repeat with various sizes of balls. You can even roll old socks into balls and practice tossing the socks into a large laundry basket. Let children decide what distance they stand from the basket. Integrate colour recognition and vocabulary by using various coloured socks.

For a sensory experience, fill a small bucket with clean water and soak small sponges. Encourage children to throw the wet sponges at the side of a building or onto a flat surface. Watch the water splash and see the mark the water makes.

Lead children in creative movement—sway like a tree, swim like a fish and jump like a frog. This is a wonderful transition activity such as when waiting to go outdoors. Describe an animal that most children have seen. Ask children to show what that animal does. Read stories about animals. Act out the movements in the story.

While walking outdoors, point out and encourage children to stop and pick up leaves or other objects. Put the objects in a basket to explore later. Practice balance skills by walking on a wide wooden plank placed flat on the ground.

Review Question

- How will your schedule, floor plan, and weekly plan enhance physical health and wellbeing?

CHAPTER ATTRIBUTION

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UNIT 20

Cognitive Development

Chapter Objectives

In this chapter, you will learn:

- Specific skills for infant or toddler cognitive development.
- Various ways to foster cognitive development.
- The meaning of foundations of learning or habits of mind.

COGNITIVE DEVELOPMENT

“...the process of learning to think and reason. Young children are learning not only knowledge, skills, and concepts, but also acquiring “learning to learn” skills”¹

Infants are naturally curious and learn through interaction with others and by exploring the environment. Piaget called this stage of cognitive development sensory-motor because infants and toddlers use all of their senses to explore their surroundings. Adults facilitate cognitive development by building positive relationships with children and families allowing infants and toddlers a secure base to explore the environment. Educators observe and encourage new learning to promote cognitive growth.

The specific skills for infant or toddler cognitive development:²

- Refine reflexes into purposeful actions (Infants)
- Develop memory skills
- Demonstrate an awareness that predictable things happen as a result of actions
- Develop problem solving skills
- Explore materials and discover mathematical concepts
- Develop early scientific skills through exploration and discovery
- Discover creative expression through music, drama, dance and art experiences

1. The Massachusetts Department of Early Education and Care. (2011). *Massachusetts Early Learning Guidelines for Infants and Toddlers*. <https://www.mass.gov/doc/massachusetts-early-learning-guidelines-for-infants-and-toddlers/download>

2. The Massachusetts Department of Early Education and Care. (2011). *Massachusetts Early Learning Guidelines for Infants and Toddlers*. <https://www.mass.gov/doc/massachusetts-early-learning-guidelines-for-infants-and-toddlers/download>

- Become aware of family and others in the community the foundations for social science

As you can see, the area of cognitive development includes content areas of the curriculum such as math, science, the arts, and social studies or science. The chapter will include intentional teaching ideas to support learning in the content areas and to build brains.

FOSTERING COGNITIVE DEVELOPMENT

The educator's role is to discover the child's needs and support their learning.

Reading Questions

As you read, consider how you can respond to children's self-initiated explorations. Remember we should follow the child's lead.

- How will you individualize the support you provide to promote cognitive development? For example, a 6-week-old child's cognitive development is dependent on sensory-motor input and a 15-month-old's learning is linked to the child's level of trust and through relationships.
- How would you facilitate ball play with a 6 month old? With a 15-month old?
For infants and toddlers, all developmental domains – physical, cognitive, language, social and emotional – are connected.

Toddler Approaches to Learning³



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=143#oembed-1>

Video Questions

- Did you observe the toddlers using making choices and decisions; solving problems; interacting with others; pursuing their interest; building language and literacy skills; discovering mathematical concepts; and experiencing themselves as capable, competent, successful learners?
- How were the teachers intentional?

Infants are ready to learn from birth. They absorb information through touch, from the sights, sounds, and scents around them. They store, sort, and use this information to explore the world around them. Try to see the world from an infant's perspective. Find a ball and explore the properties of the ball.

- What can it do?
- How does it move?

3. All About Young Children. (2014, May 15). *Approaches to Learning (Paying Attention) - 8 to 18 Months*. YouTube. <https://youtu.be/qfXKl686tuo>

- How does it feel?
- What does it look like?



Ball. Credit: Pixabay.

Read and Answer

Read the article [*Creativity, shared meaning, and relationships*](#)⁴ By Carlina Rinaldi.

Look for the answers to these questions:

1. How can we assist infants and toddlers in their search for the meaning of things and the meaning of life?
2. How can we respond to their constant questions, their 'whys' and 'hows,' with eyes that don't see them as helpless or unknowing, but rather with eyes that acknowledge the quest to learn and to know?

The foundations of learning or habits of mind include:

- Curiosity
- Attention
- Memory
- Problem Solving
- Persistence
- Information Gathering

Hopefully, you use habits of mind often because they are not limited to school environments but are life skills.

4. Rinaldi, C. (2006). Creativity, shared meaning, and relationships. In Lally, R., Mangione, P., and Greenwald, D. (Eds.), *Concepts for Care* (pp. 21-23). San Francisco, CA: WestEd.

Review Questions

In your role as an educator you might ask these questions:

- What is the most intelligent thing I can do right now?
- How can I learn from?
- How can I draw on my past successes with problems like?
- What resources do I have available or need to generate?
- How might I look at the situation in another way?
- What do I know or not know?
- What questions should I ask?
- What strategies are in my thoughts?
- What feelings or emotions might be blocking or enhancing my progress?
- What can I learn from others that would help me become a better problem solver?
- Which habits of mind are easy for you?
- Which do you struggle with?
- How will you encourage children to develop effective habits of mind?

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IMAGE CREDITS

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CHAPTER ATTRIBUTION

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UNIT 21

Language and Communication

Chapter Objectives

In this chapter you will learn:

- The role of the educator to support children's language development.
- Effective teaching strategies to promote language development and communication.
- How to evaluate the learning environment.

LANGUAGE

Language is essential for children to build relationships. Relationships are essential to learning. Language and literacy are interrelated with other domains of development and all of the content areas. Communication and literacy or the use of language is defined as:

Communication is the exchange of information between individuals through a common system of symbols, signs, and gestures of behaviour. A child's ability to communicate is dependent upon an awareness of appropriate social practices in language usage, (pragmatics) the ability to listen, to make meaning of and to follow verbal conversation (receptive language).¹

Literacy is the ability to use language, symbols and images to read, write, listen, speak, represent, observe and think critically about ideas. The ability to listen and speak, and eventually read and write, is formed in everyday experiences². Literacy learning includes dual language learners, as well as sign language and the cultural base of those languages.

1. The Massachusetts Department of Early Education and Care. (2011). *Massachusetts Early Learning Guidelines for Infants and Toddlers*. <https://www.mass.gov/doc/massachusetts-early-learning-guidelines-for-infants-and-toddlers/download>

2. Gonzalez-Mena, J., & Eyer, D.W. (2007). *Infants, toddlers, and caregivers*. Boston, MA: McGraw-Hill.

Video: *Language for Learning: Infants and Toddlers*³



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=147#oembed-1>

Begin your investigation of language and communication. The purpose of this video is to illustrate the role of the teacher in using language to support children's development. The interactions you will see include positive language, expansion, questioning, and redirection. Teachers use these techniques to expand children's knowledge, encourage complex thinking and problem solving skills, and help children develop appropriate behaviour and positive social skills.

SELF TALK

There are several effective teaching strategies to promote language development and communication. The first technique is self and parallel talk. Self talk is when the caregiver narrates or describes what is going on in the child's world by putting word labels on things. For example, if a child looks toward the door as a parent enters the room, you might say, "That's Jenny's mother. She is here to pick up Jenny." Self-talk is respectful because it involves telling children what will happen to them before it happens and waiting for the child to indicate that they are ready. You might say, "It's time for a diaper change," to describe what will happen to the child. Then wait for the child to pause their activity and indicate readiness before continuing. You then describe each step of the diaper change as it occurs, "Off come your pants. Here's the clean diaper. All done!"

PARALLEL TALK

Parallel talk focuses on the child's action and usually begins with "you." For example, "You're turning over from your back to your front." "You're putting the blocks in the bucket," "You've got the toy," or "You pulled off your shoe." Focusing on the action helps the child put word labels on behaviour.

EXPANSIONS AND EXTENSIONS

The third technique to use is expansions and extensions. These techniques take what the child says and expand on it (expansion) or add to what the child says (extension) For example, when a child says "muk," the teacher might say, "You want more milk," to expand what the child says into a complete sentence. For an extension you will add a little more to the sentence a child uses. For example, the child says, "Go bye bye." You respond with "It's time to get your things and go bye bye."

Notice that these techniques require nothing of the child. The child is not asked to repeat the larger sentence, repeat the label of an object identified by description, or to respond further. These techniques add information to the child's language skills and foster future language development.

3. North Carolina Rated License Assessment Project [NCRLAP]. (2011, February 4). *Language for Learning: Infants and Toddlers*. YouTube. <https://youtu.be/7DPhIQh91Mw>

Resources to Explore

- [More than Baby Talk 10 ways to Promote the Language and Communication Skills of Infants and Toddlers](#) a 2013 article by Gardner-Neblett, N., & Gallagher, K. C. published by The University of North Carolina, Frank Porter Graham Child Development Institute.

Questions for Readings

- Which of the 10 skills are you comfortable providing?
- Which skills would you like to develop and why?
- Which ideas will you add to your [weekly activity plan](#)?
- Which ideas will you add to your [weekly activity plan](#)?
- Why is it important for children to maintain their home language(s) and learn English?
- How will you include dual language learners as you develop your [weekly activity plan](#)?

Indicators that describe expected observable behaviours or skills of infants and toddlers in the developmental domain of language and communication.⁴

- Demonstrates the meaning of language by listening.
- Develops expressive language.
- Engages in social communication.
- Demonstrates phonological awareness.
- Develops grammar and syntax or watching if hearing impaired.
- Engages in pre-reading activities.
- Demonstrates interest and engagement in print literacy materials.
- Develops emergent writing skills.
- Develops in multiple language acquisitions when considered a dual language learner.

EVALUATE THE ENVIRONMENT

As a way to summarize the chapters about learning environments, watch the 50 minute video [Teacher Time](#) produced by the Early Childhood Knowledge and Learning Center.

4. The Massachusetts Department of Early Education and Care. (2011). *Massachusetts Early Learning Guidelines for Infants and Toddlers*. <https://www.mass.gov/doc/massachusetts-early-learning-guidelines-for-infants-and-toddlers/download>

Video Exercise Questions

- Effective teaching practices that are nurturing and responsive. How do the interactions and environments support effective teaching?
- The developmentally appropriate learning experiences in language, literacy, social and emotional development, math, science, social studies, creative arts, and physical development. What activities or materials promotes learning experiences?
- How did the classroom support dual language learners?
- How was the environment designed for individualized and small group activities?
- How were children with disabilities included so that they could fully participate in all program activities?

TEACHING TIPS

Phonological Awareness

Select a book that makes obvious use of sound play. Read it before reading it to children to ensure smooth reading and to prepare you to comment on, highlight, explain, and extend the book's language play. Here are some suggested books⁵

- *Itoona Baboona*, by J. Bynum. 1999. Harcourt.
- *Altoona Up North*, by J. Bynum. 2001. Harcourt.
- *Bearsie Bear and the Surprise Sleep-over Party*, by B. Waber. 1997. Houghton
- *Chugga Chugga Choo Choo*, by K. Lewis. 1999. Hyperion.
- *Cock-a-doodle-Moo!* by B. Most. 1996. Harcourt.
- *The Happy Hippopotami*, by B. Martin Jr. 1970. Voyager.
- *Here's a Little Poem: A Very First Book of Poetry*, by J. Yolen. 2007. Candlewick.
- *The Hungry Thing*, by J.A. Slepian & A. Seidler. 1967. New York: Scholastic. Jamerry, by B. Degen. 2000. 25th ann. ed. HarperCollins.
- *Llama Llama mad at Mama*, by A. Dewdney. 2007. Viking.
- *Llama Llama Red Pajama*, by A. Dewdney. 2005. Viking.
- *The Piggy in the Puddle*, by C. Pomerantz. 1974. Simon & Schuster.
- *Runny Babbit*, by S. Silverstein. 2005. HarperCollins.
- *Tanka Tanka Skunk*, by S. Webb. 2004. Orchard.
- *There's a Wocket in My Pocket*, by Dr. Seuss. 1974. Random House.
- *What Will You Wear, Jenny Jenkins?* by J. Garcia & D. Grisman. 2000. HarperCollins.

5. Yopp, H.K. & Yopp, H. (2009, January). Phonological Awareness Is Child's Play! *Young Children*, 64(1). <https://eric.ed.gov/?id=EJ826241>

Also **sing songs** such as “Willoughby Wallaby Woo”, “Down by the Bay,” and Raffi’s “Oo-pples and Boo-noo-noos,”. By **clapping syllables** in children’s names. For instance, clap three times as you slowly chant “Erica.” Clap two times as you say “Kareem.” Clap one time as you say “Dan” you are teaching the concept of phonological awareness. And finally, play a game during a transition such as **guess which object**. You would hold up two objects that begin with different sounds, such as a leaf and a marker. Identify each object with the children to ensure that you all are using the same label. Guess which object begins with the /l/ sound.

PRE-READING

Infants love to listen to the human voice. Start out by singing lullabies and folk. At about six months, choose books with brightly colored, simple pictures and lots of rhythm in the text. As you read, point out objects in the pictures. Allow the infant to touch and hold cloth and sturdy cardboard books. Allowing babies to handle books deepens their attachment even more.

Talking enables children to expand their vocabulary and understanding of the world. The ability to carry on a conversation is important for reading development. To encourage expressive language skills, ask questions that require more than a “yes” or “no” answer. “Which leaves are the same?” “Which leaves are different?” “What else grows on trees?” Ask “what if” questions. “What would happen if we didn’t shovel the snow?” “What if that butterfly lands on your nose?” Answer “why” questions. When you say, “I don’t know, let’s look it up,” you show how important books are as resources for answering questions. After a toddler tells you a story, ask questions so you can understand better. Expose toddlers to varied experiences such as field trips or walks in the park. Surround these events with lots of comments, questions, and answers.

Talking about what you read is another way to help toddlers develop language and thinking skills. You don’t need to plan the talk, discuss every story, or expect an answer. Read slowly and pause occasionally and say: “I wonder what’s going to happen next!” Or ask a question: “Do you know what a palace is?” Or point out: “Look where the little mouse is now.” Here are a few ideas:

Make a **rhyming basket** with several small objects that rhyme such as: pan/fan, jug/mug, cat/hat, fish/dish, and clock/block.

Have toddlers re-tell their favorite story using props. They can dress up in costumes to act it out or make puppets to help illustrate the plot of the story.

WRITING

Writing requires fine motor skills. Infants develop hand strength, eye tracking, coordination, and trunk and arm strength needed for handwriting. Tummy time provides the opportunity to coordinate their arms in order to lift their head off the ground. When they lift their head up off the ground, they are able to visually get a sense of their surroundings and begin to explore. Then when the infant begins crawling they develop the neck, arm, and trunk muscles. A strong core or trunk gives them a stable base of support. Not only does this affect their gross motor skills later on in life (such as kicking, jumping etc) it also affects their fine motor skills and handwriting.

Toddlers need to develop fine motor skills to prepare for writing. For example just playing with playdough is great for building strength in hands.

BUILDING FINE MOTOR SKILLS

Playdough – Practice making balls, rolling playdough into snakes, or create fun designs. Here are more ideas that help toddlers develop pre-writing abilities.

String large beads – Make sure you use large size beads that they can fit their hand around. Begin to encourage them to use their pincher grip (thumb, index and middle finger) to pick up items.

Snip paper with scissors – Choose a theme, like winter and help them make a picture collage. If paper is too hard to cut, try cutting playdough.

Roll clay/play dough into “snake” – Begin making basic shapes with the play dough; lines, circle, cross, square shapes.

Draw and copy a horizontal line – Use the terms “Straight line down.” and “Across” (make sure they start left to right).

Q-tip painting – Practice the pincer grip by painting with a q-tip.

Lacing – Use lacing cards or create your own from foam sheets or card stock.

Beads & Pipe Cleaners – Use the pincer grip to slide beads onto pipe cleaners.

Write in shaving cream – Pour shaving cream onto a tray. Encourage the child to write with their finger to make letters or designs. After using fingers to write, try using a writing utensil. Encourage using the tripod grip on the utensil.

Tweezers – Use tweezers or tongs to transfer objects.

Clothespins – Opening a clothespin takes a lot of strength.

Scrunching Paper – Use newspaper, tissue paper, wrapping paper, or regular paper to scrunch paper into balls to toss.

Droppers – Have the children practice using a water dropper by transfer the water from one cup to the other. The squeezing motion will help build strength in the child’s hand.

While it’s important to do fine motor activities, also give your child opportunities to practice using writing utensils. Let them use markers, crayons, coloured pencils, dry erase markers, etc. Another tip is to break crayons in half so it’s easier to write with. Make sure you use thick crayons with toddlers

ORAL STORYTELLING EXAMPLE

In a family childcare home, there is a fish tank with a few colourful fish in it. Every day, children gather as the fish are fed. They watch the fish move to the top of the tank to take food and float back down again. Some children watch the bubbles from the filter. The children make comments about feeding the fish and how their mouths move. One of the children waves to the goldfish as it gulps the food particles.

One day, Sharon, the provider, had an idea to capture what children were experiencing and the conversations that were triggered by simply feeding fish. She took a photograph of the fish-feeding event and glued it to a piece of

paper. Now, as children watch and converse each day, Sharon writes down children's words and utterances that describe the feeding event. She shares it with the children when they read stories.

Try It!

Choose a picture or series of pictures that would interest toddlers. Calendar pictures can be very useful. Consider asking relatives and friends to save them for you.

- What type of concrete, real, and relevant information do you want to share with children about the picture?
- Make up a story about the picture that includes a young child you know.
- Record and share your stories or tell us when we meet for class.
- How do you feel about oral storytelling with infants and toddlers?

YOUR CLASSROOM LIBRARY

Think about reading to infants and toddlers.

- Do you have a cozy place to read?
- What book might you select?
- How will you read to the child?
- What are your likes and dislikes about reading aloud to children?
- How will you use your strengths when reading to children?

Think of an infant or toddler classroom you were in recently.

- What did the book area or library look like?
- How might you make changes to enhance the book area?
- What books would you like to add to the book area?
- Where can you find the books you want to add, and how can you get them?
- How will you incorporate reading and storytelling into your daily routine?

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PART VI

GROWTH & DEVELOPMENT

UNIT 22

Psychosocial Growth in Infancy

Chapter Objectives

After this chapter you learn how to:

- Describe emotional development and self-awareness during infancy.
- Differentiate between stranger wariness and separation anxiety.
- Describe social referencing and synchrony.
- Describe temperament and the goodness-of-fit model.
- Contrast styles of attachment.
- Describe psychosocial development of the newborn.
- Evaluate Freud and Erikson's theories of psychosocial development during infancy.

PSYCHOSOCIAL GROWTH IN THE FIRST TWO YEARS

Psychosocial development occurs as children form relationships, interact with others, and understand and manage their feelings. In emotional and social development, forming healthy attachments is very important and is the major social milestone of infancy. Attachment is a long-standing connection or bond with others. Developmental psychologists are interested in how infants reach this milestone. They ask questions such as: how do parent and infant attachment bonds form? How does neglect affect these bonds? What accounts for children's attachment differences?

EMOTIONAL DEVELOPMENT AND ATTACHMENT

Emotional Development

At birth, infants exhibit two emotional responses: attraction and withdrawal. They show attraction to pleasant situations that bring comfort, stimulation, and pleasure. And they withdraw from unpleasant stimulation such as bitter flavors or physical discomfort. At around two months, infants exhibit social engagement in the form of **social smiling** as they respond with smiles to those who engage their positive attention. Pleasure is expressed as laughter at 3 to 5 months of age, and displeasure becomes more specific to fear, sadness, or anger (usually

triggered by frustration) between ages 6 and 8 months. Where anger is a healthy response to frustration, sadness, which appears in the first months as well, usually indicates withdrawal.

As reviewed above, infants progress from reactive pain and pleasure to complex patterns of socio-emotional awareness, which is a transition from basic instincts to learned responses. Fear is not always focused on things and events; it can also involve social responses and relationships. The fear is often associated with the presence of strangers or the departure of significant others known respectively as **stranger wariness** and **separation anxiety**, which appear sometime between 6 and 15 months. And there is even some indication that infants may experience jealousy as young as 6 months of age.¹

Stranger Wariness

Stranger wariness actually indicates that brain development and increased cognitive abilities have taken place. As an infant's memory develops, they are able to separate the people that they know from the people that they do not. The same cognitive advances allow infants to respond positively to familiar people and recognize those that are not familiar. **Separation anxiety** also indicates cognitive advances and is universal across cultures. Due to the infant's increased cognitive skills, they are able to ask reasonable questions like "Where is my caregiver going?" "Why are they leaving?" or "Will they come back?" Separation anxiety usually begins around 7-8 months and peaks around 14 months, and then decreases. Both stranger wariness and separation anxiety represent important social progress because they not only reflect cognitive advances but also growing social and emotional bonds between infants and their caregivers.

As we will learn through the rest of this module, caregiving matters in terms of infant emotional and psychosocial development. Around 8-months, infants look to their caregivers and others to understand the world, which is called **social referencing**.² When introduced to a new toy or a stranger, infants read the emotional cues from others about whether to engage or avoid. You've probably noticed this in children: if they fall down, they look up at adults' expressions to see if they're okay. If a caregiver smiles and says you're fine, the child probably continues on, but if a caregiver looks frightened and gasps, the child starts crying.

Emotional Regulation

Emotional regulation can be defined as how and when emotions are expressed. Throughout infancy, children rely heavily on their caregivers for emotional regulation; this reliance is labeled co-regulation, as parents and children both modify their reactions to the other based on the cues from the other. Caregivers use strategies such as distraction and sensory input (e.g., rocking, stroking) to regulate infants' emotions. Despite their reliance on caregivers to change the intensity, duration, and frequency of emotions, infants are capable of engaging in self-regulation strategies as young as 4 months old. At this age, infants intentionally avert their gaze from overstimulating stimuli. By 12 months, infants use their mobility in walking and crawling to intentionally approach or withdraw from stimuli.

Throughout toddlerhood, caregivers remain important for the emotional development and socialization of their children. Particularly important is **synchrony**, the quick back and forth of emotional behaviours between an infant and caregiver. It's like a dance where a baby might smile and the partner smiles quickly in return. Researchers measure this rapid, interpersonal coordination through their facial expressions, sounds, and gestures. More recently, researchers have looked at how pairs sync up internally, including hormones, bodily rhythms, and brain scans.

1. Hart, S., & Carrington, H. (2002). Jealousy in 6-month-old infants. *Infancy*, 3(3), 395–402.

2. Feinman, S. (1982). Social referencing in infancy. *Merrill-Palmer Quarterly*, 28(4), 445–470.

Additional evidence for the importance of synchrony to toddlers comes from the **still face technique**. Please do not try this at home. When you ask a caregiver, who was playing with their infant, to stop suddenly stop responding to them, you immediately notice how upset it makes the infant.

Video: Still Face Experiment Dr Edward Tronick³

<https://youtube.com/watch?v=leHcsFqK7So>

Caregivers expand a child's emotional repertoire by labeling their child's emotions, prompting thought about emotion (e.g., "why is the turtle sad?"), continuing to provide alternative activities/distractions, suggesting coping strategies, and modeling coping strategies. Caregivers who use such strategies and respond sensitively to children's emotions tend to have children who are more effective at emotion regulation, are less fearful and fussy, more likely to express positive emotions, easier to soothe, more engaged in environmental exploration, and have enhanced social skills in the toddler and preschool years.

Self-Awareness

During the second year of life, children begin to recognize themselves as they gain a sense of the self as an object. The realization that one's body, mind, and activities are distinct from those of other people is known as **self-awareness**. The most common technique used in research for testing self-awareness in infants is a **mirror test**, also known as the "Rouge Test." The rouge test works by applying a dot of rouge (colored makeup) on an infant's face and then placing them in front of the mirror. If the infant investigates the dot on their nose by touching it, they are thought to realize their own existence and have achieved self-awareness. A number of research studies have used this technique and shown self-awareness to develop between 15 and 24 months of age. Some researchers also take language such as "I, me, my, etc." as an indicator of self-awareness.

Video: Rouge test (self-recognition test)⁴



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=191#oembed-1>

Cognitive psychologist Philippe Rochat⁵ described a more in-depth developmental path in acquiring self-awareness through various stages. He described self-awareness as occurring in five stages beginning from birth.

3. TNCourts. (2016, November 9). Still Face Experiment Dr Edward Tronick. YouTube. <https://youtu.be/leHcsFqK7So>

4. Geert Stienissen. (2011, March 14). *Rouge test (self-recognition test)*. YouTube. <https://youtu.be/M2l0kwSua44>

5. Rochat, P. (2003). Five levels of self-awareness as they unfold early in life. *Consciousness and Cognition*, 12 (2003) 717–731.

Stages of acquiring self-awareness	
Stage	Description
Stage 1 – Differentiation (from birth)	Right from birth infants are able to differentiate the self from the non-self. A study using the infant rooting reflex found that infants were significantly less from self-stimulation, contrary to when the stimulation came from the experimenter.
Stage 2 – Situation (by 2 months)	In addition to differentiation, infants at this stage can also situate themselves in relation to a model. In one experiment, infants imitate tongue orientation from an adult model. Additionally, another sign of differentiation is when infants bring their hands to their mouth with objects by reaching for them.
Stage 3 – Identification (by 2 years)	At this stage, the more common definition of “self-awareness” comes into play, where infants can identify themselves in the mirror, the “rouge test” as well as begin to use language to refer to themselves.
Stage 4 – Permanence	This stage occurs after infancy when children are aware that their sense of self continues to exist across both time and space.
Stage 5 – Self-consciousness or meta-self-awareness	This also occurs after infancy. This is the final stage when children can see themselves in 3rd person, or how they are perceived by others.

Once a child has achieved **self-awareness**, the child is moving toward understanding social emotions such as guilt, shame or embarrassment, and pride, as well as sympathy and empathy. These will require an understanding of the mental state of others which is acquired around age 3 to 5 and will be explored in the next module.⁶

Temperament

Perhaps you have spent time with a number of infants. How were they alike? How did they differ? Or compare yourself with your siblings or other children you have known well. You may have noticed that some seemed to be in a better mood than others and that some were more sensitive to noise or more easily distracted than others. These differences may be attributed to temperament. **Temperament** is an inborn quality noticeable soon after birth. Temperament is not the same as personality but may lead to personality differences. Generally, personality traits are learned, whereas temperament is genetic. Of course, for every trait, nature and nurture interact.

According to Chess and Thomas (1996), children vary on nine dimensions of temperament. These include activity level, regularity (or predictability), sensitivity thresholds, mood, persistence or distractibility, among others. These categories include the following.⁷

1. Activity level. Does the child display mostly active or inactive states?
2. Rhythmicity or Regularity. Is the child predictable or unpredictable regarding sleeping, eating, and elimination patterns?
3. Approach-Withdrawal. Does the child react or respond positively or negatively to a newly encountered situation?
4. Adaptability. Does the child adjust to unfamiliar circumstances easily or with difficulty?
5. Responsiveness. Does it take a small or large amount of stimulation to elicit a response (e.g., laughter, fear, pain) from the child?

6. Berk, L. (2007) *Development through the Lifespan*. Allyn and Bacon.

7. Thomas, A., & Chess, S. (1977). *Temperament and development*. Brunner/Mazel.

6. Reaction Intensity. Does the child show low or high energy when reacting to stimuli?
7. Mood Quality. Is the child normally happy and pleasant, or unhappy and unpleasant?
8. Distractibility. Is the child's attention easily diverted from a task by external stimuli?
9. Persistence and Attention Span. Persistence – How long will the child continue at an activity despite difficulty or interruptions? Attention span – For how long a period of time can the child maintain interest in an activity?

The New York Longitudinal Study was a long term study of infants, on these dimensions, which began in the 1950s. Most children do not have their temperament clinically measured, but categories of temperament have been developed and are seen as useful in understanding and working with children. Based on this study, babies can be described according to one of several profiles: easy or flexible (40%), slow to warm up or cautious (15%), difficult or feisty (10%), and undifferentiated, or those who can't easily be categorized (35%).

Easy babies (40% of infants) have a positive disposition. Their body functions operate regularly and they are adaptable. They are generally positive, showing curiosity about new situations and their emotions are moderate or low in intensity. Difficult babies (10% of infants) have more negative moods and are slow to adapt to new situations. When confronted with a new situation, they tend to withdraw. Slow-to-warm babies (15% of infants) are inactive, showing relatively calm reactions to their environment. Their moods are generally negative, and they withdraw from new situations, adapting slowly. The undifferentiated (35%) could not be consistently categorized. These children show a variety of combinations of characteristics. For example, an infant may have an overall positive mood but react negatively to new situations.

No single type of temperament is invariably good or bad. However, infants with difficult temperaments are more likely than other babies to develop emotional problems, especially if their mothers were depressed or anxious caregivers.⁸ Children's long-term adjustment actually depends on the **goodness-of-fit** of their particular temperament to the nature and demands of the environment in which they find themselves. Therefore, what appears to be more important than child temperament is how caregivers respond to it.

Think about how you might approach each type of child in order to improve your interactions with them. An easy or flexible child will not need much extra attention unless you want to find out whether they are having difficulties that have gone unmentioned. A slow to warm up child may need to be given advance warning if new people or situations are going to be introduced. A difficult or feisty child may need to be given extra time to burn off their energy. A caregiver's ability to accurately read and work well with the child will enjoy this **goodness-of-fit**, meaning their styles match and communication and interaction can flow. The temperamentally active children can do well with parents who support their curiosity but could have problems in a more rigid family.

It is this goodness-of-fit between child temperament and parental demands and expectations that can cause struggles. Rather than believing that discipline alone will bring about improvements in children's behaviour, our knowledge of temperament may help a parent, teacher or other caregiver gain insight to work more effectively with a child. Viewing temperamental differences as varying styles that can be responded to accordingly, as opposed to 'good' or 'bad' behaviour. For example, a persistent child may be difficult to distract from forbidden things such as electrical cords, but this persistence may serve her well in other areas such as problem-solving. Positive traits can be enhanced and negative traits can be subdued. The child's style of reaction, however, is unlikely to change. Temperament doesn't change dramatically as we grow up, but we may learn how to work around and manage our temperamental qualities. Temperament may be one of the things about us that stays the same throughout development.

8. Garthus-Niegel S, Ayers S, Martini J. (2017) The impact of postpartum post-traumatic stress disorder symptoms on child development: A population-based, 2-year follow-up study. *Psychological Medicine* 47(1): 161–170.

Attachment

Psychosocial development occurs as children form relationships, interact with others, and understand and manage their feelings. In social and emotional development, forming healthy attachments is very important and is the major social milestone of infancy. **Attachment** is a long-standing connection or bond with others. Developmental psychologists are interested in how infants reach this milestone. They ask questions such as: How do parent and infant attachment bonds form? How does neglect affect these bonds? What accounts for children's attachment differences?

Researchers Harry Harlow, John Bowlby, and Mary Ainsworth conducted studies designed to answer these questions. In the 1950s, Harlow conducted a series of experiments on monkeys. He separated newborn rhesus monkeys from their mothers. Each monkey was presented with two surrogate mothers. One surrogate mother was made out of wire mesh, and she could dispense milk. The other surrogate mother was softer and made from cloth: This monkey did not dispense milk. Research shows that the monkeys preferred the soft, cuddly cloth monkey, even though she did not provide any nourishment. The baby monkeys spent their time clinging to the cloth monkey and only went to the wire monkey when they needed to be feed. Prior to this study, the medical and scientific communities generally thought that babies become attached to the people who provide their nourishment. However, Harlow⁹ concluded that there was more to the mother-child bond than nourishment. Feelings of comfort and security are the critical components of maternal-infant bonding, which leads to healthy psychosocial development.

Building on the work of Harlow and others, John Bowlby developed the concept of attachment theory. He defined attachment as the affectional bond or tie that an infant forms with the mother.¹⁰ He believed that an infant must form this bond with a primary caregiver in order to have normal social and emotional development. In addition, Bowlby proposed that this attachment bond is very powerful and continues throughout life. He used the concept of a secure base to define a healthy attachment between parent and child. A **secure base** is a parental presence that gives children a sense of safety as they explore their surroundings. Bowlby said that two things are needed for a healthy attachment: the caregiver must be responsive to the child's physical, social, and emotional needs; and the caregiver and child must engage in mutually enjoyable interactions. Over time, infants develop **working models**, or cognitive representations of the world. Their working models influence how they experience the world and can change over time with new experiences. For example, a baby might have a working model that their dad is loyal and trustworthy, which influences how they see and interact with men in the future.

Mary Ainsworth's¹¹ was one of Bowlby's students, and she wanted to know if children differ in the ways they bond, and if so, how. To find the answers, she used the **Strange Situation** procedure to study attachment between mothers and their infants. In the Strange Situation, the mother (or primary caregiver) and the infant (age 12-18 months) are placed in a room together. There are toys in the room, and the caregiver and child spend some time alone in the room. After the child has had time to explore their surroundings, a stranger enters the room. The mother then leaves her baby with the stranger. After a few minutes, she returns to comfort her child.

Based on how the toddlers responded to the separation and reunion, Ainsworth identified three types of parent-child attachments: secure, avoidant, and resistant. A fourth style, known as disorganized attachment, was later described.¹²

9. Harlow, H. F. (1958). The nature of love. *American Psychologist*, 13(12), 673–685.

10. Bowlby, J. (1969). *Attachment and Loss*. Basic Books.

11. Ainsworth, M. D., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behaviour of one-year-olds in a strange situation. *Child Development*, 41(1), 49–67.

12. Main M., & Solomon J. (1986). Discovery of a new, insecure-disorganized/disoriented attachment pattern In Yogman M. & Brazelton T. B. (Eds.), *Affective development in infancy* (pp. 95–124). Ablex.

The most common type of attachment—also considered the healthiest—is called **secure attachment** (type B). In this type of attachment, the toddler prefers their parent over a stranger. The attachment figure is used as a secure base to explore the environment and is sought out in times of stress. Securely attached children were distressed when their caregivers left the room in the Strange Situation experiment, but when their caregivers returned, the securely attached children were happy to see them. Securely attached children have caregivers who are sensitive and responsive to their needs.

In North America, this interaction may include an emotional connection in addition to adequate care. However, even in cultures where mothers do not talk, cuddle, and play with their infants, secure attachments can develop.¹³ Secure attachments can form provided the child has consistent contact and responsive care from one or more caregivers. Consistency of contacts may be jeopardized if the infant is cared for in a daycare with a high turn-over of caregivers, or if institutionalized and given little more than basic physical care, like in the example of children raised in Romanian orphanages in the 1980's.

Avoidant attachment (type A) is marked by insecurity: the child is unresponsive to the parent, does not use the parent as a secure base, and does not care if the parent leaves. The toddler reacts to the parent the same way they react to a stranger. When the parent does return, the child is slow to show a positive reaction. Ainsworth theorized that these children were most likely to have a caregiver who was insensitive and inattentive to their needs.¹⁴ An insecure-avoidant child learns to be more independent and disengaged.

In cases of **resistant attachment**, (insecure-resistant/ambivalent, type C), children tend to show clingy behaviour, but then they reject the attachment figure's attempts to interact with them.¹⁵ These children do not explore the toys in the room, appearing too fearful. During separation in the Strange Situation, they become extremely disturbed and angry with the parent. When the parent returns, the children are difficult to comfort. They seek constant reassurance that never seems to satisfy their doubt. Resistant attachment is thought to be the result of the caregivers' inconsistent level of response to their child.

Finally, children with **disorganized attachment** (type D) behaved oddly in the Strange Situation. It represents the most insecure style of attachment when the child is given mixed, confused, and inappropriate responses from the caregiver. They freeze, run around the room in an erratic manner, or try to run away when the caregiver returns.¹⁶ This type of attachment is seen most often in kids who have been abused or severely neglected. Research has shown that abuse disrupts a child's ability to regulate their emotions.

How common are the attachment styles among children in the United States? It is estimated that about 65 percent of children in the United States are securely attached. Twenty percent exhibit avoidant styles and 10 to 15 percent are resistant. Another 5 to 10 percent may be characterized as disorganized. While Ainsworth's research has found support in subsequent studies, it has also met criticism. Some researchers have pointed out that a child's **temperament** may have a strong influence on attachment and others have noted that attachment varies from culture to culture, a factor that was not accounted for in Ainsworth's research.¹⁷

13. Levine, R., Martinez, T., Brase, G., & Sorenson, K. (1994). Helping in 36 U.S. Cities. *Journal of Personality and Social Psychology*, 67, 69-81.

14. Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Lawrence Erlbaum.

15. Ainsworth, M. D., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behaviour of one-year-olds in a strange situation. *Child Development*, 41(1), 49-67.

16. Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 121-160). The University of Chicago Press.

17. Rothbaum, F., Weisz, J., Pott, M., Miyake, K. (2000). *Attachment and culture - Security in the United States and Japan*. *American Psychologist* 55(10):1093-104.

Attachment styles vary in the amount of security and closeness felt in the relationship, and they can change with new experiences. The type of attachment fostered in parenting styles varies by culture as well. For example, German parents value independence and Japanese mothers are typically by their children’s sides. As a result, the rate of insecure-avoidant attachments is higher in Germany and insecure-resistant attachments are higher in Japan. These differences reflect cultural variation rather than true insecurity.¹⁸ Cultural variations in parenting may reflect different styles: proximal or distal parenting. Lots of body contact and physical stimulation form a **proximal style** of parenting, whereas a greater focus on face-to-face context and playing with objects forms a **distal style** of parenting. One style isn’t superior to the other; they reflect different cultural values about interdependence (proximal) or independence (distal).

Keep in mind that methods for measuring attachment styles have been based on a model that reflects middle-class, US values and interpretation. Newer methods for assessing attachment styles involve using a Q-sort technique in which a large number of behaviours are recorded on cards and the observer sorts the cards in a way that reflects the type of behaviour that occurs within the situation.¹⁹

PSYCHOSOCIAL DEVELOPMENT

Theory of Psychosexual Development

Freud believed that personality develops during early childhood and that childhood experiences shape our personalities as well as our behaviour as adults. He asserted that we develop via a series of stages during childhood. Each of us must pass through these childhood stages, and if we do not have the proper nurturing and parenting during a stage, we will be stuck, or *fixated*, in that stage even as adults.

In each **psychosexual stage** of development, the child’s pleasure-seeking urges, coming from the *id*, are focused on a different area of the body, called an erogenous zone. The stages are oral, anal, phallic, latency, and genital (Table 1).

Freud’s Stages of Psychosexual Development				
Stage	Age (years)	Erogenous Zone	Major Conflict	Adult Fixation Example
Oral	0–1	Mouth	Weaning off breast or bottle	Smoking, overeating
Anal	1–3	Anus	Toilet training	Neatness, messiness
Phallic	3–6	Genitals	Oedipus/Electra complex	Vanity, overambition
Latency	6–12	None	None	None
Genital	12+	Genitals	None	None

For about the first year of life, the infant is in the **oral stage** of psychosexual development. The infant meets needs primarily through oral gratification. A baby wishes to suck or chew on any object that comes close to the mouth. Babies explore the world through the mouth and find comfort and stimulation as well. Psychologically, the infant

18. van Ijzendoorn, M. H., & Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 713–734). The Guilford Press.

19. van Ijzendoorn, M. H., Vereijken, C. M. J. L., Bakermans-Kranenburg, M. J., & Riksen-Walraven, J. M. (2004). Assessing attachment security with the attachment Q-Sort: Meta-analytic evidence for the validity of the observer AQS. *Child Development*, 75, 1188–1213.

is all id. The infant seeks immediate gratification of needs such as comfort, warmth, food, and stimulation. If the caregiver meets oral needs consistently, the child will move away from this stage and progress further. However, if the caregiver is inconsistent or neglectful, the person may stay stuck in the oral stage. As an adult, the person might not feel good unless involved in some oral activity (oral fixation) such as eating, drinking, smoking, nail-biting, or compulsive talking. These actions bring comfort and security when the person feels insecure, afraid, or bored.

During the **anal stage**, which coincides with toddlerhood and potty-training, the child is taught that some urges must be contained and some actions postponed. There are rules about certain functions and when and where they are to be carried out. The child is learning a sense of self-control. The ego is being developed. If the caregiver is extremely controlling about potty training (stands over the child waiting for the smallest indication that the child might need to go to the potty and immediately scoops the child up and places him on the potty chair, for example), the child may grow up fearing losing control. He may become fixated in this stage or “anally retentive”—fearful of letting go. Such a person might be extremely neat and clean, organized, reliable, and controlling of others. If the caregiver neglects to teach the child to control urges, he may grow up to be “anal expulsive” or an adult who is messy, irresponsible, and disorganized.

Assessing the Psychodynamic Perspective

Originating in the work of Sigmund Freud, the psychodynamic perspective emphasizes unconscious psychological processes (for example, wishes and fears of which we’re not fully aware), and contends that childhood experiences are crucial in shaping adult personality. When reading Freud’s theories, it is important to remember that he was a medical doctor, not a psychologist. There was no such thing as a degree in psychology at the time that he received his education, which can help us understand some of the controversies over his theories today. However, Freud was the first to systematically study and theorize the workings of the unconscious mind in the manner that we associate with modern psychology. The psychodynamic perspective has evolved considerably since Freud’s time, encompassing all the theories in psychology that see human functioning based upon the interaction of conscious and unconscious drives and forces within the person, and between the different structures of the personality (id, ego, superego).

Freud’s theory has been heavily criticized for several reasons. One is that it is very difficult to test scientifically. How can parenting in infancy be traced to personality in adulthood? Are there other variables that might better explain development? Because psychodynamic theories are difficult to prove wrong, evaluating those theories, in general, is difficult in that we cannot make definite predictions about a given individual’s behaviour using the theories. The theory is also considered to be sexist in suggesting that women who do not accept an inferior position in society are somehow psychologically flawed. Freud focused on the darker side of human nature and suggested that much of what determines our actions is unknown to us. Others make the criticism that the psychodynamic approach is too deterministic, relating to the idea that all events, including human action, are ultimately determined by causes regarded as external to the will, thereby leaving little room for the idea of free will.

Freud’s work has been extremely influential, and its impact extends far beyond psychology (several years ago *Time* magazine selected Freud as one of the most important thinkers of the 20th century). Freud’s work has been not only influential but quite controversial as well. As you might imagine, when Freud suggested in 1900 that much of our behaviour is determined by psychological forces of which we’re largely unaware—that we literally don’t know what’s going on in our own minds—people were (to put it mildly) displeased.²⁰ When he suggested in 1905 that we humans have strong sexual feelings from a very early age and that some of these sexual feelings are directed

20. Freud, S. (1900). *The Interpretation of Dreams*. Standard Edition, 4-5. Hogarth Press, 1953.

toward our parents, people were more than displeased—they were outraged.²¹ Few theories in psychology have evoked such strong reactions from other professionals and members of the public.

Freud's psychosexual development theory is quite controversial. To understand the origins of the theory, it is helpful to be familiar with the political, social, and cultural influences of Freud's day in Vienna at the turn of the 20th century. During this era, a climate of sexual repression, combined with limited understanding and education surrounding human sexuality heavily influenced Freud's perspective. Given that sex was a taboo topic, Freud assumed that negative emotional states (neuroses) stemmed from the suppression of unconscious sexual and aggressive urges. For Freud, his own recollections and interpretations of patients' experiences and dreams were sufficient evidence that psychosexual stages were universal events in early childhood.

So why do we study Freud? As mentioned above, despite the criticisms, Freud's assumptions about the importance of early childhood experiences in shaping our psychological selves have found their way into child development, education, and parenting practices. Freud's theory has heuristic value in providing a framework from which to elaborate and modify subsequent theories of development. Many later theories, particularly behaviourism and humanism, were challenges to Freud's views. Controversy notwithstanding, no competent psychologist, or student of psychology, can ignore psychodynamic theory. It is simply too important for psychological science and practice and continues to play an important role in a wide variety of disciplines within and outside psychology (for example, developmental psychology, social psychology, sociology, and neuroscience).

PSYCHOSOCIAL THEORY

Erikson's Psychosocial Theory

Now, let's turn to a less controversial psychodynamic theorist, the father of developmental psychology, Erik Erikson (1902-1994). Erikson was a student of Freud's and expanded on his theory of psychosexual development by emphasizing the importance of culture in parenting practices and motivations and adding three stages of adult development.²²

Background

As an art school dropout with an uncertain future, young Erik Erikson met Freud's daughter, Anna Freud, while he was tutoring the children of an American couple undergoing psychoanalysis in Vienna. It was Anna Freud who encouraged Erikson to study psychoanalysis. Erikson received his diploma from the Vienna Psychoanalytic Institute in 1933, and as Nazism spread across Europe, he fled the country and immigrated to the United States that same year. Erikson later proposed a psychosocial theory of development, suggesting that an individual's personality develops throughout the lifespan—a departure from Freud's view that personality is fixed in early life. In his theory, Erikson emphasized the social relationships that are important at each stage of personality development, in contrast to Freud's emphasis on erogenous zones. Erikson identified eight stages, each of which includes a conflict or developmental task. The development of a healthy personality and a sense of competence depend on the successful completion of each task.

21. Freud, S. (1905). Three essays on the theory of sexuality. In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 7, pp. 125–245). England: Hogarth, 1953.

22. Erikson, E. H. (1950). *Childhood and society*. Norton., Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton.

Psychosocial Stages of Development

Erikson believed that we are aware of what motivates us throughout life and that the ego has greater importance in guiding our actions than does the id. We make conscious choices in life, and these choices focus on meeting certain social and cultural needs rather than purely biological ones. Humans are motivated, for instance, by the need to feel that the world is a trustworthy place, that we are capable individuals, that we can make a contribution to society, and that we have lived a meaningful life. These are all psychosocial problems.

Erikson's theory is based on what he calls the *epigenetic principle*, encompassing the notion that we develop through an unfolding of our personality in predetermined stages, and that our environment and surrounding culture influence how we progress through these stages. This biological unfolding in relation to our socio-cultural settings is done in stages of psychosocial development, where "progress through each stage is in part determined by our success, or lack of success, in all the previous stages."

Erikson described eight stages, each with a major psychosocial task to accomplish or crisis to overcome. Erikson believed that our personality continues to take shape throughout our life span as we face these challenges. We will discuss each of these stages in greater detail when we discuss each of these life stages throughout the course. Here is an overview of each stage:

Erikson's Psychosocial Stages of Development			
Stage	Age (years)	Developmental Task	Description
1	0–1	Trust vs. mistrust	Trust (or mistrust) that basic needs, such as nourishment and affection
2	1–3	Autonomy vs. shame/doubt	Develop a sense of independence in many tasks
3	3–6	Initiative vs. guilt	Take initiative on some activities—may develop guilt when unsuccessful
4	7–11	Industry vs. inferiority	Develop self-confidence in abilities when competent or sense of inferiority
5	12–18	Identity vs. confusion	Experiment with and develop identity and roles
6	19–29	Intimacy vs. isolation	Establish intimacy and relationships with others
7	30–64	Generativity vs. stagnation	Contribute to society and be part of a family
8	65–	Integrity vs. despair	Assess and make sense of life and meaning of contributions

Trust vs. mistrust

Erikson maintained that the first year to year and a half of life involves the establishment of a sense of trust. Infants are dependent and must rely on others to meet their basic physical needs as well as their needs for stimulation and comfort. A caregiver who consistently meets these needs instills a sense of trust or the belief that the world is a safe and trustworthy place. The caregiver should not worry about overindulging a child's need for comfort, contact, or stimulation. This view is in sharp contrast with the Freudian view that a parent who

overindulges the infant by allowing them to suck too long or be picked up too frequently will be spoiled or become fixated at the oral stage of development.

Trust vs. Mistrust (Hope)—From birth to 12 months of age, infants must learn that adults can be trusted. This occurs when adults meet a child's basic needs for survival. Infants are dependent upon their caregivers, so caregivers who are responsive and sensitive to their infant's needs help their baby to develop a sense of trust; their baby will see the world as a safe, predictable place. Unresponsive caregivers who do not meet their baby's needs can engender feelings of anxiety, fear, and mistrust; their baby may see the world as unpredictable. If infants are treated cruelly or their needs are not met appropriately, they will likely grow up with a sense of mistrust for people in the world.

Autonomy vs. Shame and Doubt

Autonomy vs. Shame (Will)—As toddlers (ages 1–3 years) begin to explore their world, they learn that they can control their actions and act on their environment to get results. They begin to show clear preferences for certain elements of the environment, such as food, toys, and clothing. A toddler's main task is to resolve the issue of autonomy vs. shame and doubt by working to establish independence. This is the "me do it" stage. For example, we might observe a budding sense of autonomy in a 2-year-old child who wants to choose her clothes and dress herself. Although her outfits might not be appropriate for the situation, her input in such basic decisions has an effect on her sense of independence. If denied the opportunity to act on her environment, she may begin to doubt her abilities, which could lead to low self-esteem and feelings of shame.

As the child begins to walk and talk, an interest in independence or autonomy replaces their concern for trust. The toddler tests the limits of what can be touched, said, and explored. Erikson believed that toddlers should be allowed to explore their environment as freely as safety allows and, in doing so, will develop a sense of independence that will later grow to self-esteem, initiative, and overall confidence. If a caregiver is overly anxious about the toddler's actions for fear that the child will get hurt or violate others' expectations, the caregiver can give the child the message that they should be ashamed of their behaviour and instill a sense of doubt in their abilities. Parenting advice based on these ideas would be to keep your toddler safe,²³ but let them learn by doing. A sense of pride seems to rely on doing rather than being told how capable one is.

Strengths and weaknesses of Erikson's theory

Erikson's eight stages form a foundation for discussions on emotional and social development during the lifespan. Keep in mind, however, that these stages or crises can occur more than once or at different times of life. For instance, a person may struggle with a lack of trust beyond infancy. Erikson's theory has been criticized for focusing so heavily on stages and assuming that the completion of one stage is prerequisite for the next crisis of development. His theory also focuses on the social expectations that are found in certain cultures, but not in all. For instance, the idea that adolescence is a time of searching for identity might translate well in the middle-class culture of the United States, but not as well in cultures where the transition into adulthood coincides with puberty through rites of passage and where adult roles offer fewer choices.

By and large, Erikson's view that development continues throughout the lifespan is very significant and has received great recognition. However, like Freud's theory, it has been criticized for focusing on more men than women and also for its vagueness, making it difficult to test rigorously.

23. Berger, C. R. (2005). Interpersonal communication: Theoretical perspectives, future prospects. *Journal of Communication*, 55(3), 415–447.

Link to Learning: Toilet Training

To the relief of most parents, there is very little evidence to suggest that Freud was right about fixations caused during the anal stage, mainly because the theory itself would be very difficult to test. Nevertheless, parents worry about toilet training, and whether they will be able to guide their children through the process unscathed. Kidshealth.org has a good [web page on to potty training](#) that may help parents worried about toilet training.

We have explored the dramatic story of the first two years of life. Rapid physical growth, neurological development, language acquisition, the movement from hands-on to mental learning, an expanding emotional repertoire, and the initial conceptions of self and others make this period of life very exciting. These abilities are shaped into more sophisticated mental processes, self-concepts, and social relationships during the years of early childhood.

Babies begin to learn about the world around them from a very early age. Children's early experiences, meaning the bonds they form with their parents and their first learning experiences, affect their future physical, cognitive, emotional, and social development. Various organizations and agencies are dedicated to helping parents (and other caregivers), educators, and health care providers understand the importance of early healthy development. Healthy development means that children of all abilities, including those with special health care needs, are able to grow up where their social, emotional, and educational needs are met. Having a safe and loving home and spending time with family—playing, singing, reading, and talking—are very important. Proper nutrition, exercise, and sleep can also make a big difference; and effective parenting practices are key to supporting healthy development.²⁴ The need to invest in very young children is important to maximize their future well-being.

CHAPTER ATTRIBUTION

Adapted from [4.3 Psychosocial Growth in Infancy](#) in [Human Growth and Development](#) by Ryan Newton, Metropolitan Community College used under a CC BY License.

24. Centers for Disease Control and Prevention [CDC]. *Child Development Basics*. <https://www.cdc.gov/ncbddd/childdevelopment/facts.html>

UNIT 23

Supplemental Resources

WEBSITES

- [Areas and Function of the Brain](#)
 - Students will interact with the map and chart to review major areas of the brain and their functions. Toggle down on the top left menu to choose different structures to explore.
- [CDC's Information for Parents of Infants and Toddlers](#)
 - Besides tracking your child's growth and development, you can learn about topics such as developmental disabilities, immunization recommendations, and screening.
- [Infant and Toddler Nutrition](#)
 - This website brings together existing information and practical strategies on feeding healthy foods and drinks to infants and toddlers, from birth to 24 months of age.
- [Zero to Three Healthy Sleep](#)
 - The website information on infant sleep patterns and habits. Feel free to explore their multiple topics on the subject.
- [Institute for Learning and Brain Sciences](#)
 - The Institute for Learning & Brain Sciences (I-LABS) is the world's leading interdisciplinary research center on early learning and brain development. Our groundbreaking research is revolutionizing our understanding of children's development in their early years, and revealing how this affects brain changes in adolescence, adulthood, and aging.

VIDEOS

- [Working with children to understand how brains develop](#)
 - See how developmental psychologists conduct research with young infants. Closed captioning available.
- [How Baby Brains Develop](#)
 - CNN takes a look inside what might be the most complex biological system in the world: the human brain.
- [Harry Harlow's Study of Attachment in Monkeys](#)

- This video shows that infant rhesus monkeys appear to form an affectional bond with soft, cloth surrogate mothers that offered no food but not with wire surrogate mothers that provided a food source but are less pleasant to touch.
- [The Strange Situation](#)
 - This video shows the test that American psychologist Mary Ainsworth developed for studying attachment in infants.
- [The Attachment Theory: How Childhood Affects Life](#)
 - The attachment theory argues that a strong emotional and physical bond to one primary caregiver in our first years of life is critical to our development. This video explains the different styles of attachment.
- [Piaget – Stage 1 – Sensorimotor stage : Object Permanence](#)
 - This video shows the Piaget test of object permanence.
- [The Surprising Logical Minds of Babies-TED talk](#)
 - How do babies learn so much from so little so quickly? In a fun, experiment-filled talk, cognitive scientist Laura Schulz shows how our young ones make decisions with a surprisingly strong sense of logic, well before they can talk.
- [What Do Babies Think-Ted Talk](#)
 - “Babies and young children are like the R&D division of the human species,” says psychologist Alison Gopnik. Her research explores the sophisticated intelligence-gathering and decision-making that babies are really doing when they play.
- [Learning and Development of Language: The First 5 Years of Life](#)
 - In this video, we'll look at four things known about Language Learning in general and then listen to the story of lucky Lucy and poor Pete to understand the importance of language in everyday life.
- [Noam Chomsky on Language Acquisition](#)
 - How is it that we learn to speak and think in language so easily? Philosophers have argued about whether or not we have innate ideas. Whether we are born knowing things, as Plato believed, or rather, as John Locke and other empiricists argued, the mind is a blank slate on which experience writes. Noam Chomsky gave a twist to this debate in the 1960s.
- [Schemas, assimilation, and accommodation | Khan Academy](#)
 - This video summarizes the concepts of assimilation and accommodation that take place during the sensorimotor stage.
- [“Good” and “Bad” are Incomplete Stories that we Tell Ourselves-TED talk](#)
 - Heather Lanier’s daughter Fiona has Wolf-Hirschhorn syndrome, a genetic condition that results in developmental delays – but that doesn’t make her tragic, angelic or any of the other stereotypes about kids like her. In this talk about the beautiful, complicated, joyful and hard journey of raising a rare girl, Lanier questions our assumptions about what makes a life “good” or “bad,” challenging us to stop fixating on solutions for whatever we deem not normal, and instead to take life as it comes.

UNIT 24

Cognitive Growth in Infancy

Chapter Objectives

After this chapter, you should be able to:

- Describe Piaget's sub-stages of sensorimotor intelligence.
- Explain learning and memory abilities in infants and toddlers.
- Describe stages of language development during infancy.
- Compare theories of language development in toddlers.
- Explain the procedure, results, and implications on moral reasoning research in infants.

WHAT'S COGNITIVE DEVELOPMENT LIKE IN THE FIRST TWO YEARS?

In addition to rapid physical growth, infants also exhibit significant development of their cognitive abilities, particularly in language acquisition and in the ability to think and reason. You already learned a little bit about Piaget's theory of cognitive development, and in this section, we'll apply that model to cognitive tasks during infancy and toddlerhood. Piaget described intelligence in infancy as sensorimotor or based on direct, physical contact where infants use senses and motor skills to taste, feel, pound, push, hear, and move in order to experience the world. These basic motor and sensory abilities provide the foundation for the cognitive skills that will emerge during the subsequent stages of cognitive development.

COGNITIVE DEVELOPMENT IN INFANTS

In order to adapt to the evolving environment around us, humans rely on cognition, both adapting to the environment and also transforming it. In general, all theorists studying cognitive development address three main issues:

1. The typical course of cognitive development
2. The unique differences between individuals
3. The mechanisms of cognitive development (the way genetics and environment combine to generate patterns of change)

THE COGNITIVE PERSPECTIVE: THE ROOTS OF UNDERSTANDING

Cognitive theories focus on how our mental processes or cognitions change over time. The **theory of cognitive development** is a comprehensive theory about the nature and development of human intelligence first developed by Jean Piaget. It is primarily known as a developmental stage theory, but in fact, it deals with the nature of knowledge itself and how humans come gradually to acquire it, construct it, and use it. Moreover, Piaget claims that cognitive development is at the center of the human organism and language is contingent on cognitive development. Let’s learn more about Piaget’s views about the nature of intelligence and then dive deeper into the stages that he identified as critical in the developmental process.

STAGES OF COGNITIVE DEVELOPMENT

Like Freud and Erikson, Piaget thought development unfolded in a series of stages approximately associated with age ranges. He proposed a theory of cognitive development that unfolds in four stages: sensorimotor, preoperational, concrete operational, and formal operational.

Piaget’s Stages of Cognitive Development			
Age (years)	Stage	Description	Developmental issues
0–2	Sensorimotor	World experienced through senses and actions	Object permanence Stranger anxiety
2–7	Preoperational	Use words and images to represent things but lack logical reasoning	Pretend play Egocentrism Language development
7–11	Concrete operational	Understand concrete events and logical analogies; perform arithmetical operations	Conservation Mathematical transitions
11–	Formal operational	Utilize abstract reasoning and hypothetical thinking	Abstract logic Moral reasoning

PIAGET AND SENSORIMOTOR INTELLIGENCE

How do infants connect and make sense of what they are learning? Remember that Piaget believed that we are continuously trying to maintain cognitive equilibrium, or balance, between what we see and what we know.¹ Children have much more of a challenge in maintaining this balance because they are constantly being confronted with new situations, new words, new objects, etc. All this new information needs to be organized, and a framework for organizing information is referred to as a **schema**. Children develop schemas through the processes of **assimilation** and **accommodation**.

For example, 2-year-old Deja learned the schema for dogs because her family has a Poodle. When Deja sees other dogs in her picture books, she says, “Look mommy, dog!” Thus, she has assimilated them into her schema for dogs. One day, Deja sees a sheep for the first time and says, “Look mommy, dog!” Having a basic schema that a dog is an animal with four legs and fur, Deja thinks all furry, four-legged creatures are dogs. When Deja’s mom tells her that the animal she sees is a sheep, not a dog, Deja must accommodate her schema for dogs to include more information based on her new experiences. Deja’s schema for dog was too broad since not all furry, four-legged creatures are dogs. She now modifies her schema for dogs and forms a new one for sheep.

1. Piaget, J., & Cook, M. T. (1952). *The origins of intelligence in children*. International University Press.

Let's examine the transition that infants make from responding to the external world reflexively as newborns, to solving problems using mental strategies as two-year-olds. Piaget called this first stage of cognitive development **sensorimotor intelligence** (the sensorimotor period) because infants learn through their senses and motor skills. He subdivided this period into six substages:

Sensorimotor substages	
Stage	Age
Stage 1 – Reflexes	Birth to 6 weeks
Stage 2 – Primary Circular Reactions	6 weeks to 4 months
Stage 3 – Secondary Circular Reactions	4 months to 8 months
Stage 4 – Coordination of Secondary Circular Reactions	8 months to 12 months
Stage 5 – Tertiary Circular Reactions	12 months to 18 months
Stage 6 – Mental Representation	18 months to 24 months

SUBSTAGES OF SENSORIMOTOR INTELLIGENCE

For an overview of the substages of sensorimotor thought, it helps to group the six substages into pairs. The first two substages involve the infant's responses to its own body, call **primary circular reactions**. During the first month first (substage one), the infant's senses, as well as motor reflexes are the foundation of thought.

Substage One: Reflexive Action (Birth through 1st month)

This active learning begins with automatic movements or reflexes (sucking, grasping, staring, listening). A ball comes into contact with an infant's cheek and is automatically sucked on and licked. But this is also what happens with a sour lemon, much to the infant's surprise! The baby's first challenge is to learn to adapt the sucking reflex to bottles or breasts, pacifiers or fingers, each acquiring specific types of tongue movements to latch, suck, breath, and repeat. This adaptation demonstrates that infants have begun to make sense of sensations. Eventually, the use of these reflexes becomes more deliberate and purposeful as they move onto substage two.

Substage Two: First Adaptations to the Environment (1st through 4th months)

Fortunately, within a few days or weeks, the infant begins to discriminate between objects and adjust responses accordingly as reflexes are replaced with voluntary movements. An infant may accidentally engage in a behaviour and find it interesting, such as making a vocalization. This interest motivates trying to do it again and helps the infant learn a new behaviour that originally occurred by chance. The behaviour is identified as circular and primary because it centers on the infant's own body. At first, most actions have to do with the body, but in months to come, will be directed more toward objects. For example, the infant may have different sucking motions for hunger and others for comfort (i.e. sucking a pacifier differently from a nipple or attempting to hold a bottle to suck it).

The next two substages (3 and 4), involve the infant's responses to objects and people, called **secondary circular reactions**. Reactions are no longer confined to the infant's body and are now interactions between the baby and something else.

Substage Three: Repetition (4th through 8th months)

During the next few months, the infant becomes more and more actively engaged in the outside world and takes delight in being able to make things happen by responding to people and objects. Babies try to continue any pleasing event. Repeated motion brings particular interest as the infant is able to bang two lids together or shake a rattle and laugh. Another example might be to clap their hands when a caregiver says “patty-cake.” Any sight of something delightful will trigger efforts for interaction.

Substage Four: New Adaptations and Goal-Directed Behaviour (8th through 12th months)

Now the infant becomes more deliberate and purposeful in responding to people and objects and can engage in behaviours that others perform and anticipate upcoming events. Babies may ask for help by fussing, pointing, or reaching up to accomplish tasks, and work hard to get what they want. Perhaps because of continued maturation of the prefrontal cortex, the infant becomes capable of having a thought and carrying out a planned, goal-directed activity such as seeking a toy that has rolled under the couch or indicating that they are hungry. The infant is coordinating both internal and external activities to achieve a planned goal and begins to get a sense of social understanding. Piaget believed that at about 8 months (during substage 4), babies first understood the concept of **object permanence**, which is the realization that objects or people continue to exist when they are no longer in sight.

The last two stages (5 and 6), called **tertiary circular reactions**, consist of actions (stage 5) and ideas (stage 6) where infants become more creative in their thinking.

Substage Five: Active Experimentation of “Little Scientists” (12th through 18th months)

The toddler is considered a “little scientist” and begins exploring the world in a trial-and-error manner, using motor skills and planning abilities. For example, the child might throw their ball down the stairs to see what happens or delight in squeezing all of the toothpaste out of the tube. The toddler’s active engagement in experimentation helps them learn about their world. Gravity is learned by pouring water from a cup or pushing bowls from high chairs. The caregiver tries to help the child by picking it up again and placing it on the tray. And what happens? Another experiment! The child pushes it off the tray again causing it to fall and the caregiver to pick it up again! A closer examination of this stage causes us to really appreciate how much learning is going on at this time and how many things we come to take for granted must actually be learned. This is a wonderful and messy time of experimentation and most learning occurs by trial and error.

Substage Six: Mental Representations (18th month to 2 years of age)

The child is now able to solve problems using mental strategies, to remember something heard days before and repeat it, to engage in pretend play, and to find objects that have been moved even when out of sight. Take, for instance, the child who is upstairs in a room with the door closed, supposedly taking a nap. The doorknob has a safety device on it that makes it impossible for the child to turn the knob. After trying several times to push the door or turn the doorknob, the child carries out a mental strategy to get the door opened – he knocks on the door! Obviously, this is a technique learned from the past experience of hearing a knock on the door and observing someone opening the door. The child is now better equipped with mental strategies for problem-solving. Part of this stage also involves learning to use language. This initial movement from the “hands-on” approach to knowing about the world to the more mental world of stage six marked the transition to preoperational thinking, which you’ll learn more about in a later module.

DEVELOPMENT OF OBJECT PERMANENCE

A critical milestone during the sensorimotor period is the development of object permanence. Introduced during substage 4 above, **object permanence** is the understanding that even if something is out of sight, it continues to exist. The infant is now capable of making attempts to retrieve the object. Piaget thought that, at about 8 months, babies first understand the concept of objective permanence, but some research has suggested that infants seem to be able to recognize that objects have permanence at much younger ages (even as young as 4 months of age). Other researchers, however, are not convinced.² It may be a matter of “grasping vs. mastering” the concept of objective permanence. Overall, we can expect children to *grasp* the concept that objects continue to exist even when they are not in sight by around 8 months old, but memory may play a factor in their consistency. Because toddlers (i.e., 12–24 months old) have *mastered* object permanence, they enjoy games like hide-and-seek, and they realize that when someone leaves the room they will come back. Toddlers also point to pictures in books and look in the appropriate places when you ask them to find objects.

MEMORY ABILITIES IN INFANTS

Memory is central to cognitive development and **information processing theories**. Our memories form the basis for our sense of self, guide our thoughts and decisions, influence our emotional reactions, and allow us to learn.³

It is thought that Piaget underestimated memory ability in infants⁴). This belief came in part from findings that adults rarely recall personal events from before the age of 3 years (a phenomenon that is known as **infantile** or **childhood amnesia**). However, research with infants and young children has made it clear that they can and do form memories of events. Infants show evidence of **implicit memories** early in life. Implicit memories are for automatic processes, like motor skills, whereas **explicit memories**, those you can consciously recall, develop later.⁵

As mentioned when discussing the development of infant senses, within the first few weeks of birth, infants recognize their caregivers by face, voice, and smell. Sensory and caregiver memories are apparent in the first month, motor memories by 3 months, and then, at about 9 months, more complex memories including language.⁶ There is an agreement that memory is fragile in the first months of life, but that improves with age. Repeated sensations and brain maturation are required in order to process and recall events. Infants remember things that happened weeks and months ago, although they most likely will not remember it decades later. From the cognitive perspective, this has been explained by the idea that the lack of linguistic skills of babies and toddlers limit their ability to mentally represent events; thereby, reducing their ability to encode memory. Moreover, even if infants do form such early memories, older children and adults may not be able to access them because they may be employing very different, more linguistically based, retrieval cues than infants used when forming the memory.

LANGUAGE DEVELOPMENT

Given the remarkable complexity of a language, one might expect that mastering a language would be an especially arduous task; indeed, for those of us trying to learn a second language as adults, this might seem to be

2. Mareschal, D. & Kaufman, J. (2012). Object permanence in infancy: revisiting Baillargeon's drawbridge study. *Psychology*.

3. Bauer, P. J. (2008). Event memory in infancy and early childhood. In T. F. Shipley & J. M. Zacks (Eds.), *Understanding events: From perception to action* (pp. 130–159). Oxford University Press.

4. Schneider, W. (2015). The Development of Children's Memory. *Child Development Perspectives*, 9(3).

5. Rovee-Collier, C. (1997). Dissociations in infant memory: Rethinking the development of implicit and explicit memory. *Psychological Review*, 104(3), 467–498.

6. Mullally, S. L., & Maguire, E. A. (2014). Learning to remember: The early ontogeny of episodic memory. *Developmental Cognitive Neuroscience*, 9, 12–29.

true. However, young children master language very quickly with relative ease. B. F. Skinner (1957) proposed that language is learned through reinforcement. Noam Chomsky (1965) criticized this behaviourist approach, asserting instead that the mechanisms underlying language acquisition are biologically determined. The use of language develops in the absence of formal instruction and appears to follow a very similar pattern in children from vastly different cultures and backgrounds. It would seem, therefore, that we are born with a biological predisposition to acquire a language⁷ Moreover, it appears that there is a critical period for language acquisition, such that this proficiency at acquiring language is maximal early in life; generally, as people age, the ease with which they acquire and master new languages diminishes.⁸

Children begin to learn about language from a very early age (Table 4). In fact, it appears that this is occurring even before we are born. Newborns show a preference for their mother's voice and appear to be able to discriminate between the language spoken by their mother and other languages. Babies are also attuned to the languages being used around them and show preferences for videos of faces that are moving in synchrony with the audio of spoken language versus videos that do not synchronize with the audio.⁹

Milestones of Language and Communication Development

Age	Developmental Language and Communication
Newborn	Reflexive communication (e.g., cries)
to 3 months	Cooing
4–6 months	Interest in others; begins babbling
7–12 months	Understands common words; gestures
12–18 months	First words
18–24 months	Simple sentences of two words
2–3 years	Sentences of three or more words
3–5 years	Complex sentences; has conversations

Each language has its own set of **phonemes**, the smallest unit of sound to make a meaningful difference to a word. Phonemes are used to generate **morphemes**, the smallest units of meaning within words. Babies can discriminate among the sounds that make up a language (for example, they can tell the difference between the “s” in vision and the “ss” in fission). Before 9 months, they can differentiate between the sounds of all human languages! This is something that older children and adults cannot do. By the time that they are about 1 year old, they start to specialize in the languages they hear and they can only discriminate among those phonemes that are used in the language(s) in their environments.¹⁰

7. Chomsky, N. (1965). *Aspects of the theory of syntax*. M.I.T. Press., Fernández, E. & Cairns, H. (2010). *Fundamentals of psycholinguistics*. Wiley-Blackwell.

8. Johnson, J. S., & Newport, E. L. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology*, 21(1), 60–99., Singleton, D. (1995). *Second Languages in the Primary School: The Age Factor*. Dimension.

9. Pickens, J. (1994). Perception of auditory-visual distance relations by 5-month-old infants. *Developmental Psychology*, 30(4), 537–544.

10. Werker, J. F., & Lalonde, C. E. (1988). Cross-language speech perception: Initial capabilities and developmental change. *Developmental Psychology*, 24(5), 672–683.

INFANT COMMUNICATION

Intentional Vocalizations

Infants begin to vocalize and repeat vocalizations within the first couple of months of life. That gurgling, musical vocalization called cooing can serve as a source of entertainment to an infant who has been laid down for a nap or seated in a carrier on a car ride. Cooing serves as practice for vocalization. It also allows the infant to hear the sound of their own voice and try to repeat sounds that are entertaining. Infants also begin to learn the pace and pause of conversation as they alternate their vocalization with that of someone else and then take their turn again when the other person's vocalization has stopped. **Cooing** initially involves making vowel sounds like "oooo." Later, as the baby moves into babbling (see below), consonants are added to vocalizations such as "nananananana."

Babbling and Gesturing

Between 6 and 9 months, infants begin making even more elaborate vocalizations that include the sounds required for any language. Guttural sounds, clicks, consonants, and vowel sounds stand ready to equip the child with the ability to repeat whatever sounds are characteristic of the language heard. These babies repeat certain syllables (ma-ma-ma, da-da-da, ba-ba-ba), a vocalization called **babbling** because of the way it sounds. Eventually, these sounds will no longer be used as the infant grows more accustomed to a particular language. Deaf babies also use gestures to communicate wants, reactions, and feelings. Because gesturing seems to be easier than vocalization for some toddlers, sign language is sometimes taught to enhance one's ability to communicate by making use of the ease of gesturing. The rhythm and pattern of language are used when deaf babies sign just as when hearing babies babble.

At around ten months of age, infants can understand more than they can say. You may have experienced this phenomenon as well if you have ever tried to learn a second language. You may have been able to follow a conversation more easily than to contribute to it.

Holophrastic Speech

Children begin using their first words at about 12 or 13 months of age and may use partial words to convey thoughts at even younger ages. These one-word expressions are referred to as holophrastic speech (**holophrase**). For example, the child may say "ju" for the word "juice" and use this sound when referring to a bottle. The listener must interpret the meaning of the holophrase. When this is someone who has spent time with the child, interpretation is not too difficult. They know that "ju" means "juice" which means the baby wants some milk! But, someone who has not been around the child will have trouble knowing what is meant. Imagine the parent who exclaims to a friend, "Ezra's talking all the time now!" The friend hears only "ju da ga" which, the parent explains, means "I want some milk when I go with Daddy."

First words and cultural influences

The first words for English-speaking children tend to be nouns. The child labels objects such as a cup or a ball. In a verb-friendly language such as Chinese or Korean, however, children may learn more verbs.¹¹ This may also be due to the different emphasis given to objects based on culture. Chinese children may be taught to notice action

11. Gopnik, A., & Nazzi, T. (2003). Words, kinds, and causal powers: A theory theory perspective on early naming and categorization. In D. H. Rakison & L. M. Oakes (Eds.), *Early category and concept development: Making sense of the blooming, buzzing confusion* (pp. 303–329). Oxford University Press.

and relationships between objects while children from the United States may be taught to name an object and its qualities (color, texture, size, etc.). These differences can be seen when comparing interpretations of art by older students from China and the United States.

Vocabulary growth spurt

One-year-olds typically have a vocabulary of about 50 words. But by the time they become toddlers, they have a vocabulary of about 200 words and begin putting those words together in telegraphic speech (short phrases). This language growth spurt is called the **naming explosion** because many early words are nouns (persons, places, or things).

Two-word sentences and telegraphic speech

Words are soon combined and 18-month-old toddlers can express themselves further by using phrases such as “baby bye-bye” or “doggie pretty.” Words needed to convey messages are used, but the articles and other parts of speech necessary for grammatical correctness are not yet included. These expressions sound like a telegraph (or perhaps a better analogy today would be that they read like a text message) where unnecessary words are not used. “Give baby ball” is used rather than “Give the baby the ball.” Or a text message of “Send money now!” rather than “Dear Mother. I really need some money to take care of my expenses.” You get the idea.

Child-directed speech

Why is a horse a “horsie”? Have you ever wondered why adults tend to use “baby talk” or that sing-song type of intonation and exaggeration used when talking to children? This represents a universal tendency and is known as child-directed speech or motherese or parentese. It involves exaggerating the vowel and consonant sounds, using a high-pitched voice, and delivering the phrase with great facial expression. Why is this done? It may be in order to clearly articulate the sounds of a word so that the child can hear the sounds involved. Or it may be because when this type of speech is used, the infant pays more attention to the speaker and this sets up a pattern of interaction in which the speaker and listener are in tune with one another. When I demonstrate this in class, the students certainly pay attention and look my way. Amazing! It also works in the college classroom!

THEORIES OF LANGUAGE DEVELOPMENT

How is language learned? Each major theory of language development emphasizes different aspects of language learning: that infants’ brains are genetically attuned to language, that infants must be taught and that infants’ social impulses foster language learning. The first two theories of language development represent two extremes in the level of interaction required for language to occur.¹²

Chomsky and the language acquisition device

This theory posits that infants teach themselves and that language learning is genetically programmed. The view is known as *nativism* and was advocated by Noam Chomsky, who suggested that infants are equipped with a neurological construct referred to as the **language acquisition device (LAD)**, which makes infants ready for language. The LAD allows children, as their brains develop, to derive the rules of grammar quickly and effectively from the speech they hear every day. Therefore, language develops as long as the infant is exposed to it. No

12. Berk, L. (2007) *Development through the Lifespan*. Allyn and Bacon.

teaching, training, or reinforcement is required for language to develop. Instead, language learning comes from a particular gene, brain maturation, and the overall human impulse to imitate.

Skinner and reinforcement

This theory is the opposite of Chomsky's theory because it suggests that infants need to be taught language. This idea arises from behaviourism. Learning theorist, B. F. Skinner, suggested that language develops through the use of reinforcement. Sounds, words, gestures, and phrases are encouraged by following the behaviour with attention, words of praise, treats, or anything that increases the likelihood that the behaviour will be repeated. This repetition strengthens associations, so infants learn the language faster as parents speak to them often. For example, when a baby says "ma-ma," the mother smiles and repeats the sound while showing the baby attention. So, "ma-ma" is repeated due to this reinforcement.

Social pragmatics

Another language theory emphasizes the child's active engagement in learning the language out of a need to communicate. Social impulses foster infant language because humans are social beings and we must communicate because we are dependent on each other for survival. The child seeks information, memorizes terms, imitates the speech heard from others and learns to conceptualize using words as language is acquired. Tomasello and Herrmann¹³ argue that all human infants, as opposed to chimpanzees, seek to master words and grammar in order to join the social world. Many would argue that all three of these theories (Chomsky's argument for nativism, conditioning, and social pragmatics) are important for fostering the acquisition of language.¹⁴

MORAL REASONING IN INFANTS

The Foundation of Moral Reasoning in Infants

The work of Lawrence Kohlberg was an important start to modern research on moral development and reasoning. However, Kohlberg relied on a specific method: he presented moral dilemmas and asked children and adults to explain what they would do and—more importantly—why they would act in that particular way. Kohlberg found that children tended to make choices based on avoiding punishment and gaining praise. But children are at a disadvantage compared to adults when they must rely on language to convey their inner thoughts and emotional reactions, so what they say may not adequately capture the complexity of their thinking.

Starting in the 1980s, developmental psychologists created new methods for studying the thought processes of children and infants long before they acquire language. One particularly effective method is to present children with puppet shows to grab their attention and then record nonverbal behaviours, such as looking and choosing, to identify children's preferences or interests.

A research group at Yale University has been using the puppet show technique to study the moral thinking of children for much of the past decade. What they have discovered has given us a glimpse of surprisingly complex thought processes that may serve as the foundation of moral reasoning.

13. Tomasello, M., & Herrmann, E. (2010). Ape and human cognition: What's the difference? *Current Directions in Psychological Science*, 19(1), 3–8.

14. Berger, L. M. (2004). Income, family structure, and child maltreatment risk. *Children and Youth Services Review*, 26(8), 725–748.

Remember that Lawrence Kohlberg thought that children at this age—and, in fact, through 9 years of age—are primarily motivated to avoid punishment and seek rewards. Neither Kohlberg nor Carol Gilligan nor Jean Piaget was likely to predict that infants as young as 3-months would show preferences for moral behaviour.

CHAPTER ATTRIBUTION

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UNIT 25

Cognitive Development in Infancy and Toddlerhood

Chapter Objectives

After this chapter, you should be able to:

1. Describe the substages of the Piaget's sensorimotor stage.
2. Explain how the social environment affects cognitive development according to Vygotsky's theory.
3. Discuss the progression of language development during the first two years.
4. Compare the theories of language development.
5. Define classical and operant conditioning.
6. Summarize the different types of memory

INTRODUCTION

In an effort to better understand the large spectrum of cognition that infants and toddlers go through, it is important to analyze and comprehend various theories that relate to their growth and development. This chapter will take a look at the following theorists: Piaget, Vygotsky, Chomsky, Skinner, Pavlov, Watson, Bandura, and Bronfenbrenner.

PIAGET

Jean Piaget is the most noted theorist when it comes to children's cognitive development. He believed that children's cognition develops in stages. He explained this growth in the following stages:

- Sensory Motor Stage (birth through 2 years old)
- Preoperational Stage (2-7 years old)
- Concrete Operational Stage (7-11 years old)
- Formal Operational Stage (12 years old – adulthood)

In this cognitive chapter we will focus on his first stage which occurs in infancy.

Piaget and Sensorimotor Intelligence

Piaget describes intelligence in infancy as sensorimotor or based on direct, physical contact. Infants taste, feel, pound, push, hear, and move in order to experience the world. Let's explore the transition infants make from responding to the external world reflexively as newborns to solving problems using mental strategies as two years old.

Substages of Piaget's Sensorimotor Stage		
Substage	Age	Description
Substage One: Simple Reflexes	Birth to 1 month	This active learning begins with automatic movements or reflexes. A ball comes into contact with an infant's cheek and is automatically sucked on and licked.
Substage Two: Primary Circular Reactions	1 to 4 months	The infant begins to discriminate between objects and adjust responses accordingly as reflexes are replaced with voluntary movements. An infant may accidentally engage in a behaviour and find it interesting such as making a vocalization. This interest motivates trying to do it again and helps the infant learn a new behaviour that originally occurred by chance. At first, most actions have to do with the body, but in months to come, will be directed more toward objects.
Substage Three: Secondary Circular Reactions	4 to 8 months	The infant becomes more and more actively engaged in the outside world and takes delight in being able to make things happen. Repeated motion brings particular interest as the infant is able to bang two lids together from the cupboard when seated on the kitchen floor.
Substage Four: Coordination of Circular Reactions	8 to 12 months	The infant can engage in behaviours that others perform and anticipate upcoming events. Perhaps because of continued maturation of the prefrontal cortex, the infant becomes capable of having a thought and carrying out a planned, goal-directed activity such as seeking a toy that has rolled under the couch. The object continues to exist in the infant's mind even when out of sight and the infant now is capable of making attempts to retrieve it.
Substage Five: Tertiary Circular Reactions	12 to 18 months	The infant more actively engages in experimentation to learn about the physical world. Gravity is learned by pouring water from a cup or pushing bowls from high chairs. The caregiver tries to help the child by picking it up again and placing it on the tray. And what happens? Another experiment! The child pushes it off the tray again causing it to fall and the caregiver to pick it up again!
Substage Six: Internalization of Schemes and Early Representational Thought	18 months to 2 years	The child is now able to solve problems using mental strategies, to remember something heard days before and repeat it, to engage in pretend play, and to find objects that have been moved even when out of sight. Take for instance, the child who is upstairs in a room with the door closed, supposedly taking a nap. The doorknob has a safety device on it that makes it impossible for the child to turn the knob. After trying several times in vain to push the door or turn the doorknob, the child carries out a mental strategy learned from prior experience to get the door opened-he knocks on the door! The child is now better equipped with mental strategies for problem-solving.

Evaluating Piaget's Sensorimotor Stage

Piaget opened up a new way of looking at infants with his view that their main task is to coordinate their sensory impressions with their motor activity. However, the infant's cognitive world is not as neatly packaged as Piaget portrayed it, and some of Piaget's explanations for the cause of change are debated. In the past several decades, sophisticated experimental techniques have been devised to study infants, and there have been a large number of research studies on infant development. Much of the new research suggests that Piaget's view of sensorimotor development needs to be modified.

OBJECT PERMANENCE

One necessary modification would be to when children develop object permanence. Infants seem to be able to recognize that objects have permanence at much younger ages than Piaget proposed (even as young as 3.5 months of age).

The A-not-B Error

The data does not always support Piaget's claim that certain processes are crucial in transitions from one stage to the next. For example, in Piaget's theory, an important feature in the progression into substage 4, **coordination of secondary circular reactions**, is an infant's inclination to search for a hidden object in a familiar location rather than to look for the object in a new location. Thus, if a toy is hidden twice, initially at location A and subsequently at location B, 8- to 12-month-old infants search correctly at location A initially. But when the toy is subsequently hidden at location B, they make the mistake of continuing to search for it at location A. **A-not-B error** is the term used to describe this common mistake. Older infants are less likely to make the A-not-B error because their concept of object permanence is more complete.

Researchers have found, however, that the A-not-B error does not show up consistently (Sophian, 1985). The evidence indicates that A-not-B errors are sensitive to the delay between hiding the object at B and the infant's attempt to find it². Thus, the A-not-B error might be due to a failure in memory. Another explanation is that infants tend to repeat a previous motor behaviour.³

VYGOTSKY

Development Is Determined By Environmental Factors

Piaget set the tone for much of current-day research but his theory has also received a great deal of criticism. Many believe that Piaget ignored the huge influence that society and culture have in shaping a child's development. At a similar time, another researcher named Lev Vygotsky (1896–1934) had come to similar conclusions as Piaget about children's development, in thinking that children learned about the world through physical interaction with it. However, where Piaget felt that children moved naturally through different stages of

1. Brooks, R., & Meltzoff, A. N. (2014). Gaze following: A mechanism for building social connections between infants and adults. In M. Mikulincer & P. R. Shaver (Eds.), *Mechanisms of social connection: From brain to group* (pp. 167–183). American Psychological Association., Scott, R. M., & Baillargeon, R. (2014). How fresh a look? A reply to Heyes. *Developmental Science*, 17(5), 660–664.
2. Diamond, A. (1985). Development of the ability to use recall to guide action, as indicated by infants' performance on AB. *Child Development*, 56(4):868–83.
3. Smith, L.T. (1999). *Decolonizing methodologies: Research and indigenous peoples*. Zed

development, based on biological predispositions and their own individual interactions with the world, Vygotsky claimed that adult or peer intervention was a much more important part of the developmental process.

Vygotsky concentrated more on the child's immediate social and cultural environment and his or her interactions with adults and peers. He argued that development occurred first through children's immediate social interactions, and then moved to the individual level as they began to internalize their learning. While Piaget saw the child as actively discovering the world through individual interactions with it, Vygotsky saw the child as more of an apprentice, learning through a social environment of others who had more experience and were sensitive to the child's needs and abilities.



An adult playing Legos with a child. Credit: Tabeajaichhalt

COGNITIVE MILESTONES

Children are actively learning about the world as they perceive it from the time they are in the womb. Here is a table of some of the cognitive milestones infants and toddlers typically develop.

Cognitive Milestones ⁴	
Typical Age	What Most Children Do by This Age
2 months	Pays attention to faces
	Begins to follow things with eyes and recognize people at a distance
	Begins to act bored (cries, fussy) if activity doesn't change
4 months	Lets you know if she is happy or sad
	Responds to affection
	Reaches for toy with one hand
	Uses hands and eyes together, such as seeing a toy and reaching for it
	Follows moving things with eyes from side to side
	Watches faces closely
	Recognizes familiar people and things at a distance
6 months	Looks around at things nearby
	Brings things to mouth
	Shows curiosity about things and tries to get things that are out of reach
	Begins to pass things from one hand to the other
9 months	Watches the path of something as it falls
	Looks for things he sees you hide
	Plays peek-a-boo
	Puts things in mouth
	Moves things smoothly from one hand to the other
	Picks up things like cereal o's between thumb and index finger
1 year	Explores things in different ways, like shaking, banging, throwing
	Finds hidden things easily
	Looks at the right picture or thing when it's named
	Copies gestures
	Starts to use things correctly; for example, drinks from a cup, brushes hair
	Bangs two things together
	Puts things in a container, takes things out of a container
	Lets things go without help
	Pokes with index (pointer) finger
	Follows simple directions like "pick up the toy"
18 months	Knows what ordinary things are for; for example, telephone, brush, spoon
	Points to get the attention of others
	Shows interest in a doll or stuffed animal by pretending to feed
	Points to one body part
	Scribbles on own
	Can follow 1-step verbal commands without any gestures; for example, sits when you say "sit down"
2 years	Finds things even when hidden under two or three covers
	Begins to sort shapes and colors
	Completes sentences and rhymes in familiar books

Cognitive Milestones	
Typical Age	What Most Children Do by This Age
	Plays simple make-believe games
	Builds towers of 4 or more blocks
	Might use one hand more than the other
	Follows two-step instructions such as "Pick up your shoes and put them in the closet."
	Names items in a picture book such as a cat, bird, or dog

LANGUAGE DEVELOPMENT

Do newborns communicate? Absolutely! However, they do not communicate with the use of language. Instead, they communicate their thoughts and needs with body posture (being relaxed or still), gestures, cries, and facial expressions. A person who spends adequate time with an infant can learn which cries indicate pain and which ones indicate hunger, discomfort, or frustration as well as translate their vocalizations, movements, gestures and facial expressions.

Stages of Language Development

Stage 1 – Intentional Vocalizations: Cooing and taking turns: Infants begin to vocalize and repeat vocalizations within the first couple of months of life. That gurgling, musical vocalization called cooing can serve as a source of entertainment to an infant who has been laid down for a nap or seated in a carrier on a car ride. Cooing serves as practice for vocalization as well as the infant hears the sound of his or her own voice and tries to repeat sounds that are entertaining. Infants also begin to learn the pace and pause of conversation as they alternate their vocalization with that of someone else and then take their turn again when the other person's vocalization has stopped. Cooing initially involves making vowel sounds like "oooo". Later, consonants are added to vocalizations such as "nanananana".

Stage 2 – Babbling and gesturing: At about four to six months of age, infants begin making even more elaborate vocalizations that include the sounds required for any language. Guttural sounds, clicks, consonants, and vowel sounds stand ready to equip the child with the ability to repeat whatever sounds are characteristic of the language heard. Eventually, these sounds will no longer be used as the infant grows more accustomed to a particular language. Deaf babies also use gestures to communicate wants, reactions, and feelings. Because gesturing seems to be easier than vocalization for some toddlers, sign language is sometimes taught to enhance one's ability to communicate by making use of the ease of gesturing. The rhythm and pattern of language is used when deaf babies sign just as it is when hearing babies babble.

Stage 3 – Understanding: At around ten months of age, the infant can understand more than he or she can say. You may have experienced this phenomenon as well if you have ever tried to learn a second language. You may have been able to follow a conversation more easily than to contribute to it.

Stage 4 – Holophrastic speech: Children begin using their first words at about 12 or 13 months of age and may use partial words to convey thoughts at even younger ages. These one word expressions are referred to as **holophrastic speech**. For example, the child may say "ju" for the word "juice" and use this sound when referring to a bottle. The listener must interpret the meaning of the holophrase and when this is someone who has spent time with the child, interpretation is not too difficult. They know that "ju" means "juice" which means the baby wants some milk! But, someone who has not been around the child will have trouble knowing what is meant. Imagine

the parent who to a friend exclaims, "Ezra's talking all the time now!" The friend hears only "ju da ga" which, the parent explains, means "I want some milk when I go with Daddy."

Stage 5 – Underextension: A child who learns that a word stands for an object may initially think that the word can be used for only that particular object. Only the family's Irish Setter is a "doggie". This is referred to as **underextension**. More often, however, a child may think that a label applies to all objects that are similar to the original object. In overextension all animals become "doggies", for example.

Stage 6 – First words and cultural influences: First words if the child is using English tend to be nouns. The child labels objects such as cup or ball. In a verb-friendly language such as Chinese, however, children may learn more verbs. This may also be due to the different emphasis given to objects based on culture. Chinese children may be taught to notice action and relationship between objects while children from the United States may be taught to name an object and its qualities (color, texture, size, etc.). These differences can be seen when comparing interpretations of art by older students from China and the United States.

Stage 7 – Vocabulary growth spurt: One year olds typically have a vocabulary of about 50 words. But by the time they become toddlers, they have a vocabulary of about 200 words and begin putting those words together in telegraphic speech (I think of it now as 'text message' speech because texting is more common and is similar in that text messages typically only include the minimal amount of words to convey the message).

Stage 8 – Two word sentences and **telegraphic speech**: Words are soon combined and 18 month old toddlers can express themselves further by using expressions such as "baby bye- bye" or "doggie pretty". Words needed to convey messages are used, but the articles and other parts of speech necessary for grammatical correctness are not yet used. These expressions sound like a telegraph (or perhaps a better analogy today would be that they read like a text message) where unnecessary words are not used. "Give baby ball" is used rather than "Give the baby the ball." Or a text message of "Send money now!" rather than "Dear Mother. I really need some money to take care of my expenses."



A toddler playing with a toy telephone. Credit: Salim Virji

LANGUAGE MILESTONES

In the first two years of life, children go from communicating by crying to being able to express themselves with words. Here is a table of common language milestones for infants and toddlers.

Language Milestones^[footnote]Centers for Disease Control and Prevention. (2022). Developmental Milestones. <https://www.cdc.gov/ncbddd/actearly/milestones/index.html>^[/footnote]

Typical Age	What Most Children Do By This Age
2 months	Coos, makes gurgling sounds
	Turns head toward sounds
4 months	Begins to babble
	Babbles with expression and copies sounds he hears
	Cries in different ways to show hunger, pain, or being tired
6 months	Responds to sounds by making sounds
	Strings vowels together when babbling ("ah," "eh," "oh") and likes taking turns with parent while making sounds
	Responds to own name
	Makes sounds to show joy and displeasure
	Begins to say consonant sounds (jabbering with "m," "b")
9 months	Understands "no"
	Makes a lot of different sounds like "mamamama" and "bababababa"
	Copies sounds and gestures of others
	Uses fingers to point at things
1 year	Responds to simple spoken requests
	Uses simple gestures, like shaking head "no" or waving "bye-bye"
	Makes sounds with changes in tone (sounds more like speech)
	Says "mama" and "dada" and exclamations like "uh-oh!"
	Tries to say words you say
18 months	Says several single words
	Says and shakes head now
	Points to show others what is wanted
2 years	Points to things or pictures when they are named
	Knows names of familiar people and body parts
	Says sentences with 2 to 4 words
	Follows simple instructions
	Repeats words overheard in conversation
	Points to things in a book

Child-Directed Speech

Why is a horse a "horsie"? Have you ever wondered why adults tend to use "baby talk" or that sing-song type of intonation and exaggeration used when talking to children? This represents a universal tendency and is known as **child-directed speech** or parentheses (historically referred to as motherese). It involves exaggerating the vowel and consonant sounds, using a high- pitched voice, and delivering the phrase with great facial expression. Why is this done? It may be in order to clearly articulate the sounds of a word so that the child can hear the sounds

involved. Or it may be because when this type of speech is used, the infant pays more attention to the speaker and this sets up a pattern of interaction in which the speaker and listener are in tuned with one another.

THEORIES OF LANGUAGE DEVELOPMENT

The following two theories of language development represent two extremes in the level of interaction required for language to occur.⁵

Chomsky and the Language Acquisition Device

The view known as **nativism** advocated by Noam Chomsky suggests that infants are equipped with a neurological construct referred to as the **language acquisition device** or LAD that makes infants ready for language. Language develops as long as the infant is exposed to it. No teaching, training, or reinforcement is required for language to develop.

Social Pragmatics

Another view emphasizes the child's active engagement in learning language out of a need to communicate. The child seeks information, memorizes terms, imitates the speech heard from others and learns to conceptualize using words as language is acquired. Many would argue that all three of these dynamics foster the acquisition of language.⁶

5. Berk, L. (2007). *Development through the Lifespan*. Allyn and Bacon.

6. Berger, L. M. (2004). Income, family structure, and child maltreatment risk. *Children and Youth Services Review*, 26(8), 725–748.

THEORIES OF COGNITIVE DEVELOPMENT, LEARNING, AND MEMORY

Pavlov

Ivan Pavlov (1880-1937) was a Russian physiologist interested in studying digestion. As he recorded the amount of salivation his laboratory dogs produced as they ate, he noticed that they actually began to salivate before the food arrived as the researcher walked down the hall and toward the cage. The dogs knew that the food was coming because they had learned to associate the footsteps with the food. The key word here is "learned". A learned response is called a "conditioned" response. Pavlov began to experiment with this "psychic" reflex. He began to ring a bell, for instance, prior to introducing the food. Sure enough, after making this connection several times, the dogs could be made to salivate to the sound of a bell. Once the bell had become an event to which the dogs had learned to salivate, it was called a conditioned stimulus. The act of salivating to a bell was a response that had also been learned, now termed in Pavlov's jargon, a conditioned response. Notice that the response, salivation, is the same whether it is conditioned or unconditioned (unlearned or natural). What changed is the stimulus to which the dog salivates. One is natural (unconditioned) and one is learned (conditioned). [caption id="" align="aligncenter"]

Classical Conditioning

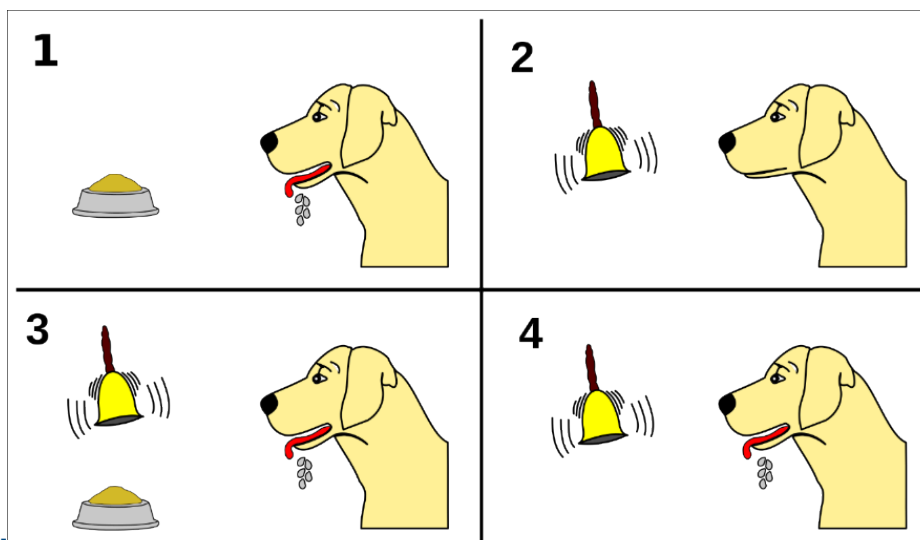
Classical conditioning is a form of learning whereby a **conditioned stimulus** (CS) becomes associated with an unrelated **unconditioned stimulus** (US), in order to produce a behavioural response known as a **conditioned response** (CR). The conditioned response is the learned response to the previously neutral stimulus. The unconditioned stimulus is usually a biologically significant stimulus such as food or pain that elicits an **unconditioned response** (UR) from the start. The conditioned stimulus is usually neutral and produces no particular response at first, but after conditioning it elicits the conditioned response.

If we look at Pavlov's experiment, we can identify these four factors at work:

- The unconditioned response was the salivation of dogs in response to seeing or smelling their food.
- The unconditioned stimulus was the sight or smell of the food itself.
- The conditioned stimulus was the ringing of the bell. During conditioning, every time the animal was given food, the bell was rung. This was repeated during several trials. After some time, the dog learned to associate the ringing of the bell with food and to respond by salivating. After the conditioning period was finished, the dog would respond by salivating when the bell was rung, even when the unconditioned stimulus (the food) was absent.
- The conditioned response, therefore, was the salivation of the dogs in response to the conditioned stimulus (the ringing of the bell).

Neurological Response to Conditioning

Consider how the conditioned response occurs in the brain. When a dog sees food, the visual and olfactory stimuli send information to the brain through their respective neural pathways, ultimately activating the salivary glands to secrete saliva. This reaction is a natural biological process as saliva aids in the digestion of food. When a dog hears a buzzer and at the same time sees food, the auditory stimuli activates the associated neural pathways. However, since these pathways are being activated at the same time as the other neural pathways, there are weak synapse



width="463"] Pavlov's experiments with dogs and conditioning. Credit: Maxxl.[/caption] Let's think about how classical conditioning is used on us. One of the most widespread applications of classical conditioning principles was brought to us by the psychologist, John B. Watson.[footnote][Lifespan Development - Module 4: Infancy](#) by [Lumen Learning](#) references [Psysc 200 Lifespan Psychology](#) by Laura Overstreet, licensed under [CC BY 4.0](#)

reactions that occur between the auditory stimuli and the behavioural response. Over time, these synapses are strengthened so that it only takes the sound of a buzzer to activate the pathway leading to salivation.

Operant Conditioning

Operant conditioning is a theory of behaviourism, a learning perspective that focuses on changes in an individual's observable behaviours. In **operant conditioning** theory, new or continued behaviours are impacted by new or continued consequences. Research regarding this principle of learning was first studied by Edward L. Thorndike in the late 1800's, then brought to popularity by B.F. Skinner in the mid-1900's. Much of this research informs current practices in human behaviour and interaction.

SKINNER'S RESEARCH

Thorndike's initial research was highly influential on another psychologist, B.F. Skinner. Almost half a century after Thorndike's first publication of the principles of operant conditioning, Skinner attempted to prove an extension to this theory—that all behaviours were in some way a result of operant conditioning. Skinner theorized that if a behaviour is followed by reinforcement, that behaviour is **more** likely to be repeated, but if it is followed by punishment, it is **less** likely to be repeated. He also believed that this learned association could end, or become extinct, if the reinforcement or punishment was removed.

To prove this, he placed rats in a box with a lever that when tapped would release a pellet of food. Over time, the amount of time it took for the rat to find the lever and press it became shorter and shorter, until finally the rat would spend most of its time near the lever eating. This behaviour became less consistent when the relationship between the lever and the food was compromised. This basic theory of operant conditioning is still used by psychologists, scientists, and educators today.

Shaping, Reinforcement Principles, and Schedules of Reinforcement

Operant conditioning can be viewed as a process of action and consequence. Skinner used this basic principle to study the possible scope and scale of the influence of operant conditioning on animal behaviour. His experiments used shaping, reinforcement, and reinforcement schedules in order to prove the importance of the relationship that animals form between behaviours and results.

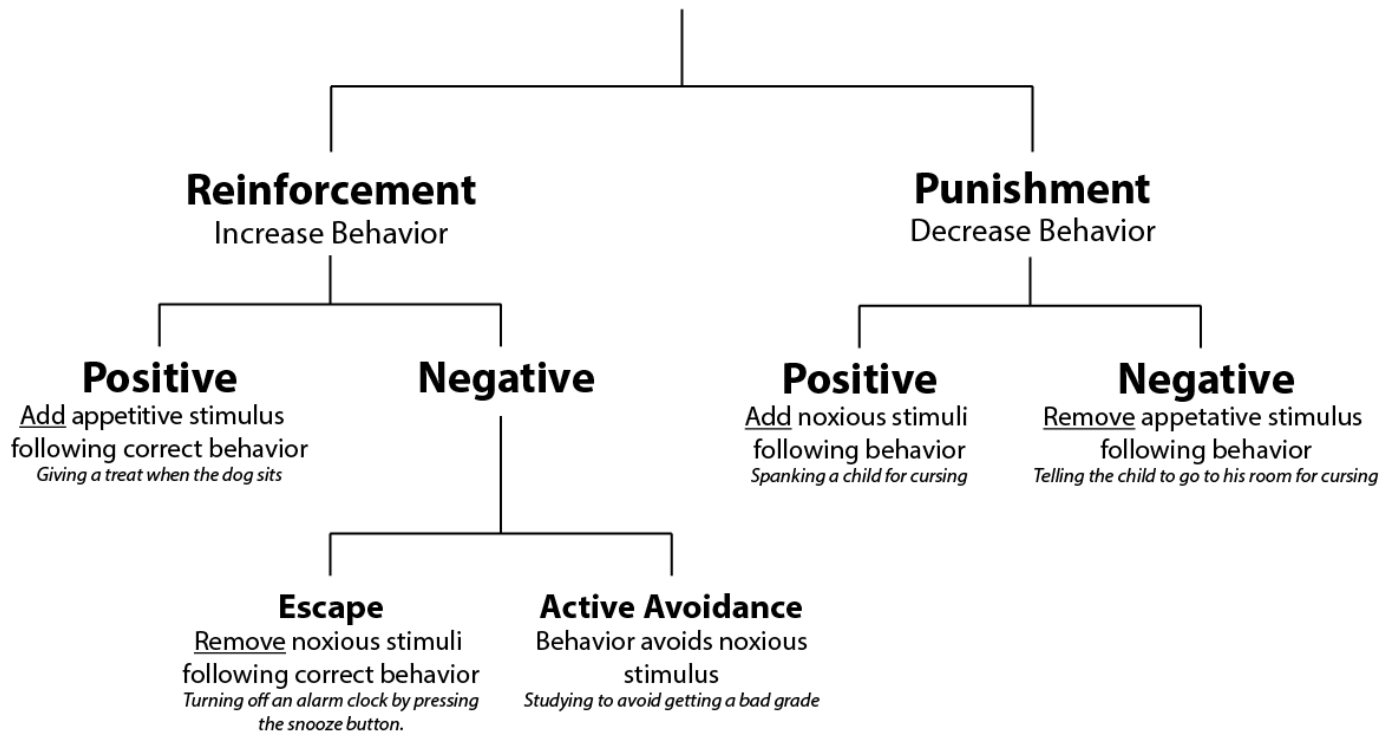
All of these practices concern the setup of an experiment. **Shaping** is the conditioning paradigm of an experiment. The form of the experiment in successive trials is gradually changed to elicit a desired target behaviour. This is accomplished through reinforcement, or reward, of the segments of the target behaviour, and can be tested using a large variety of actions and rewards. The experiments were taken a step further to include different schedules of reinforcement that become more complicated as the trials continued. By testing different reinforcement schedules, Skinner learned valuable information about the best ways to encourage a specific behaviour, or the most effective ways to create a long-lasting behaviour. Much of this research has been replicated on humans, and now informs practices in various environments of human behaviour.

Positive and Negative Reinforcement

Sometimes, adding something to the situation is reinforcing as in the cases we described above with cookies, praise and money. **Positive reinforcement** involves adding something to the situation in order to encourage a behaviour. Other times, taking something away from a situation can be reinforcing. For example, the loud,

annoying buzzer on your alarm clock encourages you to get up so that you can turn it off and get rid of the noise. Children whine in order to get their parents to do something and often, parents give in just to stop the whining. In these instances, negative reinforcement has been used.

Operant Conditioning



Reinforcement in operant conditioning. Credit: Curtis Neveu.

Operant conditioning tends to work best if you focus on trying to encourage a behaviour or move a person into the direction you want them to go rather than telling them what not to do. **Reinforcers** are used to encourage a behaviour; punishers are used to stop behaviour. A **punisher** is anything that follows an act and decreases the chance it will reoccur. But often a punished behaviour doesn't really go away. It is just suppressed and may reoccur whenever the threat of punishment is removed. For example, a child may not cuss around you because you've washed his mouth out with soap, but he may cuss around his friends. Or a motorist may only slow down when the trooper is on the side of the freeway. Another problem with punishment is that when a person focuses on punishment, they may find it hard to see what the other does right or well. And punishment is stigmatizing; when punished, some start to see themselves as bad and give up trying to change.

Reinforcement can occur in a predictable way, such as after every desired action is performed, or intermittently, after the behaviour is performed a number of times or the first time it is performed after a certain amount of time. The schedule of reinforcement has an impact on how long a behaviour continues after reinforcement is discontinued. So a parent who has rewarded a child's actions each time may find that the child gives up very quickly if a reward is not immediately forthcoming. Think about the kinds of behaviours that may be learned through classical and operant conditioning. But sometimes very complex behaviours are learned quickly and without direct reinforcement. Bandura's Social Learning covered later in the chapter explains how.⁷

7. Lifespan Development - Module 4: Infancy by Lumen Learning references Psyc 200 Lifespan Psychology by Laura Overstreet, licensed under CC BY 4.0

WATSON AND BEHAVIOURISM

Another theorist who added to the spectrum of the behavioural movement was John B. Watson. Watson believed that most of our fears and other emotional responses are classically conditioned. He had gained a good deal of popularity in the 1920s with his expert advice on parenting offered to the public. He believed that parents could be taught to help shape their children's behaviour and tried to demonstrate the power of classical conditioning with his famous experiment with an 18 month old boy named "Little Albert". Watson sat Albert down and introduced a variety of seemingly scary objects to him: a burning piece of newspaper, a white rat, etc. But Albert remained curious and reached for all of these things. Watson knew that one of our only inborn fears is the fear of loud noises so he proceeded to make a loud noise each time he introduced one of Albert's favorites, a white rat. After hearing the loud noise several times paired with the rat, Albert soon came to fear the rat and began to cry when it was introduced.

Watson filmed this experiment for posterity and used it to demonstrate that he could help parents achieve any outcomes they desired, if they would only follow his advice. Watson wrote columns in newspapers and in magazines and gained a lot of popularity among parents eager to apply science to household order. Parenting advice was not the legacy Watson left us, however. Where he really made his impact was in advertising. After Watson left academia, he went into the world of business and showed companies how to tie something that brings about a natural positive feeling to their products to enhance sales. Thus the union of sex and advertising!⁸

Sometimes we do things because we've seen it pay off for someone else. They were operantly conditioned, but we engage in the behaviour because we hope it will pay off for us as well. This is referred to as vicarious reinforcement.⁹

Do parents socialize children or do children socialize parents?

Bandura (1986) suggests that there is interplay between the environment and the individual. We are not just the product of our surroundings, rather we influence our surroundings. There is interplay between our personality and the way we interpret events and how they influence us. This concept is called reciprocal determinism. An example of this might be the interplay between parents and children. Parents not only influence their child's environment, perhaps intentionally through the use of reinforcement, etc., but children influence parents as well. Parents may respond differently with their first child than with their fourth. Perhaps they try to be the perfect parents with their firstborn, but by the time their last child comes along they have very different expectations both of themselves and their child. Our environment creates us and we create our environment.

8. [Lifespan Development - Module 4: Infancy](#) by [Lumen Learning](#) references [Psyc 200 Lifespan Psychology](#) by Laura Overstreet, licensed under [CC BY 4.0](#)

9. Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *The Journal of Abnormal and Social Psychology*, 66(1), 3-11.



A smiling infant playing with toys. Credit: OmarMedinaFilms.

SOCIAL LEARNING THEORY

Albert Bandura is a leading contributor to **social learning theory**. He calls our attention to the ways in which many of our actions are not learned through conditioning; rather, they are learned by watching others (1977). Young children frequently learn behaviours through imitation. Sometimes, particularly when we do not know what else to do, we learn by modeling or copying the behaviour of others. A new employee, on his or her first day of a new job might eagerly look at how others are acting and try to act the same way to fit in more quickly.

Adolescents struggling with their identity rely heavily on their peers to act as role-models. Newly married couples often rely on roles they may have learned from their parents and begin to act in ways they did not while dating and then wonder why their relationship has changed.

MEMORY AND ATTENTION

If we want to remember something tomorrow, we have to consolidate it into long-term memory today. **Long-term memory** is the final, semi-permanent stage of memory. Unlike sensory and short-term memory, long-term memory has a theoretically infinite capacity, and information can remain there indefinitely. Long-term memory has also been called reference memory, because an individual must refer to the information in long-term memory when performing almost any task. Long-term memory can be broken down into two categories: explicit and implicit memory.

Explicit Memory

Explicit memory, also known as conscious or **declarative memory**, involves memory of facts, concepts, and events that require conscious recall of the information. In other words, the individual must actively think about retrieving the information from memory. This type of information is **explicitly** stored and retrieved—hence its name. Explicit memory can be further subdivided into **semantic memory**, which concerns facts, and episodic memory, which concerns primarily personal or autobiographical information.

Episodic Memory

Episodic memory is used for more contextualized memories. They are generally memories of specific moments, or episodes, in one's life. As such, they include sensations and emotions associated with the event, in addition to the who, what, where, and when of what happened. An example of an episodic memory would be recalling your family's trip to the beach.

Autobiographical memory (memory for particular events in one's own life) is generally viewed as either equivalent to, or a subset of, episodic memory. One specific type of autobiographical memory is a flashbulb memory, which is a highly detailed, exceptionally vivid "snapshot" of the moment and circumstances in which a piece of surprising and consequential (or emotionally arousing) news was heard. For example, many people remember exactly where they were and what they were doing when they heard of the terrorist attacks on September 11, 2001. This is because it is a flashbulb memory.

Semantic and episodic memory are closely related; memory for facts can be enhanced with episodic memories associated with the fact, and vice versa. For example, the answer to the factual question "Are all apples red?" might be recalled by remembering the time you saw someone eating a green apple. Likewise, semantic memories about certain topics, such as football, can contribute to more detailed episodic memories of a particular personal event, like watching a football game. A person that barely knows the rules of football will remember the various plays and outcomes of the game in much less detail than a football expert.

Implicit Memory

In contrast to explicit (conscious) memory, **implicit** (also called "unconscious" or "procedural") **memory** involves procedures for completing actions. These actions develop with practice over time. Athletic skills are one example of implicit memory. You learn the fundamentals of a sport, practice them over and over, and then they flow naturally during a game. Rehearsing for a dance or musical performance is another example of implicit memory. Everyday examples include remembering how to tie your shoes, drive a car, or ride a bicycle. These memories are accessed without conscious awareness—they are automatically translated into actions without us even realizing it. As such, they can often be difficult to teach or explain to other people.

Implicit memories differ from the semantic scripts described above in that they are usually actions that involve movement and motor coordination, whereas scripts tend to emphasize social norms or behaviours.



A toddler walking. Credit: Peter Griffin.

Short-Term Memory Storage

Short-term memory is the ability to hold information for a short duration of time (on the order of seconds). In the process of encoding, information enters the brain and can be quickly forgotten if it is not stored further in the short-term memory. George A. Miller suggested that the capacity of short-term memory storage is approximately seven items plus or minus two, but modern researchers are showing that this can vary depending on variables like the stored items' phonological properties. When several elements (such as digits, words, or pictures) are held in short-term memory simultaneously, their representations compete with each other for recall, or degrade each other. Thereby, new content gradually pushes out older content, unless the older content is actively protected against interference by rehearsal or by directing attention to it.

Information in the short-term memory is readily accessible, but for only a short time. It continuously decays, so in the absence of rehearsal (keeping information in short-term memory by mentally repeating it) it can be forgotten.

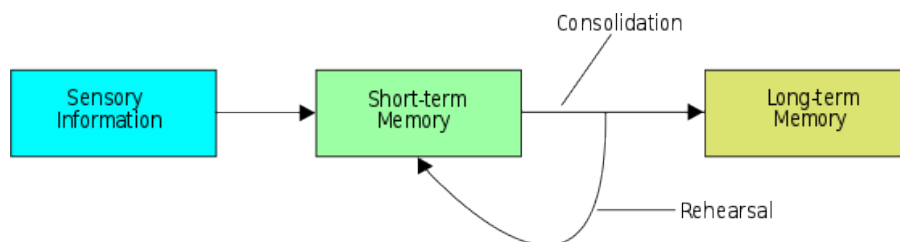


Diagram of the memory storage process. Credit: Wikipedia.

Long-Term Memory Storage

In contrast to short-term memory, **long-term memory** is the ability to hold semantic information for a prolonged period of time. Items stored in short-term memory move to long-term memory through rehearsal, processing, and use. The capacity of long-term memory storage is much greater than that of short-term memory, and perhaps unlimited. However, the duration of long-term memories is not permanent; unless a memory is occasionally recalled, it may fail to be recalled on later occasions. This is known as forgetting.

Long-term memory storage can be affected by traumatic brain injury or lesions. Amnesia, a deficit in memory, can be caused by brain damage. Anterograde amnesia is the inability to store new memories; retrograde amnesia is the inability to retrieve old memories. These types of amnesia indicate that memory does have a storage process.

CONCLUSION

In this chapter we looked at:

- Piaget's sensorimotor stage.
- The impact of the social environment on children's learning.
- The progression and theories of language development.
- Classical and operant conditioning and systems of reinforcement.
- The types of memory and how they work together.

In the following chapter, we will finish looking at the first two years of life by examining social and emotional development, including temperament and attachment.

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CHAPTER ATTRIBUTION

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UNIT 26

Social and Emotional Development

Chapter Objectives

After this chapter, you should be able to:

1. Classify types of temperament.
2. Discuss the roles of culture and gender in socialization.
3. Describe the sequence of emotional development during the first two years.
4. Compare different theories of attachment and attachment styles.
5. Explain Erikson's stages of trust versus mistrust and autonomy versus shame and doubt.
6. Contrast child care options for families.

INTRODUCTION

While temperament is determined by genetics and emotions develop through maturation, the early interactions we have with the adults that care for us as infants and toddlers are very important for healthy emotional development. Let's examine some of the important interactions and milestones in social and emotional development during the first two years of life.

TEMPERAMENT

Perhaps you have spent time with a number of infants. How were they alike? How did they differ? How do you compare with your siblings or other children you have known well? You may have noticed that some seemed to be in a better mood than others and that some were more sensitive to noise or more easily distracted than others. These differences may be attributed to temperament. **Temperament** is the innate characteristics of the infant, including mood, activity level, and emotional reactivity, noticeable soon after birth.

In a 1956 landmark study, Chess and Thomas¹ evaluated 141 children's temperament based on parental interviews. Referred to as the New York Longitudinal Study, infants were assessed on 10 dimensions of temperament including:

- Activity level

1. Chess, S., & Thomas, A. (1996). *Temperament: Theory and practice*. Brunner/Mazel.

- Rhythmicity (regularity of biological functions)
- Approach/Withdrawal (how children deal with new things)
- Adaptability to situations
- Intensity of reactions
- Threshold of responsiveness (how intense a stimulus has to be for the child to react)
- Quality of mood
- Distractibility
- Attention Span
- Persistence

Based on the infants' behavioural profiles, they were categorized into three general types of temperament:

Types of Temperament

Type	Percentage	Description
Easy	40%	Able to quickly adapt to routine and new situations
		Remains calm
		Easy to soothe
		Usually in positive mood
Difficult	10%	Reacts negatively to new situations
		Has trouble adapting to routine
		Usually negative in mood
		Cries frequently
Slow-to-warm-up	15%	Low activity level
		Adjusts slowly to new situations
		Often negative in mood

As can be seen the percentages do not equal 100% as some children were not able to be placed neatly into one of the categories. Think about how each type of child should be approached to improve interactions with them. An easy child requires less intervention, but still has needs that must not be overlooked. A slow-to-warm-up child may need to be given advance warning if new people or situations are going to be introduced. A child with a difficult temperament may need to be given extra time to burn off their energy.

A caregiver's ability to work well and accurately read the child will enjoy a **goodness-of-fit**, meaning their styles match and communication and interaction can flow. Parents who recognize each child's temperament and accept it, will nurture more effective interactions with the child and encourage more adaptive functioning.²



This adventurous child's parents provide a good "fit" to her temperament.

Credit: ph.

Parenting is Bidirectional

Not only do parents affect their children, children influence their parents. A child's characteristics, such as temperament, affect parenting behaviours and roles. For example, an infant with an easy temperament may enable parents to feel more effective, as they are easily able to soothe the child and elicit smiling and cooing. On the other hand, a cranky or fussy infant elicits fewer positive reactions from his or her parents and may result in parents feeling less effective in the parenting role.³ Over time, parents of more difficult children may become more punitive and less patient with their children.⁴ Parents who have a fussy, difficult child are less satisfied with their marriages and have greater challenges in balancing work and family roles.⁵ Thus, child temperament is one of the child characteristics that influences how parents behave with their children.

PERSONALITY

Temperament does not change dramatically as we grow up, but we may learn how to work around and manage our temperamental qualities. Temperament may be one of the things about us that stays the same throughout development. In contrast, **personality**, defined as an individual's consistent pattern of feeling, thinking, and behaving, is the result of the continuous interplay between biological disposition and experience.

Personality also develops from temperament in other ways.⁶ As children mature biologically, temperamental characteristics emerge and change over time. A newborn is not capable of much self-control, but as brain-based capacities for self-control advance, temperamental changes in self-regulation become more apparent. For

3. Eisenberg, D., Campbell, B., Gray, P., & Sorenson, M. (2008). Dopamine Receptor Genetic Polymorphisms and Body Composition in Undernourished Pastoralists: An Exploration of Nutrition Indices among Nomadic and Recently Settled Ariaal Men of Northern Kenya. *BMC Evolutionary Biology*, 8, 173-173.

4. Clark, L. A., Kochanska, G., & Ready, R. (2000). Mothers' personality and its interaction with child temperament as predictors of parenting behaviour. *Journal of Personality and Social Psychology*, 79(2), 274-285.

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example, a newborn who cries frequently doesn't necessarily have a grumpy personality; over time, with sufficient parental support and increased sense of security, the child might be less likely to cry.

In addition, personality is made up of many other features besides temperament. Children's developing self-concept, their motivations to achieve or to socialize, their values and goals, their coping styles, their sense of responsibility and conscientiousness, as well as many other qualities are encompassed into personality. These qualities are influenced by biological dispositions, but even more by the child's experiences with others, particularly in close relationships, that guide the growth of individual characteristics. Indeed, personality development begins with the biological foundations of temperament but becomes increasingly elaborated, extended, and refined over time. The newborn that parents gazed upon thus becomes an adult with a personality of depth and nuance.⁷

CULTURE AND PERSONALITY

The term **culture** refers to all of the beliefs, customs, ideas, behaviours, and traditions of a particular society that are passed through generations. Culture is transmitted to people through language as well as through the modeling of behaviour, and it defines which traits and behaviours are considered important, desirable, or undesirable.

Within a culture there are norms and behavioural expectations. These cultural norms can dictate which personality traits are considered important. The researcher Gordon Allport considered culture to be an important influence on traits and defined common traits as those that are recognized within a culture. These traits may vary from culture to culture based on differing values, needs, and beliefs. Positive and negative traits can be determined by cultural expectations: what is considered a positive trait in one culture may be considered negative in another, thus resulting in different expressions of personality across cultures.



A family from a non-Western culture. Credit: Theodore Goutas.

Considering cultural influences on personality is important because Western ideas and theories are not necessarily applicable to other cultures.⁸ There is a great deal of evidence that the strength of personality traits varies across cultures, and this is especially true when comparing individualist cultures (such as European,

7. [Lifespan Development: A Psychological Perspective](#) by Martha Lally and Suzanne Valentine-French is licensed under [CC BY-NC-SA 3.0](#)

8. Benet-Martínez, V., & Oishi, S. (2008). Culture and personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 542–567). The Guilford Press.

North American, and Australian cultures) and collectivist cultures (such as Asian, African, and South American cultures). People who live in **individualist cultures** tend to believe that independence, competition, and personal achievement are important. In contrast, people who live in **collectivist cultures** tend to value social harmony, respectfulness, and group needs over individual needs. These values influence personality in different but substantial ways; for example, Yang⁹ found that people in individualist cultures displayed more personally-oriented personality traits, whereas people in collectivist cultures displayed more socially-oriented personality traits.¹⁰

GENDER AND PERSONALITY

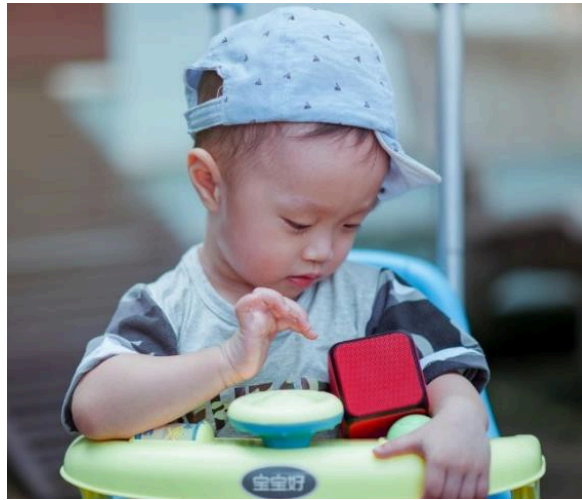
In much the same manner that cultural norms can influence personality and behaviour, gender norms (the behaviours that males and females are expected to conform to in a given society) can also influence personality by emphasizing different traits between different genders.



A female infant wearing stereotypically feminine clothing and accessories. Credit: Abdullah Shakoar.

9. Yang, K.-S. (2006). Indigenous Personality Research: The Chinese Case. In U. Kim, K.-S. Yang, & K.-K. Hwang (Eds.), *Indigenous and cultural psychology: Understanding people in context* (pp. 285–314). Springer Science + Business Media.

10. [Lifespan Development - Module 4: Infancy](#) by [Lumen Learning](#) references [Psyc 200 Lifespan Psychology](#) by Laura Overstreet, licensed under [CC BY 4.0](#)



A male infant wearing stereotypically masculine clothing. Credit: An Min.

Ideas of appropriate behaviour for each gender (masculine and feminine) vary among cultures and tend to change over time. For example, aggression and assertiveness have historically been emphasized as positive masculine personality traits in the United States. Meanwhile, submissiveness and care-taking have historically been held as ideal feminine traits. While many gender roles remain the same, others change over time. In 1938, for example, only 1 out of 5 Americans agreed that a married woman should earn money in industry and business. By 1996, however, 4 out of 5 Americans approved of women working in these fields. This type of attitude change has been accompanied by behavioural shifts that coincide with changes in trait expectations and shifts in personal identity for men and women.¹¹

INFANT EMOTIONS

At birth, infants exhibit two emotional responses: attraction and withdrawal. They show attraction to pleasant situations that bring comfort, stimulation, and pleasure, and they withdraw from unpleasant stimulation such as bitter flavors or physical discomfort. At around two months, infants exhibit social engagement in the form of social smiling as they respond with smiles to those who engage their positive attention.¹²

Social smiling becomes more stable and organized as infants learn to use their smiles to engage their parents in interactions. Pleasure is expressed as laughter at 3 to 5 months of age, and displeasure becomes more specific as fear, sadness, or anger between ages 6 and 8 months.

Anger is often the reaction to being prevented from obtaining a goal, such as a toy being removed.¹³ In contrast, sadness is typically the response when infants are deprived of a caregiver.¹⁴ Fear is often associated with the presence of a stranger, known as **stranger wariness**, or the departure of significant others known as **separation anxiety**. Both appear sometime between 6 and 15 months after object permanence has been acquired. Further, there is some indication that infants may experience jealousy as young as 6 months of age.¹⁵

11. [Lifespan Development - Module 4: Infancy](#) by [Lumen Learning](#) references [Psyc 200 Lifespan Psychology](#) by Laura Overstreet, licensed under CC BY 4.0

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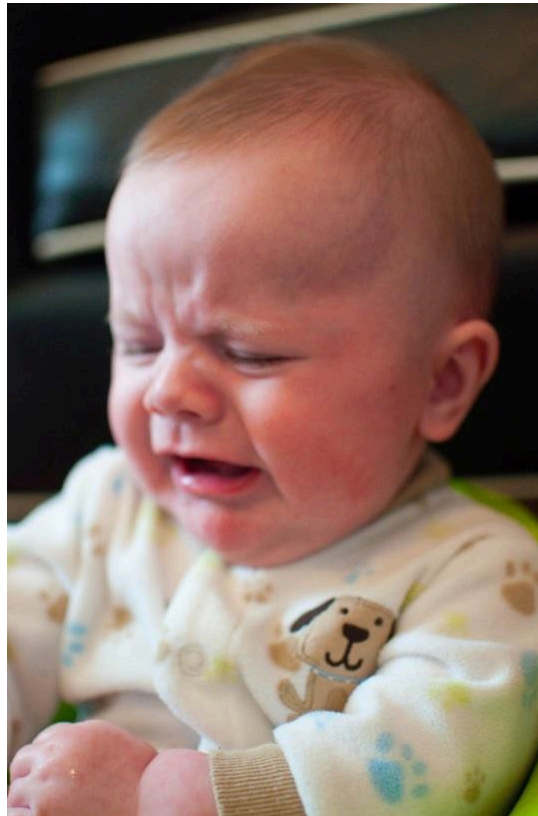


An infant making an angry facial expression. Credit: Brytny.com.

Emotions are often divided into two general categories: **Basic emotions** (primary emotions), such as interest, happiness, anger, fear, surprise, sadness and disgust, which appear first, and **self-conscious emotions** (secondary emotions), such as envy, pride, shame, guilt, doubt, and embarrassment. Unlike primary emotions, secondary emotions appear as children start to develop a self-concept, and require social instruction on when to feel such emotions. The situations in which children learn self-conscious emotions varies from culture to culture.

Individualistic cultures teach us to feel pride in personal accomplishments, while in more collective cultures children are taught to not call attention to themselves, unless you wish to feel embarrassed for doing so.¹⁶

16. Akimoto, S. A., & Sanbonmatsu, D. M. (1999). Differences in self-effacing behaviour between European and Japanese Americans: Effect on competence evaluations. *Journal of Cross-Cultural Psychology*, 30(2), 159–177.



An infant making a sad facial expression. Credit: acheron0.

Facial expressions of emotion are important regulators of social interaction. In the developmental literature, this concept has been investigated under the concept of **social referencing**; that is, the process whereby infants seek out information from others to clarify a situation and then use that information to act.¹⁷ To date, the strongest demonstration of social referencing comes from work on the visual cliff. In the first study to investigate this concept, Campos and colleagues placed mothers on the far end of the “cliff” from the infant.¹⁸ Mothers first smiled to the infants and placed a toy on top of the safety glass to attract them; infants invariably began crawling to their mothers. When the infants were in the center of the table, however, the mother then posed an expression of fear, sadness, anger, interest, or joy. The results were clearly different for the different faces; no infant crossed the table when the mother showed fear; only 6% did when the mother posed anger, 33% crossed when the mother posed sadness, and approximately 75% of the infants crossed when the mother posed joy or interest.

Other studies provide similar support for facial expressions as regulators of social interaction. Researchers posed facial expressions of neutral, anger, or disgust toward babies as they moved toward an object and measured the amount of inhibition the babies showed in touching the object. The results for 10- and 15-month olds were the same: Anger produced the greatest inhibition, followed by disgust, with neutral the least. This study was later replicated using joy and disgust expressions, altering the method so that the infants were not allowed to touch the toy (compared with a distractor object) until one hour after exposure to the expression.¹⁹ At 14 months of age,

17. Sorce, J. F., Emde, R. N., Campos, J. J., & Klinnert, M. D. (1985). Maternal emotional signaling: Its effect on the visual cliff behaviour of 1-year-olds. *Developmental Psychology*, 21(1), 195–200.

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significantly more infants touched the toy when they saw joyful expressions, but fewer touched the toy when the infants saw disgust.

A final emotional change is in self-regulation. **Emotional self-regulation** refers to strategies we use to control our emotional states so that we can attain goals.²⁰ This requires effortful control of emotions and initially requires assistance from caregivers.²¹

Young infants have very limited capacity to adjust their emotional states and depend on their caregivers to help soothe themselves. Caregivers can offer distractions to redirect the infant's attention and comfort to reduce the emotional distress. As areas of the infant's prefrontal cortex continue to develop, infants can tolerate more stimulation. By 4 to 6 months, babies can begin to shift their attention away from upsetting stimuli. Older infants and toddlers can more effectively communicate their need for help and can crawl or walk toward or away from various situations.²² This aids in their ability to self-regulate. Temperament also plays a role in children's ability to control their emotional states, and individual differences have been noted in the emotional self-regulation of infants and toddlers.^{23 24}



A toddler at a park. Credit: Maxpixel.

Development of sense of self

During the second year of life, children begin to recognize themselves as they gain a sense of self as separate from their primary caregiver. In a classic experiment by Lewis and Brooks (1978) children 9 to 24 months of age were placed in front of a mirror after a spot of rouge was placed on their nose as their mothers pretended to

20. Thompson, R. A., & Goodvin, R. (2007). Taming the tempest in the teapot: Emotion regulation in toddlers. In C. A. Brownell & C. B. Kopp (Eds.), *Socioemotional development in the toddler years: Transitions and transformations* (pp. 320–341). The Guilford Press.
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24. [Lifespan Development: A Psychological Perspective](#) by Martha Lally and Suzanne Valentine-French is licensed under [CC BY-NC-SA 3.0](#)

wipe something off the child's face. If the child reacted by touching his or her own nose rather than that of the "baby" in the mirror, it was taken to suggest that the child recognized the reflection as him or herself. Lewis and Brooks found that somewhere between 15 and 24 months most infants developed a sense of self-awareness. **Self-awareness** is the realization that you are separate from others.²⁵

SOCIAL EMOTIONAL MILESTONES

As infants and toddlers interact with other people, their social and emotional skills develop. Here is a table of social and emotional milestones that they typically experience during the first two years.

25. Kopp, C.B. (2011). Development in the Early Years: Socialization, Motor Development, and Consciousness. *Annual Review of Psychology*, 62:165-187.[footnote] Once a child has achieved self-awareness, the child is moving toward understanding social emotions such as guilt, shame or embarrassment, as well as, sympathy or empathy.[footnote][Lifespan Development: A Psychological Perspective](#) by Martha Lally and Suzanne Valentine-French is licensed under [CC BY-NC-SA 3.0](#)

Social and Emotional Milestones²⁶

Typical Age	What Most Children Do By This Age
2 months	Begins to smile at people
	Can briefly calm self (may bring hands to mouth and suck on hand)
	Tries to look at parent
4 months	Smiles spontaneously, especially at people
	Likes to play with people and might cry when playing stops
	Copies some movements and facial expressions, like smiling or frowning
6 months	Knows familiar faces and begins to know if someone is a stranger
	Likes to play with others, especially parents
	Responds to other people's emotions and often seems happy
	Likes to look at self in a mirror
9 months	May be afraid of strangers
	May be clingy with familiar adults
	Has favorite toys
1 year	Is shy or nervous with strangers
	Cries when mom or dad leaves
	Has favorite things and people
	Shows fear in some situations
	Hands you a book when wants to hear a story
	Repeats sounds or actions to get attention
	Puts out arm or leg to help with dressing
	Plays games such as "peek-a-boo" and "pat-a-cake"
18 months	Likes to hand things to others as play
	May have temper tantrums
	May be afraid of strangers
	Shows affection to familiar people
	Plays simple pretend, such as feeding a doll
	May cling to caregivers in new situations
	Points to show others something interesting
	Explores alone but with parent close by
2 years	Copies others, especially adults and older children
	Gets excited when with other children
	Shows more and more independence
	Shows defiant behaviour (doing what he has been told not to)
	Plays mainly beside other children, but is beginning to include other children, such as in chase games

26. [Developmental Milestones](#) by the [CDC](#) is in the public domain

FORMING ATTACHMENTS

Attachment is the close bond with a caregiver from which the infant derives a sense of security. The formation of attachments in infancy has been the subject of considerable research as attachments have been viewed as foundations for future relationships. Additionally, attachments form the basis for confidence and curiosity as toddlers, and as important influences on self-concept.

Freud's Psychoanalytic Theory

According to Freud (1938) infants are oral creatures who obtain pleasure from sucking and mouthing objects. Freud believed the infant will become attached to a person or object that provides this pleasure. Consequently, infants were believed to become attached to their mother because she was the one who satisfied their oral needs and provided pleasure. Freud further believed that the infants will become attached to their mothers "if the mother is relaxed and generous in her feeding practices, thereby allowing the child a lot of oral pleasure."²⁷

Harlow's Research

In one classic study, Wisconsin University psychologists Harry and Margaret Harlow investigated the responses of young rhesus monkeys to explore if breastfeeding was the most important factor to attachment.



A rhesus monkey sucking its thumb. Credit: spotter_nl.

The infant monkeys were separated from their biological mothers, and two surrogate mothers were introduced to their cages. The first mother (the wire mother) consisted of a round wooden head, a mesh of cold metal wires, and a bottle of milk from which the baby monkey could drink. The second mother was a foam-rubber form wrapped in a heated terry-cloth blanket. The infant monkeys went to the wire mother for food, but they overwhelmingly preferred and spent significantly more time with the warm terry-cloth mother. The warm terry-cloth mother provided no food but did provide comfort.²⁸ The infant's need for physical closeness and touching is referred to as **contact comfort**. Contact comfort is believed to be the foundation for attachment. The Harlows' studies confirmed that babies have social as well as physical needs. Both monkeys and human babies need a secure base that allows them to feel safe. From this base, they can gain the confidence they need to venture out and explore their worlds.

27. Schaffer, H. R. (1985). Making decisions about children. *Adoption & Fostering*, 9(1), 22–28.

28. Harlow, H. F. (1958). The nature of love. *American Psychologist*, 13(12), 673–685.

Bowlby's Theory

Building on the work of Harlow and others, John Bowlby developed the concept of attachment theory. He defined attachment as the affectional bond or tie that an infant forms with the mother.²⁹ An infant must form this bond with a primary caregiver in order to have normal social and emotional development. In addition, Bowlby proposed that this attachment bond is very powerful and continues throughout life. He used the concept of secure base to define a healthy attachment between parent and child. A **secure base** is a parental presence that gives the child a sense of safety as the child explores the surroundings.



A mother offering a secure base as her infant plays on a slide.
Credit: ph

Bowlby said that two things are needed for a healthy attachment: The caregiver must be responsive to the child's physical, social, and emotional needs; and the caregiver and child must engage in mutually enjoyable interactions.³⁰ Additionally, Bowlby observed that infants would go to extraordinary lengths to prevent separation from their parents, such as crying, refusing to be comforted, and waiting for the caregiver to return.

Bowlby also observed that these same expressions were common to many other mammals, and consequently argued that these negative responses to separation serve an evolutionary function. Because mammalian infants cannot feed or protect themselves, they are dependent upon the care and protection of adults for survival. Thus, those infants who were able to maintain proximity to an attachment figure were more likely to survive and reproduce.

Erikson: Trust vs. Mistrust

Erikson formulated an eight-stage theory of psychosocial development. Erikson was in agreement on the importance of a secure base, arguing that the most important goal of infancy was the development of a basic sense of trust in one's caregivers. Consequently, the first stage, trust vs. mistrust, highlights the importance of attachment. Erikson maintained that the first year to year and a half of life involves the establishment of a sense of trust.³¹ Infants are dependent and must rely on others to meet their basic physical needs as well as their needs for stimulation and comfort. A caregiver who consistently meets these needs instills a sense of trust or the belief that

29. Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664–678.

30. Bowlby, J. (1969). *Attachment and Loss*. Basic Books.

31. Erikson, E. (1982). *The life cycle completed*. W. W. Norton & Company.

the world is a trustworthy place. The caregiver should not worry about overly indulging a child's need for comfort, contact or stimulation.

Problems Establishing Trust

Erikson believed that mistrust could contaminate all aspects of one's life and deprive the individual of love and fellowship with others. Consider the implications for establishing trust if a caregiver is unavailable or is upset and ill-prepared to care for a child. Or if a child is born prematurely, is unwanted, or has physical problems that make him or her more challenging to parent. Under these circumstances, we cannot assume that the parent is going to provide the child with a feeling of trust.

Erikson: Autonomy vs. Shame and Doubt

As the child begins to walk and talk, an interest in independence or autonomy replaces a concern for trust. The toddler tests the limits of what can be touched, said, and explored. Erikson believed that toddlers should be allowed to explore their environment as freely as safety allows and in so doing will develop a sense of independence that will later grow to self-esteem, initiative, and overall confidence. If a caregiver is overly anxious about the toddler's actions for fear that the child will get hurt or violate other's expectation, the caregiver can give the child the message that he or she should be ashamed of their behaviour and instill a sense of doubt in their own abilities. Parenting advice based on these ideas would be to keep your toddler safe, but let him or her learn by doing.

Mary Ainsworth and the Strange Situation

Developmental psychologist Mary Ainsworth, a student of John Bowlby, continued studying the development of attachment in infants. Ainsworth and her colleagues created a laboratory test that measured an infant's attachment to his or her parent. The test is called **The Strange Situation** because it is conducted in a context that is unfamiliar to the child and therefore likely to heighten the child's need for his or her parent.³²

32. Ainsworth, M. S. (1979). Infant-mother attachment. *American Psychologist*, 34(10), 932-937.



An infant crawling on the floor with toys around as done in the Strange Situation.
Credit: Peter Kratochvil

During the procedure, which lasts about 20 minutes, the parent and the infant are first left alone, while the infant explores the room full of toys. Then a strange adult enters the room and talks for a minute to the parent, after which the parent leaves the room. The stranger stays with the infant for a few minutes, and then the parent again enters and the stranger leaves the room. During the entire session, a video camera records the child's behaviours, which are later coded by the research team. The investigators were especially interested in how the child responded to the caregiver leaving and returning to the room, referred to as the "reunion." On the basis of their behaviours, the children are categorized into one of four groups where each group reflects a different kind of attachment relationship with the caregiver. One style is secure and the other three styles are referred to as insecure.

- A child with a **secure attachment style** usually explores freely while the caregiver is present and may engage with the stranger. The child will typically play with the toys and bring one to the caregiver to show and describe from time to time. The child may be upset when the caregiver departs, but is also happy to see the caregiver return.
- A child with an **ambivalent** (sometimes called resistant) **attachment style** is wary about the situation in general, particularly the stranger, and stays close or even clings to the caregiver rather than exploring the toys. When the caregiver leaves, the child is extremely distressed and is ambivalent when the caregiver returns. The child may rush to the caregiver, but then fails to be comforted when picked up. The child may still be angry and even resist attempts to be soothed.
- A child with an **avoidant attachment style** will avoid or ignore the mother, showing little emotion when the mother departs or returns. The child may run away from the mother when she approaches. The child will not explore very much, regardless of who is there, and the stranger will not be treated much differently from the mother.
- A child with a **disorganized/disoriented attachment style** seems to have an inconsistent way of coping with the stress of the strange situation. The child may cry during the separation, but avoid the mother when she returns, or the child may approach the mother but then freeze or fall to the floor.

How common are the attachment styles among children in the United States? It is estimated that about 65 percent of children in the United States are securely attached. Twenty percent exhibit avoidant styles and 10 to 15 percent are ambivalent. Another 5 to 10 percent may be characterized as disorganized.

Some cultural differences in attachment styles have been found.³³ For example, German parents value independence and Japanese mothers are typically by their children's sides. As a result, the rate of insecure-avoidant attachments is higher in Germany and insecure-resistant attachments are higher in Japan. These differences reflect cultural variation rather than true insecurity, however.³⁴

Keep in mind that methods for measuring attachment styles have been based on a model that reflects middle-class, U. S. values and interpretation. Newer methods for assessment attachment styles involve using a **Q-sort technique** in which a large number of behaviours are recorded on cards and the observer sorts the cards in a way that reflects the type of behaviour that occurs within the situation.³⁵ There are 90 items in the third version of the Q-sort technique, and examples of the behaviours assessed include:

- When child returns to mother after playing, the child is sometimes fussy for no clear reason.
- When the child is upset or injured, the child will accept comforting from adults other than mother.
- Child often hugs or cuddles against mother, without her asking or inviting the child to do so.
- When the child is upset by mother's leaving, the child continues to cry or even gets angry after she is gone.

At least two researchers observe the child and parent in the home for 1.5-2 hours per visit. Usually two visits are sufficient to gather adequate information. The parent is asked if the behaviours observed are typical for the child. This information is used to test the validity of the Strange Situation classifications across age, cultures, and with clinical populations.

CAREGIVER CONSISTENCY

Having a consistent caregiver may be jeopardized if the infant is cared for in a child care setting with a high turnover of staff or if institutionalized and given little more than basic physical care. Infants who, perhaps because of being in orphanages with inadequate care, have not had the opportunity to attach in infancy may still form initial secure attachments several years later. However, they may have more emotional problems of depression, anger, or be overly friendly as they interact with others.³⁶

SOCIAL DEPRIVATION

Severe deprivation of parental attachment can lead to serious problems. According to studies of children who have not been given warm, nurturing care, they may show developmental delays, failure to thrive, and attachment disorders.³⁷ **Non-organic failure to thrive** is the diagnosis for an infant who does not grow, develop, or gain

33. Behrens, K. Y. (2010). Amae through the eyes of Japanese mothers: Refining differences and similarities between attachment and amae. In P. Erdman & K.-M. Ng (Eds.), *Attachment: Expanding the cultural connections* (pp. 55–69). Routledge/Taylor & Francis Group.

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37. Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, 52(4), 664–678.

weight on schedule. In addition, postpartum depression can cause even a well-intentioned mother to neglect her infant.

REACTIVE ATTACHMENT DISORDER

Children who experience social neglect or deprivation, repeatedly change primary caregivers that limit opportunities to form stable attachments, or are reared in unusual settings (such as institutions) that limit opportunities to form stable attachments can certainly have difficulty forming attachments. According to the *Diagnostic and Manual of Mental Disorders*,³⁸ those children experiencing neglectful situations and also displaying markedly disturbed and developmentally inappropriate attachment behaviour, such as being inhibited and withdrawn, minimal social and emotional responsiveness to others, and limited positive affect, may be diagnosed with **Reactive Attachment Disorder**. This disorder often occurs with developmental delays, especially in cognitive and language areas.

Fortunately, the majority of severely neglected children do not develop Reactive Attachment Disorder, which occurs in less than 10% of such children. The quality of the caregiving environment after serious neglect affects the development of this disorder.

RESILIENCY

Being able to overcome challenges and successfully adapt is **resiliency**. Even young children can exhibit strong resilience to harsh circumstances. Resiliency can be attributed to certain personality factors, such as an easy-going temperament. Some children are warm, friendly, and responsive, whereas others tend to be more irritable, less manageable, and difficult to console, and these differences play a role in attachment.³⁹ It seems safe to say that attachment, like most other developmental processes, is affected by an inter play of genetic and socialization influences.

Receiving support from others also leads to resiliency. A positive and strong support group can help a parent and child build a strong foundation by offering assistance and positive attitudes toward the newborn and parent. In a direct test of this idea, Dutch researcher van den Boom (1994) randomly assigned some babies' mothers to a training session in which they learned to better respond to their children's needs. The research found that these mothers' babies were more likely to show a secure attachment style in comparison to the mothers in a control group that did not receive training.⁴⁰

CHILD CARE

Child care involves supervising a child or children, usually from infancy to age twelve, and typically refers to work done by somebody outside the child's immediate family. Child care is a broad topic covering a wide spectrum of contexts, activities, social and cultural conventions, and institutions. Licensed child care institutions in Nova Scotia require that child care providers have training in first aid and are CPR certified, Criminal Record Check with Vulnerable Sector check, and Child Abuse Registry check.

38. American Psychiatric Association, DSM-5 Task Force. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc..

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40. [Lifespan Development: A Psychological Perspective](#) by Martha Lally and Suzanne Valentine-French is licensed under [CC BY-NC-SA 3.0](#)

It is traditional in Western society for children to be cared for by their parents or their legal guardians. In families where children live with one or both of their parents, the child care role may also be taken on by the child's extended family. If a parent or extended family is unable to care for the children, orphanages and foster homes are a way of providing for children's care, housing, and schooling.

CONCLUSION

In this chapter, we looked at:

- Temperament and goodness-of-fit.
- Cultural and gender influences.
- The development of emotions.
- Theories and styles of attachment.
- Erikson's stage of trust versus distrust.
- Importance of attachment and things that can impede it.
- The types of child care available to families.

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CHAPTER ATTRIBUTION

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UNIT 27

Monitoring, Screening and Evaluating

Chapter Objectives

In this chapter, you will be learning about:

1. The Purpose of Monitoring, Screening and Evaluating Young Children.
2. The Process of Monitoring.
3. The Process of Screening and Evaluating.
4. The Practice of Monitoring.
5. The Practice of Screening and Evaluating.
6. Public Policies on Including Children with Special Needs.

INTRODUCTION

It is essential that Early Childhood Educators be able to recognize typical from atypical development. With typical development, there are certain behavioural expectations and developmental milestones that children should master within certain age ranges. Any behaviour and development that falls outside of the standard norms would be considered atypical. As early care providers, how do we know whether a child's development is happening at a normal, excelled or delayed pace? How can we be certain that we are providing an optimal learning space for each child? As intentional teachers our goal is to accommodate all the varied skill levels and diverse needs of the children in our classrooms. Additionally, we must provide a safe, nurturing and culturally respectful environment that promotes inclusion so that all children can thrive. In this chapter we will examine the purpose, process and practice of monitoring, screening and evaluating young children. If we are to effectively support the children and families in our care, we must be able to identify a child's capabilities and strengths early on, as well as recognize any developmental delays or developmental areas that may need additional support. Additionally, we must be aware of the resources and services that are available to support children and families.



Building Blocks. Credit: Markus Spiske

THE PURPOSE OF MONITORING, SCREENING AND EVALUATING YOUNG CHILDREN

Because many parents are not familiar with developmental milestones, they might not recognize that their child has a developmental delay or disability.

Developmental disability (DD) is a common type of disability, defined as an impairment in cognitive function that presents prior to adulthood and persists throughout a person's life¹. The number of individuals impacted by DD in Canada is large. Estimates of the percentage of children in Canada with DD have ranged from 6.5 to 8.3% and many people with DD experience lifelong limitations that impact their quality of life^{2,3}.

What's more concerning is that many children are not being identified as having a delay or disability until they are in elementary school. Subsequently, they will not receive the appropriate support and services they need early on to be successful at school. It has been well-documented, in both educational and medical professional literature, that developmental outcomes for young children with delays and disabilities can be greatly improved with early identification and intervention.⁴ While some parents might be in denial and struggling with the uncertainty of having a child with special needs, some parents might not be aware that there are support services available for young children and they may not know how to advocate for their child. Thus, as early child educators we have an obligation to help families navigate through the process of monitoring, as well as provide information and resources if a screening or evaluation is necessary.

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THE PROCESS OF MONITORING

Who can monitor a child's development? Parents, grandparents, early caregivers, providers and teachers can monitor the children in their care. One of the tasks of an intentional teacher is to gather baseline data within the first 60 days of a child starting their program. With each observation, teachers are listening to how a child speaks and if they can communicate effectively; they are watching to see how the child plays and interacts with their peers; and they are recording how the child processes information and problem solves. By monitoring a child closely, not only can we observe how a child grows and develops, we can track changes over time. More importantly, we can identify children who fall outside the parameters of what is considered normal or "typical" development.

When teachers monitor children, they are observing and documenting whether children are mastering "typical" developmental milestones in the physical, cognitive, language, emotional and social domains of development. In particular, teachers are tracking a child's speech and language development, problem-solving skills, fine and gross motor skills, social skills and behaviours, so that they can be more responsive to each child's individual needs. Even more so, teachers are trying to figure out what a child can do, and if there are any "red flags" or developmental areas that need further support. As early caregivers and teachers, we are not qualified to formally screen and evaluate children. We can however monitor children's actions, ask questions that can guide our observations, track developmental milestones, and record our observations. With this vital information we can make more informed decisions on what is in the child's best interest.

WHAT IS THIS CHILD TRYING TO TELL ME?

With 12-24 busy children in a classroom, there are bound to be occasional outbursts and challenging behaviours to contend with. In fact, a portion of a teacher's day is typically spent guiding challenging behaviours. With all the numerous duties and responsibilities that a teacher performs daily, dealing with challenging behaviours can be taxing. When a child repeats a challenging behaviour, we might be bothered, frustrated, or even confused by their actions. We might find ourselves asking questions like:

- *"Why does she keep pinching her classmate?"*
- *"Why does he put his snack in his hair?"*
- *"Why does he cry when it's clean up time or when he has to put his shoes on?"*
- *"Why does she fidget so much during group time?"*

Without taking the time to observe the potential causes and outcomes associated with the challenging behaviour, we may only be putting on band-aids to fix a problem, rather than trying to solve the problem. Without understanding the *why*, we cannot properly guide the child or support the whole-child's development. As intentional teachers we are taught to observe, document, and analyze a child's actions so we can better understand what the child is trying to "tell" us through their behaviour. Behaviour is a form of communication. Any challenging behaviour that occurs over and over, is happening for a reason. If you can find the "pattern" in the behaviour, you can figure out how to redirect or even stop the challenging behaviour.

FINDING PATTERNS

To be most effective, it is vital that we record what we see and hear as accurately and objectively as possible. No matter which observation method, tool or technique is used (e.g. Event Sampling, Frequency Counts, Checklists or

Technology), once we have gathered a considerable amount of data we will need to interpret and reflect on the observation evidence so that we can plan for the next step. Finding the patterns can be instrumental in planning curriculum, setting up the environment with appropriate materials, and creating social situations that are suitable for the child's temperament.

Patterns and Play

If Wyatt is consistently observed going to the sandbox to play with dinosaurs during outside play:

- What does this tell you?
- What is the pattern?
- Is Wyatt interacting with other children?
- How is Wyatt using the dinosaurs?
- How can you use this information to support Wyatt during inside play?

IDEAS FOR WYATT

To create programming encourage the child to go into the art center, knowing that he likes dinosaurs, lay down some butcher paint on a table, put a variety of dinosaurs out on the table, and add some trays with various colors of paint.

To arrange the environment add books and pictures about dinosaurs, and materials that could be used in conjunction with dinosaurs.

To support social development: I noticed Wyatt played by himself on several observations. I may need to do some follow up observations to see if Wyatt is initiating conversations, taking turns, joining in play with others or playing alone.

As you can see these are just a few suggestions. What ideas did you come up with? As we monitor children in our class, we are gathering information so that we can create a space where each child's individual personality, learning strengths, needs, and interests are all taken into account. Whether the child has a disability, delay or impairment or is developing at a typical pace, finding their unique pattern will help us provide suitable accommodations

WHAT IS A RED FLAG?

If, while monitoring a child's development, a "red flag" is identified, it is the teacher's responsibility to inform the family, in a timely manner, about their child's developmental progress. First, the teacher and family would arrange a meeting to discuss what has been observed and documented. At the meeting, the teacher and family would share their perspectives about the child's behaviour, practices, mannerisms, routines and skill sets. There would be time to ask questions and clarify concerns, and a plan of action would be developed. It is likely that various adjustments to the environment would be suggested to meet the individual child's needs, and ideas on how to tailor social interactions with peers would be discussed. With a plan in place, the teacher would continue to monitor the child. If after a few weeks there was no significant change or improvement, the teacher may then

recommend that the child be formally screened and evaluated by a professional (e.g. a pediatrician, behavioural psychologist or a speech pathologist).

THE PROCESS OF SCREENING AND EVALUATING

Who can screen and evaluate children? Doctors, pediatricians, speech pathologists, behaviourists, Screenings and evaluations are more formal than monitoring. Developmental screening takes a closer look at how a child is developing using brief tests. Your child will get a brief test, or you will complete a questionnaire about your child. The tools used for developmental and behavioural screening are formal questionnaires or checklists based on research that ask questions about a child's development, including language, movement, thinking, behaviour, and emotions.

Developmental screenings are cost effective and can be used to assess a large number of children in a relatively short period of time. There are screenings to assess a child's hearing and vision, and to detect notable developmental delays. Screenings can also address some common questions and concerns that teachers, and parents alike, may have regarding a child's academic progress. For example, when a teacher wonders *why* a child is behaving in such a way, they will want to observe a child's social interactions and document how often certain behaviours occur. Similarly, when a parent voices a concern that their child is not talking in complete sentences the way their older child did at that same age. The teacher will want to listen and record the child's conversations and track their language development.

Developmental Delays – is the condition of a child being less developed mentally or physically than is normal for their age.

Developmental Disabilities^[footnote]Centers for Disease Control and Prevention [CDC]. (n.d.). *Facts About Developmental Disabilities*. <https://www.cdc.gov/ncbddd/developmentaldisabilities/facts.html>^[/footnote] — developmental disabilities are a group of conditions due to an impairment in physical, learning, language, or behaviour areas. These conditions begin during the developmental period, may impact day-to-day functioning, and usually last throughout a person's lifetime. Some noted disabilities include:

- ADHD
- Autism Spectrum Disorder
- Cerebral Palsy
- Hearing Loss
- Vision Impairment
- Learning Disability
- Intellectual Disability

SCREENING YOUNG CHILDREN

To quickly capture a snapshot of a child's overall development, early caregivers and teachers can select from several observation tools to observe and document a child's play, learning, growth and development. Systematic and routine observations, made by knowledgeable and responsive teachers, ensure that children are receiving the quality care and support they deserve. Several observation tools and techniques can be used by teachers to screen a child's development. Because each technique and tool provides limited observation data, it is suggested

that teachers use a combination of tools and techniques to gather a full panoramic perspective of a child's development. Here are some guidelines:

- Monitoring cannot capture the complete developmental range and capabilities of children, but can provide a general overview
- Monitoring can only indicate the possible presence of a developmental delay and cannot definitively identify the nature or extent of a disability
- Not all children with or at risk for delays can be identified
- Some children who are red-flagged may not have any actual delays or disabilities; they may be considered "exceptional" or "gifted"
- Children develop at different paces and may achieve milestones at various rates

DEVELOPMENTAL MILESTONE CHECKLISTS AND CHARTS

There are many factors that can influence a child's development: genetics, gender, social interactions, personal experiences, temperaments and the environment. It is critical that educators understand what is "typical" before they can consider what is "atypical." Developmental Milestones provide a clear guideline as to what children should be able to do at set age ranges. However, it is important to note that each child in your classroom develops at their own individualized pace, and they will reach certain milestones at various times within the age range.

Developmental Milestone Charts are essential when setting up your classroom environments. Once you know what skills children **should** be able to do at specific ages, you can then plan developmentally appropriate learning goals, and you can set up your classroom environment with age appropriate materials. Developmental Milestone Charts are also extremely useful to teachers and parents when guiding behaviours. In order to set realistic expectations for children, it is suggested that teachers and parents review all ages and stages of development to understand how milestones evolve. Not only do skills build upon each other, they lay a foundation for the next milestone that's to come. Developmental Milestone Charts are usually organized into 4 Domains: Physical, Cognitive, Language, and Social-Emotional.

Table 1: Gross Motor Milestones 2 Months to 2 Years – What Most Children Do⁵

2 months	Can hold head up and begins to push up when lying on tummy
	Makes smoother movements with arms and legs
4 months	Holds head steady, unsupported
	Pushes down on legs when feet are on a hard surface
	May be able to roll over from tummy to back
	Brings hands to mouth
	When lying on stomach, pushes up to elbows
6 months	Rolls over in both directions (front to back, back to front)
	Begins to sit without support
	When standing, supports weight on legs and might bounce
	Rocks back and forth, sometimes crawling backward before moving forward
9 months	Stands, holding on
	Can get into sitting position
	Sits without support
	Pulls to stand
	Crawls
1 year	Gets to a sitting position without help
	Pulls up to stand, walks holding on to furniture (“cruising”)
	May take a few steps without holding on
	May stand alone
18 months	Walks alone
	May walk up steps and run
	Pulls toys while walking
	Can help undress self
2 years	Stands on tiptoe
	Kicks a ball
	Begins to run
	Climbs onto and down from furniture without help
	Walks up and down stairs holding on
	Throws ball overhand

5. Development Milestones charts copied from: Centers for Disease Control and Prevention [CDC]. (n.d.). *CDC's Developmental Milestones*. <https://www.cdc.gov/ncbddd/actearly/milestones/index.html>

Table 2: Fine Motor Milestones 2 Months to 2 Years – What Most Children Do

2 months	Grasps reflexively
	Does not reach for objects
	Holds hands in fist
4 months	Brings hands to mouth
	Uses hands and eyes together, such as seeing a toy and reaching for it
	Follows moving things with eyes from side to side
	Can hold a toy with whole hand (palmar grasp) and shake it and swing at dangling toys
6 months	Reaches with both arms
	Brings things to mouth
	Begins to pass things from one hand to the other
9 months	Puts things in mouth
	Moves things smoothly from one hand to the other
	Picks up things between thumb and index finger (pincer grip)
1 year	Reaches with one hand
	Bangs two things together
	Puts things in a container, takes things out of a container
	Lets things go without help
	Pokes with index (pointer) finger
18 months	Scribbles on own
	Can help undress herself
	Drinks from a cup
	Eats with a spoon with some accuracy
	Stacks 2-4 objects
2 years	Builds towers of 4 or more blocks
	Might use one hand more than the other
	Makes copies of straight lines and circles
	Enjoys pouring and filling
	Unbuttons large buttons
	Unzips large zippers
	Drinks and feeds self with more accuracy

Table 3: Cognitive Milestones 2 Months to 2 Years – What Most Children Do

2 months	Pays attention to faces
	Begins to follow things with eyes and recognize people at a distance
	Begins to act bored (cries, fussy) if activity doesn't change
4 months	Lets you know if she is happy or sad
	Responds to affection
	Reaches for toy with one hand
	Uses hands and eyes together, such as seeing a toy and reaching for it
	Follows moving things with eyes from side to side
	Watches faces closely
	Recognizes familiar people and things at a distance
6 months	Looks around at things nearby
	Brings things to mouth
	Shows curiosity about things and tries to get things that are out of reach
	Begins to pass things from one hand to the other
9 months	Watches the path of something as it falls
	Looks for things he sees you hide
	Plays peek-a-boo
	Puts things in mouth
	Moves things smoothly from one hand to the other
	Picks up things like cereal o's between thumb and index finger
1 year	Explores things in different ways, like shaking, banging, throwing
	Finds hidden things easily
	Looks at the right picture or thing when it's named
	Copies gestures
	Starts to use things correctly; for example, drinks from a cup, brushes hair
	Bangs two things together
	Puts things in a container, takes things out of a container
	Lets things go without help
	Pokes with index (pointer) finger
	Follows simple directions like "pick up the toy"
18 months	Knows what ordinary things are for; for example, telephone, brush, spoon
	Points to get the attention of others
	Shows interest in a doll or stuffed animal by pretending to feed
	Points to one body part
	Scribbles on own
	Can follow 1-step verbal commands without any gestures; for example, sits when you say "sit down"

Table 3: Cognitive Milestones 2 Months to 2 Years – What Most Children Do

2 years	Finds things even when hidden under two or three covers
	Begins to sort shapes and colors
	Completes sentences and rhymes in familiar books
	Plays simple make-believe games
	Builds towers of 4 or more blocks
	Might use one hand more than the other
	Follows two-step instructions such as “Pick up your shoes and put them in the closet.”
	Names items in a picture book such as a cat, bird, or dog

Table 4: Language Milestones 2 Months to 2 Years – What Most Children Do

2 months	Coos, makes gurgling sounds
	Turns head toward sounds
4 months	Begins to babble
	Babbles with expression and copies sounds he hears
	Cries in different ways to show hunger, pain, or being tired
6 months	Responds to sounds by making sounds
	Strings vowels together when babbling (“ah,” “eh,” “oh”) and likes taking turns with parent while making sounds
	Responds to own name
	Makes sounds to show joy and displeasure
	Begins to say consonant sounds (jabbering with “m,” “b”)
9 months	Understands “no”
	Makes a lot of different sounds like “mamamama” and “bababababa”
	Copies sounds and gestures of others
	Uses fingers to point at things
1 year	Responds to simple spoken requests
	Uses simple gestures, like shaking head “no” or waving “bye-bye”
	Makes sounds with changes in tone (sounds more like speech)
	Says “mama” and “dada” and exclamations like “uh-oh!”
	Tries to say words you say
18 months	Says several single words
	Says and shakes head now
	Points to show others what is wanted
2 years	Points to things or pictures when they are named
	Knows names of familiar people and body parts
	Says sentences with 2 to 4 words
	Follows simple instructions
	Repeats words overheard in conversation
	Points to things in a book

Table 5: Social and Emotional Milestones 2 Months to 2 Years – What Most Children Do

2 months	Begins to smile at people
	Can briefly calm self (may bring hands to mouth and suck on hand)
	Tries to look at parent
4 months	Smiles spontaneously, especially at people
	Likes to play with people and might cry when playing stops
	Copies some movements and facial expressions, like smiling or frowning
6 months	Knows familiar faces and begins to know if someone is a stranger
	Likes to play with others, especially parents
	Responds to other people's emotions and often seems happy
	Likes to look at self in a mirror
9 months	May be afraid of strangers
	May be clingy with familiar adults
	Has favorite toys
1 year	Is shy or nervous with strangers
	Cries when mom or dad leaves
	Has favourite things and people
	Shows fear in some situations
	Hands you a book when she wants to hear a story
	Repeats sounds or actions to get attention
	Puts out arm or leg to help with dressing
	Plays games such as “peek-a-boo” and “pat-a-cake”
18 months	Likes to hand things to others as play
	May have temper tantrums
	May be afraid of strangers
	Shows affection to familiar people
	Plays simple pretend, such as feeding a doll
	May cling to caregivers in new situations
	Points to show others something interesting
	Explores alone but with parent close by
2 years	Copies others, especially adults and older children
	Gets excited when with other children
	Shows more and more independence
	Shows defiant behaviour (doing what he has been told not to)
	Plays mainly beside other children, but is beginning to include other children, such as in chase games

Table 6: Gross Motor Milestones 3 Years to 5 Years – What Most Children Do

3 years	Climbs well
	Runs easily
	Pedals a tricycle (3-wheel bike)
	Walks up and down stairs, one foot on each step
4 years	Hops and stands on one foot up to 2 seconds
	Catches a bounced ball most of the time
5 years	Stands on one foot for 10 seconds or longer
	Hops; may be able to skip
	Can do a somersault
	Can use the toilet on own
	Swings and climbs

Table 7: Fine Motor Milestones 3 Years to 5 Years – What Most Children Do

3 years	Copies a circle with pencil or crayon
	Turns book pages one at a time
	Builds towers of more than 6 blocks
	Screws and unscrews jar lids or turns door handle
4 years	Pours, cuts with supervision, and mashes own food
	Draws a person with 2 to 4 body parts
	Uses scissors
	Starts to copy some capital letters
5 years	Can draw a person with at least 6 body parts
	Can print some letters or numbers
	Copies a triangle and other geometric shapes
	Uses a fork and spoon and sometimes a table knife

Table 8: Cognitive Milestones 3 Years to 5 Years – What Most Children Do

3 years	Can work toys with buttons, levers, and moving parts
	Plays make-believe with dolls, animals, and people
	Does puzzles with 3 or 4 pieces
	Understands what “two” means
4 years	Names some colors and some numbers
	Understands the idea of counting
	Starts to understand time
	Remembers parts of a story
	Understands the idea of “same” and “different”
	Plays board or card games
	Tells you what he thinks is going to happen next in a book
5 years	Counts 10 or more things
	Knows about things used every day, like money and food

Table 9: Language Milestones 3 Years to 5 Years – What Most Children Do

3 years	Follows instructions with 2 or 3 steps
	Can name most familiar things
	Understands words like “in,” “on,” and “under”
	Says first name, age, and sex
	Names a friend
	Says words like “I,” “me,” “we,” and “you” and some plurals (cars, dogs, cats)
	Talks well enough for strangers to understand most of the time
	Carries on a conversation using 2 to 3 sentences
4 years	Knows some basic rules of grammar, such as correctly using “he” and “she”
	Sings a song or says a poem from memory such as the “Itsy Bitsy Spider” or the “Wheels on the Bus”
	Tells stories
	Can say first and last name
5 years	Speaks very clearly
	Tells a simple story using full sentences
	Uses future tense; for example, “Grandma will be here.”
	Says name and address

Table 10: Social and Emotional Milestones 3 Years to 5 Years – What Most Children Do

3 years	Copies adults and friends
	Shows affection for friends without prompting
	Takes turns in games
	Shows concern for a crying friend
	Dresses and undresses self
	Understands the idea of “mine” and “his” or “hers”
	Shows a wide range of emotions
	Separates easily from mom and dad
	May get upset with major changes in routine
4 years	Enjoys doing new things
	Is more and more creative with make-believe play
	Would rather play with other children than by self
	Cooperates with other children
	Plays “mom” or “dad”
	Often can't tell what's real and what's make-believe
	Talks about what she likes and what she is interested in
5 years	Wants to please friends
	Wants to be like friends
	More likely to agree with rules
	Likes to sing, dance, and act
	Is aware of gender
	Can tell what's real and what's make-believe
	Shows more independence
	Is sometimes demanding and sometimes very cooperative

TIME SAMPLING OR FREQUENCY COUNTS

When a teacher wants to know **how often or how infrequent** a behaviour is occurring, they will use a Frequency Count to track a child's behaviour during a specific timeframe. This technique can help teachers track a child's social interactions, play preferences, temperamental traits, aggressive behaviours, and activity interests.

CHECKLISTS

When a teacher wants to look at a child's overall development, checklists can be a very useful tool to determine the presence or absence of a particular skill, milestone or behaviour. Teachers will observe children during play times, circle times and centers, and will check-off the skills and behaviours as they are observed. Checklists help to determine which developmental skills have been mastered, which skills are emerging, and which skills have yet to be learned.

TECHNOLOGY

Teachers can use video recorders, cameras and tape recorders to record children while they are actively playing. This is an ideal method for capturing authentic quotes and work samples. Information gathered by way of technology can also be used with other screening tools and techniques as supporting evidence. (Note: it is important to be aware of center policies and procedures regarding proper consent before photographing or taping a child).

EVENT SAMPLING AND THE ABC TECHNIQUE

When an incident occurs, we may wonder **what triggered** that behaviour. The Event Sampling or ABC technique helps us to identify the social interactions and environmental situations that may cause children to react in certain ways. If we are to reinforce someone's positive behaviour, or change someone's negative behaviour, we must first try to understand what might be causing that particular behaviour. With an ABC Analysis, the observer is looking for and tracking a specific **behaviour**. More than the behaviour itself, the observer wants to understand what is causing the behaviour – this is antecedent. The antecedent happens **before** the behaviour. It is believed that if the observer can find the “triggers” that might be leading up to or causing the challenging behaviour, then potential strategies can be planned to alter, redirect or end the challenging behaviour. In addition to uncovering the antecedent, what happens **after** the behaviour is just as important, this is the “consequence.” How a child is treated after the incident or challenging behaviour can create a positive or negative reinforcement pattern. In short, the ABC technique tells a brief story of what is happening before, during, and after a noted behaviour.

The ABC observation method requires some training and practice. The observer must practice being neutral and free of bias, judgement and assumption in order to collect and record objective evidence and to portray an accurate picture. Although it may be uncomfortable to admit, certain behaviours can frustrate a teacher. If the teacher observes a child while feeling frustrated or annoyed, this can possibly taint the observation data. It is important to record just the facts. And to review the whole situation before making any premature assumptions.

COLLECTING YOUR DATA

If you have a concern about a child's behaviour or if you have noticed a time when a child's behaviour has been rather disruptive, you will schedule a planned observation. For this type of observation, you can either video record the child in classroom environment, or you can take observation notes using a Running Record or Anecdotal Record technique. To find a consistent pattern, it is best to tape or write down your observations for several days to find a true and consistent pattern. To document your observations, include the child's name, date, time, setting, and context. Observe and write down everything you see and hear before, during and after the noted behaviour.

ORGANIZING YOUR DATA

Divide a piece of paper into 3 sections: A – for Antecedent; B – for Behaviour; and C – for Consequence. Using your observation notes you will organize the information you collected into the proper sections. As you record the observation evidence, remember to report just the facts as objectively as possible. Afterwards, you will interpret the information and look for patterns. For example, did you find any “triggers” **before** the behaviour occurred? What kind of “reinforcement” did the child receive **after** the behaviour? What are some possible strategies you can try to minimize or redirect the challenging behaviour? Do you need to make environmental changes? Are their

social interactions that need to be further monitored? With challenging behaviours, there is not a quick fix or an easy answer. You must follow through and continue to observe the child to see if your strategies are working.

The ABC Method

(A) Antecedent: Right **before** an incident or challenging behaviour occurs, something is going on to lead up to or prompt the actual incident or behaviour.

For example, one day during lunch Susie spills her milk (this behaviour has happened several times before). Rather than focusing solely on the incident itself (Susie spilling the milk), look to see what was going on **before** the incident. More specifically, look to see if Susie was in a hurry to finish her snack so she could go outside and play? Was Susie being silly? Which hand was Susie using – is this her dominant hand? Is the milk pitcher too big for Susie to manipulate?

(B) Behaviour: This refers to the measurable or observable actions.

In this case, it is Susie spilling the milk.

(C) Consequence: The consequence is what happens directly **after** the behaviour.

For example, right after Susie spilt the milk, did you yell at her or display an unhappy or disgusted look? Did Susie cry? Did Susie attempt to clean up the milk? Did another child try to help Susie?

ANTECEDENT BEHAVIOR CONSEQUENCE: ABC CHARTS & MODEL BY TEACHINGS IN EDUCATION⁶



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://pressbooks.nsc.ca/eceinfantcare/?p=88#oembed-1>

6. Teachings in Education. (2017, September 25). *Antecedent Behavior Consequence: ABC Charts & Model*. YouTube [Video]. https://youtu.be/UVKb_BXEp5U

conducted at the local elementary school if their child is 3 to 5 years old. Depending upon the nature of the red flag, there are a battery of tools that can be used to evaluate a child's development. Here are some guidelines:

- Screenings are designed to be brief (30 minutes or less)
- A more comprehensive assessment and formal evaluation must be conducted by a professional in order to confirm or disconfirm any red flags that were raised during the initial monitoring or screening process
- Families must be treated with dignity, sensitivity and compassion while their child is going through the screening process
- Use a screening tool from a reputable publishing company

SCREENING INSTRUMENTS AND EVALUATION TESTS

The instruments listed below are merely a sample of some of the developmental and academic screening tests that are widely used.

- Ages and Stages Questionnaires (ASQ®-3), [Brookes Publishing Company](#)
- Battelle Developmental Inventory Screening Test (BDI-3®), [Riverside Publishing](#)
- Developmental Indicators for Assessment of Learning (DIAL-4), [Pearson Assessments](#)
- Dynamic Indicators of Basic Early Literacy Skills (DIBELS®), [University of Oregon Center on Teaching and Learning](#)
- Early Screening Inventory-Revised (ESI-R), Pearson Assessments (includes separate scoring for preschool and kindergarten)⁷

Reliability and Validity Defined

Reliability means that the scores on the tool will be stable regardless of when the tool is administered, where it is administered, and who is administering it. Reliability answers the question: Is the tool producing consistent information across different circumstances? Reliability provides assurance that comparable information will be obtained from the tool across different situations.

Validity means that the scores on the tool accurately capture what the tool is meant to capture in terms of content. Validity answers the question: Is the tool assessing what it is supposed to assess?

CHILDREN WITH SPECIAL NEEDS

Throughout the past 40 years there have been some significant changes in public policy and social attitudes towards integrating children with special needs and learning disabilities into typical classroom settings. Stigmas from the past have dissipated and more inclusive practices are in place.

Early childhood inclusion embodies the values, policies, and practices that support the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society. The desired results of inclusive experiences for children with and without disabilities and their families include a sense of belonging and membership, positive social

7. Washington State Office of Superintendent of Public Instruction. (2008). *A Guide to Assessment in Early Childhood: Infancy to Age Eight*. http://www.k12.wa.us/EarlyLearning/pubdocs/assessment_print.pdf

relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used to identify high quality early childhood programs and services are access, participation, and supports.⁸

When early caregivers and preschool teachers practice monitoring as part of their regular routines, they demonstrate accountability and responsive caregiving. Nearly 65% of children are identified as having a special need, disability, delay or impairment, and will require some special services or intervention. As early educators our role is twofold:

1. Provide an environment where children feel safe, secure and cared for
2. Help children develop coping skills to decrease stress and promote learning and development

INDIVIDUALIZED EDUCATION PLANS

Some children may need more individualized support and might benefit from specialized services or individual accommodations. The child care team plans appropriately accommodations, modifications and makes recommendations that will help the child meet their developmental goals.

While everyone on the team has a role, the teacher's role is to integrate approaches that can best support the child while in class. For example, if the plan notes that the child needs support with language development, the teacher would consider finding someone in class who could provide peer to peer scaffolding. The teacher would want to find someone who has strong language skills, and who is cooperative and kind to others. She would then partner the two children up throughout the day so that the typical child could model ideal language skills. The teacher would also provide regular updates to parents, continue observing and monitoring the child's development, and would provide access to alternative resources and materials as much as possible.

CREATING INCLUSIVE LEARNING ENVIRONMENTS

To ensure that all children feel safe, secure and nurtured, teachers must strive to create a climate of cooperation, mutual respect and tolerance. To support healthy development, teachers must offer multiple opportunities for children to absorb learning experiences, as well as process information, at their own pace. While one child may be comfortable with simple verbal instructions to complete a particular task, another child may benefit from a more direct approach such as watching another child or adult complete the requested task first. Teachers who are devoted to observing their children are motivated to provide experiences that children will enjoy and be challenged by. The classroom is not a stagnant environment – it is ever-changing. In order to maintain a high-quality classroom setting, it is essential to utilize your daily observations of children and the environment to monitor the experiences and interactions to ensure there is a good fit.⁹

CONCLUSION

Monitoring, screening and evaluating children is both necessary and takes time and practice. Rather than waiting until there is a major concern, intentional teachers should conduct observations on a regular basis to closely monitor each child's development. By watching children, we can find patterns. Once we understand the patterns,

8. Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC). (April 2009). *Early Childhood Inclusion*. https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/ps_inclusion_dec_naeyc_ec.pdf.

9. Morin, A. (2020). *Least Restrictive Environment (LRE): What You Need to Know*. <https://www.understood.org/en/school-learning/special-services/special-education-basics/least-restrictive-environment-lre-what-you-need-to-know>

we can better understand why children do what they do, and ideally, we can create an inclusive learning environment that meets the needs of all our children. Understanding that over half of the children in your classroom may potentially have some special need, disability, delay or impairment is crucial. Recognizing that unless we observe regularly, we won't be able to refer families in a timely manner to get the support services and professional help that they need is essential. Research tells us that children who receive early intervention are more likely to master age-appropriate developmental milestones, have increased academic readiness and are more apt to socialize with their peers. It is important to remember that everyone in the classroom, including teachers, assistants and directors and supervisors, should be involved with monitoring a child's development. As you continue to read this text, you will discover how observations are essential in planning effective curriculum, documenting children's learning, assessing development and communicating with families.¹⁰

RESOURCES TO EXPLORE

Developmental Screening: Developmental Monitoring. by Centers for Disease Control and Prevention [CDC].

IMAGE CREDITS

Spiske M. (2017, January 19). Unsplash. https://unsplash.com/photos/OO89_95aUC0

CHAPTER ATTRIBUTION

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10. The Early Learning Institute. (2018). *Top 5 Benefits of Early Intervention*. <https://www.telipa.org/top-5-benefits-early-intervention/>

PART VII

GUIDELINES AND REGULATIONS

UNIT 28

Early Learning and Child Care Act

LEGAL FRAMEWORK IN NOVA SCOTIA

This page contains links to the legislation in Nova Scotia that sets the legal standards and requirements for child care in Nova Scotia:

- [Early Learning and Child Care Act](#)
- [The Early Learning and Child Care Regulations](#)

UNIT 29

Communicable Diseases

Learning Objectives

After reading this chapter you will:

- Be familiar with practices to reduce the spread of infections and communicable diseases in a child care setting.
- Understand why the preventive practices are important.

HAND WASHING

Hand washing is the single most effective way to prevent infections from spreading. Enforcing proper hand washing by staff, food handlers, and children helps ensure a safe and healthy environment. The best kind of sink for hand washing has hot and cold water mixed through one faucet, and also has foot, knee, or wrist-operated water controls. Mixing valves maybe required.

Supply the hand wash sink with paper towels and liquid soap in a dispenser. It is not necessary to use disinfectant or antimicrobial soaps. Cartridge-type dispensers, rather than refillable soap dispensers, are preferable. If you use refillable liquid soap dispensers, clean and sanitize the containers before refilling them. Cloth towels are not recommended. For an illustration of the proper hand washing technique refer to Proper Hand Washing Procedures poster.



Proper Hand Washing Procedures poster. Credit: Department of Health and Wellness

Alcohol-based hand rubs should only be used when soap and water are unavailable. It is recommended that alcohol-based hand sanitizers have a minimum of 60 per cent ethanol (ethyl alcohol). Hand sanitizers should not be used if hands are visibly soiled with dirt or other contaminated material (e.g., stool, urine, vomit or blood). Children must be supervised while using alcohol hand rubs because it can be harmful to the child, if swallowed. Allow the hands to dry completely before children touch anything, especially before hand-to-mouth contact. These products should be stored away from children.

DIAPERING

The rate of intestinal infection in programs directly relates to the presence of children in diapers. Diaper changing is one of the highest risk procedures for the spread of diarrhea illness among children and staff. Proper hand washing, cleaning and disinfecting of diaper change tables help prevent diarrheal illness in the program.

To help reduce the spread of intestinal illnesses, the program must ensure there is a

- properly designed diaper change area
- proper procedure for using gloves
- proper procedure for changing diapers

- proper procedure for toileting

DIAPER CHANGE AREA GUIDELINES

When designing a diaper change area, follow these guidelines:

- Always separate diaper change areas from food preparation areas. Diaper change areas require a separate hand washing sink with liquid soap and paper towel.
- Always ensure the diaper change table and pad is made of a smooth, non-absorbent, and easily cleanable material. Clean and disinfect the diaper change table in between each diaper change.
- Always make sure the waste container has a tight-fitting, foot-operated lid and is lined with a disposable plastic bag. Empty the container frequently. Clean and disinfect it at least daily.
- Never dispense creams and ointments in a way that contaminates the contents, such as with fingers, common sticks, or tissues. If special creams are necessary ALWAYS use an individual utensil to dispense it for each child.
- Never rinse soiled clothing or cloth diapers at the program. Place soiled clothing or cloth diapers in a sealed plastic bag for home washing.
- Never use just hand sanitizer between diaper changes—wash your hands with soap and water.

FOOD SAFETY PRACTICES

Children must receive food that is safe and healthy to eat. Safe food helps prevent the development and spread of infectious illnesses, such as gastroenteritis.

Proper food safety requires that staff and food service staff practice good personal hygiene and know how to handle food safely when preparing, storing, and serving it.

All programs serving meals must have at least one person who has successfully completed a recognized food handlers training course present in the food preparation area at all times when food is being prepared. Information on these courses can be found by visiting [Food Hygiene \(Handling\) Courses](#) on the NS Department of Environment and Climate Change web page.

PERSONAL HYGIENE

To practice good personal hygiene, follow these steps:

1. Develop and enforce a clear policy about staff and illness. For example, no food handler may work while suffering from a gastrointestinal illness such as diarrhea.
2. Ensure that food handlers wash their hands with liquid soap and warm water
 - before starting work
 - upon return to work from a break
 - after using the washroom
 - after handling raw meats, vegetables or fruits

- after handling garbage or garbage containers
 - after blowing or wiping their nose
 - after completing any other activity that may have contaminated their hands
3. Ensure that food handlers have clean hands, clothes, and hair restraints. Do not allow smoking in the kitchen or on the premises of the program.
 4. Ensure that staff who change diapers wash their hands both after diapering and before preparing food.

FOOD

Receiving, storing, preparing and handling food properly are essential in ensuring the program serves safe food. To safely prepare food follow these guidelines:

THAWING FOOD

- Do not thaw food on a counter at room temperature. This can cause rapid bacterial growth and can result in food poisoning.
- Practice the following safe thawing methods:
 - Thaw food in a refrigerator.
 - Thaw food under cold running water, if rapid thawing is necessary.
 - Thaw food in a microwave and then cook immediately.
 - Cook from frozen where applicable.

PREPARING FOOD

- Thoroughly wash all raw fruits and vegetables under cold running water.
- Wash the tops of canned food before opening. Wash the opener with clean, soapy water after each use.
- Avoid hand contact with food by using clean utensils to mix and serve food.
- Before each use, clean and sanitize all utensils you use to taste food during preparation. Do not put a utensil you just used to taste food back into a pot or dish that contains food that will be served to others.
- Clean and sanitize all surfaces as you prepare the food to prevent cross contamination of food and work surfaces. Where possible, use separate areas or utensils for raw and ready-to-eat foods.
- Clean and sanitize work areas and wash your hands when changing from raw to cooked food, or from raw to ready-to-eat food.
- Ensure a minimum internal temperature of 74°C (165°F) when cooking food, or 82°C (180°F) when cooking whole poultry. For more details please see [Food Safety Factsheet](#).
- Maintain a minimum temperature of 60°C (140°F) when holding hot food.
- Ensure a minimum internal temperature of 74°C (165°F) when reheating food.
- Refrigerate prepared food as quickly as possible. The prepared food should be no deeper than two inches (approximately 5 cm), to enhance rapid cooling.

- Dispose of leftover food that has been put out in serving bowls for the children.

BREAST MILK

Breast milk is the only food an infant needs for the first 6 months of life. If an infant is not breastfed, formula is the only acceptable substitute for the first 6 months of life. Infants should not be fed solid food before 6 months. Breast milk will continue to be the infant's main source of nourishment for 12 months, and continue to provide nourishment for as long as the mother continues to provide breast milk.

Some mothers may switch between breast milk and formula, or feed their baby both as needed. It is important to work with the family to develop an infant feeding plan to address feeding and storage of breast milk. This may also include a plan to follow if the supply runs out, and a 'transition' plan to other milks if/when necessary.

To safely store breast milk:

- Ensure bottles and containers are labelled with the following:
 - child's name
 - date received
 - date to be used by
- Store the breast milk in the refrigerator or freezer as soon as it is received, as requested by the family. Breast milk may be stored in the same fridge as other foods.
- Never leave freshly expressed breast milk at room temperature for more than 3-4 hours.
- Breast milk that has not been previously frozen can be stored in the refrigerator between 0°C (32°F) and 4°C (40°F) for up to 5 days, however less than 72 hours is ideal.
- Breast milk that has been frozen can be stored for different lengths of time depending on the type of freezer.
 - In a freezer compartment inside a refrigerator at a temperature of -15°C (5°F) for 2 weeks
 - In a freezer compartment with a separate door at a temperature of -18°C (0°F) for 3-6 months
 - In a deep freeze at a temperature of -20°C (-4°F) for 6-12 months
- Previously frozen breast milk that has been thawed can be safely kept refrigerated for up to 24 hours, after which it should be discarded.

To safely prepare breast milk:

- Wash your hands before and after preparing breast milk and handling bottles.
- Clean and sanitize counters where bottles of breast milk are prepared.
- Frozen breast milk can be thawed in the refrigerator or by placing the container in lukewarm water.
- To warm breast milk, place the container or bottle in a pan or bowl of warm water.
- Do not heat breast milk in the microwave. Microwaves cause uneven heating and the breast milk could scald the infant.

To safely feed breast milk:

- Wash your hands prior to and after feeding.
- An infant must not be fed in a crib or by bottle propping. An infant who cannot hold a bottle must be held by staff during the feeding.
- If the baby does not finish the breast milk bottle, it may be used again within 1–2 hours. If not used within 1–2 hours, it must be discarded.
- If a child is given the breast milk intended for another child, the family of both the children must be notified.

FORMULA

For infants who are not breastfed, formula is the only food an infant needs in the first 6 months of life. Infants should not be fed solid food before 6 months. Formula will continue to be the infant's main source of nourishment from 6–12 months of age. Some mothers may switch between breast milk and formula, or feed both as needed. Work with the family to develop an infant feeding plan to address feeding and storage of formula. This may also include a plan to follow if the supply runs out, and a 'transition' plan to other milks if/when necessary.

Formula is available in ready-to-serve liquid, a concentrated liquid, or a powder form. It is important to follow the measuring directions on the formula container exactly.

To safely store formula prepared at home:

- Ensure bottles and containers of formula are labelled with:
 - child's name
 - date prepared
 - date received
 - date to be used by
- Store prepared formula in the fridge as soon as it is received. Prepared formula may be stored in the same fridge as other foods.
- Never leave prepared formula (powdered, liquid concentrate, or ready to serve) at room temperature for more than 2 hours.

To safely feed prepared formula:

- Wash hands prior to and after feeding.
- Do not heat infant formula in a microwave. Microwaves cause uneven heating and the formula could scald the infant.
- Leftover formula must be discarded. Infants must start a new bottle at each feeding.
- An infant must not be fed in a crib or by bottle propping. An infant who cannot hold a bottle must be held by staff during the feeding.
- If a child is given the formula intended for another child, the families of both the children must be

notified.

When formula is prepared in a program the following guidelines should be followed:

For ready-to-serve liquid formula:

- Ready-to use formula does not need to be mixed.
- Wash your hands prior to preparing formula.
- Until a child is 6 months old, everything used to prepare the formula needs to be sterilized each time by boiling for 2 minutes to make sure it is germ-free. This includes things like the measuring cup, can opener and tongs, as well as bottles and nipples.
- After a child is 6 months old, everything used to prepare the formula must be washed and sanitized as per the [Nova Scotia Food Retail & Food Services Code](#)
- Clean and sanitize counters where formula is prepared.
- Store the filled bottles in the refrigerator. The bottles must be used within 48 hours. After this the formula must be discarded.
- Once opened, ready-to-use formula can be covered and stored in the refrigerator for up to 48 hours. After this it must be discarded.

For liquid concentrate formula:

- Wash your hands prior to preparing formula.
- Until a child is 6 months old, everything used to prepare the formula needs to be sterilized each time by boiling for 2 minutes to make sure it is germ-free. This includes things such as the measuring cup, can opener and tongs, as well as bottles and nipples.
- After a child is 6 months old, everything used to prepare the formula must be washed and sanitized as per the [Nova Scotia Food Retail & Food Services Code](#)
- Clean and sanitize counters where formula is prepared.
- Until a child is 6 months old, all types of water used to prepare the liquid concentrate formula must be boiled for at least 1 minute and cooled before mixing.
- Well water must be tested for bacteria and chemical content. It is not safe to use well water that has high levels of chemicals or minerals to mix formula, even if you boil it.
- The Nova Scotia Department of Environment recommends that your well water be tested every 6 months for bacteria and every 2 years for chemical content.
- If well water is used, continue to use boiled water for as long as the baby drinks formula.
- To prepare the formula, follow the instructions on the can. Use a measuring cup, not a bottle, to measure liquids because the measurements on bottles are not always accurate.
- Store the filled bottles in the refrigerator at 4°C (40°F) or lower. The bottles must be used within 48 hours. After this the formula must be discarded.
- Once opened, the liquid concentrate formula can be covered tightly and stored in the refrigerator for up to 48 hours. After this, it must be discarded.

For powdered formula:

- It is not safe to use powdered formula for babies less than 2 months old.
- Wash your hands prior to preparing formula.
- Clean and sanitize counters where formula is prepared.
- Until a child is 6 months old, everything used to prepare the formula needs to be sterilized each time by boiling for 2 minutes to make sure it is germ-free. This includes things such as the measuring cup, can opener and tongs, as well as bottles and nipples.
- After a child is 6 months old, everything used to prepare the formula must be washed and sanitized as per the [Nova Scotia Food Retail & Food Services Code](#).
- Well water must be tested for bacteria and chemical content. It is not safe to use well water that has high levels of chemicals or minerals to mix formula, even if you boil it.
- The Nova Scotia Department of Environment recommends that your well water be tested every 6 months for bacteria and every 2 years for chemical content.
- It is safest to prepare only one bottle of formula at a time because powdered formula cannot be sterilized and may contain a small amount of bacteria.
- To prepare the formula, follow the instructions on the can. Use a measuring cup, not a bottle, to measure liquids because the measurements on bottles are not always accurate.
- Regardless of infant's age, all types of water used to prepare the powdered formula must be brought to a rolling boil for 1 minute and cooled to no less than 70°C (158°F) (cool for no more than 30 minutes at room temperature) before adding powder. **The prepared bottle of formula may then be cooled to room or body temperature (37°C) by quickly placing the bottle under cold running water or into a container of cold or ice water prior to feeding the infant to avoid potential scalding.**
- If preparing formula for later use, the water used to prepare the formula must be brought to a rolling boil for 1 minute, dispensed into containers of a maximum size of 1 L and cooled down to no less than 70°C (158°F) (cool for no more than 30 minutes at room temperature) before adding powder. The prepared bottle of formula may then be cooled to room or body temperature (37°C) by quickly placing the bottle under cold running water or into a container of cold or ice water prior to feeding the infant to avoid potential scalding.
- If well water is used, continue to use boiled water for as long as the baby drinks formula.
- If not used immediately, put the filled, cooled bottles in the refrigerator right away.
- Formula that is prepared for later use can be stored up to 24 hours when refrigerated at 4°C (40°F).
- Store open containers of powdered formula in the original container with a tight-fitting lid in a cool, dry area and off the floor.
- Store open cans of powdered formula for up to 30 days only. Label each can with the date it was opened. Discard after 30 days or before the expiry date, whichever comes first.

To safely feed prepared formula:

- Wash hands prior to and after feeding.
- Do not heat infant formula in a microwave. Microwaves cause uneven heating and the formula could

scald the infant.

- Leftover formula must be discarded. Infants must start a new bottle at each feeding.
- An infant must not be fed in a crib or by bottle propping. An infant who cannot hold a bottle must be held by staff during the feeding.
- If a child is given the formula intended for another child, the families of both the children must be notified.

PREPARING FOR PICNICS AND OUTINGS

When planning for picnics and other outings, consider the duration of the outing and the availability of proper refrigeration. Improper storage of food increases the capability for bacterial growth and can result in an outbreak of food poisoning.

To properly prepare for picnics and outings, follow these guidelines:

- Bring only non-perishable foods, if possible. These are foods that do not support bacterial growth, i.e., normally do not require refrigeration to be kept safe.
- Keep perishable food, such as cooked meat, fish, poultry, and dairy products at a temperature less than 4°C (40°F). Do not bring raw meat, fish, or poultry on an outing.
- Use alcohol-based hand rubs or moist towelettes to clean hands of staff and children before eating, if proper hand washing facilities are not available.
- Drink water from a known safe source only. Do not drink from springs, streams, and similar sources. If uncertain, always bring bottled water.

SERVING CATERED FOODS

Catering includes foods from local restaurants and food service providers. Preparing and storing food properly is important if the program uses catered food. The caterer must be able to answer several questions:

Where does the caterer prepare the food?

The food must be prepared in a licensed facility.

How does the caterer transport the food to the program?

The caterer must protect the food from contamination both during transportation to the program and upon arrival. The covered containers must either be disposable or made of an easily cleanable, non-absorbent, food-grade material.

What is the temperature of the food during transportation to the program and upon arrival?

The caterer must keep hot food at a temperature above 60°C (140°F) and cold food below 4°C (40°F).

WHAT utensils will the program use to serve and eat the food?

The caterer must supply an adequate number of clean, sanitized utensils. If the caterer does not supply utensils, the program must have them available as well as the ability to clean and sanitize them. The program must contact a Food Safety Specialist if the safety or integrity of the food is in question. To contact a Food Safety Specialist, please see: [Department of Environment and Climate Change offices](#).

FOOD FROM HOME

- Food brought in from homes may be a risk to food safety, because the means of preparation, cooking, temperature and transporting of these foods is not known.
- When medical or dietary needs require a child to bring food from home or if the child is in the school-aged program, this food must be labelled with the child's name and refrigerated if required.
- Food considered to be a low-risk food by Nova Scotia Environment, including whole fruits and vegetables that have not been cut except for the purpose of harvesting and dry non-potentially hazardous baked goods (i.e., those that do not contain cream, custard, cream cheese, meat or any other potentially hazardous food as filling or a topping) may be brought into the program if this is acceptable to the licensee.
- For specific requirements related to food safety, please see the Food Safety Standard, page A15, in the [Manual for Food and Nutrition in Regulated Child Care Settings](#)

STORING FOOD

To provide children with safe and wholesome meals, the program must create and enforce proper conditions for storing food. To properly store food, follow these guidelines:

Refrigerated Foods

- Check that each refrigerated space has an accurate indicating thermometer.
- Store meats, fish, poultry, and dairy products at a temperature below 4°C (40°F). Store raw meats, fish, and poultry on the lowest shelf with all cooked ready-to-eat foods stored above.
- Keep frozen food at a temperature below -18°C (0°F).
- Follow the manufacturer's label for storage requirements of other food products.
- Cover or wrap and label all food in refrigerators and freezers—label with the food name, date, and the cook's name.
- Ensure adequate air circulation for even cooling. Do not overstock refrigerators, which could block or prevent air circulation.
- Store raw perishable foods for 2 to 3 days only. Consider freezing if longer storing time is required.

Dry Storage (non-refrigerated food)

- Keep storage areas clean, dry, well-ventilated, and adequately lit.
- Store only food in food storage areas.
- Store food at least 15 cm (6 inches) above the floor on racks or pallets.
- Check that all shelving is made of easily cleanable and non-absorbent material.
- Place open package and bulk foods in sealed and easily cleanable containers to prevent contamination.
- Store insecticides and chemicals in a locked cupboard or room away from food and children.

Cleaning and Sanitizing Utensils

Dirty utensils can contaminate food. The improper cleaning and sanitizing of utensils can result in unsafe food. Unsafe food can in turn lead to food poisoning. Clean and sanitize all utensils that touch food before using them. Avoid cross contamination—do not use a knife to cut raw chicken and the same knife to cut cooked chicken. Properly wash the knife between uses. A safe method to clean and sanitize multi-service utensils should include either a three-compartment sink or a dishwasher.

ENVIRONMENTAL SANITATION

Many germs that can cause illnesses survive for a long time on surfaces. Some germs only live for a few hours, while others can live for several days or even weeks. In some cases, it only takes a few germs to cause an illness. Proper cleaning and disinfecting practices play an important part in preventing illnesses and infections in the program. To have a clean, safe environment, the program must develop and enforce proper cleaning and disinfection policies.

Cleaning

Cleaning is an important way to remove visible dirt from various surfaces. To remove dirt, rub the surface with a cloth or towel moistened with a household detergent. The rubbing action creates friction and the detergent helps break down fats and proteins.

Cleaning removes some germs from a dirty surface, but does not necessarily remove all of the germs. Certain germs are very resistant to detergents. The only way to remove them is to sanitize the surface properly.

A good way to remember the difference between cleaning and sanitizing is that cleaning gets rid of the dirt you can see, while sanitizing gets rid of most of the germs you can't see.

Sanitizing

Sanitizing reduces the germs present on a surface or object. Sanitizing should not be done on its own. Always clean before sanitizing as dirt places a great demand on the chemical found in sanitizing solutions and reduces their effectiveness. If sanitizing is done without cleaning, the surface may not be properly sanitized. Use rubber gloves when sanitizing to avoid contact with corrosive materials that cause skin problems. Always wash hands after cleaning or sanitizing. Wash hands immediately after removing rubber gloves.

Disinfecting

Disinfection inactivates or kills the germs that may be present on environmental surfaces and that cleaning does not remove. Always clean before disinfecting. Use rubber gloves when disinfecting to avoid contact with corrosive materials that cause skin problems. Always wash hands after cleaning or disinfecting. Wash hands immediately after removing rubber gloves.

Mixing a Disinfectant Solution

Household bleach is the most commonly used chemical for disinfecting objects and surfaces in programs. It is convenient, readily available, economical, and effective. Undiluted bleach is a corrosive chemical. It is important to

dilute it to a working strength. There are a number of other disinfectant and sanitizing products available that are suitable for use in programs. Alternative products to bleach can be used provided that:

- The product has a drug identification number (DIN) for food contact surfaces and pest control product (PCP) registration number for non-food contact surfaces on the label.
- It is effective for its intended use.
- The manufacturer's directions can be followed exactly as printed on the label.

INSTRUCTIONS FOR MIXING VARIOUS DISINFECTANT SOLUTIONS

Household Bleach (Original strength approx. 5.25% sodium hypochlorite)		
To Disinfect/Sanitize	Dilution	Method
Bathrooms, diaper change tables, toys, water tables, sleep mats, chairs, general surfaces	Mix 2 teaspoons (10 mL) of bleach to each litre of water. Approximately 500 parts per million (ppm) chlorine	Apply to a cleaned surface and leave on the surface for 2 minutes. Allow to air dry. Surfaces such as diaper change tables and potties can be wiped dry after 30 seconds with a clean, single-use paper towel
Food contact surfaces, dishes, eating utensils, toys that children put in their mouths	Mix ½ tsp (2.5 mL) – 1 tsp (5 mL) of bleach to each litre of water. Approximately 100 ppm of chlorine	Immerse cleaned object in sanitizer solution for 2 minutes or spray on surfaces and allow to stand for at least 2 minutes. Surface may be wiped with a clean, single-use paper towel
Surfaces contaminated with blood, feces, vomit, or other bodily fluids	Mix 7 tablespoons (Tbsp) (100 mL) of bleach to each litre of water. Approximately 5000 ppm of chlorine	Apply to a cleaned surface and leave on the surface for 30 seconds. Allow to air dry. Adequate ventilation must be provided.
Using Quaternary Ammonia Compounds		
To Disinfect/Sanitize	Dilution	Method
Food contact surfaces, dishes, eating utensils, toys that children put in their mouths	200 ppm	Follow manufacturer's instructions
Using Iodine		
Food contact surfaces, dishes, eating utensils, toys that children put in their mouths	25 ppm	Follow manufacturer's instructions

Directions for mixing disinfectant/sanitizer solutions

- Use only potable (drinkable) water.
- Always pour bleach into water.
- Do not use clear spray bottles or containers because light quickly weakens the strength of the solution.
- Mix a fresh solution daily. Household bleach solutions quickly lose strength. Discard unused/leftover solutions at the end of the day.
- Label containers with the name of the solution and its dilution. Follow the requirements of your Workplace Hazardous Materials Information System (WHMIS) program for the labeling and storage of sanitizers.
- For all other sanitizers or disinfectants, follow the manufacturer's instructions for application strength, contact time and rinsing or wiping.
- **DO NOT mix bleach** with any other chemicals.
- Keep all chemical solutions **out of children's reach**.

CLOTHING

Personal clothing and other items must be stored in individual cubicles (cubbyholes) or on hooks. Personal clothing and items including cloth diapers that have been soiled must not be rinsed in the program and must be placed in a sealed plastic bag to be washed at home. Wash dress-up clothing each week or more often if soiled.

FURNITURE AND EQUIPMENT

To properly sanitize certain furniture and equipment, spray tables and chairs with the sanitizing solution and let the solution sit for at least 2 minutes. Wipe dry with a clean, single-use towel.

TOYS

Clean and sanitize infant and toddler mouth toys at least once a day. Clean and sanitize other toys and toys used by older children once a week, or more often if contaminated.

To properly clean and sanitize toys to prevent the spread of germs, follow these guidelines:

1. Wash and sanitize plastic toys as you would for furniture and equipment as discussed above.
2. Moist-wipe toys such as books and puzzles with a sanitizer each week.
3. Launder soft, cuddly toys at least once a week and more often, as required.
4. Store personal toys in the child's cubicle when not in use.
5. Personal toys including stuffed toys that have been soiled must be placed in a sealed plastic bag to be washed at home.

SANDBOXES, WATER PLAY AND OTHER SENSORY PLAY AREAS

Sandboxes and water areas are great places for children to play, but they also are a source for germs. To establish safe play areas, follow these guidelines:

Outdoor Sandboxes

- Cover outdoor sandboxes when they are not in use to prevent access by animals. Check that the lid fits tightly.
- Rake the sand daily and inspect for animal or human feces or urine.
- If animal or human feces is found, empty the sandbox, discard the contaminated sand, clean and disinfect the sandbox, and allow to air dry before refilling it with clean sand.
- If only urine is present, leave the sandbox open to sunlight. Children should not be allowed to use it for 24–48 hours.
- Clean and disinfect sandbox toys at least once a week.
- Replace outdoor sand every 2 years.

Indoor Sandboxes

- Cover the sand table when not in use.
- Discard any sand that has fallen on the floor.
- Throw out the contents and clean and sanitize the sand table 3 times a year or more often if contaminated.
- Clean and disinfect sand table toys at least once a week.

Water Play Tables

- Both staff and children should wash their hands before and after water play.
- The water table should be filled with fresh potable water immediately before use.
- Supervise children and ensure they do not drink the water.
- Drain, clean, and disinfect water play container after each use—at least once a day.
- Clean and disinfect toys used in water play each day.
- Children who have an infection of any kind, or who have open sores or wounds, cannot participate in water play.
- During an outbreak, water play table use should be discontinued.

Wading Pools

- The wading pool should be filled with fresh potable water immediately before use.
- Wading pools should be stored to prevent water collecting in the pool.
- The wading pool must have a depth of less than 12 inches of water.
- Supervise children and ensure they do not drink the water.
- Empty, clean and disinfect the pool after each use.
- Children in diapers cannot participate in wading pool play.
- Children who have an infection of any kind, or who have open sores or wounds, cannot participate in water play.
- During an outbreak, wading pool use should be discontinued.
- Other Sensory Play Materials
- Both staff and children should wash their hands before and after sensory play.
- Sensory play items such as rice, pasta, confetti and others must be discarded once a week or more frequently if contaminated.
- Clean and disinfect the basin when the sensory material is changed.
- During an outbreak, sensory play table use should be discontinued.

Cots and Cribs

Sleeping areas also are a potential source for spreading illnesses. To prevent spreading illnesses, follow these guidelines:

- Assign each crib, cot, or sleeping mat and appropriate linen to a specific child.
- When in use, separate cribs, cots or sleeping mats by at least 46 cm (18 in.), so that children are not able to touch each other. See [Early Learning and Child Care Regulations](#).
- Ensure each child's linen is separated during storage.
- Store sleeping mats or mattresses (including linen) that are placed directly on the floor in separate plastic bags.
- Launder all linen each week.
- Launder linen and clean and disinfect cots, cribs, crib mattresses, or sleeping mats contaminated with feces, urine, or other bodily fluids immediately and before assigning to another child.

Washrooms

Proper cleaning and sanitizing is crucial in washroom areas to avoid spreading illnesses.

To properly clean and disinfect the washroom, follow these guidelines:

- Wear gloves as a personal protection from cleaners.
- Clean and disinfect the washroom including faucets, sinks, and toilet seats at least once each day, and more often as necessary.
- Start from the highest areas and move to the lowest areas—from the ceiling down to the floors. This way, you work on the least soiled areas first and the most soiled areas last.
- Ensure adequate supplies of toilet paper, liquid soap, and paper towels in dispensers.
- Proper Procedure for Using Disposable Gloves

You should wear disposable gloves when there is the chance of infection transferring to you during care activities. This is especially important when the child has diarrhea. However, it is good practice to always use disposable gloves during diaper changing. If you wear disposable, single-use gloves remember a few very important rules. You must:

- Never use gloves as a substitute for hand washing.
- Wash your hands after wearing gloves.
- Wear gloves on both hands.
- Wear a new pair of clean gloves to perform caregiving activities for each child.
- Remove gloves and wash your hands when going from a 'dirty' to a 'clean' procedure (e.g., from changing diapers—a dirty procedure—to helping wash the child's hands—a clean procedure).

PROPER PROCEDURE FOR CHANGING DIAPERS

To establish a proper diaper changing procedure, you should:

1. Wash your hands with soap and water before each diaper change; do not use just hand sanitizer between changes.
2. Assemble all necessary supplies before starting (e.g., fresh diapers or clothes, towelettes and/or paper towels).
3. Hold the child away from your body and place the child on a clean table or change pad and remove the dirty diaper. Fold the diaper surface inward and set it aside. Never place safety pins in your mouth or within reach of the child.
4. Clean the child's skin with a moist disposable cloth or towelette, wiping the child's bottom from front to back. Remember to wash in the creases in the child's skin.
5. Diaper and dress the child.
6. When cloth diapers are used, flush formed stool down the toilet (avoid splashing).
7. Throw out disposable diapers and towelettes in the plastic-lined waste container. Place cloth diapers in a covered, lined diaper pail. **DO NOT RINSE CLOTH DIAPERS.**
8. Wash your hands.
9. Clean the change table/pad and spray a disinfection solution (1:100 household bleach) over the entire surface of the diaper change table after each use. Let the spray sit for a minimum of 2 minutes or follow the manufacturer's instructions for dilution and contact time if using another disinfectant.
10. Once the sanitizer has had contact time of 2 minutes, dry the change table surface with single-use paper towels and throw them out.
11. **WASH YOUR HANDS AGAIN THOROUGHLY.**
12. Record unusual skin conditions or bowel movements.

PROPER PROCEDURE FOR TOILETING USING A TOILET

To develop a proper toileting procedure for toddlers, you should follow these steps:

1. Remove the diaper.
2. Place the toddler on the toilet.
3. Wipe the toddler's bottom from front to back and teach the toddler to do the same. This reduces the chance of urinary tract contamination.
4. Flush the toilet or allow the toddler to flush it.
5. Diaper and help dress the toddler as necessary.
6. Help wash the toddler's hands.
7. If soiled, clean the toilet seat or toilet trainer seat and spray a disinfectant (1: 100 household bleach solution) over the entire surface of the seat. Let the spray sit for at least two minutes or follow the manufacturer's instructions for dilution and contact time if using another disinfectant.
8. Remove and throw out gloves and **wash your hands.**
9. Once the sanitizer has had contact time for two minutes, dry the toilet seat or toilet trainer seat with single-use towels and throw them out.
10. **Wash your hands thoroughly.**

11. Record unusual skin conditions or bowel movements.

PROPER PROCEDURE FOR TOILETING USING A POTTY

To develop a proper toileting procedure for toddlers, you should follow these steps:

1. Remove the diaper.
2. Place the toddler on the potty.
3. Wipe the toddler's bottom from front to back and teach the toddler to do the same. This reduces the chance of urinary tract contamination.
4. Diaper and help dress the toddler as necessary.
5. Help wash the toddler's hands.
6. Rinse the potty and flush contents down the toilet.
7. Wear gloves and use toilet paper to remove remaining stool.
8. Clean the potty and spray a disinfectant (1: 100 household bleach solution) over the potty's entire surface. Let the spray sit for at least 2 minutes or follow the manufacturer's instructions for dilution and contact time if using another disinfectant.
9. Remove and throw out gloves and **wash your hands**.
10. Once the sanitizer has contact time for 2 minutes, dry the potty with single use towels and throw them out.
11. Return the potty to storage.
12. **Wash your hands thoroughly.**
13. Record unusual skin conditions or bowel movements.

IMAGE CREDITS

The Communicable Disease Prevention and Control Division, Public Health Branch, Department of Health and Wellness [DHW]. (2013). *Proper Hand Washing Procedures Poster*. https://novascotia.ca/dhw/CDPC/documents/Guidelines_CDPC_Child_care_Setting.pdf

CHAPTER ATTRIBUTION

Adapted from Province of Nova Scotia. (2015). Guidelines for Communicable Disease Prevention and Control for Child Care Settings (pp 20-37). https://novascotia.ca/dhw/CDPC/documents/Guidelines_CDPC_Child_care_Setting.pdf

UNIT 30

Snack Ideas

SNACK IDEAS FOR INFANTS

As infants grow and develop they adjust to the textures of new foods and fewer modifications are required. When infants reach 12 months of age they should be eating most of the same foods as older children. Ongoing communication between the parent/guardian and staff/care provider about the infant's nutritional needs is important during the transition to new food.

As stated in Standard 4.5 "Unless otherwise identified on the Infant Feeding Plan, children who are six months of age or older receive daily meals and snacks that are based on the menu."

Depending on the child's stage of development you may have to adjust the textures of some food that are on your menu. It is simple to change the texture of the foods you serve. You can mash, chop, or grate it.

- **Fruit** may be served to an infant according to the child's feeding abilities. Some options for preparing fruit include: puree, chop, minced, grate, cut up, stewed or canned. Selecting soft fruit such as bananas, pears or plums can also be helpful.
- **Vegetables** that are appropriate to serve as snacks also depend on the child's feeding abilities. Some options for preparing vegetables include: cooking until soft, cut into small pieces, or grate. Ideas: sweet potatoes, peas, squash and potatoes become soft when cooked and are easy to mash.
- **Dry cereal** and **oatmeal** are all great options.
- **Bagel bits** or **toast strips** – break the bagel or toast into small sizes that are acceptable for the child's feeding abilities.
- **Wholegrain crackers** – when necessary, break into smaller pieces.
- **Bits of muffin** – don't forget that if the child is less than 12 months old, the muffin must be made without using honey as an ingredient.
- **Cheese** – cheese can be given in small cubes or shredded, depending on the child's feeding abilities.
- **Smoothies** – prepared with fresh or frozen fruit, milk, yogurt and/or silken tofu.
- **Yogurt** or **cottage cheese** – try adding fruit or fruit sauces to cottage cheese.
- **Hard boiled eggs** – chop the egg up into small pieces.
- **Fruit sauces** – 100% fruit, no added sugar or artificial sweeteners.
- **Hummus, tuna salad, tofu cubes** and **other meat alternatives** are great snack ideas

- **Avocado** slices

Note: it is important to note that honey and products containing honey are not to be served to children less than 12 months of age.

CHAPTER ATTRIBUTION

Adapted from Government of Nova Scotia. (n.d.). *Snack Ideas for Infants*. <https://www.ednet.ns.ca/earlyyears/documents/providers/EN-Snack-ideas-infants.pdf>

UNIT 31

Food and Nutrition

Learning Objectives

After reading this chapter you will:

- Be familiar with the standards for food and nutrition in regulated child care settings in Nova Scotia.
- Understand that the requirements are defined in the Government of Nova Scotia's [*Standards for Food and Nutrition in Regulated Child Care Settings*](#).

The Standards for Food and Nutrition in Regulated Child Care Settings identify the expectations for the provision of food and nutrition practices in regulated child care settings. Compliance with each of the standards is required by all child care facilities and approved family day care homes as per Regulations 25 and 26 in the Day Care Regulations.

DEFINITIONS

Agency means a person licensed to manage a family home day care program.

Care provider means a person who is approved by an agency to provide a family home day care program in the person's home.

Facility Director means a person who provides daily onsite supervision of a facility.

Family home day program means a day care program that is provided by a care provider in the care provider's home.

Food allergy means a sensitivity caused by a reaction of the body's immune system to specific proteins in a food. Food allergies are estimated to affect as many as 6% of young children and 3% to 4% of adults.*

Food and Beverage Criteria means the Food and Beverage Criteria for Regulated Child Care Settings in Nova Scotia, which are based upon Eating Well with Canada's Food Guide (Health Canada, 2007). These criteria provide specific information for choosing food and beverages, based on sodium, sugar, fibre and fat content.

Food intolerance means a food sensitivity that does not involve the individual's immune system. Unlike food allergies, or chemical sensitivities, where a small amount of food can cause a reaction, it generally takes a more

normal sized portion to produce symptoms of a food intolerance. While the symptoms of food intolerance vary and can be mistaken for those of a food allergy, food intolerances are more likely to originate in the gastrointestinal system and are usually caused by an inability to digest or absorb certain foods, or components of those foods.*

Food sensitivity means an adverse reaction to a food that other people can safely eat, and includes food allergies, food intolerances, and chemical sensitivities.

Full-day program means a day care program that is not a family home day care program and that

- (i) provides day care for children who are not attending school, and
- (ii) is operated for more than 4 consecutive hours per day or more than 30 hours per week.

Infant means a child who is younger than 18 months old.

Infant Feeding Plan means a written document for parents and staff/care providers to use in order to ensure that the infant's daily nutritional needs are met. The Infant Feeding Plan will document any plans for the introduction of new foods. The Infant Feeding Plan will have a space for parents to provide comments and observations. The Infant Feeding Plan is a key communication tool for parents/guardians and staff/care providers.

Licensee means the person in whose name a license has been issued under the Act.

Part-day program means a day care program that is not a family home day care program and that

- (i) provides day care for children who are older than 30 months and are not attending school, and
- (ii) is operated for fewer than 4 consecutive hours per day or fewer than 30 hours per week;

Potable drinking water means water that is suitable for human consumption.

Regulated child care settings means the facility or home in which full-day, part-day, school-age and family home day care programs are offered.

Special dietary considerations means food allergies, food intolerances and food restrictions that may be related to a child's ability to self feed, medical conditions and/or religious or cultural beliefs.

Standards for Food and Nutrition mean requirements that must be met in order to comply with Section 25(1) of the Day Care Regulations.

Staff means paid employees of a licensee and does not include care providers.

OBJECTIVES

These standards will accomplish the following:

- Enable licensees to comply with Regulations 25 and 27 in the Day Care Regulations.
- Support licensees, staff and care providers to develop menus for snacks and meals that will meet the nutritional needs of all children.
- Support licensees, staff and care providers to develop menus and make menu substitutions that reflect the healthy foods enjoyed by all children and staff in the facility or approved family day care home, as well as the kinds of foods that are easily accessible in the community, such as locally grown and produced products.

- Support licensees, staff and care providers in creating an environment that supports all children in developing healthy eating patterns and behaviours.
- Support licensees, staff and care providers in creating an environment that is inclusive and supportive of children with special dietary considerations.
- Support licensees, staff and care providers to develop a culture that fosters healthy development by promoting nutritious food and beverage choices that are consistent with the Food and Beverage Criteria for Regulated Child Care Settings in all program areas.
- Provide a framework for Public Health Nutritionists, Early Childhood Development Consultants, Licensing Officers, licensees, care providers, and staff to build capacity and understanding of healthy eating and healthy child development within regulated child care settings.
- Provide parents, families, food service providers, and the child care sector with a shared understanding of expectations for food and nutrition practices in regulated child care settings.

SCOPE

These standards apply to all child care settings that are regulated under the *Day Care Act and Regulations*. This includes licensed child care facilities and family day care homes that are approved by a licensed Family Home Day Care Agency.

These standards reflect local, national, and international food and nutrition policies and are grounded in health sciences and early human development evidence. These standards also reflect local insight and practices with respect to the provision of healthy foods in regulated child care settings. Each standard is preceded by a rationale that explains why the requirement is included.

It is the responsibility of the licensee to ensure that the standards are implemented in regulated child care settings. These standards must be followed in order to comply with requirements for the provision of food under the Day Care Regulations.

Standards must be followed in each of the following areas:

- Food and Beverages Served
- Clean Drinking Water
- Breastfeeding
- Adapting the Menu for Infants
- Food Safety
- Special Dietary Considerations
- Meal and Snack Routines
- Meal and Snack Time Environment
- Modelling Positive Attitudes Towards Food and Nutrition
- Fundraising with Food and Beverages
- Food is Not Used to Reinforce Desired Behaviours
- Special Functions

- Promotion and Advertising

ACCOUNTABILITY AND MONITORING

- The Departments of Education and Early Childhood Development and Health and Wellness and Public Health Services will review these standards, tools, and resources on an as-needed basis.
- The Departments of Education and Early Childhood Development and Health and Wellness will work with Public Health Nutritionists and partners in the nutrition and early childhood sectors to enhance pre-service and in-service training opportunities related to food and nutrition in early childhood and the requirements under these standards.
- Licensees will ensure that parents, staff, children (as appropriate), food service providers and community partners are informed of the standards and able to access them.
- The Department of Education and Early Childhood Development, Licensing Division, will monitor compliance with the Standards for Food and Nutrition in Regulated Child Care Settings through the licensing inspection process.

EVALUATION

The Departments of Education and Early Childhood Development and Health and Wellness and Public Health Services will work with licensees to evaluate and improve upon the effectiveness of the standards.

1.0 FOOD AND BEVERAGES SERVED

The selection of food and beverages served in regulated child care settings is based on *Eating Well with Canada's Food Guide* and complies with the Food and Beverage Criteria for Regulated Child Care Settings. *Eating Well with Canada's Food Guide* outlines recommendations for a pattern of eating that supports healthy growth and development for children who are two years of age and older.

For children between the ages of six months to two years old, new foods, tastes and textures should be introduced with the goal of having all children consume foods presented in *Eating Well with Canada's Food Guide* by the time they are two years old.

- 1.1 Foods and beverages served are consistent with the Food and Beverage Criteria for Regulated Child Care Settings. The facility director, or the person responsible for menu development, signs and dates the menu to confirm that it complies with the Food and Beverage Criteria.
- 1.2 Full fat milk (3.25% MF) is provided to children under the age of two years.
- 1.3 Menu planning is the responsibility of the facility director or care provider. The facility director may delegate this responsibility to one person, for example, a cook.
- 1.4 Menus are posted in a conspicuous area and identify substitutions that are made.
- 1.5 Menus are developed at least one week in advance of when they will be posted.
- 1.6 All menus and any substitutions made must be kept on file for one year.

Indicators for Licensing

- Menus are posted and signed to confirm that the Food and Beverage Criteria have been followed in the menu development process.
- Substitutions are recorded with a date and kept on file.

Resources to Explore

[Eating Well with Canada's Food Guide](#)

[Nutrition Labelling, Health Canada](#)

2.0 CLEAN DRINKING WATER

Water is an essential nutrient. Even mild dehydration can have negative effects on brain function, alertness and energy levels. *Eating Well with Canada's Food Guide* encourages drinking water to quench thirst.

- 2.1 Adults and children have access to potable drinking water throughout the day, including when they are engaged in outdoor play and while on off-site outings.

Indicators for Licensing

- Positive Health Inspection Report
- Water is available during outdoor play and on outings.

Resources to Explore

[Guidelines for Communicable Disease Prevention and Control for Child Care Settings](#)

[Water and Wastewater Facilities and Public Drinking Water Supplies Regulations](#) – Sections 31-35

3.0 BREASTFEEDING

Nova Scotia along with the World Health Organization, Health Canada and the Canadian Pediatric Society promote breastfeeding as the best way to feed infants for optimal growth and development. It is recommended that infants be exclusively breastfed for the first six months of life, with the introduction of complementary foods at six months and continued breastfeeding up to two years and beyond.

Nova Scotia has a Provincial Breastfeeding Policy that promotes, protects and supports breastfeeding. Providing a supportive environment in regulated child care settings is essential to promote continued breastfeeding.

- 3.1 Regulated child care settings welcome mothers to breastfeed anywhere in the facility or home. A statement to support this is included in the Parent Handbook.

- 3.2 When requested, regulated child care settings provide a comfortable space for breastfeeding mothers (e.g. a chair in a quiet space). A statement to support this is included in the Parent Handbook.
- 3.3 Breast milk is stored in the refrigerator and labeled with the contents, date and the child's name.
- 3.4 When requested, regulated child care settings work with families to develop an Infant Feeding Plan to address storage and feeding of breast milk. This may also include a plan to follow when the supply runs out and a 'transition' plan to other milks if/when necessary. The Infant Feeding Plan is available for review.

Indicators for Licensing

- Parent Handbook includes statement on breastfeeding.
- Bottles are labeled with required information.
- Infant Feeding Plans are on file when applicable.

Resources to Explore

[Infant Feeding Plan](#) Appendix C: Resources and Tools

[Office of Nutrition Policy and Promotion](#) (ONPP), Health Canada

[Provincial Breastfeeding Policy](#)

[Breastfeeding Basics](#)

[Make Breastfeeding Your Business](#): An Action Support Kit

4.0 ADAPTING THE MENU FOR INFANTS

When babies are 6 months old they will begin to learn to swallow, chew and pick up solid food. This is a time for getting used to new tastes and textures of food. Infants will explore new foods and learn to enjoy healthy foods. It is important that infants receive nutrient dense, iron containing foods at 6 months of age. This may include foods from the meat and alternative group, including beef, fish, poultry, cooked egg yolks, tofu, and well-cooked legumes.

As infants grow and develop they adjust to the textures of new foods and fewer modifications are required. When infants reach 12 months of age they should be eating most of the same foods as older children. Ongoing communication between the parent/guardian and staff/care provider about the infant's nutritional needs is important during the transition to new foods.

- 4.1 Upon enrolment, Infant Feeding Plans are created for children between the ages of birth to 17 months, at the request of the parents or when parents provide foods from home.
- 4.2 Infant Feeding Plans, when created, are used for ongoing communication between the infant's parent/guardian and the care provider or the staff, including the cook.
- 4.3 The Infant Feeding Plan is used to record and communicate the infant's progress during the transition to solid foods and indicates, when requested by the parent, how menu items are prepared to

accommodate the infant's developmental stage.

- 4.4 Staff and care providers allow infants to explore their food, feed themselves and respond to hunger and fullness cues. A statement to support this is included in the Parent Handbook.
- 4.5 Unless otherwise identified on the Infant Feeding Plan, children who are six months of age or older receive daily meals and snacks that are based on the menu. (Parents may bring food from home during their child's transition to solid food; however, this is not required and must be identified on an Infant Feeding Plan.)
- 4.6 Iron containing foods as listed in the rationale are included on the menu.
- 4.7 Honey and products containing honey are not served to children who are less than 12 months of age.

Indicators for Licensing

- When applicable, infant feeding plans are available for review.
- Parent Handbook includes a statement on 4.3 with respect to self feeding and following hunger and fullness cues.
- Bottles and foods brought from home are labeled with required information.

Resources to Explore

[Infant Feeding Plan](#) Appendix C: Resources and Tools

[Health Canada: Nutrition for Healthy Term Infants](#)

5.0 FOOD SAFETY

Children in group child care settings are at an increased risk for acquiring food borne illnesses. Some of the risk factors associated with food borne illness include poor temperature control, cross contamination and inadequate hygiene. It is essential that regulated child care settings implement sound practices for the prevention of food borne illness. Foods and beverages served in regulated child care settings must comply with applicable food safety regulations to ensure a consistent and safe food environment for children.

- 5.1. Full day child care facilities require a Food Establishment Permit or must purchase food from an establishment that has a Food Establishment Permit.
- 5.2 Regulated child care settings follow the Guidelines for Communicable Disease Prevention and Control for Child Care Settings.
- 5.3 When medical, religious, or cultural beliefs require a child to bring food from home, or when the child is in a school age program where lunch is not provided, foods must be labeled with the child's name and refrigerated if necessary.
- 5.4 Child care facilities that hold a Food Establishment Permit can only purchase or receive donations of food or beverages in accordance with the Department of Agriculture Food Safety Regulations.
- 5.5 Child care settings that do not hold a Food Establishment Permit can only purchase or receive

donations of food or beverages from an establishment permitted by the Department of Agriculture.

- 5.6 Despite Sections 5.4 and 5.5, some foods may be donated to or purchased for regulated child care settings under the following circumstances:
 - i. the food is considered to be a low risk food by the Department of Agriculture, including whole fruits and vegetables that have not been cut except for the purpose of harvesting and dry non-potentially hazardous baked goods (i.e. those that do not contain cream, custard, cream cheese, meat or any other potentially hazardous food as a filling or a topping; and
 - ii. the food brought into the program is acceptable to the licensee.
- 5.7 Foods that have been donated to or purchased for a facility must:
 - i. be labelled with the name of the source of the food;
 - ii. include a list of ingredients and any special preparation, storage or serving instructions; and
 - iii. (be in accordance with Standard 6 (special dietary considerations).
- 5.8 The Parent Handbook must include a statement on the requirements for foods that have been donated to or purchased for a facility.

Indicators for Licensing

- Food from home is labeled and stored properly.
- Guidelines for Communicable Disease Prevention and Control for Child Care Settings are observed.
- Parent Handbook includes a statement on food purchased for or donated to the facility.

Resources to Explore

[Guidelines for Communicable Disease Prevention and Control for Child Care Settings](#) – Section 10 Food

[Safety Regulations](#)

6.0 SPECIAL DIETARY CONSIDERATIONS

All children need nourishment during the day and should participate in the routine meal and snack times in the child care setting. It is recognized that some children may not be able to eat all of the foods served and may be challenged in following the regular meal and snack routines.

There could be a variety of reasons for this, including life threatening food allergies and other medical conditions that require special dietary considerations to be implemented. It is important that staff and care providers demonstrate openness and a non-judgmental approach toward children's dietary requirements to ensure that all children receive the nourishment they need in a supportive environment.

- 6.1 Special dietary considerations are identified during the enrolment process and documented on the child's file.

- 6.2 Food brought from home for a child with special dietary considerations must adhere to any policies and protocols related to special dietary considerations as per 6.3.
- 6.3 Special dietary considerations, including allergy and anaphylaxis information specific to an individual child is communicated to all staff, those who prepare and serve food, care providers, substitutes, volunteers and student interns. This information is posted in the food preparation area and any other places necessary to ensure that those people who need to know this information are able to view it.
- 6.4 Any other protocols, anaphylaxis policies and general information related to special dietary considerations are posted in a clearly visible location in the child care setting

Indicators for Licensing

- If applicable, child's enrolment information includes information on special dietary considerations.
- Foods and beverages brought from home are identified on the child's enrolment information.
- Information regarding a child's special dietary considerations is visibly posted in the appropriate locations.

7.0 MEAL AND SNACK ROUTINES

Healthy meal environments focus on positive meal and snack routines, rather than specific times to eat. While there is a need for routine in respecting children's appetite, it is important for staff and care providers to be flexible and recognize that children need to eat frequently. An understanding of children's food intake may be developed by observing and recognizing other factors that may influence their appetite and interest in food (e.g. illness, distractions, foods consumed before arriving at child care).

Maintaining an open line of communication with the child's parents is essential in understanding issues and challenges that may arise and in ensuring that children's nutritional needs are met.

- 7.1 Daily meal and snack schedules provide children, staff and care providers with enough time to prepare the eating area, serve the food, consume the food and clean-up.
- 7.2 Staff and care providers are responsive to children's cues around hunger and provide snacks and meals outside of the regular schedule as required. A statement to support this is included in the Employee Handbook and the Parent Handbook.

Indicators for Licensing

- Daily schedule posted.
- Employee Handbook and the Parent Handbook contain a statement regarding responsiveness to children's hunger cues.

8.0 MEAL AND SNACK TIME ENVIRONMENT

Infants and children are born with the ability to regulate how much food and drink they require for healthy growth and development. Staff and care providers are responsible for what and when children eat, and children are responsible for how much or even if they want to eat. Respecting children's ability to determine when they are hungry, and when they are full, will promote healthy eating behaviours that will have lasting effects.

It is important that adults sit with the children as they are important role models during meal and snack times. When children are engaged with adults during snack and meal times, and watch adults eating various types of foods, they are more likely to eat the same foods. Over time, when children participate in meal service and serve themselves, they are also more likely to take only the food they require. Meal and snack times provide excellent opportunities to foster children's self-help and social skill development.

- 8.1 Staff and care providers create a relaxing and enjoyable meal environment (e.g. plan for transitions in routine from play to meal/snack). A statement to support this is included in the Parent Handbook and the Employee Handbook.
- 8.2 For all snacks and meals, child care settings provide safe and sanitary seating and table arrangements with tables, chairs and table settings (e.g. plates, utensils, cups) that are appropriate for the children's ages and competencies.
- 8.3 Staff and care providers implement appropriate seating accommodations and provide specialized utensils, when needed, for children with special needs.
- 8.4 Children with special needs join their peers for meal and snack times.
- 8.5 Staff and care providers encourage children to respond to hunger and feelings of fullness and children are not forced to finish food that has been served. A statement to support this is included in the Employee or Care Provider Handbook and the Parent Handbook.

Indicators for Licensing

- Employee or Care Provider Handbook and Parent Handbook includes statements on the meal and snack environment and following children's hunger cues.
- Observed mealtimes are appropriately managed by staff/care provider.

Resources to Explore

[Loving Care: 6-12 months and 1 – 3 years](#) – Food Section

9.0 MODELLING POSITIVE ATTITUDES TOWARDS FOOD AND NUTRITION

The types of foods that children choose and the attitudes that they develop towards food and nutrition, are influenced by their peers and the adults in their lives.

When adults consistently model healthy eating practices and positive attitudes towards food and nutrition, they directly influence and encourage children to develop positive ideas and attitudes about food and nutrition.

Staff and care providers are important role models in regulated child care settings and can influence children's attitudes toward food and nutrition through their own behaviours and actions with food.

- 9.1 When working directly with children, staff and care providers model healthy eating practices that are consistent with these standards. A statement to support this is included in the Employee Handbook and the Care Provider Handbook.

Indicators for Licensing

- Observed mealtimes are appropriately managed by staff/care provider.
- Employee Handbook or Care Provider Handbook includes a statement regarding the expectations for staff/care providers during meal and snack times.

Resources to Explore

[Loving Care: Parents and Families](#) – Section on Eating for Wellness

10.0 FUNDRAISING WITH FOOD AND BEVERAGES

Regulated child care settings often fundraise to purchase materials and equipment that will enhance the programs they offer. Fundraising with healthy food and beverages, or non-food items, provides an opportunity for licensees, staff and care providers to promote positive nutrition messages that reflect these standards.

This will help to ensure that the messages that children receive around health and nutrition in child care are consistent with the messages they hear at home and in the broader community.

- 10.1 When fundraising occurs in facilities during operating hours, the items are non-food items, or food and beverages that comply with the Food and Beverage Criteria.

Indicators for Licensing

Fundraising during operating hours complies with expectations set out in the Food and Beverage Criteria.

Resources to Explore

[Manual for Food and Nutrition in Regulated Child Care Settings](#)

[Fundraising with Healthy Food and Beverages](#)

11.0 FOOD IS NOT USED TO REINFORCE DESIRED BEHAVIOURS

Children are served best when they are supported to develop competence, self awareness, and a sense of self-worth in their child care setting. Ensuring that there are many opportunities for children to develop trusting and genuine relationships with the adults and peers in their child care setting will contribute to this. Children display positive behaviours and meaningful activities when the environment reflects their interests, is child-centered and play-based.

When children are respected for who they are and are supported by caring adults and peers to resolve difficult situations, external motivators, such as food, are not required. Using food as a motivator teaches children that food is associated with an action and not with hunger. It can teach children to prefer some foods over others and

can alter children's natural ability to respond to internal cues that allow them to know when they are hungry and when they are full.

- 11.1 The licensee's Behaviour Guidance Policy states that:
 - (i) Staff, volunteers and care providers do not offer food to reinforce positive behaviours.
 - (ii) Staff, volunteers and care providers do not withhold food as a consequence for inappropriate behaviours.
 - (iii) Food is not used as a reward for completing a task or finishing a meal (e.g. dessert will not be withheld if the child does not finish the main meal).
- 11.2 When a child's team (which may include staff, external professionals and the child's parents/guardians) has determined that food is the most appropriate and natural way to reinforce desired behaviours and support the child's development, then a routine-based plan (RBP) must be developed for the child. The RBP must include a plan for replacing and/or reducing the use of food as a motivator.

Indicators for Licensing

- Behaviour Guidance Policy includes the required statements.
- Routine Based Program Plans include the above if appropriate.

12.0 SPECIAL FUNCTIONS

Special occasions and celebrations create opportunities for children and adults in a child care setting to build relationships and get to know each other. Food is often a symbol of community and kinship during special occasions and celebrations.

- 12.1 Any policies and protocols related to special dietary considerations, in accordance with Section 6, are followed.
- 12.2 Foods and beverages served at special functions during regular operating hours (e.g. Valentine's Day, Halloween, and birthday celebrations) are identified on the menu in advance of the celebration and comply with the Food and Beverage Criteria.

Indicators for Licensing

- Menus are posted and appropriately signed indicating the Food and Beverage Nutrient Criteria have been met.

13.0 Promotion and Advertising

Marketing to children has a strong influence on the food that children choose. The Internet, television, games, toys, and character placement on food products, clothing, utensils and placemats make it easy for food companies to market their products to children. This allows companies to create brand loyalty that will last into adulthood. Food and beverages that are marketed to children are often of poor nutritional quality and negatively impact on children's food preferences.

Regulated child care settings have a responsibility to nurture healthy childhood growth and development, which includes creating an early learning environment that fosters healthy food preferences.

- 13.1 Promotional materials that are intended to advertise specific brands or characters are not used to serve meals and snacks.

Indicators for Licensing

- Promotional materials are not used to serve meals and snacks.

SECTION B: GUIDELINES FOR FOOD AND NUTRITION IN REGULATED CHILD CARE SETTINGS GOVERNMENT OF NOVA SCOTIA

Guidelines are based on evidence and best practices. Guidelines are not mandatory but provide suggestions for recommended courses of action in regulated child care settings.

1.0 Family Involvement and Communication

It is important for families and regulated child care settings to work together to ensure that young children eat well and develop positive attitudes towards healthy foods and nutrition. For these Standards for Food and Nutrition in Regulated Child Care Settings to be successful, it is important that families and child care work together to understand and implement them.

- 1.1 Regulated child care settings welcome families to participate in snacks and meals when possible.
- 1.2 Regulated child care settings provide families with recipes when requested.
- 1.3 Regulated child care settings invite families to participate in educational opportunities to learn about the Standards for Food and Nutrition in Regulated Child Care Settings and the importance of healthy attitudes towards eating and nutrition in early childhood (e.g. parent-teacher nights).
- 1.4 Staff and care providers create opportunities for families to share ideas and information on inclusive healthy food and nutrition practices, religious practices and cultural beliefs.
- 1.5 Regulated child care settings recognize the strengths and resources that families can offer in enabling the setting to comply with the Standards for Food and Nutrition.

2.0 Creating Opportunities for Children to Learn About Nutrition

Children learn about food and nutrition through natural play experiences that emerge during the daily routine. Through observation and by listening to children, staff and care providers can build upon children's knowledge of and interest in healthy foods and nutrition. Through play and meaningful activities, children can explore and investigate their ideas about health and nutrition, building upon their interest in and understanding of the importance of healthy eating and the wide variety of foods that may be found locally and around the world.

- 2.1 When opportunities occur naturally ("teachable moments") to share food and nutrition information with children, staff and care providers foster children's understanding of healthy eating and food choices.
- 2.2 Staff and care providers build upon and expand children's natural interest in food and nutrition

concepts beyond meal and snack times (e.g. preparing food with the children, planting a garden, composting, exploring new foods).

- 2.3 Children learn about breastfeeding as the natural and healthiest way to feed a baby.
- 2.4 Staff and care providers create an environment that encourages learning, understanding and respect for diversity. Children have opportunities to learn about food and eating practices in many cultures.
- 2.5 Staff and care providers model and promote respectful practices toward food to ensure minimal food waste. Non-food items are used for art activities, sensory play and games.

3.0 Nova Scotia Produce and Products

Nova Scotia produces an abundance of produce and food products. Buying food that is grown and produced within the province supports Nova Scotia agriculture and business and means that more money remains in the community. Locally grown, fresh food is often more nutritious if it is used shortly after harvest.

- 3.1 When possible, regulated child care settings serve local, seasonal food and beverages that are harvested, produced, or manufactured in Nova Scotia and Atlantic Canada.

4.0 FOOD PACKAGING AND ENVIRONMENTAL

As future leaders and stewards of the earth, it is important for young children to learn about the importance of leading an environmentally friendly lifestyle. This encompasses an understanding of the value in composting and reducing waste. Nova Scotia is noted for its commitment to composting and recycling. Many communities and families teach their children the value of reducing, reusing and recycling. It is important to ensure that children receive consistent messages with respect to the environment in both home and child care settings.

- 4.1 Licensees encourage staff and care providers to find ways to reduce consumer and food waste.
- 4.2 Licensees encourage and support staff and care providers to use energy-saving practices (e.g. energy saving equipment such as fridges and stoves that meet the Energy Star standard).
- 4.3 When possible, licensees ensure that staff and care providers use food-safe bulk containers rather than individual containers (e.g. pitchers/cartons of milk will be used rather than individual containers).
- 4.4 When possible, licensees ensure that staff and care providers use reusable dishes and cutlery. When this is not possible, child care facilities and family day care homes ensure that dishes can be recycled or composted.
- 4.5 Licensees strive to minimize food waste in regulated child care settings through appropriate menu planning and food preparation.

5.0 FOOD FOR STAFF AND CARE PROVIDERS

Staff and care providers may bring food for their own consumption into the child care setting. It is important to recognize that children view adults as role models and often want to copy adult behaviour. Children will want to eat the same kinds of foods as they see the adults in their lives eating.

- 5.1 Regulated child care settings develop a clear policy for staff and care providers regarding foods brought into the setting. The policy must be consistent with all food related policies and protocols that are in place.

- 5.2 When eating with children, staff and care providers choose the same foods as the children unless they have special dietary considerations that prevent them from doing so.

SECTION C: FOOD AND BEVERAGE CRITERIA IN REGULATED CHILD CARE SETTINGS

In accordance with Section 1 of the Standards for Food and Nutrition, the Food and Beverage Criteria must be followed when creating a menu. The criteria will guide you in creating a menu that will meet requirements set out in both the Day Care Regulations and the Standards. One of these requirements is to ensure the foods served in regulated child care settings follow Eating Well with Canada's Food Guide. The pattern of healthy eating outlined in the Food Guide will contribute to the optimal growth and development of the children.

The Food and Beverage Criteria were developed based on international and national recommendations and guidelines from the Institute of Medicine (Dietary Reference Intakes), Health Canada, Canadian Pediatric Society, Heart and Stroke Foundation and Dietitians of Canada, in addition to similar policies and guidelines in other provinces, territories and jurisdictions.

Total fat, saturated and trans fat, sodium and sugar are the focus of these criteria as they influence health outcomes such as obesity, diet-related cancers, diabetes, high blood pressure and dental problems. Foods that are high in total fat, saturated and trans fat, sodium and sugar can take the place of healthier foods and as a result won't give toddlers and preschoolers the nourishment they need to grow and develop.

Research has shown that when children are exposed to and consume fatty, salty and sweet foods, they may prefer them over healthier foods. For these reasons, the Food and Beverage Criteria will guide the selection and preparation of foods that are low in total fat, saturated fat, sodium and sugar. A more thorough explanation regarding the specific nutrients of concern is provided in Appendix A.

HOW TO USE THE FOOD AND BEVERAGE CRITERIA

These food and beverage criteria are based on *Eating Well with Canada's Food Guide*. The Food and Beverage Criteria include the **Foods to Serve**, **Nutrient Criteria** tables, **Food Preparation Tips** and **Foods Not to Serve**.

- Review the current menu to ensure that the foods served meet the Food and Beverage Criteria. Or, photocopy and use the Menu Template in the Resources and Tools section to create a new menu. A new menu can be created each week or a series of menus can be created and rotated. Offer a variety of foods from the four food groups on all days of the week. Once the menu is completed, sign and date it to confirm that it meets the Food and Beverage Criteria. See example on page C5.
- Use the Foods to Serve lists to help choose foods for the menu as well as for ideas on how to prepare these foods in a healthy way. If a food is on the Foods to Serve list, it can be included on the menu and it is not necessary to look at the Nutrient Criteria for these foods.
- Use the Nutrient Criteria to determine if foods that are not on the Foods to Serve list can be included on the menu.
- Use the Nutrient Criteria to identify which packaged foods can be included on the menu. While packaged foods are convenient, they are often high in fat, salt and/or sugar or contain sugar substitutes, and are low in nutritional value. If the packaged food does not fit the criteria, it should not be included on the menu.

Menu for Week 1 of 4

	Monday	Tuesday	Wednesday	Thursday	Friday
Morning Snack					
Snack description (At least 2 food groups, one of which is vegetable or fruit)	<i>Fruit smoothie</i>	<i>Hummus dip & vegetables</i>	<i>Yogurt topped with bran cereal</i>	<i>Fruit salad & crackers</i>	<i>Peaches & toast</i>
	Strawberry & banana Milk	Carrot sticks & cucumber slices Hummus Water to drink	100% orange juice to drink Bran flakes cereal Yogurt	Apples, pears, plums (sliced) Whole wheat crackers Water to drink	Peaches Whole wheat toast Water to drink
Lunch					
Lunch description (All 4 food groups are included)	<i>Vegetarian chili with whole grain rolls</i>	<i>Cauliflower 'n' cheddar soup & tuna or egg sandwich</i>	<i>Chuckwagon taco pie with milk</i>	<i>Homemade fish cakes with rice & vegetables</i>	<i>Deluxe pizza & tossed salad</i>
Vegetables & fruit	Tomato sauce, tomatoes, corn, onion, green pepper, carrot, mushrooms	Soup: Cauliflower Sandwich: Diced celery, green leaf lettuce	Tomato paste, red and green pepper, kernel corn, onion Celery & potato	Celery & potato Carrots and peas	Pizza: tomato sauce, mushrooms, spinach, pineapple Salad: lettuce, tomato, cucumber
Grain products	Whole grain rolls	Whole wheat bread	Whole wheat tortillas	Brown rice Whole grain bread crumbs	Whole wheat pita bread
Milk & alternatives	Milk to drink	Cheese Milk to drink	Cheese Milk to drink	Milk to drink	Cheese Milk to drink
Meat & alternatives	Beans and lentils	Canned light tuna and egg	Ground beef, black beans	White fish (haddock/cod)	Diced chicken
Others*		Mayonnaise			
Afternoon Snack					
Snack Description	<i>Spanakopita triangles & milk</i>	<i>Hearty blueberry muffins, seasonal fruit and milk</i>	<i>Banana & nut butter with milk</i>	<i>Pita & blueberry salsa</i>	<i>Broccoli & dip</i>
(At least 2 food groups, one of which is vegetable or fruit)	Spinach Whole wheat tortillas Water to drink	Blueberries Hearty blueberry muffin Water to drink	Banana slices Nut butter Milk to drink	Blueberry salsa Baked whole wheat pita chips Water to drink	Broccoli Yogurt dip Milk to drink

*Others include condiments, sauces, spreads and toppings

I have followed the Food and Beverage Criteria to ensure this menu meets the Standards for Food and Nutrition.

Signature: _____ Date: _____

Sample menu.

MENU CHECKLIST

The **Menu Checklist** can be used as a starting point to create a menu, and as a final check once the menu is completed to ensure all the criteria have been met.

Recipes

- Individual ingredients in the recipe fit within the Foods to Serve lists or the Nutrient Criteria tables.
- Items on the Foods Not to Serve lists are not included in recipes.
- Use the list of Healthy Substitutions (Appendix B) to reduce or eliminate fat, salt and sugar in recipes.

Balance and Variety

- At least one serving* from each of the four food groups is served at meal time.
- At least two of the four food groups are included at every snack.
- Meal and snack items within the same day and from day to day include variety in terms of:
 - colour (e.g. neutrals, oranges, greens, reds) flavour (e.g. strong or mild; sweet or sour)
 - texture (e.g. crisp or soft)
 - shape (e.g. natural, round, cubes, sticks)
 - temperature (e.g. cold or hot)

*Refer to Appendix A for more information on Food Guide Servings and portion sizes.

Vegetables and Fruit

- All snacks include at least one serving from the Vegetables and Fruit Food Group
- In full day child care settings, at least one dark green vegetable or one orange vegetable or fruit is served each day (see Foods to Serve lists for examples).
- 100% juice is served no more than two times a week (½ cup per serving).
- A variety of vegetables and fruit are served each day.

Grain Products

- In full day child care settings, a minimum of half the grain products served each day are whole grain.

Milk and Alternatives

- Children under two years of age are served whole/homogenized (3.25%) milk.
- In full day child care settings, one cup of fluid milk should be offered to each child every day. This could be divided into two ½ cup (125 mL or 4 oz) servings a day for children to ensure they will eat the foods at the meals and snacks as well.

Meat and Alternatives

In full day child care settings:

- Meat alternatives are served at least once a week (e.g. dried beans, lentils, tofu).
- Fish is served at least once a week.
- A variety of meats and alternatives are served throughout the week (e.g. poultry, eggs, beef, pork, fish, beans, peas, lentils, tofu).

Other

- Plain water is available throughout the day as well as during snacks and lunch.
- Condiments (e.g. salsa, cream cheese, parmesan cheese, sour cream, jam, ketchup, chutney, croutons, unsweetened cocoa powder, feta, brie, and blue cheese) are used sparingly as minor ingredients (e.g. 1 teaspoon (5 mL) to 1 tablespoon (15 mL) per serving).
- Packaged foods on your menu fit within the Foods to Serve lists or Nutrient Criteria.
- Foods from the Foods Not to Serve lists are not included on the menu.
- The quantity of foods from each food group included in a mixed dish is sufficient to count as a serving* for every child. (If you serve chicken noodle casserole for lunch, there needs to be enough chicken to count as a serving from the Meat and Alternatives food group for each child).

VEGETABLES AND FRUIT

- All snacks include at least one serving from the Vegetables and Fruit Food Group.
- In full day child care settings, at least one dark green vegetable or one orange vegetable or fruit is served each day (see Foods to Serve lists for examples).
- 100% juice is served no more than two times a week (½ cup per serving).
- A variety of vegetables and fruit are served each day.

If a product is packaged, it must fit within the Foods to Serve list or the Nutrient Criteria.

Foods to Serve

- Fresh vegetables
- Frozen vegetables (no added sodium or fat)
- Canned tomatoes, whole, diced or crushed (look for no added sodium or low sodium)
- Canned vegetables (rinsed and drained)
- Fresh fruit
- Frozen fruit (100% fruit, no added sugar)
- Canned fruit (packed in juice or light syrup)
- Dark green vegetables include:
 - asparagus, green beans, bok choy/Chinese cabbage, broccoli, Brussels sprouts, edamame, fiddle heads, endive, kale/collards, leeks, lettuce (romaine), mesclun mix, mustard greens, okra, peas, green pepper, seaweed, snow peas, spinach, zucchini
- Orange vegetables and fruit include:
 - carrots, pumpkin, squash, sweet potato, yam, apricot, cantaloupe, mango, nectarine, papaya, peach
- Apple sauce and other fruit sauces (100% fruit, no added sugar or sugar substitutes)
- Dried fruit and vegetables without added sugars, sugar substitutes or fat

Packaged foods can be high in sodium, fat and/or sugar. Some packaged foods can be served if they fit within the criteria below.

Nutrient Criteria: Vegetables and Fruit (per Food Guide Serving)					
Food	Serving size	Sodium	Fat	Sugar	Examples
Prepared vegetables, frozen	½ cup 110 g or 125 mL	≤ 360 mg	≤ 3 g total fat, 2 g or less of saturated and trans fat combined	no added sugar	Frozen vegetables such as french fries, vegetables with sauce
100% vegetable and fruit juices/ blends or 100% frozen unsweetened juice bars	½ cup	≤ 240 mg	N/A	no added sugar	Vegetable juices such as carrot, tomato, vegetable blends
					Fruit juices such as orange, pineapple, apple, etc
					Frozen bars made with 100% real juice

Note: ≤ this symbol means less than or equal to.

FOOD PREPARATION TIPS

- Prepare vegetables and fruit with little or no added fat, sugar or salt.
- Enjoy vegetables steamed, roasted or stir-fried.
- Leave the skin on new carrots and potatoes as a way to keep the fibre.
- Add vegetables like cucumber, peppers, mushrooms, and celery to sandwich fillings.
- Use orange vegetables such as carrots, squash or yams to make soup.
- Add vegetables to your pizza, like peppers, mushrooms, pineapple, onions, broccoli and tomatoes.
- Drain and rinse canned vegetables in cold water for 30 seconds to reduce the sodium content.
- Choose spices, herbs and reduced sodium broth, instead of regular broth and salt when making soups.
- Choose reduced sodium sauces (e.g. soy sauce, hoisin sauce).
- Use spices and herbs to season vegetables instead of fat or salt.
- Rinse and drain fruit canned in syrup to reduce sugar content.
- Chop or dice dried fruits into small pieces to reduce choking risk.

FOODS NOT TO SERVE

These foods should not be included on the menu:

- Fruit-based drinks that contain less than 100% fruit juice. (e.g. fruit drinks, fruit punch, fruit beverages, fruit-flavoured drinks, lemonade)
- Battered vegetables (e.g. battered zucchini)
- Sweetened gelatin/jellied desserts
- Pickles

- Dried vegetables or fruit with added sugar and/or sugar substitutes

GRAIN PRODUCTS

- In full day child care settings, a minimum of half the grain products served each day are whole grain. Grain products are considered whole grain if:
 - the ingredient list of prepackaged grains includes whole grains as the first ingredients listed OR
 - your recipe includes whole grains (e.g. whole grain flour, oats, cornmeal, cracked wheat, quinoa)

If a product is packaged, it must fit within the **Foods to Serve** list or **Nutrient Criteria**.

Foods to Serve

Oats, corn, rice, wheat berries, flax seeds, wheat germ, rye, light rye, stone ground whole wheat, kamut, amaranth, quinoa, pumpernickel, barley, cracked wheat, bulgur, sprouted grain, flax, wheat germ

- Whole grains
- Rice (no added salt)
- Couscous

Packaged foods can be high in sodium, fat and/or sugar. Some packaged foods can be served if they fit within the criteria below.

Nutrient Criteria: Grain Products (per Food Guide Serving)						
Food	Serving size	Sodium	Fat	Sugar	Fibre	Examples
Bread products	1 slice bread (35 g), ½ bagel (45 g), ½ pita or tortilla (45 g)	≤ 240 mg	≤ 2 g saturated & trans fats combined	≤ 8 g	≥ 1.6 g	Breads, buns, rolls, bagels, tortillas, chapatti, roti, naan, bannock, pita, buns, english muffins, tortillas
Ready-to-eat cold and hot cereals	cold cereal, ¾ cup – 1 cup (175-250 mL) or prepared hot cereal ¾ cup (175 mL)	≤ 350 mg	≤ 2 g saturated & trans fats combined	≤ 11 g	≥ 2 g	Wheat squares, oat, O's, oatmeal
Crackers	30 g	≤ 360 mg	≤ 2 g saturated & trans fats combined	≤ 2 g	≥ 1.6 g	Whole wheat or whole grain crackers
Rice crackers, rice cakes	30 g	≤ 280 mg	≤ 2 g saturated & trans fats combined	N/A	N/A	Plain rice cakes, plain rice crackers
Pasta (fresh or dried, no condiments or filling)	85 g dry serving*	≤ 140 mg	≤ 2 g saturated & trans fats combined	N/A	≥ 3 g	Whole wheat pasta including macaroni, spaghetti, lasagna, penne, pasta side dish
Baked goods (fresh or frozen, no sweetened fillings)	35 g	≤ 250 mg	≤ 2 g saturated & trans fats combined	≤ 50% carbohydrate from sugar	≥ 2 g	Fruit or vegetable based muffins, scones or loaves, granola bars
Pancakes and Waffles	35 g	≤ 115 mg	≤ 2 g saturated & trans fats combined	≤ 5 g	≥ 1 g	Frozen pancakes or waffles

Note: ≤ this symbol means less than or equal to; ≥ this symbol means greater than or equal to.

*This is a packaged serving size, not a Food Guide serving

Food Preparation Tips

- Add brown or wild rice to soups, salads and casseroles.
- Prepare baked goods with whole grains (e.g. whole wheat flour, rolled oats).
- When baking, use vegetable oils such as canola, olive and soybean.
- Choose soft margarines that are low in saturated and trans fats (e.g. non-hydrogenated margarine).
- Prepare muffins with bran and fruits.
- Use whole wheat pasta in macaroni and cheese and other casseroles.
- Use whole wheat pizza crusts and tortilla wraps.
- Prepare grain products with little or no added fat, sugar and salt (See Healthy Substitutions, Appendix B).

Foods Not to Serve

These foods should not be included on the menu:

- Baked goods and other grain products with sugar substitutes
- Foods containing honey to those 12 months and younger
- Hard taco shells
- Pastries and doughnuts

MILK AND ALTERNATIVES

- Children under 2 years of age are served whole/homogenized (3.25%) milk.
In full day child care settings, one cup of fluid milk should be offered to each child every day.
- This could be divided into two 1/2 cup (125 mL or 4 oz) servings a day for children to ensure they will eat the foods at the meals and snacks as well.

Foods to Serve

- Milk (including fluid, powdered and canned evaporated milk)
- Plain fortified soy beverage (children 2 years of age and older)
- Ricotta cheese (plain)
- Cottage cheese (plain)

Packaged foods can be high in sodium, fat and/or sugar. Some packaged foods can be served if they fit within the criteria below.

Nutrient Criteria: Milk and Alternatives (per Food Guide Serving)				
Food	Serving Size	Sodium	Sugar	Examples
Yogurt or kefir	¾ cup/175 g	≤ 140 mg	≤ 30 g	Plain or fruit flavored yogurt
Yogurt beverage	200 mL	≤ 140 mg	≤ 30 g	Flavored yogurt beverage
Cheese*	1 ½ oz (50 g)	≤ 480 mg	N/A	Cheddar, mozzarella, Swiss, brick
Ricotta cheese	55 g*	≤ 240 mg	No added sugar	Plain ricotta cheese
Puddings and custards	½ cup (125 mL)	≤ 450 mg	≤ 30 g	Ready-to-eat or prepared from mix
Flavoured milk or soy beverage	1 cup/250 mL	≤ 200 mg	≤ 28 g	Chocolate milk, vanilla or chocolate soy beverage

Note: ≤ this symbol means less than or equal to.

*This is a package serving size and not a Food Guide Serving.

Food Preparation Tips

- Add milk and/or yogurt to smoothies.
- Use yogurt as a base when making dips.
- Use milk or yogurt in baked goods.

- Serve milk-based soups and chowders.
- Use yogurt as a dip for fruit.
- Shred cheese such as mozzarella and include in sandwiches, salads and wraps, and on baked potatoes.
- Choose reduced sodium cottage cheese and ricotta.
- Freeze yogurt smoothies for a cool snack.

Foods not to Serve

These foods should not be included on the menu:

- Low fat or non-fat milk to children younger than 2 years of age.
- Yogurt containing sugar substitutes.
- Ice cream and frozen desserts.
- Processed cheese spreads and slices.

MEATS AND ALTERNATIVES

In full day child care settings:

- Meat alternatives are served at least once a week (e.g. beans, lentils, tofu).
- Fish is served at least once a week.
- A variety of meats and alternatives are served throughout the week (e.g. poultry, eggs, beef, pork, fish, beans, peas, lentils, tofu).

Foods to Serve

- All dried, frozen and canned (rinsed and drained) legumes (e.g. beans, peas, lentils, chickpeas)
- Fresh fish
 - (e.g. capelin, char, haddock, hake, herring, Atlantic mackerel, mullet, salmon, smelt, rainbow trout, lake whitefish, blue crab, shrimp, clam, mussels, tongol)
- Canned fish (e.g. canned light tuna made from skipjack or yellowfin)
- Nut and seed butters (e.g. peanut butter, almond butter)
- Nuts and seeds (not served to children under 4 years old)
- Eggs
- Fresh lean meats (e.g. beef, venison, bison, pork, lamb)
- Fresh poultry (e.g. chicken, turkey, duck) (skin removed)
- Hummus and bean dips

Packaged foods can be high in sodium, fat and/or sugar. Some packaged foods can be served if they fit within the criteria below.

Nutrient Criteria: Meats and Alternatives (per Food Guide Serving)				
Food	Serving Size	Sodium	Fat	Examples
Poultry (frozen, plain, seasoned, coated)	2 ½ oz (75 g or 125 mL)	≤ 216 mg	≤ 12.75 g total fat	Fresh, frozen, plain, unseasoned poultry, with or without skin
Fish, seafood or shellfish (frozen, plain, seasoned, coated)	2 ½ oz (75 g or 125 mL)	≤ 216 mg	≤ 3.5 g saturated and trans fat combined	Fresh or frozen haddock, salmon, herring, halibut, trout, shrimp, mackerel, canned light tuna
Beef, pork, lamb (frozen, seasoned, etc)	2 ½ oz (75 g or 125 mL)	≤ 216 mg	≤ 12.75 g total fat, ≤ 4.5 g saturated fat	Fresh or frozen meat
Processed meats	2 ½ oz (75 g or 125 mL)	≤ 490 mg	≤ 7.5 g total fat, saturated and trans fat 5% or less of total fat	Luncheon meats, sliced turkey, chicken, ham, roast beef, canned meat
Liquid eggs	¼ cup (61 g)	≤ 115 mg	≤ 3.7 g	Liquid egg
Legumes (prepared)	¾ cup (175 mL)	≤ 500 mg	N/A	Baked beans, bean salads
Vegetarian, products (soy, tofu, etc)	2 ½ oz (75 g or 125 mL)	≤ 450 mg	≤ 7.5 g total fat, ≤ 2 g saturated and trans fat combined	Veggie ground beef, veggie burgers, tofu

Note: ≤ this symbol means less than or equal to.

Food Preparation Tips

- Bake, broil, boil, poach or roast meat, poultry, and fish.
- Drain excess fat from cooked meat or poultry.
- Drain and rinse canned legumes in cold water for 30 seconds to reduce the sodium content.
- Prepare lean meat and alternatives with little or no added fat or salt.
- When buying whole chicken or chicken pieces, remove the skin before cooking.
- Use whole wheat bread crumbs or crushed whole grain cereal when making bread coatings.
- Serve hummus and pita wedges as a snack.
- Offer hard-boiled eggs or egg salad as a snack.
- Include tofu and/or legumes (e.g. chick peas) in stir fries.
- Serve lentil or split pea soups.
- Add dried beans and peas to soups, stews, and salads and chili.

Foods not to Serve

These foods should not be included on the menu:

- Hot dogs, bologna, salami, pepperoni, bacon and sausages
- Nuts and seeds to children under the age of four years*.
- Fish with bones*

- High mercury fish:
 - Limit fresh/frozen tuna, shark, swordfish, marlin, orange roughy and escolar to 75 g or one Food Guide serving a month.
 - Limit canned albacore (white) tuna** to 75 grams or one Food Guide serving a week.

* Choking hazard

**Does not apply to canned light tuna.

MIXED DISHES AND OTHER FOODS

Mixed dishes (e.g. casseroles, stews, lasagna) have ingredients from at least two of the four food groups. When a mixed dish is packaged, it must fit within the **Foods to Serve** list or **Nutrient Criteria**.

If lasagna is served, it needs to fit within the **Nutrient Criteria** and also include enough vegetable and/or meat to count as a serving for each child. It may also be used as a serving of grain if there is a sufficient quantity of pasta for each child.

If chicken noodle casserole is served for lunch, there needs to be enough chicken to count as a serving from the Meat and Alternatives food group for each child. A vegetarian pizza would have to have enough vegetables to count as at least one vegetable serving.

Foods to Serve

- Homemade pizza, casseroles, lasagna, chowders and soups, etc.

Packaged foods can be high in sodium, fat and/or sugar. Some packaged foods can be served if they fit within the criteria below.

Nutrient Criteria: Pre-packaged Mixed Dishes (per Food Guide Serving)				
Food	Serving Size	Sodium	Fat	Examples
Dinners/mixed entrées	1 cup (250 mL)	≤ 720 mg	≤ 2 g saturated fat trans fat, ≤ 5% of total fat	Prepared stews, chili, dahls, casseroles, lasagna, Shepherd's pie, etc
Pizza	1 slice (140 g)	≤ 480 mg	≤ 10 g trans fat, ≤ 5% of total fat	Prepared pizza (frozen or fresh)
Soups and chowders	1 cup (250 mL)	≤ 480 mg	≤ 2 g saturated fat, Trans fat ≤ 5% of total fat	Corn or seafood chowder, broth or cream based soups
Sauces	¾ cup (175 mL)	≤ 750 mg	≤ 3 g saturated fat, trans fat ≤ 5% of total fat	Meat, vegetarian, tomato or cream sauces

Note: ≤ this symbol means less than or equal to.

OTHER

Oils and fats

- Use vegetable oils such as canola, olive and soybean. This includes oils and fats used for cooking, salad dressings, and for spreads.

- Choose soft margarines that are low in saturated fat and trans fat. Avoid butter, hard margarine, lard, shortening and gravy.

Condiments

- Condiments (e.g. salsa, cream cheese, parmesan cheese, bread crumbs, sour cream, jam, ketchup, chutney, croutons, unsweetened cocoa powder, feta, brie, and blue cheese) are used in small amounts to enhance flavours and do not fit within the *Food Guide as a Food Guide Serving*. As such, small amounts are defined as 1 tsp (5 mL) to 1 tbsp (15 mL).

Recipes

- When cooking or baking, there are a few things to look for in order to decide if a recipe fits the criteria. If the following are met, then your recipe fits and can be included on the menu:
 - Individual ingredients* in the recipe fit within the **Foods to Serve** lists or the **Nutrient Criteria**.
 - Items on the **Foods Not to Serve** lists are not included in recipes.
 - Use the list of Healthy Substitutions (Appendix B) to reduce or eliminate fat, salt and sugar in recipes.

*Flours, sugar, buttermilk, spices, leavening agents (baking soda and baking powder), etc are not listed on the Foods to Serve lists as they are not typically consumed on their own, but are allowed in recipes as ingredients.

Foods Not to Serve

The following foods will not be included on the regular daily menu as ingredients or as foods served. These foods are typically high in fat, sodium and/or sugar, may contain sugar substitutes and are low in nutritional value.

- Fruit-based drinks that contain less than 100% fruit juice. (e.g. fruit drinks, fruit punch, fruit beverages, fruit-flavoured drinks, lemonade)
- Battered and fried vegetables (e.g. battered zucchini)
- Sweetened gelatin (jellied desserts)
- Pickles
- Dried vegetables or fruit with added sugar and/or sugar substitutes
- Hard taco shells
- Pastries and doughnuts
- Ice cream and frozen desserts (e.g. freezies and popsicles)
- Processed cheese spreads and slices
- Low fat or nonfat milk to children younger than 2 years of age
- Hot dogs, bologna, salami, pepperoni, bacon and sausages
- Foods or beverages containing sugar substitutes (e.g. yogurt, baked goods)
- Candy and chocolate, including chocolate spreads

- Marshmallows
- Snack foods (e.g. potato chips, tortilla chips, cheese puffs, pretzels)
- Pop, diet pop
- Sport and energy drinks
- Water with added flavourings, sweeteners, vitamins, minerals, etc.
- Beverages with caffeine or alcohol should never be served to children

Food Safety

The following foods pose a risk and will not be included on the menu:

- Honey is not safe for infants under 12 months, due to the risk of infant botulism. Do not give infants honey, or any kind of food made with honey, for the first year. This includes baked and cooked items that contain honey.
- Unpasteurized food and beverages
- Homemade canned goods
- High mercury fish:
 - Limit fresh/frozen tuna, shark, swordfish, marlin, orange roughy and escolar to 75 g or one Food Guide serving a month.
 - Limit canned albacore (white) tuna* to 75 grams or one Food Guide serving a week.
*Does not apply to canned light tuna.

CHOKING HAZARDS

The following foods are potential choking hazards for children younger than 4 years of age:

- Nuts, popcorn
- Hard candy, cough drops, gum
- Whole grapes, raisins
- Carrots cut into rounds
- Hot dog
- Fish with bones
- Snacks with toothpicks or skewers
- Marshmallows

Some of these foods can be served in a way that makes them safer for young children to eat, for example:

Foods that can cause choking	Suggestions to make these foods safer
Sticky spreads like peanut butter, tahini and almond butter	Spread them thinly on bread or crackers, do not give spoonful of these foods
Hard foods like some raw vegetables and fruit	Cook hard foods to soften them, grate them into small pieces
Round, smooth foods like grapes and cherries	Cut each one into four small sections, remove seeds or pits
Tube-shaped foods like cooked baby carrots	Cut them lengthwise into strips, cut the strips into small pieces
Stringy or chewy foods like meat, long thin pasta and melted cheese	Cut these foods into small pieces
Dried fruit	Chop or dice into small pieces

BACKGROUND FOR FOOD AND BEVERAGE CRITERIA

Fat

Fat is an important part of a healthy diet because it provides essential fatty acids and energy (calories). It also helps the body absorb fat soluble vitamins including A, D and E. *Eating Well with Canada's Food Guide* recommends that nutritious foods not be restricted because of their fat content for young children. They are growing and have relatively high energy needs and may require healthy higher fat choices from the four food groups.

High fat foods can help children meet their energy needs for growth and development, especially children who eat a small quantity of food. Research also suggests that, for this age group, a low fat diet could lead to inadequate intake of certain nutrients (e.g. vitamins). For this age group, the type of fat is more important, than the amount, in determining health outcomes.

Healthy fats include polyunsaturated and monounsaturated fats. These fats are found in vegetable oils, nuts and seeds, fish, flax and non-hydrogenated margarines. These fats help to lower the risk of heart disease in children and adults. For this reason, healthy fats are included in *Canada's Food Guide* as part of a healthy diet.

Saturated and trans fats are unhealthy fats and can increase the risk of heart disease in children and adults. Saturated and trans fats should be avoided or reduced. Saturated fats also raise blood levels of "bad" cholesterol. Saturated fats are found in high fat milk and milk products (e.g. butter and cream), fatty meats (e.g. hot dogs, bologna, salami, pepperoni, ribs, regular ground beef) and tropical oils (palm kernel, coconut oil in store-bought cookies, crackers, granola bars).

Naturally occurring trans fats are found in very small amounts in dairy products as well as beef and lamb.

Artificial trans fats are made when liquid oil is changed into a solid fat (e.g. hydrogenated fats). These hydrogenated fats are found in many processed baked goods (e.g. store bought muffins, cookies, cakes, pastries), deep fried and battered products (e.g. french fries, chicken nuggets, fish sticks), some crackers, shortening products, and hard margarines.

To reduce the amount of trans fats, choose products made without hydrogenated or partially hydrogenated oils.

After two years of age, children can start to transition towards lower fat milk and milk products as their growth slows.

The Food and Beverage Criteria will guide you to choose healthy fats as well as avoid unhealthy fats in your menu.

Fibre

The Adequate Intake (AI) for fibre is 19 grams/day for children between the ages of 1 and 3 and 25 grams/day for children between the ages of 4 and 8.³ Canadian children do not eat enough fibre.² Ensuring that children eat enough fibre can help to prevent obesity, diabetes, diet-related cancers and reduce the risk of heart disease and constipation. Whole grains, vegetables and fruit, and legumes are high in dietary fibre. Fruit juice is lower in fibre compared to whole vegetables and fruit, and therefore whole vegetables and fruit should be eaten more often than juice.

Eating Well with Canada's Food Guide recommends that at least half of the grains consumed each day be whole grains. Whole grains provide fibre and other nutrients that children need for healthy growth and development. Having a wide variety of whole grains on the menu will help ensure children are meeting their nutritional needs. The Food and Beverage Criteria will help in selecting whole grains as well as other grain products that are nutritionally dense and rich in fibre.

Sodium

Children 4-8 years old should consume no more than 1900 mg sodium per day. Toddlers and infants should consume even less (1500 mg/day). Eating too much sodium can lead to high blood pressure and other health problems. The Canadian Community Health Survey (2004) revealed that the sodium intake of children one to eight years of age exceeds the recommended limits, which increases their risk of adverse health effects.

Most of the sodium we eat comes from processed, packaged foods, so the Food and Beverage Criteria will provide guidance to help you select low sodium foods and recipes for your menu.

Sugar

Some very nutritious foods naturally contain sugar, such as fruit and milk. Sugars are also added to many products to increase their sweetness. Added sugars are found in sweetened beverages such as fruit punch, sodas and some milk based beverages. Candies, chocolate, sweet desserts and syrups, are other sources of added sugars. Added sugars are indicated in the Ingredient List of product labels. Examples include cane juice, syrup, dextrose, fructose, sucrose, glucose, maltose, lactose, fruit juice concentrate.

International and national recommendations recommend choosing foods and beverages without added sugars to maintain a healthy weight, decrease cardiovascular risk, avoid dental problems and meet nutritional needs. Total sugar intake can be limited by reducing intake of foods and beverages containing naturally occurring sugars (milk, milk products and fruits) and limiting foods and beverages with added sugars.

Although a healthy choice, vegetable and fruit juices contain naturally occurring sugar. Research has shown that drinking too much juice may lead to early childhood tooth decay, diarrhea and being overweight. Drinking too much juice can also replace other nutrient dense foods. Children may fill up on juice and not eat their snacks or meals. For these reasons, it is recommended that children drink water or plain milk in place of juice and to limit juice to no more than ½ cup (125 mL) per day. Children are often receiving juice and other sweetened beverages outside of child care, therefore the Food and Beverage Criteria limit juice to no more than twice a week.

Sugar substitutes

Sugar substitutes include artificial sweeteners (e.g. acesulfame-potassium, aspartame, erythritol, neotame, sucralose, thaumatin) and sugar alcohols (e.g. sorbitol, isomalt, lactitol, maltitol, mannitol and xylitol). Sugar substitutes are used to lower sugar and calorie content of food and beverages such as sweetened beverages, yogurts, sodas, cookies and many other foods.

Children have small appetites. If they eat foods with sugar substitutes regularly, they may not get the nutrients and energy they need for healthy growth and development. This is particularly the case with artificially sweetened beverages, which are low in nutritional value and often replace more nutrient dense beverages such as milk. For these reasons, avoid sugar substitutes.

Portion sizes

[*Canada's Food Guide*](#) is intended for individuals two years of age and older. The foods served between six months and two years should include a variety of foods from Canada's Food Guide, so that by the time toddlers are two years old, they are consuming a variety of foods along with the other children.

Children have small stomachs that fill quickly. Small, frequent, nutritious and energy- dense meals and snacks, including a variety of foods from the four food groups are recommended to meet the nutrient and energy needs of infants, toddlers and young children.

The amount of food consumed by a child will vary from day to day and from child to child. Generally the size of a portion increases with age. For example, a two-year-old may eat a half slice of bread, whereas a four-year-old is more likely to eat a whole slice.

However, this can change based on the child's appetite, growth spurts, how the child is feeling, distraction in the room, etc. When preparing foods it is important that you offer each child sufficient foods and let the children determine how much they are going to consume.

A Food Guide Serving (FGS) is a reference amount. It is not intended to necessarily represent what someone would eat at one time, but it can be used as a consistent measure to compare how much people eat with the recommendations in Canada's Food Guide. Children may not eat a full serving of Canada's Food Guide or may they eat more than 1 serving from a food group. A guideline to follow is to offer children $\frac{1}{2}$ of the Food Guide Serving for each food group and provide more food if children are still hungry.

Processed foods

Children's nutrition needs are different from adults. They have small stomachs and require frequent nutrient dense meals. A focus on healthy foods, prepared with little to no added fat, sugar and salt, will help ensure they meet their nutrient needs. These healthy foods are whole foods or minimally processed and nutrient dense. Offering foods that are not nutrient dense could mean that a child may not receive their nutrition requirements.

Menus should focus on foods that are fresh and/or minimally processed with little to no additives or preservatives. The more a food is processed, the more nutrients that are lost. When foods are prepared from a recipe with whole ingredients, the ingredients can be modified or reduced to control the amount of added fat, sugar and salt. In addition to reducing fat, sugar and salt, healthy ingredient substitutions can also increase the nutrients available in the foods (e.g. fibre and calcium).

RESOURCES TO EXPLORE

- [Do Canadian Children Meet Their Nutrient Requirements Through Food Intake Alone?](#)
- [Healthy Teeth for Children](#)
- [The Use and Misuse of Fruit Juice in Pediatrics](#)
- [The Safety of Sugar Substitutes](#)
- [Alberta Nutrition Guidelines For Children and Youth: A Childcare, School and Recreation/Community Centre Resource Manual](#)

HEALTHY SUBSTITUTIONS

Cooking: Improve the nutritional value and lower the amount of fat, sugar and salt.

Use less fat	
Instead of	Try
Frying	Grilling, baking, roasting, broiling, or poaching
Butter, margarine, or oil in the amount called for	Using less than the recipe calls for
	Replacing with cooking spray, water, or broth, or using a non-stick frying pan
Fatty cuts of beef, pork, lamb, or sausage	Lean cuts of meat such as “loin” or “round”, and trimming visible fat
	Fish, dried peas, beans, or lentils
Cooking poultry with skin on	Removing the skin and excess fat
	Adding colour with paprika, herbs, or tomato sauce
Ground beef or pork in hamburgers, meatloaf, meat balls, etc.	Adding it raw and cooking until tender in the liquid, or browning in a non-stick skillet or one that has been sprayed with a non-stick cooking spray
Browning meat in oil or other fat for a stew or sauce	Adding it raw and cooking until tender in the liquid, or browning in a non-stick skillet or one that has been sprayed with a non-stick cooking spray
Cream	Using skim, 1% or 2% milk, or evaporated milk or equal parts of low-fat milk and evaporated milk
	Using fortified milk (one part skim milk powder to four parts low-fat or skim milk)
	Using low-fat sour cream
Full-fat cream cheese	Using fat-free or low-fat cream cheese, yogurt cheese, or cottage cheese puréed until smooth
Full-fat sour cream	Replacing all or part with fat-free or low-fat sour cream, cottage cheese, part skim ricotta, yogurt cheese, or plain yogurt (250 mL yogurt blended with 15mL cornstarch if it will be cooked)

Use less sugar	
Instead of	Try
Fruit canned in syrup	Using fresh fruit or fruit canned in its own juice or water
Syrup	Using puréed fruit or small amounts of syrup
	Using the suggestions in Healthy Substitutions – Baking
High-sugar baked goods	Lean cuts of meat such as “loin” or “round”, and trimming visible fat
	Fish, dried peas, beans, or lentils

Use less sodium	
Instead of	Try
Canned broth	Using homemade stock, or commercial reduced sodium or salt-free stock, or bouillon in soups, gravies, sauces, dressings, etc.
Regular canned foods	Using foods canned in water, preferably with no salt added
	Using reduced-sodium products
	Draining and rinsing canned foods for 30 seconds
	Using fresh foods when possible
Processed, cured, or smoked meats	Using fresh or frozen meat or poultry cooked without salt or high-sodium smoked meats ingredients
Instant packaged foods, especially with salty powder or sauce packets	Preparing product from scratch using fresh ingredients
	Using only a small amount of the prepared powder or sauce
	Using homemade herb and spice mixtures
	Using chopped or sliced vegetables or fruit instead of pickles
	Using homemade chunky fruit or vegetable sauces like salsa, chutney or relish
Commercial condiments	Using small amounts (1 tsp (5 mL) to 1 tbsp (15 mL)) of condiments such as ketchup, soy sauce, commercial salad dressings and salsas, etc.
	Substituting reduced-sodium products

Baking: Improve the nutritional value and lower the amount of fat, salt and sugar.

Boost fibre	
Instead of	Try
250 mL white flour	Using 125 mL white flour plus 125 mL whole wheat or whole grain flour
	Using 175 mL white flour plus 50 mL ground flaxseed
	Adding wheat bran or oatmeal to breads and muffins

Use less fat	
Instead of	Try
125 mL fat (e.g. oil, margarine or butter)	Using 50 mL mashed fruit plus 50 mL fat; use applesauce, apple butter, mashed banana, puréed prunes or puréed pumpkin (using mashed fruit may reduce the baking time by 25%)
250 mL fat (e.g. oil, margarine or butter)	Using 150 to 175 mL fat
250 mL solid fat (e.g. margarine, butter, or shortening in yeast breads)	Using 175 mL ricotta cheese plus 50 mL solid fat
Cream	Using low-fat evaporated milk, or low-fat sour cream

Use less salt	
Instead of	Try
Using the amount called for	Omitting the salt or using less

Use less sugar	
Instead of	Try
250 mL sugar	Using 150 to 175 mL sugar; add cinnamon, vanilla, or almond extract
250 mL chocolate chips	Using 125 to 250 mL chopped nuts or chopped dried fruits such as cranberries, raisins, apricots or cherries (or a combination)
Fruit canned in syrup	Using fruit canned in its own juice or water, or fresh fruit
Frosting or icing	Using sliced fresh fruit, or puréed fruit

Boost iron	
Instead of	Try
125 mL fat (e.g. oil, margarine or butter)	Using 50 mL fat plus 50 mL pumpkin purée
	Adding raisins, dried apricots, pumpkin or sesame seeds, nuts, oatmeal, wheat germ
375 mL sugar in breads, muffins cookies	Using 250 mL blackstrap molasses and 175 mL sugar; add 2 mL of baking for each 250 mL molasses; omit baking powder or use half the amount. Molasses should not replace more than half of the sugar called for in a recipe

INFANT FEEDING PLANS

Infant Feeding Plans are developed at the request of parents or when foods from home are provided for children between birth and 17 months old. The following is a list of possible questions that may be used when developing an infant feeding plan:

- What types of food does the child currently consume?
- Have solid foods been successfully introduced, and, if so, what types?
- What textures have been successfully introduced?
- What are the child's food preferences?
- What are the child's self-feeding abilities?
- Are there any dietary considerations or special requests?
- Does the child have any identified allergies, food intolerances or any suspected concerns?
- What are the child's feeding times/routines?
- Are there any foods that the parents wish to wait to introduce?
- What is the plan for updating and making changes to a feeding plan?
- To what extent will the child care setting be involved in introducing new solids/textures?
- What is the plan for breast milk supply (e.g. liquid or frozen)?
- How should the child care setting respond in the event that breast milk is unavailable (e.g. runs out)?
- May the child eat modified items from menu?
- Are there any food requests based on medical issues?

- Will the child consume food from home as well as from the center? If so, how should the child care setting respond in the event that foods and beverages brought from home are unavailable (e.g. run out)?

These questions may be helpful when developing an Infant Feeding Plan. Infant Feeding Plans are especially beneficial to ensure there is ongoing communication between the child care setting and the family.

Feeding plans may be created for infants (children between the ages of birth to 17 months) upon enrolment in a regulated child care setting at the request of parents or when the parent requests that foods be supplied from home. This will enable ongoing communication between the infant's parent/guardian and the care provider or the child care staff, including the cook and can be used in conjunction with the infant daily record.

Name of Child:
Date of Birth:
Age at time of enrolment:

Does your child currently consume	Feeding method	Special instructions
Breastmilk, formula, solid foods**	Breastfed, bottle, spoon, cup	This can include: breastmilk or formula storage and supply, food allergies, religious/cultural food requests, food requests related to medical conditions etc. This can also include if the infant will consume food from home at the parents'/guardians' request, or consume the foods served in the centre.
Solid foods that have been introduced	Feeding abilities (e.g. fed by caregiver, self feed with fingers, spoon and/or fork)	
	Textures (e.g. pureed, minced, diced)	

* Regulated child care settings welcome mothers to breastfeed anywhere in the facility or home. Ongoing communication between centre staff and the parent/guardian will occur to make sure there is an adequate supply of your breastmilk for your child at the centre. No other form of nutrition will be provided unless instructed by the parent/guardian.

** It is important that infants receive nutrient dense, iron containing foods at 6 months of age. This may include foods from the Meat and Alternative group, including meats, fish, poultry, cooked egg yolks, tofu and well-cooked legumes.

CHAPTER ATTRIBUTION

Chapter adapted from: Government of Nova Scotia. (2011). *Manual for Food and Nutrition in Regulated Child Care Settings: Section A*. https://www.novascotia.ca/coms/families/provider/documents/manual-food_and_nutrition.pdf

UNIT 32

Material Checklists

Learning Objectives

After reading this chapter you will:

- Understand the checklist requirements for licensed child care facilities.
- Be familiar with checklists and how to use them.

MATERIALS AND EQUIPMENT

Developmentally appropriate programs for infants and toddlers include activities and materials to support play and learning in a variety of areas. The provision of high-quality open-ended materials and equipment sets the foundation for a responsive and inclusive environment that will nurture and stimulate development of the whole child.

The following checklist must be completed annually and kept on file as part of the Ministerial Requirements for the Daily Program in Licensed Child Care Facilities. One checklist for each age group at a facility must be completed. The checklist must be kept on file for two years from the date of completion. It is not necessary to send it into the Department of Education and Early Childhood Development for submission.

The **Licensing Officer** (LO) will verify that there is a completed the checklist during the annual licensing inspection and may request to review it at subsequent licensing visits or inspections.

An **Early Childhood Development Consultant** (ECDC) may review the checklist during a program consultation and provide assistance when there are questions.

INFANT AND TODDLER CHECKLIST

General

The materials and equipment are:

- Available for children to choose and explore during free play.
- Developmentally appropriate and reflect the interests and competencies of the children.

- Easily cleaned and set aside for cleaning. A cleaning schedule is posted and describes the process and expectations for cleaning toys and equipment.
- Organized so that most are easily accessible to children. For example, organized in containers, or baskets on low shelves that can be easily accessed by the children.
- Appropriate to enable children's participation in clean-up. For example, child size brooms, dust pans and a supply of towels/cloths for cleaning with water are available.
- Rotated and presented to children to reflect their emerging interests and developing competencies, keeping favorites to ensure familiarity.
- Stored when not in use so they can be accessed by staff, as needed.
- Culturally diverse, reflecting diversity of gender roles, racial and cultural backgrounds.
- Arranged in the environment to provide a home-like atmosphere for children that is reflective of their lived experiences and families and where they can interact together and find places to be alone.
- No less than 4 cm in diameter. Small toys and items can be choking hazards. Generally, if it can fit through a toilet paper roll, it is too small for children under 3 years old.
- Inclusive of loose parts and open-ended materials that nurture creativity
- Other

Art Exploration and Creativity

The following (or alternatives) are available:

- Space for infants to engage in art activities and an area for drying, displaying and storing art
- Paints in a variety of colours and formats. For example:
 - finger paints
 - water colour paints
 - liquid tempera
- Painting tools and brushes in various shapes and sizes. For example:
 - paint brushes with thick, short handles
 - paint rollers
 - sponges
- Paper in various sizes, shapes and colors
- Large (beginner) crayons, markers and chalk
- Glue sticks and/or glue pots with brushes/spreaders
- Collage materials and found items. For example:
 - paper, magazine pictures, wrapping paper
 - stickers, ribbons, large cotton balls, large pom poms
 - natural items such as shells, twigs, and stones
- Other

Sensory-Rich Activities

- The following (or alternatives) are available:
- Adequate space for engaging with the materials
- Materials and tools for shaping. For example:
 - play dough, goop, paper mache
 - clay tools (spreaders, shape cutters, rolling pins)
- Sand, gravel, multi-textured, non-toxic materials presented in sand tables or individual boxes or containers
- Sand toys in various shapes and sizes. For example:
 - pails, shovels, spoons, containers
 - toy cars/trucks/diggers
 - natural and lifelike items such as sea shells, toy insects/animals
- Water-based activities. For example:
 - water tables, bins
 - sprinklers, hoses
- Water toys in various shapes and sizes. For example:
 - buckets, containers, funnels, pumps, tubes, plastic bottles
 - natural items such as sea shells, rocks, drift wood
 - dramatic play toys such as dolls, toys and dishes
- Sensory materials. For example:
 - unscented shaving cream
 - bubbles, goop
- Various types of tape and textured paper
- Other

Construction (Blocks)

The following (or alternatives) are available:

- Variety of soft blocks in foam or vinyl
- Variety of commercial and home-made blocks in different shapes/sizes and textures. For example:
 - cardboard, foam
 - wooden building blocks
 - plastic
- Lightweight large blocks. For example:
 - cardboard or foam blocks

- large cardboard boxes
 - large wooden blocks and hollow blocks, loose materials for construction
- Age appropriate selection of vehicles, toy people/animals and accessories
- Containers to fill and dump
- Other

Language and Literacy

The following (or alternatives) are available:

- Materials and books displayed on low racks and shelves that are easily accessed
- Comfortable space for infants and toddlers to enjoy time on their own, or with an adult in a small group
- Comfortable furnishings. For example:
 - child-size soft furniture such as small sofa/armchair
 - area rug, pillows with washable coverings
- Variety of age-appropriate books that reflect the infants' and toddlers' interests including large and small thick cardboard, cloth and vinyl books that focus on topics such as:
 - babies and toddlers
 - animals and nature
 - familiar people, objects and routines
- Puppets, flannel board with props
- Laminated pictures and photos relevant to the infants and toddlers. For example:
 - their families and pets
 - familiar places and activities
- Songs and stories on tape/CD/streaming services
- Other

Dramatic and Pretend Play

The following (or alternatives) are available:

- Child size furnishings (table, chairs, shelving)
- Real and lifelike materials (dishes, utensils, appliances, telephones, artificial plants and flowers)
- Props to support re-enactment of the real-life experiences:
 - variety of dress-up clothes such as shoes/boots, purses, costumes, shirts, dresses, skirts
 - household items such as pots/pans, woks, chop sticks
 - water to wash dolls, clean dishes
 - play foods that reflect the food groups identified in Eating Well with Canada's Food Guide and are culturally diverse and representative of the children and families in the program

- Art supplies, open-ended and loose materials to use as, or in making, props. For example:
 - play dough, blocks, wheels, gears
- Dolls and accessories that represent diverse cultures. For example:
 - multi-ethnic dolls, doll clothes, puppets
 - blankets, crib, stroller
- Play buildings and accessories. For example:
 - wooden and cardboard boxes that can be transformed into buildings and objects of interest
 - barn with animals and small props
 - doll house with furniture and figurines
 - toy garage with vehicles
- Unbreakable mirror (securely fastened)
- Other

Fine Motor/Manipulatives (Thinking & Reasoning)

The following (or alternatives) are available:

- Grasping and squeeze toys
- Puzzles (wood, rubber, heavy cardboard, three to eight pieces with and without knobs)
- Rattles, stacking rings, nesting cups
- Cause and effect toys with sounds or responses when buttons are pushed
- Construction sets (large duplo blocks, take apart and put together toys)
- Large peg boards, large lacing cards
- Large beads, thick strings, laces
- Shapes sorters, materials for sorting, matching (variety of textures, shapes and sizes)
- Containers for filling and dumping
- Pounding boards with mallets
- Other

Music and Movement

The following (or alternatives) are available:

- Real and home-made musical instruments in a variety of styles. For example:
 - drums, maracas, rhythm sticks, cymbals, shakers and rain sticks
 - xylophones, tambourines
- Musical toys in a variety of shapes and sizes. For example:
 - toy instruments

- musical push/pull toys
- music boxes, soft toys with bells/sounds.
- CD/tape player with a variety of CDs/tapes
- Music from a variety of genres, cultures and languages
- Scarves and loose materials for dance/movement
- Gross motor equipment. For example:
 - low climber with slide, structures for climbing and rocking toys
 - tunnels, soft mats, cushions, inflatable inner tubes, beach rings, hoops for crawling, jumping and climbing
 - variety of soft balls in various textures, sizes, and colors. For example
 - beach balls, cloth balls, nerf balls, textured balls for easy grasping
 - large and small push, pull toys
 - low platforms, ramps for setting up simple obstacle/climbing courses
- Ballet Barre and large unbreakable mirror or alternative space for infants to pull themselves up and support their emerging desire to walk and travel around the room
- Other

Science and Nature

The following (or alternatives) are available:

- Natural objects to explore. For example:
 - stones, bark, large shells
 - leaves, driftwood
- Non-toxic plants and flowers
- Living things. For example:
 - aquariums, worm composting, gardening, bird houses that can be observed
- Lifelike objects. For example:
 - plastic and rubber insects
 - animals and plants, that look real
- Pictures, models and photos of interesting items, places and objects. For example:
 - x-rays, factual books
 - maps, globes
- Magnifying glasses, prisms, microscopes, pulleys, levers, smelling pots, feely boxes, sink and float items
- Other

CHAPTER ATTRIBUTION

Adapted from Government of Nova Scotia. (2020). *Section H: Materials and Equipment Checklists in Licensed Child Care Facilities* (pp.3-8). https://www.ednet.ns.ca/earlyyears/documents/ministerial_requirements/Section%20H%20-%20Materials%20and%20Equipment%20Checklist%20EN.pdf

UNIT 33

Learning Goals

Learning Objectives

After reading this chapter you will:

- Understand why learning goals and objective are important.
- Be familiar with the Nova Scotia Early Learning Curriculum Framework's goals and learning objectives for:
 - well-being
 - discovery and invention
 - language and communication
 - personal and social responsibility

LEARNING GOALS AND OBJECTIVES

Learning goals provide a structure for early learning practice, guide educators' reflections and critical thinking, and form the basis for the assessment of children's learning and holistic development.

The four learning goals are:

- well-being
- discovery and invention
- language and communication
- personal and social responsibility

These goals are consistent with the framework's image and vision of children as confident and capable learners. Each goal is supported by several Learning Objectives that provide educators with specific reference points. These reference points are there to identify, document and communicate children's progress to families, other early childhood professionals, and educators in schools. Over time, educators can reflect on how children have developed, how they have engaged with increasingly complex ideas, and how they have participated in increasingly sophisticated learning experiences.

Educators understand that children take different pathways to achieve these goals. Early learning does not focus exclusively on the endpoints of children's learning; educators give equal consideration to improvements made by individual children and recognize and celebrate not only the giant leaps that children take in their learning but the small steps as well.

WELL-BEING

Well-being is a holistic concept that focuses on children being happy, confident, and healthy in all aspects of their development. For children, well-being implies that they are loved, respected, protected, and supported by their families and communities.

Dispositions to learn develop when children are immersed in an environment that is characterized by well-being and trust, belonging and purposeful activity, contributing and collaborating, communicating and representing, and exploring and guided participation.¹

Children's well-being is affected by all their experiences within and outside of their early childhood education programs. Educators know that when they attend to children's well-being by providing warm and trusting relationships, they are supporting children's learning and development. Educators understand that it is essential to ensure predictable and safe environments for children, that provide affirmation and respect for all aspects of their physical, emotional, social, cognitive, linguistic, creative, and spiritual needs. By acknowledging each child's cultural and social identity, and responding sensitively to their emotional states, educators give children confidence, a sense of well-being, and a willingness to engage in learning. As children experience being cared for by educators and others, they become aware of the importance of living and learning together with others.

Children develop their own well-being and confidence as they learn more about healthy lifestyles, emotional well-being, and healthy social relationships. As children become more independent they can take greater responsibility for their health, hygiene, and personal care, and become mindful of their own and others' safety. Routines provide opportunities for children to learn about health and safety. Educators understand that good nutrition is essential to healthy living and enables children to be active participants in play, and they are responsible for providing many opportunities for children to experience a range of healthy foods.

The state of children's well-being influences the way they interact in their environments. A strong sense of well-being provides children with confidence and optimism to develop new friendships, interact with groups of other children, participate in new types of activities, and measure and calculate reasonable risks. It also influences children's readiness to persevere when faced with unfamiliar and challenging learning situations and creates opportunities for success and achievement.

Learning objectives supporting the goal of well-being include:

- children feel safe, secure, and supported
- children become strong in their social and emotional well-being
- children take increasing responsibility for their own health and physical well-being
- children develop knowledgeable and confident self-identities

1. New Zealand Ministry of Education. (2017). *Te Whāriki. Early Childhood Curriculum*. Wellington, NZ. www.education.govt.nz/assets/Documents/Early-Childhood/Te-Whariki-Early-Childhood-Curriculum-ENG-Web.pdf

DISCOVERY AND INVENTION

Children use a variety of processes such as exploration, collaboration and problem-solving to develop curiosity, persistence, and creativity. Children who are effective learners are transfer and adapt what they have learned from one context to another, and are able to locate and use resources for learning.

Through play, children invent symbols to explore relations of power, truth, and beauty as they move between the world as it is and the worlds they create. In these possible worlds, children have the liberty to push the boundaries and explore who they are as members of communities engaged with age-old issues such as good and evil. Learning to be imaginative and creative requires open and flexible environments, rich in materials and role models that reflect the cultural life of their communities—the songs, crafts, languages and artifacts—and opportunities for children to invent their own cultural forms and symbols; to explore unique and innovative approaches to understanding their worlds.²

Educators recognize children as competent learners, and understand that they are capable of interacting with their indoor and outdoor environments to discover new concepts, problem solve, and create new ways of learning and playing. Children use their representational knowledge to invent new play—a rock may become a truck, a tree may become a house, and a line of chairs may become a train. Creativity allows children to create their learning environments over and over and in different ways. This type of active learning environment supports children's confidence to be involved learners who are increasingly able to take responsibility for their own learning, personal regulation, and contributions to the social environment. Connections and continuity between learning experiences in different settings make learning more meaningful, and contribute to the integrated nature of children's learning and development.

Children develop an understanding of themselves and their world through active, hands-on investigation. A supportive, active learning environment encourages children's engagement in learning which can be recognized as deep concentration and complete focus on what captures their interests. Children bring their own sense of self and their previous experiences to their learning. They have many ways of seeing the world, different processes of learning, and their own preferred learning styles.

An example of a learning disposition is the disposition to be curious. It may be characterized by: an inclination to enjoy puzzling over events; the skills to ask questions about them in different ways; and an understanding of when is the most appropriate time to ask questions.³

Active involvement in learning builds children's understandings of concepts, as well as the creative thinking and inquiry processes that are necessary for lifelong learning. They challenge and extend their own thinking, and that of others, and create new knowledge in collaborative interactions and negotiations. Children's active involvement changes what they know, can do, and value, and transforms their learning.

Educators' knowledge of individual children is crucial to providing environments and experiences that optimize children's learning.

Learning Objectives intended to support discovery and invention include:

- children develop curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence,

2. Makovichuk, L., Hewes, J., Lirette, P., and N. Thomas. (2014). *Play, Participation, and Possibilities: An Early Learning and Child Care Curriculum Framework for Alberta*. Government of Alberta. www.childcareframework.com.

3. New Zealand Ministry of Education. (2017). *Te Whāriki. Early Childhood Curriculum*. Wellington, NZ. www.education.govt.nz/assets/Documents/Early-Childhood/Te-Whariki-Early-Childhood-Curriculum-ENG-Web.pdf

and imagination

- children develop a range of skills and processes such as problem-solving, inquiry, experimentation, hypothesizing, researching, and investigating

LANGUAGE AND COMMUNICATION

From birth, children communicate with others using gestures, facial expressions, sounds, language(s), and assisted communications. Responsive adults support the development of language throughout early childhood

- by giving language to a baby's gestures (Oh, you want the teddy bear!) and expressions (Ah, you like this applesauce!)
- by repeating toddlers' expressions into full sentences (You want to read the book again?)
- by probing and extending possibilities for language development when engaging in conversations
- by providing opportunities for children to express their ideas, ask questions, and share stories

Educators appreciate that children are social beings who are intrinsically motivated to exchange ideas, thoughts, questions, and feelings, and who use a range of tools and media, including music, dance and drama, to express themselves, connect with others and extend their learning.

Early Childhood Educators provide opportunities for children to be able to communicate their feelings, thoughts, and ideas through careful and thoughtful design of the environment, and the educators' own use of language and expression. Educators are skilled at maintaining a special balance in their exchanges with children—to respond to children's expressions in ways that inspire children to continue their communication, rather than replacing children's language with their own.⁴

Children's use of their first language underpins their sense of identity and their conceptual development. They feel a sense of belonging when their language, interaction styles, and ways of communicating are valued. Children who hear, not only their own first language but the languages of other children in their program and community, begin to learn about the rhythms and sounds of all languages, and cultivate a sense of personal attachment to their own language, which contributes to their sense of personal identity.

Educators understand that children communicate with more than their words. Their constructions with blocks, art work, playdough figures, and pretend play scenarios all provide information about various stages of childhood development, interests and abilities, and how children interact both with the learning environment and other children. Educators encourage children to ask questions, and by analyzing those questions, educators assess children's learning concepts, use of language, and pursue the types of things that children wonder about. When children are encouraged to re-tell an event, describe a painting, or explain what's happening in the dress up corner, they have the opportunity to practice sequential thinking and reasoning. This expression and communication helps both educators and parents learn about children's thinking, their ideas, and who they are.

Experiences in early childhood education programs build on children's range of experiences with language, literacy, and numeracy within their families and communities. Positive attitudes towards, and competencies in literacy and numeracy are essential for successful learning. The foundations for these are built in early childhood.

Learning objectives supporting language and communication:

4. Flanagan, K. (2012). *PEI Early Learning Framework: Relationships, Environments, Experiences*. Department of Education and Early Childhood Development. www.princeedwardisland.ca/sites/default/files/publications/eecd_eyfrwrk_full.pdf

- children interact verbally and nonverbally with others
- children engage with a variety of texts and gain meaning from them
- children express ideas and make meaning with a variety of media
- children begin to understand how symbols and patterns work
- children use technology to access information, investigate ideas, and express their thoughts
- Acadian and Francophone children in French minority language communities develop strong foundations in French

PERSONAL AND SOCIAL RESPONSIBILITY

From infancy, a child's relationships and experiences begin to influence the development of a uniquely personal sense of identity. Identity is not fixed at birth, but is shaped by a child's family and community, interactions with others, culture, language, and experiences. Children who grow and develop in safe, secure, responsive, and consistent environments are more likely to develop the confidence to explore their environment and seek out new experiences. Children who are respected for their ideas, competencies, talents, and aptitudes develop a sense of themselves as competent and capable individuals.

Membership in communities involves interdependency. It is as simple and as complicated as this: we need to take care of each other, and we need to take care of the natural and constructed world around us. When children engage in respectful, responsive, and reciprocal relationships guided by sensitive and knowledgeable adults, they grow in their understanding of interdependency.⁵

Throughout the early years, children develop their own identities, and understand how they relate to others. Participation in high-quality, play-based early childhood education programs gives children the opportunity to test out different roles, such as taking turns being the doctor, patient, store clerk, and airplane pilot, and understand and appreciate other perspectives.

Interactions with other children and adults provide opportunities to learn how to listen to other opinions, promote one's ideas, and resolve conflicts. Outdoor play cultivates a respect for the environment, and allows children to experience their natural environments in a first-hand and concrete way, and to understand their roles and responsibilities in taking care of our world.

Infants and toddlers begin to develop a sense of personal responsibility when they learn to feed themselves and recognize their belongings. Toddlers take greater responsibility for themselves when they accomplish self-care tasks, such as toileting and washing their hands.

Helping children develop strong personal identities, awareness, and sense of responsibility means educators spend time developing skills and strategies to help children regulate their emotions, problem solve, and communicate with others. Educators understand their own responsibility to model respect for children, families, and each other as professionals. They also understand the importance of creating inclusive environments that respect diversity and support all children to participate in activities regardless of their skill level or development.

5. University of New Brunswick Early Childhood Research and Development Team. (2008). *New Brunswick Curriculum Framework for Early Learning and Child Care*. Department of Social Development, Government of New Brunswick. https://www2.gnb.ca/content/gnb/en/departments/education/elcc/content/curriculum/curriculum_framework.html

In school age care settings, children's sense of responsibility for their learning is co-determined and skills and attitudes towards life-long learning are consolidated. Children actively involved in community building develop common interests and learn about citizenship.⁶

By the time children are in their early school years, they are able to create rules for fair play, and modify and re-shape those rules in consideration of fairness to the group, or to ensure that all children have a chance to be included. Participation in games with teams encourages a sense of fair play for all and a sense of responsibility to the team.

Learning Objectives supporting personal and social responsibility

- children learn to interact in relation to others with care, empathy, and respect
- children develop a sense of belonging to groups and communities, and how they can actively participate in them
- children respond to diversity with respect
- children become aware of fairness
- children become socially responsible and show respect for the environment

CHAPTER ATTRIBUTION

This page is adapted from: Province of Nova Scotia Department of Education and Early Childhood Development. (2018). *Capable, Confident, and Curious: Nova Scotia's Early Learning Curriculum Framework* (pp. 47-54). <https://www.ednet.ns.ca/earlyyears/providers/EarlyLearningFramework.shtml>

6. Australian Government Department of Education and Training. (2011). *My Time, Our Place: Framework for School Age Child Care in Australia*. Commonwealth of Australia. https://www.acecqa.gov.au/sites/default/files/2018-05/my_time_our_place_framework_for_school_age_care_in_australia_0.pdf

Version History

NSCC Version	Resource Used to Create <i>Care and Development of Infants and Toddlers</i>
Chapter 1	Chapter 4 in Infant and Toddler Education and Care by Susan Eliason
Chapter 2	Making Life Easier – Diapering
Chapter 3	Making Life Easier – Bedtime and Naptime
Chapter 4	<i>Family Routine Based Support Guide: Building Relationships with Infants.</i> Pages 5-16
Chapter 5	Chapter 7 in Infant and Toddler Development by Northeast Wisconsin Technical College
Chapter 6	Appendix C – Developmental Milestones in Introduction to Curriculum for Early Childhood Education ,
Chapter 7	Chapter 1: Infant Development in Infant and Toddler Education and Care
Chapter 8	Chapter 2 Toddler Development in Infant and Toddler Education and Care
Chapter 9	<i>Curriculum Planning 101: Lesson Plans for Infants, Toddlers, and Preschoolers.</i>
Chapter 10	Planning for individual infants and toddlers in group care.
Chapter 11	<i>Additional Resource List</i>
Chapter 12	working on
Chapter 13	Unit 1.1 Diversity in The Role of Equity and Diversity in Early Childhood Education
Chapter 14	Unit 1.1 The Importance of Culture in The Role of Equity and Diversity in Early Childhood Education
Chapter 15	Unit 7 Effectively Negotiating and Resolving Conflict in The Role of Equity and Diversity in Early Childhood Education
Chapter 16	Unit 9 Diverse family Structures in The Role of Equity and Diversity in Early Childhood Education
Chapter 17	Scheduling and Overall Design Considerations in Infant and Toddler Education and Care
Chapter 18	Enhance Social and Emotional Development in Infant and Toddler Education and Care
Chapter 19	Chapter 10 Enhance Physical Health and Well-Being in Infant and Toddler Education and Care
Chapter 20	Chapter 12 Enhance Cognitive Development in Infant and Toddler Education and Care
Chapter 21	Chapter 13 Enhance Language and Communication in Infant and Toddler Education and Care
Chapter 22	Ryan Newton – ??
Chapter 23	Ryan Newton – ??
Chapter 24	Ryan Newton – ??
Chapter 25	Chapter 5: Cognitive Development in Infancy and Toddlerhood in Early Childhood in Child Growth and Development
Chapter 26	Chapter 9: Social Emotional Development in Early Childhood in Child Growth and Development
Chapter 27	Chapter 10: The Purpose, Process and Practice of Monitoring, Screening and Evaluating in Infant & Toddler Development
Chapter 28	legislation
	Info from NSCC Library – how to access research tools
Chapter 29	Guidelines for Communicable Disease Prevention and Control for Child Care Settings – pages 20-37
Chapter 30	Government of Nova Scotia. (n.d.). <i>Snack Ideas for Infants.</i>
Chapter 31	Government of Nova Scotia. (2011). <i>Manual for Food and Nutrition in Regulated Child Care Settings: Section A.</i>

Chapter 32	Government of Nova Scotia. (2020). <i>Section H: Materials and Equipment Checklists in Licensed Child Care Facilities</i> .
Chapter 33	Province of Nova Scotia Department of Education and Early Childhood Development. (2018). <i>Capable, Confident, and Curious: Nova Scotia's Early Learning Curriculum Framework</i>