Adapted Outdoor Education

A guidebook to support educators with instructing students with exceptionalities through outdoor education.
The purpose of this guidebook is to support educators who instruct students with exceptionalities in an inclusive outdoor education program. This guidebook focuses on students with exceptionalities whose skills may need extra attention and practice, provides information on the various skills that can be supported through outdoor education, and describes activities to support student skill development.

The guidebook does not specifically name exceptionalities, such as autistic, as many of the challenges that occur for students with one exceptionality can also occur for students with a different exceptionality. Therefore, this guidebook specifies the challenges that some students can have such as attention difficulties, which may fit into more than one exceptionality type. This guidebook is intended to be used by educators to support the specific needs of their students no matter the designated exceptionality.

The guidebook is divided into three chapters focusing on different child developmental areas: cognitive, social-emotional and physical development – that can be addressed through outdoor education. Each chapter includes an outline of the developmental area being discussed and in what way outdoor education can support its development. The chapter then continues with a brief overview of academic theories that supports student development. The final part of each chapter includes various adaptable games and activities to support instruction in each developmental area and how to engage students in outdoor education.
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Chapter 1

Cognitive Development
Cognitive development occurs from childhood through adulthood and is the construction of thought processes to make an understanding of the world through perceiving, thinking and interacting with our environment. Some areas of cognitive development include information processing, reasoning, language development, conceptual and logical thought, and memory.

The focus of cognitive development is to understand how children learn and ways to support that learning throughout their development. A child’s cognitive development starts from infancy, when a child is learning independence of their interpersonal space through perceptual and motor abilities. As the child ages, speech and language are used to interact, share, and communicate with others. Perception, memory and language continue to develop resulting in the child’s ability to make predictions about the world around him or her. Near adulthood, the development of logical and conceptual reasoning and thoughts about the world evolves.

The study of cognitive development has had many contributors over the years that have added to the general understanding of children’s cognitive abilities. In the next section I will briefly review two of the theories behind cognitive development and how their discoveries can be used to support teaching students with exceptionalities in an inclusive outdoor environmental setting. These two theories are: Vygotsky’s Sociocultural Theory and Piaget’s Cognitive Development Theory.
Sociocultural Theory

Vygotsky’s theory of cognitive development is focused on the social interactions of children and how those interactions develop their cognitive ability. This theory asserts that the community around a child is the predominant method of understanding and learning, and the environment that a child grows up in will influence how and what they think. Vygotsky’s theory emphasizes scaffolding through his model called the zone of proximal development. The zone of proximal development demonstrates that a child achieves more understanding when guided by an expert than what they can achieve independently. To be successful in learning or completing a task, the child needs to observe an expert performing the task and then applies the gained knowledge to perform the same task independently.

Vygotsky believed that this model could be used to support the learning of all children when they are in the appropriate zone of proximal development. Following Vygotsky’s model theory, when instructing students in an activity, they should first be given the opportunity to observe an expert performing the task prior to completing the task with peers and then eventually completing the task individually. To fully scaffold and support the learners, a progression from teacher organized activities, to large groups or partners and eventually individual activities would help students to gain independence and success with outdoor activities. The
expert, or teacher, should also be involved and engaging in the activities with the students to support those students who might need extra time learning with an expert before working independently.

**Cognitive Development Theory**

Piaget’s theory of cognitive development explains how children construct mental models of the world during biological maturation and interaction with the environment. Piaget was more interested in the way children developed fundamental concepts such as numbers, time, quantity, and so on, instead of focusing on their intellectual ability. He proposed stages of development that gradually increased in number and complexity of skills, ideas, concepts and behaviours based on biological maturation and environmental experiences. Piaget proposed four stages of cognitive development that become increasingly sophisticated as the child matures and ages. The four stages are: sensorimotor stage, pre-operational stage, concrete operational stage and formal operational stage. The sensorimotor stage is approximately from birth to two years of age and is focused on objects and creating a mental representation of things the child interacts with. From ages two to seven, Piaget called this stage the pre-operational stage where the child begins to develop symbolic thoughts and can relate a word or object to something else. The concrete operational stage, from seven to eleven years of age, begins the formation of logical and operational thought where children begin to understand mental concepts. From eleven years on, the child is in the formal operational stage where children develop abstract thoughts on concepts and begin to test their own
theories on knowledge of the world.

According to Piaget’s theory, activities should be planned according to the stage in which the child is at. The ages of each stage are approximate and some students do not progress through the stages as quickly as other students. By understanding these stages, teachers can help to support the child’s development by organizing activities to practice the use of skills in a manner in which the child can be successful for their level. Piaget’s theory puts great emphasis on a hands-on concrete approach to learning prior to moving to an approach based on symbolic understanding. Outdoor education provides a great opportunity to use concrete elements to support learning while those things can also be adapted with symbolic representation for those students who are ready for that stage.
Matching

Matching activities are helpful for students to develop their thinking and foundational skills with more abstract concepts. To complete matching activities, students need to use visual discrimination to identify objects by their similarities and/or differences, which aids students in representing and solving problems. The dexterity required to move objects for matching can also aid in developing fine motor skills in students, while incorporating physical aspects into the activity can assist with developing student’s gross motor skills.

Comparing and Contrasting

An extension from matching, this skill continues to develop a student’s ability to see the differences or similarities of items and begins to recognize items based on their features such as size, shape, colour, etc. Comparing and contrasting questions can help to develop higher-order thinking skills, support a focus on details, assist with retaining more information and can be beneficial with organizing information for expressing ideas. This is a skill that is used widely throughout a student’s education but is also useful for making personal decisions, choosing a personal path, and even leading a healthy lifestyle.
**Sorting and Classifying**

Sorting and classifying are skills that are useful for students to acquire to make sense of the world around them. These skills assist students to intake new information and make connections to their previous knowledge so as to make sense of what they are learning. By using sorting and classifying skills, students can structure their knowledge to make it more manageable for them and easier to remember. As students mature and learn they will gravitate from being able to sort by physical characteristics to a stage where they can rationalize various sorting methods. This skillset helps a student to sort and classify their knowledge through multiple categories. This skill allows students to see how some things in their environment can belong to many categories and to make connections between different knowledge branches that they have formed.

**Sequencing**

Sequencing is the logical ordering of events, images, thoughts and actions. Students will use sequencing to manage daily tasks, learn new skills, recognize patterns, make predictions and understand the world around them. Practicing sequencing can help students learn routines and develop academic skills including reading comprehension, math problem solving and scientific inquiry.
**Attention**

Attention is a learned behaviour that will develop throughout a student’s life. It involves a variety of elements including staying on task, ignoring distractions and choosing relevant information. With sustained attention, students can engage in a task for longer periods of time, which supports learning all skills through repeated practice. Better attention skills assist the student to improve communication, social skills, language and vocabulary, develop literacy skills, and complete more complex activities.

**Memory**

Memory activities assist students with discovering relationships between concrete and abstract items, developing concentration, focusing and increasing their attention span, as well as assisting with overall acquisition of knowledge and skills. In order to learn, students need to be able to take in new information and retain it long enough to process that information with their preexisting knowledge. This will have an impact on their academic abilities as well as with social skills and daily life skills. Concentration, following directions and understanding instructions are also developed through the use of memory. A student who can use their memory to direct their actions to what will happen next will have an easier time in completing multiple step activities. Finally, memory will improve a student’s attention span, by assisting their focus while completing tasks and allowing for a greater ability to retain that knowledge.
Games and Activities
Nature Hunt

This is an exploration game utilizing the senses while exploring the natural world through the use of matching and sorting skills. This game is a good activity for developing cooperation and conversation as students can work together to discuss how the found items fit different categories. In addition, this game can be adapted to instruct different concepts by adjusting the items to be hunted for.

Materials

- A treasure hunt sheet for each student/group with items that can be found in the surrounding environment.
  Examples: leaf shapes, seeds, colours, texture, animals, plants, living/non-living, etc.
- Clipboard (optional).
- Sample items for a visual cue (optional).
- A basket or bag to collect items

Set-up

- Decide on which items the students are hunting for and place them on the treasure hunt sheet.
How to Play

1. Give students the treasure hunt sheet and bag in the area that they can search in. Instruct students to try and find the items on their treasure hunt sheet.
   * Give students a time limit or certain number of items to obtain.

2. Discuss the boundaries that the students must follow. The students should only find one item to fit each category, to encourage greater discussion with their partner, and need to explain why their item matches the description of that category.

3. Have a sharing opportunity at the end for students to demonstrate what they found and how the item matches the category on the treasure hunt sheet.

Extensions/Variations

- Provide students with a sensory card, with real examples attached, to visually assist searching for items.
- Have students create their own sensory treasure hunt card, with their found items, to provide to their peers to search for in a second round.
- Have students create a collage demonstrating their sorting of the found items - challenge them to sort the items in multiple ways.
- Using blindfolds, have the students try to identify their collected items using their other senses.
- The game can be turned into a physical activity by having students run back with one found item each time.
Nature Treasure Hunt

How Many Items Can You Find?
Nature Memory

This is a game to develop a student’s memory and matching skills while also exploring their social skills, self-awareness and self-confidence. This game can also be used to teach math and science concepts by adjusting the items that are being used to fit with current units of study.

Materials

• 12 large leaves (or other items to be used as a cover).
• 6 matching pairs of items from the environment.
  * Collect more of each item if you want to make the activity more challenging

Set-up

• Collect all the items to be used. This can be done in advance or can be a group activity with the students participating in a nature hunt to collect all the items.
• Set up the game by mixing up the collected pairs of items and hiding them under leaves. Depending on age of students, this can be done by the teacher or student arranged.

How to Play

* This game can be played with classic memory rules or can be adjusted to suit the needs of your students. *
1. Group students into equal groups (for 12 items, groups of 2 works
2. The first player picks a leaf and looks beneath it, making sure to show the item to all players.
3. That same player then picks a second leaf and looks beneath it. If the items are a match then the student gets to keep the items. If the items do not match, then the leaves are replaced over both revealed items.
4. If the player made a correct match then the student gets another turn. Once a player makes an incorrect match then the next player gets a turn.
5. The game continues until there are no more items to match and the winning player has the most items.

Extensions/Variations

• Choose items that will fit with a current unit of study (i.e.: seeds, flowers, rocks, colours, seasonal items, locational items, etc.)
• To make this activity more sensory related have the students feel beneath the leaves first and make their choice of what to uncover by feel instead of sight.
• Have students work cooperatively with a partner to decide on which leaf to turn over based on sight or feel.
• Extend the activity by requiring students to describe the similarities and differences between the items. To make a successful match they need to find a similarity between two different items instead of two matching items.
• To connect to math, make matches based on number of items under each leaf, the amount of colours, points, etc. instead of exact
matching pairs.

- Once the students have completed the matching game have them sort and classify the objects.
- Have the students move around to other student’s memory stations to try playing the game with other items and unfamiliar things.
Sorting Items from Nature

An activity to develop student’s ability to sort items from their environment into groups while developing their social skills and cooperation with their peers. This activity can be useful for exploring curriculum concepts through the selection of items to be used for sorting.

Materials

• Items for students to sort - ensure the items have some similarities and differences.
• Create category headings to sort items under - this can be actual items or pictures/words on paper (white erase paper/boards can be a great resource to allow students to change their categories).
• Worksheet/paper/photo for students to describe how they sorted their items (optional).

Set-up

• Collect enough items for each group/student to sort. Ensure there are enough items to occupy students and that each items has some similarities and differences between them.
• Create category headings for each grouping or blank category headings to challenge students to create their own headings.
  *Try this activity a few times with different headings.
• Allow students the opportunity to create their own headings first to see how they sort their items. In further rounds give students pre-designed headings to focus thinking on concepts being investigated.
Create a worksheet - have students describe their thinking through pictures/words to practice describing their reasoning for their categories or sorting methods (optional).

**How to Play**

1. Give each group/student the items, headings and worksheet.
2. Provide a time limit to be able to sort their items and encourage group work/discussion.
3. After students have sorted their items, have students walk around other student’s collections and look for similarities/differences with their own sorting.
4. Come together as a class and share any strategies, thoughts, observations that were made through the sorting and/or observations of other group’s collections.
5. Repeat the activity and see how groups might change their sorting after seeing others, give new headings, narrow the heading categories, etc.
6. After each round or final round have students search for new items that can be added to their current categories.
7. If using a worksheet - give time for students to describe the way they sorted their items and their reasoning.

**Extensions/Variations**

- Have the students collect the items themselves in advance of the sort - Give guidelines of what to collect or allow for the spontaneity of students choice.
• Have students take a photo of their sort to be able to extend their understanding through describing or writing about their sorts.
• Have students complete the sort while blindfolded to sort items by feel rather than sight.
• Develop feedback skills by giving other groups comments/suggestions on sorts.
• Have students create a piece of artwork with their sorted items (collage, picture, scene, etc.)
Nature Tic-Tac-Toe

This activity uses the ideas in the game called “tic-tac-toe” to have students select an item and classify it according to the categories on the game board. This game can be adapted to fit certain curricular concepts being learned and can be adapted into a physical game or relay to develop gross motor skills.

Materials

• Tic-tac-toe boards - one for each partner
• Markers to help keep track of each partner’s items on the board (optional)

Set-up

• Create the game board with concepts to be developed - leave the board options open-ended so students can obtain each square.
  - Make multiple board games so students can switch game boards after each game.
  - Examples for game boards:
    - Math (numbers of items, patterns, sequencing, etc.)
    - Science (colour, texture, plants, etc.)

How to Play

1. Give partners a game board and time to discuss what each square means. Clarify so that the students have no confusions about the
meaning for each square.

2. Students should go one at a time to find something that will fit a category on the tic-tac-toe board. They will return with their item and place it under the category explaining to their partner why they believe it fits in that category. Then the second student then gets a turn. The partners alternate until one has a line of three items.

* Use a marker to help students remember which item belongs to which partner.

3. Students can switch game boards and attempt the game again.

4. Meet as a class to discuss the strategies students used, items they found and what categories they completed, any challenging categories, etc.

Extensions/Variations

- Include some gross motor development skills by requiring students to run to the collection area.
- Create bigger game boards by expanding the board matrix to 4x4 or 5x5, which allows the students to make more choices.
- Include a stealing strategy - students can take another student’s spot on the board if they can find a suitable second category for the original item.
# Nature Tic-Tac-Toe

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Spot the Difference

This activity works on visual memory skills, by requiring students to figure out missing item(s). The game can be adapted to include sorting, classifying and matching skills practice.

Materials

• Minimum of 8 items to observe and memorize - these items should have some similar qualities but also be distinct items (leaves, twigs, feather, rock, sand, etc.).

Set-up

• Collect all the items needed for the game. If working in groups, collect enough items for each group.
  - Students can complete a nature hunt to find the items in advance of the activity.
• Organize the items into an open area where all items are visible.

How to Play

1. Require students to observe the items and have a small discussion about names, similarities, differences, etc.

2. After about 30-60 seconds, ask students to close their eyes and remove one or more items from view and rearrange the remaining items.

3. Ask students to open their eyes and guess which item has
disappeared.

4. The student who gets the answer right is rewarded by: keeping the item with the goal of collecting the most items, or collecting a point, or choosing the next item to disappear, or being exempt from completing a physical task (i.e.: run to a tree, push ups, jumping jacks, etc.)

5. After completing this games with the entire class or in large groups, try smaller groups or partners.

Extensions/Variations

- Play this game with students as the objects and have the students hold items from the environment. Take away an item from a student asking the rest of the group to guess what has disappeared (a hat, a flower they are holding, etc.).
What is the Category?

This is a categorization group game that requires students to observe similarities and differences of a group of student’s personal effects or the specific of each student (height, weight, hair colour, etc.). This game can be played in any environment and uses student’s attire or can additionally utilizes props from the surrounding environment for curricular connections or a challenge.

Materials

- Student participation.
- Items or props for students to hold (optional).

Set-up

- Have each child collect an object to hold from the environment (optional).
- Gather students together in a small area.

How to play

1. Select students (4+) with similar things about them to stand up in front of the rest of the group (pink on their shoes, wearing a hat, blue eyes, holding a rock, etc.).
   - Can link well with units of study by focusing categories to terminology learned in class.
2. Ask the rest of the class to observe the students and name the
category that they all fit under.

3. If a student selects the right category they can be rewarded by:
   gaining a point, choosing the next category and students who fit that
category, or not engaging in a physical task (running, jumping jacks,
etc.).

4. After a few rounds, discuss possible categories that can be used and
   break students into smaller groups.

**Extensions/Variations**

- Instead of using students bodies or personal effects, use
  environmental items (rocks, flowers, grass, etc.)
- Perform this activity with items and use student’s senses to find the
  similarities by having students close their eyes or wear blindfolds.
Sequencing Students

This is an activity that uses the student’s full bodies to engage in a group game. Students will develop various skills including: cooperation, communication, comparing and sequencing.

How to Play

1. Gather students in a group to explain the rules
2. Ask students to sort themselves into a line in a certain way.
   - Sort by height, birthdate, age, etc.
3. The students should then work together to move themselves into a line that sequences based on the category provided.
4. Once the students have completed the task, check their accuracy.
5. Play a few times changing the item that needs to be compared and sequenced.

Extensions/Variations

• Students could be silent to complete the activity for a greater challenge, or allow talking for first attempts to understand the idea.
• Pick a student to be the leader and in charge of arranging the class (that student might be the only person who can speak).
• Blindfold the students and have them achieve the task by using their other senses (touch, hearing) - this version is best if broken into smaller groups.
• Use items instead of students - length of sticks, rock size/colour, patterns of pinecones, etc.
Silly Stories

This is a story telling game in which the students need to remember the content of previous student’s addition to the story to enable them to add their own part and allow the story to continue around the group. Depending on the age, this can be used for single words or full sentences and can also been focused on a learning outcome being taught such as plants and animals.

How to Play

1. Gather students into a circle
2. Start the game by introducing the story through either a word or a small sentence.
3. The next student will continue the story by paraphrasing the previous story and adding a word or small sentence.
   - If using sentences inform students that they do not need to have the exact words, but should remember and paraphrase the meaning of the student’s sentence.
4. Provide some help to keep the game going if students forget a part of the story.

Example of a story:
Teacher: “One day in the dark forest.”
Student 1: “One day in the dark forest, there was a brown bear.”
Student 2: “One day in the dark forest, there was a brown bear and a blue bird.” …
Example of words:
Teacher: “One”
Student 1: “One day”
Student 2: “One day there” …

Extensions/Variations

• Ask students to include information from the unit of study (best played with terminology or vocabulary).

• Can be used with student’s names and having students come up with an item, emotion, action, etc. to accompany their name/personality. (Jessica the Jumper, Pamela the plant, Freda the flower, etc.)

• Ask students to provide actions to go along with their addition to the story. This allows for easier explanation for students with limited vocabulary as well as a visual to help with memory.
Chapter 2

Social and Emotional Development
Social-emotional development is the ability of the child to identify and understand their own feelings as well as those of others, to manage strong emotions and feelings and be able to express them in an appropriate manner, to regulate one’s own behaviours, to develop empathy for others and to establish positive relationships.

Many of these skills are learned throughout childhood and into adolescence, and children develop them through experiences and experimenting with the environment and community around them. Younger children may experience these skills before they can fully understand them, however, over time they will begin to recognize, label and communicate their emotions. This assists them in understanding the world around them and the emotions of others to better connect with their family, peers, teachers and the community at large.

Developing strong social-emotional skills with children can assist them in becoming competent with their social interactions with others, participating effectively in group relationships, developing an understanding of the social rules in different contexts, and being able to be an involved member of society.
Many theorists including Freud, Bandura, and Skinner have studied social and emotional development in children. The next section of this chapter will provide a brief overview of two theoretical approaches that have explored social-emotional development for learning in children and adolescents. The two theories are: Freud’s Psychodynamic Approach, and Bandura, Thorndike and Skinner’s Social Learning Theories.
Freud’s psychoanalytic theory states that a person’s personality and behaviour is developed through their experiences, communications and social interactions. When a child receives positive feelings through personal experiences and communications they attempt to recreate those feelings in future experiences and communications. On the other hand, if they receive negative feelings they attempt to not make those choices again. In this way, through the reward of positive feedback children develop a sense of the appropriate behaviours and emotions they want to experience and will continue to experiment to obtain the positive feedback for their actions. These experimentations start with the child seeking outside confirmation but eventually develop into internal mechanisms as they age and experience more opportunities to test out their behaviours in social situations.

Freud explains the development of behaviours over time through his stages described in his Personality Structure. The first stage is called “Id” in which a child wants to fulfill their desires immediately regardless of consequences, since they are aiming for pleasure as the outcome. “Ego”, the second stage, is more concerned with the balance between the desires and ability to reason within the rules of reality, and whether or not those desires should be fulfilled at that present time or not. The final stage is “Super Ego”, which is the opposite of “Id.” At this stage, the child is more
concerned with moral values, standards and ideals of his or her actions and will weigh consequences before acting.

Freud’s ideas of the three stages of behaviour and personality development can support the growth of student’s social emotional development through the use of rewards for positive behaviour through communications and by providing the experience to practice and develop the student’s social and emotional skills. With more opportunities to practice in social settings, students have a greater opportunity to learn through experimentation, receiving feedback for their actions, and by developing a greater understanding of reality and its constraints on their desire to fulfill their immediate needs. With appropriate feedback, guidance and time, students can develop greater success with their social and emotional skills and build stronger communications and relationships with others.

Social Learning Theory

Bandura has contributed to the behaviorist’s learning theory of conditioning through his beliefs that behaviour is learned from the environment through observation, which he termed as identification. His studies demonstrate that children observe models in their environment such as parents, teachers, peers, and even characters from television or movies, and then they may imitate the behaviours they observed. Children will observe and imitate any behaviour, both positive and negative, and are more likely to imitate a person that they perceive as similar to themselves.
While imitating the behaviour the child looks to the models for either reinforcement or punishment for the behaviour, and will continue or stop the behaviour based on those reactions. Bandura also suggested that children observe their model’s behaviours and the responding consequences to learn whether or not they want to imitate that behaviour based on the consequence received.

Psychologists Thorndike and Skinner also contributed to the behaviorist’s learning theory through the “law of effect” principle and the term “reinforcement”. Thorndike’s principle law of effect states that any behaviour met with positive consequences is likely to be repeated, whereas behaviours met with negative consequences are less likely to be repeated. Skinner added the term “reinforcement” into Thorndike’s principle stating that behaviours that are reinforced tend to be repeated, while behaviours that are not reinforced will weaken and disappear. Both psychologists work states the importance of feedback to help develop behaviours in children. Skinner’s ideas of reinforcement add that both positive and negative reinforcements can be used to adjust behaviours while punishments will weaken behaviours.

Through a greater understanding of identification and reinforcement of behaviours, teachers can help support the development of student’s social and emotional skills through activities and lessons. By being aware of the behaviours used in the class, the use of positive and negative feedback, teachers can better address both the appropriate and inappropriate social and emotional behaviours being displayed by students. Outdoor education offers a great opportunity for students to observe
models, receive feedback and practice their own skills. Many of the activities can encourage cooperation between peers and teachers as well as provide opportunities for appropriate feedback.
Sharing and Taking Turns

Learning to share and take turns is an important skill for students to practice and develop to support their ability to communicate and promote positive social interactions with other people. Students learn to take turns through play and the sharing of toys and over time they appreciate that they also gain when others share with them. Through sharing and taking turns, students begin to realize other people have needs, like themselves, and that by sharing they support those needs of others and in turn may have their own needs met.

In older students the use of the concepts of sharing and taking turns becomes more central to their social desires. In conversation they take turns to speak and listen respectfully, sharing a common subject to the enjoyment of all parties engaged in the conversation.

The act of sharing and taking turns begins extrinsically with a teacher or parent telling a student to act a certain way, but with practice and development of the student’s communication ability, the act of sharing and taking turns should be intrinsically motivated if the student can see the reward in it.

Perspective and Feelings of Others

The idea that other people have different viewpoints, perspectives and feelings can be a challenge for some students to understand and therefore they may be unable to respect differing ideas and perspectives. Developing an understanding of different
perspectives is important for students to learn and use while cooperating in groups, having conversations and learning from others. A student who has difficulty with understanding that other people can think and believe differently from themselves can have challenges with considering the feelings of others and their needs. An appreciation for other people’s perspectives and needs helps to develop empathy and a greater understanding of the world around them.

Expressing Emotions and Understanding Powerful Feelings

Students can experience differing emotions while at school, working with their peers, or playing on the playground. Students can explore these emotions so they can identify why they are having them, what they might mean, and how they can react appropriately to them. If a student is told that they should not be feeling an emotion or not to react in a certain manner, and are not given the opportunity to explore that emotion and response, then they will not learn why or how they felt with that emotion and how to appropriately respond. They can also develop a sense of insecurity and shame about feeling an emotion, even though emotions are normal and experienced by everyone. Students need to be given an opportunity to experience their emotions, to understand what it feels like and to learn how to react and either avoid or embrace the reaction in the future.
In order to deal with emotions, students need to have the opportunity to experience them and to recognize and accept the feeling. Modeling how to deal with emotions can be of great help for students in reacting to their own emotions and above all, not allowing a student to feel shame for their reaction. Provide feedback on how the student can handle his or her emotions in a more socially acceptable way.

Self-Awareness and Self-Esteem

Early on, students develop an awareness of their physical features and as they age, they become aware of their interests and personality as well as their emotional responses to things in their life that set them apart from other people. It is important that students celebrate their difference and similarities to build on their self-awareness and create a positive image of themselves that bolsters their self-esteem. A student’s self-esteem can greatly affect their ability to develop relationships, communicate successfully with others, and participate in activities. If they struggle with low self-esteem it can inhibit their development due to a lack of confidence with their own ability.

Teachers can support the development of self-awareness and self-esteem through encouraging positive self-esteem behaviours and acceptance of the differences in everyone. Modeling positive self-esteem and encouraging it in all students supports student’s ability to see their own worth and the worth of others and they in turn develop confidence and belief in themselves.
Social Rules

Students initially learn about social rules based on reward or punishment for their actions and behaviours. Overtime, and with an understanding of the perspective of others, they develop a sense of what is expected of them and learn to exercise self-control and behave in a morally responsible way. Students learn about these expectations by testing the boundaries of the rules imposed on them to find out what is acceptable. They push those boundaries to see what the limits are and once they have confirmed the limits, then they can safely act and learn within those limits. If a student doesn’t understand or have clear boundaries, they have difficulties with following the social rules and behaving in a morally acceptable way.

On top of this, each situation and environment has a different set of social rules that apply, such as talking with their teacher versus playing with their friends. The expectation is that students can differentiate between the different social settings and behave or act in a manner that is suitable. Students learn how to act by observing others and by receiving feedback from their models that either reinforces or diminishes the behaviour.

Social skills we expect students to develop can include good manners, being polite, showing consideration towards others, sharing and taking turns, saying please and thank you and generally being positive with physical and verbal interactions with others.
Building Relationships

As students go through their school careers they experience many relationships with both adults and other students and have a wider social circle to manage and observe. Each individual in their social circle acts as a model for that student to observe and either imitate or choose to disengage from. When students are younger these relationships are of more importance for behaviour and social practice, but as students age their relationships with people become very important in shaping their behaviours and the ability to follow varying social rules. Students learn important communication and social skills through these relationships such as how to: make themselves understood, cooperate, negotiate, evaluate disagreements, reciprocate, approach others, consider differing views, form judgments, and how to show affection and control their aggression. Depending on the relationship, whether it is with a parent, teacher or a peer, the student develops a different response to the skills and learns their effectiveness based on the model’s responses to their actions. Overtime, the student learns the social rules for the different social circles and through trial and error develops their skills and maintains those relationships or moves onto others.
Another aspect to developing various relationships is the emotional support that relationships can offer. When students are younger they gain emotional support from their families and teachers, but as they age students can turn to their peers for that emotional support. Receiving support for their emotions is important for students to learn to be able to express themselves to others and to be able to understand and support other individual’s emotional needs.

A final skill that can be developed through relationships with others is independence. As students age they begin to practice independence by separating themselves from their parents and participating in activities with their peers, but not quite fully independent. This step in moving away from their family can build confidence in achieving things on their own and yet still have the support from their peers or teachers to accomplish tasks.
Games and Activities
Story Building

This activity develops student’s social skills through story telling and using vocabulary to describe their perspective, or view, of an object. The students experience viewing an object from their own perspective but also listening and observing the different ways that other students view the same object. This activity provides practice in sharing and taking turns as the group or partner is required to listen and wait for their own turn to describe what they see and as an extension build on what their partner said demonstrating their listening skills.

Materials

• Items from the environment (sticks, rocks, leaves, a bug, etc.).
• Clipboards
• Paper and pencils

How to Play

1. Have students gather in small groups.
2. Give a student an object and ask them to describe what they think/feel/smell about this object.
3. Encourage the student to describe the object and turn it into something else through description or a short story (a stick might become a witches broom).
4. Challenge students to make their descriptions the funniest, the scariest, or the most useful.
5. Once one student has shared their perspective on the item, give positive feedback for their creative view and contribution.

6. Give the same item to another student and ask them to describe how they see it.

7. Once the ideas are starting to get stale for one object, change the object for a new start.

8. After the group exercise with at least a few items, have the students select their own item and create their own creative story/description about their item and the alternative ways to view it.

9. Give an opportunity for students to share their item and the story/description with a partner.

**Extensions/Variations**

- Blindfold the student who is holding the item and ask them to describe and tell a story about their item without sight.

- Have the whole group tell one single story about the item by passing it around the circle and continuing the story of the item through the whole circle.
This game can be played like Simon says, but should focus more on visualizing and expressing emotions and feelings. Students will get a chance to see how other people express and act out different feelings and emotions.

**Materials**
- A box of cards with emotions or feelings described to support students with choosing an emotion or feeling (optional).

**How to Play**
1. Begin with easy emotions such as happy or sad and for each emotion display multiple ways that students might express that emotion (happy – a big smile, a laugh, hugging a friend, high fives, etc.).
2. Have students watch and copy your actions quietly then ask the class what emotion they were acting.
3. Have students then demonstrate their favourite way to show that emotion. During this part verbalize the ways that different people are expressing the emotion and give feedback for all ways that the emotion is expressed.
4. Continue with new emotions/feelings by either teacher choosing emotions or asking a student to demonstrate an emotion and have the class copy that emotion.
   * The key is to demonstrate in multiple ways so the teacher may need to support the student to give enough examples to the students.
5. After a few rounds with demonstrating what these emotions look like, go back to some easy emotions and have a discussion about how to respond to these emotions.
   - Example: Happy - others might also be happy if your happy.
     Sad - sit on our own until they feel better, go comfort someone by asking if they are okay.

Extensions/Variations

- Have students in groups sharing one emotion/feeling and have them brainstorm how to demonstrate this emotion before showing the rest of the class for them to guess.
- Have students make a tableau (a frozen picture) of their emotion, or act out like in charades.
- Have students in groups to demonstrate an emotion/feeling and how to respond as both the person feeling the emotion and observing the emotion in others.
Freeze Laugh

This is a movement and cooperation game that will develop social skills though practicing self-control and patience. It will also develop a sense of personal space and boundaries for students to maintain.

How to Play

1. Gather students in a central location; give a perimeter area, not too big, in which they can roam around during the movement phase.
2. Choose a student to be “it” and have that student stand to the side.
3. The “it” student will choose how the class will move around the area (running, walking, as trains, as cats, etc.) and will watch for a few seconds before yelling “freeze”.
4. The “it” student will then move through the group and makes funny sounds and movements to try to get the other students to laugh. The “it” student must maintain a respectful boundary and cannot touch the other students. The “it” student should only spend a few seconds with each student and then move on to try to make another student laugh.
5. The first student to laugh becomes the next “it”, if that student has already had a turn, another student can be chosen.

Extensions/Variations

• Incorporate items from your environment by allowing students to use props such as sticks or rocks to make their classmates laugh.
• Make the movements focus on a unit of study (animals, transportation, movement styles, etc.)
Puppet Master

In this game the students need to lead their partner by describing what they would like them to do. This game develops students social skills by asking students to describe movements and give instructions to their partner who will need to practice their listening skills to respond appropriately to the instructions. Students will also be practicing their patience, and observational skills with this activity, needing to change their instructions if their puppet cannot follow.

Materials

• Can incorporate props to differentiate the movements that students describe (optional).

How to Play

1. Have students in partners and decide which partner will be the puppet master first. The puppet should select a prop if they will be using one.
2. Discuss as a group how to give instructions and give examples of ways that instructions can be confusing. For examples demonstrate walk by showing the multiple ways that someone can walk. Then specifically say take 5 steps forward and demonstrate following the instructions.
3. The puppet master should describe what they would like the puppet to do, making sure to give precise details and the puppet should follow their puppet masters instructions.

4. Ask students to give 5-10 different instructions, and then ask students to switch roles.

5. Come back together as a class and discuss how the students felt
   - Was it easy? Hard? Did their puppet respond the way they expected them to? If not, why?
   - Try to direct the conversation around to different perspectives of the instructions and how people can interpret instructions differently.

6. Change the partners and have students try again with a new partner.

7. Come back together as a class and discuss if they found working with a new partner more challenging or easier? Why?

**Extensions/Variations**

- For an extra challenge have the puppet close their eyes or be blindfolded so that they cannot observe the body language of the puppet master and therefore are unaware if they are responding as expected. It might be beneficial if the partners tried the activity once with the blindfold and once without to compare their thoughts, feelings and the results.

- Have the puppet master be in charge of two puppets and observe if two puppets will respond to the same instruction in the same way.
Be the Leader

This is a whole class or group activity in which the leader will need to safely lead their group around a space. The students will develop their social skills through observing and following a leader as well as leading appropriately. The leader will need to observe the reactions to their instructions and adjust their instructions to have the group respond appropriately. This can be done through an obstacle course, over playground equipment or with random movements for students to follow.

How to Play

1. Group students into groups of 3-5 students and pick one student to be the leader first.
2. Discuss with students the area in which they can lead their groups, the end destination to get their group to, and decide on movement style if students are to focus on a specific movement type (slow motion, jumping, skipping, etc.).
   - Ensure the area is not too large so the destination is obtainable and allow for all students to have a turn at being the leader.
3. The group of students should stand in a line with the leader to the side or in front. The leader should give verbal cues to safely move their group through the area and should be adjusting their instructions if their group is not responding the way they intended.
4. Once all groups have reached the end point or time limit, then come together to discuss the challenge. Did the leaders find it easy or
hard? What could they do differently? What feedback would the groups give to their leader to help them next time?

5. Change the leaders and have the groups try the activity again with a different path, movement type or instruction method to keep groups engaged.

6. Repeat the process so each student gets to be the leader.
Personality Shuffle

In this activity students will have a chance to identify their own personality traits and learn common traits between them and their peers. This activity can be adapted to demonstrate other concepts, name learning, and other personal features.

Materials

- Cones/markers to mark student spaces (one less than the participants).

How to Play

1. Have students stand on a marker around a circle with one student in the middle. For a first time playing the game, the teacher should begin in the middle.

2. The student in the middle will make a statement about him/herself that is true.
   - “I love to play soccer, I have a pet dog, I am an only child…”

3. Any other students who find this statement true for themselves as well needs to enter the circle and find a new marker to stand on. The current student in the middle also finds a marker in the circle to stand on. If no other student moves then the current students makes a new statement.

4. The last student left without a marker will be the new person in the middle to make a true statement about him/herself.
Extensions/Variations

- Have the students practice different movement types as they move across the circle (leap frog, crawling, hopping, etc.).
- Turn the game into an “I have never…” game and have students come up with things they have never done, but may want to.
Personal Information Toss

This is a simple partner tossing game to encourage listening, sharing, and developing an understanding of social rules within conversations.

Materials

• An item to toss between partners – ideally something soft like pinecone or a ball.

How to Play

1. Have partners facing each other about one step away.
2. One partner starts with the item to toss. That student needs to create a true statement about them to share with their partner.
   - “I have two brothers, I am good at painting, I like to run…”
3. The partner then needs to repeat what their first partner said.
   - If they repeat it correctly then the first partner will toss the item.
4. Once caught both partners take a step backwards.
   - If they do not repeat the statement correctly, then the first partner needs to create a new statement and both partners take a step closer together.
5. The second partner now makes his or her own statement and follows the same routine as the first partner.
6. The goal is to get as much distance between the partners as possible without dropping the item. If the item is dropped then both partners must take a step forward.
Extensions/Variations

- To create a challenge, have students try to remember all of their partners statements and repeat their statements throughout the whole game.
- Change the rules to be statements about specific topics (things you like to eat, games you like to play, things you hate).
- Use this game to explore emotions (things that make you angry, things that scare you, etc.).
Relay Races

There are various styles of relay races that can be adapted to suit multiple themes and are a good way to encourage physical activity, teamwork, cooperation and taking turns. Students will be required to work together to accomplish a task either one at a time or as a whole group, but overall the students will need to use social skills to accomplish the tasks.

How to Play

1. Students stand at one end of the area in a group line.
2. The first student will go to the other end of the playing area and accomplish the task that is required before returning to tag the next teammate.
   - Multiple students can also go at one time for more group work.
3. Students should be encouraged to cheer on and encourage their teammates – a good way to develop feedback skills in students.
4. Once a team has accomplished the task together, they sit down to show that they are done.
   - The winning team could be the team that finishes first, the team with the most spirit, the team that showed the best teamwork, etc.
5. Discuss the methods of cooperation and how did the class encourage their teammates and work as a team.
Relay Activities to support Social-Emotional Development

Manners Relay

Materials
- Items for students to collect (stones, sticks, leaves, etc.).

How to Play
- When the students reach the end of the relay track they need to ask another student politely for the item they are collecting before running back to their group. The goal is to be polite and collect the most items.
- If a student is not polite then they do not receive an item for their run and their next teammate gets a turn.

Emotion Relay

Materials
- Emotion cards (with either pictures or words of emotions that students know).
How to Play

• When students reach the end of the relay area they pick an emotion card and need to demonstrate what that emotion looks like before running back to their group and tagging their next teammate.
• The relay finishes when all students have had a turn or there are no more emotion cards to collect and the winning group has the most emotion cards.

Extension/Variations

• Have one student stay at the end of the relay area and demonstrate an emotion to the teammate who is traveling. That student might need to identify the emotion that the student is demonstrating, or demonstrate how they might react to another student showing that emotion.

Look What I Can Do Relay

Materials

• Items for the students to show their skills with (skipping rope, bean bags, soccer ball, rocks, etc.).

How to Play

1. When the students reach the end of the relay area they demonstrate a skill, either using their body (jumping jack, hand stand) or with an
item (skipping rope, dribbling a ball). The student then returns to their team and tags the next teammate.

2. Encourage their teammates to celebrate their skills and express that it is okay to have the same skill as a teammate.

Cooperation Relay

How to Play

1. The first student will run every time, while the last student will run only once – the team should discuss who wants to run the most and who wants to run the least, organizing themselves into a line. Remind students that when running a group, either holding hands or running close together, you need to run at a speed all can manage.

2. The first student will run to the other end of the relay area to accomplish a task (jumping jack, push up, silly dance, etc.).

3. They will then return to their teammates to grab and run with the second teammate to the end of the relay area. Both students then accomplish the task and return to their teammates for the third teammate.

4. This continues until all teammates are running together and accomplish the task together and then return to all sit down.
Charades

Charades are a great way to help students understand and demonstrate different social and emotional experiences and how they might respond appropriately in different situations. Games of charades can be tailored for different ages as well as to teach different social and emotional skills.

How to Play Charades

1. Break students into groups or partners.
2. Provide each group with an action/item for them to act out.
3. Give time to prepare their act (3-5 minutes maximum).
4. Gather groups back together and have each group take a turn to act out their action/item.
5. The other groups watch and after the acting is done they try to guess what the action/item is.
6. If the groups guess correctly then the acting group receives a point (this helps ensure the groups act appropriately).
Charades to Support Social and Emotional Development

Emotions

- Afraid
- Angry
- Jealous
- Embarrassed
- Disgusted
- Sorry
- Ecstatic

Emotional Situations

- Hitting a baseball through a neighbour’s window (sorry, nervous)
- Saying goodbye to a family member (sad, depressed)
- Missing the winning soccer goal (angry, disappointed)
- Taking out a stinky garbage bag (disgusted)
- Performing on stage (nervous, excited, happy)

Social Rules

- Asking a friend for help
- Following directions
• Taking responsibility for actions
• Giving a compliment
• Joining a group
• Sharing a book/toy

**Perspectives**

• Getting hit by a ball in dodge ball (cry or ignore it)
• Saying a wrong answer in class (embarrassed or learn from it)
• Not being invited to play (sad or problem solve)

**Personal Interests**

• Playing soccer
• Drawing / art
• Spelling
• Cooking
Chapter 3

Physical Development
Physical Development is the process of developing control over the body, particularly muscles and physical coordination, and is usually concentrated on gross and fine motor skills. Physical development begins in infancy and is important as it affects a child’s overall health and well-being.

A child’s physical development is especially important during infancy and childhood as the coordination of the child’s brain and body works together to learn important skills such as grasping, crawling and walking. By progressing with these skills, a child gains self-confidence in their abilities and continues to succeed with their development in all motor skills.

Physical development is broken into two categories: gross and fine motor control. Gross motor control is the ability to control the large muscles in the body and control movements such as balance, walking, running, and more. Fine motor control is responsible for the control of small muscles in the body, which allows us to manipulate, grasp and use objects, such as in writing.

Over the years, opinions on children’s physical development have been adapted and adjusted by multiple theories, however, one theorist, Arnold Gesell, focused on growth and development in children. In the next section we will look at Gesell’s Maturational-developmental theory and its effects on development standards today.
Arnold Gesell established standardized levels for early development of children with an emphasis on motor development. His studies involved developmental testing and collecting normative data on children’s motor abilities which showed that children go through a similar and predictable sequence of movements but pass through these sequences at their own pace, meaning that a child’s physical developmental age may be different from their chronological age. The sequence focused mostly on a process he called maturation, in which internal factors such as genetics governed a child’s motor development, but it could also be affected by external factors such as the environment, cultural influences and parenting styles.

The sequence of physical development always continues in a fixed sequence where every child develops motor abilities in a specific order, although the rate of development may vary from child to child. Gesell believed that these growth rate differences were the result of internal genetics and not external factors. He recognized that external factors could have an influence on a child’s motor development, but has more influence when they are used in harmony with a child’s inner maturational timetable. Gesell suggested that children should not be taught motor skills before they are developmentally ready, as demonstrated by the child’s natural mastery of the skill and by the child’s own inclination.
Another aspect that Gesell suggested occurred throughout the process of children’s physical development is reciprocal interweaving. In this process a child will go through times of challenges or disequilibrium with their motor skills, fluctuating between being successful or not, before finally reaching a balance and mastering that skill. The child needs to experience both success and failure while acquiring a skill to be able to fully master the skill in the future.

By using the ideas and normative standards that Gesell created, activities can be better tailored to allow for differentiated motor abilities in students engagement within activities, and each student can participate to the best of their physical capabilities. Ensure that activities allow for various levels of physical capabilities and that students can practice the skills that they can achieve while giving opportunity to work on the skills they have not yet mastered.
Strength, Running and Walking

Developing strength in student’s gross and fine motor muscles is important for their daily lives and their ability to learn. Strength should be developed first with the use of large and light equipment to support proper movement in limbs and as a student’s ability and strength improves, smaller and heavier equipment can be used.

For fine motor skills students need to develop the strength in their shoulders, wrists and fingers to better be able to use their whole arm together to accomplish tasks such as writing, painting and picking up items. In particular developing strength in student’s wrists and fingers is important to support a student’s pincer grip, the ability to manipulate small objects with thumb and forefinger, and one-handed manipulation of objects such as rotating a pencil into a proper grip. Simple activities within school can become tiring and frustrating for students who have a lack of strength in their upper limbs.

Strength with gross motor skills is best practiced with weight-bearing exercises such as running and walking. Using a student’s own body weight in these actions will help to develop strong muscles and bones in the legs and hips. When walking, students should be encouraged to practice with feet and legs close together and stepping from their heel to toe. As students walking skills improve they will be able to improve their balance while moving resulting in walking more quickly and eventually running. An important aspect to developing running skills is also to engage students in stopping, changing directions and avoiding obstacles.
Jumping, Hopping and Climbing

Jumping, hopping and climbing are important gross motor skills to develop awareness of their body position and the different features of their body being used in these movements.

Generally students will start with small movements when jumping and hopping as they learn where their feet are in space compared to the rest of their body and as they figure out how to land in a safe manner, using their whole legs to cushion their landing. Practicing jumping and hopping in different directions, such as forward, backward and sideways, will assist students with learning the spatial relationship of their feet compared to their bodies. Encouraging jumping and hopping over low objects, such as a skipping rope, will assist students with developing an awareness of their feet, bodies and the item they are jumping over, increasing the knowledge of their bodies in space.

Climbing is a skill that students cultivate as balance develops. With increased balance, students can begin to climb using one foot on each level as opposed to both feet stepping on the same level. Achieving climbing skills supports a student’s confidence with playing on elevated equipment and with varying heights of play areas. Students should also develop their climbing skills by having the primary force for climbing coming from their legs and using their arms to guide their bodies.
Coordination, Throwing, Catching and Kicking

Body coordination is a student’s ability to use their bodies and their vision together to maintain eye contact with what they are doing and allow them to interpret what they see to respond physically. Throwing, catching and kicking are all examples of bodies and vision working together to accomplish a task. A lack of ability in this skill can cause injury and frustration in students and have an effect on their self-confidence with play and work. Students should engage in throwing, catching and kicking large and light items to develop proper movement and strength before moving onto smaller and heavier items to avoid injuries.

Throwing and catching generally begin with a student using their whole upper body to accomplish the task, such as throwing two handed and catching the item into their chest. With practice, students learn to use just their hands to catch and their arms to absorb the impact of the item. When throwing, students can put their entire body off balance as they throw from the shoulder. With practice and time, students learn to stand sideways and transfer their weight as they move their arm with their body.

Kicking is also a great practice for gross motor skills. When students begin to kick equipment, they require the equipment to be still, as their coordination improves, students can begin to kick at moving equipment and eventually move with the equipment while kicking.
Stretching

Stretches are another physical development skill that should be included with any other movement skills. This activity is important in developing strong and healthy muscles and ligaments and avoiding injury when children are playing. Exercises to stretch the big muscle and ligament groups such as quads, hamstrings, hip flexors, abdominal muscles and back extensors are very important for safe physical activity. Doing stretches with students should be active, movement based and light to avoid injury and warm up muscles and ligaments before further exercise.

Other methods of stretching, such as Yoga or Pilates, are also useful for strengthening muscles and ligaments while adding a calming environment to stretching routines. Again light and gentle movements should be used during Yoga or Pilates to avoid injury. These two practices are good for cooling down to help stretch and relax muscles that have been used during physical activity.
Games and Activities
Follow the Leader Stretches

An activity to develop leadership in students while stretching muscles and focusing the mind before engaging in other physical activities. This activity will need to be teacher led for certain ages or until students are into a routine for leading stretches.

Materials

- A location to safely move and stretch as a group (field, open area).

How to Play

1. Complete a gentle warm up (a jog, a walk, dancing, etc.).
2. Gather students into a circle ensuring that students have enough space to stretch without touching one another.
3. Choose one or two leaders to start the stretches and by picking one stretch to lead the class through.
   - Encourage students to move through stretches from their head to their toes.
   - Remind students to gently stretch and not to cause pain while they are stretching.
4. Once one student has demonstrated a stretch, the next student in the circle gets to lead the class through a stretch of their choosing.
Stretches to support Gross Motor Development

Overhead Arm Stretch

• Stretches the upper body, shoulders and arms.
• Stand with feet together and a straight back; reach both arms straight up and over the head. Hold the stretch for 10-20 seconds.

Wide Arms

• Stretches arms and shoulders.
• Stand with arms outstretched to the side with thumbs facing down and gently push arms backwards, pushing shoulder blades together. Hold the stretch for 10-20 seconds.

Cross Arm Stretch

• Stretches the shoulder and upper arm.
• Reach one arm straight in front and with the other arm reach beneath and place wrist against the straight arms elbow. Use the bent arm to press the straight arm across the body until a gentle pull can be felt. Hold the stretch for 10-20 seconds then repeat with the other arm.

Triceps Push

• Stretches the upper arm.
• Raise one arm overhead and bend at the elbow touching fingers to the back of the neck or between shoulder blades. Using the other
arm, push down on the bent elbow until a gentle stretch is felt. Hold for 10-20 seconds then repeat with the other arm.

**Back Twists**

- Stretches the back extensors and side abdominals.
- Stand with feet hip width apart and stretch arms out in front of the body grabbing the opposite arms' elbow. Keep arms at 90-degree angles to the body and slowly twist to one side, until a gentle pull is felt. Hold for 10-20 seconds before repeating on the other side.

**Kneeling Lunge**

- Stretches the muscles in the groin and hip.
- Kneel on the ground with a straight back. Step forward placing one foot flat on the ground and press forward until the knee is directly over the ankle. Hold for 10-20 seconds and then return to a kneeling position and repeat with other leg.

**Butterfly Legs**

- Stretches the inner thighs and hips.
- Sit with soles of feet together and hold with both hands, placing elbows either on knees or resting between the legs. Press the knees down towards the ground until a gentle stretch is felt. Hold for 10-20 seconds.
Straddle Stretch
• Stretches the lower back, inner thighs and hamstrings (back of thigh).
• Sit on the ground with legs stretched apart as wide as is comfortable. Slowly bend over one leg until a gentle pull is felt and hold for 10-20 seconds. Sit back up and repeat the process bending between the two legs and then over the other leg.

Leg Cross
• Stretches the hamstring muscle.
• In a seated position, stretch one leg straightforward with toes pointing up. Bend the other leg and place the sole of the foot against the straight leg’s knee or upper thigh. Reach forward along the straight leg until you feel a slight pull. Hold for 10-20 seconds and then repeat with the other leg.

Quadriceps Stretch
• Stretches the quadriceps (large upper leg muscle).
• If needed, use a partner or stationary object for balance.
• Bend one knee and grab the ankle with the same-sided hand, pressing the foot towards the body until a gentle stretch is felt. Hold for 10-20 seconds then repeat with other leg.

Calf Muscles Stretch
• Stretches the calf muscle (back of lower leg).
• Best practiced with a stationary object or a partner.
• Place hands on a wall or interlock hands with partner and place one leg near to partner or wall. Extend the other leg back, keeping the heel to the ground, until a gentle stretch is felt. Hold for 10-20 seconds then repeat with the other leg.

**Lunges**

• Stretches the thighs and hips.
• Stand up straight and step to the side with one leg bending the knee to a 90 degree angle, while the other leg should remain straight with both feet facing forwards. Hold the stretch for 10-20 seconds then return to standing position. Repeat with the opposite leg.

**Toe Touches**

• Stretches the back and the hamstring.
• Stand straight with feet together and knees slightly bent and roll down from the lower back to reach for the toes until you feel a slight pull. Do not try to touch the toes if you feel a slight pull first. Hold the stretch for 10-20 seconds.

**Cross Toe Touches**

• Stretches the back and the hamstrings.
• Cross the legs while standing straight with knees slightly bent and reach for the toes until a slight pull is felt. Do not try to touch the toes if you feel a slight pull first. Hold the stretch for 10-20 seconds.
Relay Stretches

The students will not realize that they are stretching or strengthening their muscles while doing this activity. Best done with working on the lower body, as the students can engage in a relay while exercising the legs.

Materials

- Markers for start and finish
- Any equipment for the exercises.

* For rules on relay’s please see relay races in the social/emotional activities*

Relay Stretches for Gross Motor Development

Forward Lunges

- Students will step forward until their knee is above their ankle and will keep the back leg’s heel on the ground. Then students stand up moving forward and step forward with the other foot.

Side Step Lunges

- Students face sideways and step to the side bending the knee until the knee is over the ankle. Keep both feet facing forward of the body. Then students stand up and repeat. Have students turn and face the other direction about half way.
Grapevine

- Students face sideways and put hands straight out beside them for balance. Take their back foot and step around their front foot placing it to the opposite side of the front foot. Then the new back foot moves back to the front of the other foot and students continue crossing their feet as they move sideways.

Walking backwards

- Students should face their teammates and put their hands straight out beside them for balance, and walk or a slow jog backwards. Remind students to slow and glance behind them to avoid obstacles.

Butt Kicks

- Students run slowly forward and with each step kick their heel up towards their butt. Some students may not be able to hit their butts, but encourage students to kick high enough to feel the pull in their thigh.

High Knees

- Students run slowly forward with their hands open with palms facing down at hip height above each thigh. As students run they attempt to get each thigh to hit their palms.

Skips or Hops

- Students skip or hop, depending on their ability, forward at a safe speed.
Obstacle Course

An obstacle course is a great way to have students participate in performing any set of activities that they may not practice in play. An obstacle course can be set up on a playground, a field, or even in a forested environment.

Materials

- Posters or pictures demonstrating what the students need to do.
- Any equipment that is needed for the different obstacles.

How to Play

1. Set up the obstacle course so that it makes an easy route for students to follow. Select at least 6-8 obstacles that will develop different skills. *See below for suggestions on obstacles*
2. Put students into groups or partners to lessen amount of student in the obstacle course at one time as well as to promote encouragement and teamwork.
3. Have one student from each group go through the obstacle course at one time
4. Inform students that they should try each obstacle, but if it is too difficult then they may pass, once they have given it a try.
5. Have students repeat the obstacle course 1 or 2 times.
Obstacle Course Routines for Gross and Fine Motor Development

The obstacle course ideas will be broken down into different skills that they will aid in developing, and can be adapted to suit the needs and abilities of all students.

Running / Walking

Zigzag Pattern

• Set up cones in a zigzag pattern that students will need to alternate running between.
• To make this more challenging, ask students to hop on one foot between the cones, or zigzag backwards between the cones, etc.

Ring Step

• Place rings or hula-hoops in a path and at distance to be able to step or jump through. Students will need to jump or step into each ring/hoop along the path.
• This can practice both one and two feet jumps as well as eye-foot coordination while running.

Hula Hoop Lift

• Make a path of hula-hoops for the students to follow. They must pick up the hula-hoop they are standing in and raise it above their heads and put it back on the ground as they step to the next hula-hoop.
• This will use both their gross motor and fine motor skills to manipulate their bodies and hands around the hula-hoop, as well as work on hand-eye coordination.

**Item Walk**

• Students must walk from one end to another placing an item under their feet with each step so as not to touch the ground. Give students three flat items (leaves, poly-spots, paper) that they need to use to walk to the end.

• Students will need their fine motor skills and coordination to move the item under their feet with each step.

**Crabwalk**

• Students sit on the ground and attempt to walk backwards on their hands and feet with their stomachs towards the air. Aim for a short distance and encourage students to take a break if their arms or legs get tired.

• This activity develops shoulder and upper arm strength, which will aid in fine motor skills development.

**Balance**

**Balance Beam**

• Using a skipping rope, bench, or line on the ground, have students attempt to step one foot in front of the other along the beam.

• Students will require foot-eye coordination to complete this task.
Stepping Stones

• Place a few items out in a path. They should be small enough for only one foot to properly stand on. Students should try to balance on one foot on each item, walking between each spot along the path.

Jumping / Hopping

Cone jumping

• Set out a few low cones or other obstacles in a path and have students hop or jump over the cones.
• The higher the item, the more challenging it will be to jump over. Providing a variety of heights will allow students to challenge themselves but also be successful.

How High Can You Jump

• Using a wall, tree or side of a playground, place a marker at a reachable level for students to jump. Students need to perform a two-foot jump and try to touch the marker.
• For a variation, put a few markers at different heights for students to try to reach a marker that is attainable for them.

Skipping

• Students need to skip with a skipping rope 5 times. Encourage students to try to complete 5 skips in a row.
• When skipping on their own, students will develop strength in their shoulders to support fine motor development.
• When skipping students will be using their spatial awareness and coordination to avoid the rope and perform good timing.

Sack Hop
• Using large sacks have students hop while in the bag from a start to finish point.
• The students should try to use only two foot jumps for safety reasons.

Crawling / Climbing

Crawl through Pool Noodles
• Set up a path for students to crawl through an arch of pool noodles using weights or buckets to support the hoops to stand.
• Crawling is a good exercise for the shoulders and upper arms to develop strength for fine motor skill development.

Crawling over or under
• Using a hockey stick or skipping rope and two cones, balance the rope or stick on top of the cones for students to have to crawl under or climb over.
• Having a few in a row will make students practice both skills.
Rope Obstacle

- Using skipping ropes and a soccer or hockey net (without the net) string the skipping ropes to make intersecting strings for students to have to climb through.
- Encourage students to not touch the ropes and go over and under at least two ropes.

Rolling

- Have students perform a log roll from one location to another.
- If on a hard surface have students roll on a mat.
- Log rolls support the development of strength in the back and abdomen.

Throwing / Catching

Throw and catch

- Have students throw a ball, beanbag, or a pinecone at a wall or hard surface and then try to catch the item as it bounces off. Complete this task 5 times.
- Students will develop hand-eye coordination in this activity.

Toss and Catch

- Toss an item (ball, bean bag, pinecone, leaf) in the air and try to catch it again. Complete this task 5 times.
- Students will develop hand-eye coordination in this activity.
Aim and Throw

- Using small items that can thrown and a bucket to aim at, have students throw the items into the bucket. Aim to throw at least 5 items successfully.

Kicking

Balloon on a string

- Tie a balloon or small ball with a string or rope. Students then hold the end of the rope and kick the balloon/ball trying to make full contact at least 5 times.
- Encourage students to kick the ball repeatedly without letting it hit the ground.
- This requires good eye-foot coordination and reaction time.

Dribbling

- Students need to dribble, repeatedly kick, a ball from the start to the finish.
- Students may need to stop the ball and kick while it is stationary or may be able to kick with the ball is still rolling.
Piggy in the Middle

This is a quick, easy game to practice throwing and catching with accuracy and can easily be accomplished in any learning environment.

Materials

• An item to throw (ball, bean bag, pinecone, etc.)

How to Play

1. This game is played in groups of three with two students on the outside and one between them. Can be adjusted to have two students in the middle or three on the outside if a student is left out.
2. The goal is for the outside students to keep the item away from the student in the middle.
3. If the item touches the floor, the last student to touch the item moves to the middle.

Extensions/Variations

• Have students on the outside required to answer a question from the middle student before they can throw the item (curriculum review).
• Have students required to take step away from each other each successful throw and catch.
How Far Can You Go?

This is a short game to practice throwing and catching with accuracy and is useful for developing hand-eye coordination and teamwork.

Materials

• Something to throw (ball, bean bag, pinecone, etc.).

How to Play

1. Students stand about one meter apart facing each other.
2. One student tosses the item to the other student to catch.
3. With each successful catch, the partners both take a step backwards. If the item touches the floor then they return to the starting position.
4. The goal is to see how far apart the students can successfully throw and catch.

Extensions/Variations

• Have students on the outside required to answer a question from the middle student before they can throw the item (curriculum review).
• Try different throwing techniques (underhand, overhand, backwards).
• Use different sized items to see which is easier or harder to catch and throw.
• Turn the game into a tournament with partners competing to see who can go the furthest (encourage sportsmanship).
• Have students count up or move through the alphabet to see how far they can get with each throw.
Skittles

This game is a mixture of bowling and dodge ball and aids in developing student aim and throwing. It also works on gross motor movements as students try to dodge the other teams throws.

Materials

- 10 items, or “Skittles,” for students to aim at such as bowling pins, cones, sticks, etc.
- Soft balls of varying sizes.

Set up

- Place 5 “skittles” spread out through the back of the playing area for each team.
- Place all the balls in the middle of the playing area that divides the two teams.

How to Play

1. Divide students into two teams and have them stand between the balls and their skittles.
2. The goal is to protect their skittles and try to knock down the other teams skittles by throwing the balls and without crossing into the other teams territory.
3. Encourage students to stand 5 steps away from the skittles and if a skittle is accidently knocked down then it must stay down.
4. If a ball hits a student, then they must run to the back of their teams territory and return before they can throw another ball.

5. The winning team is the team with the most skittles standing after a time limit or the only team with skittle standing.
Over and Under

This activity requires teamwork and coordination while students stretch to move the item. It can be done standing still, or involve the students moving in time as a chain.

Materials

• An item to pass (pinecone, ball, etc.).

How to Play

1. Line students up in a straight line with space between each student.
2. The first student in line will pass an item over their head to the student behind them. The second student will then pass the item under their legs to the student behind them.
3. The pattern continues making a wave until the item gets to the last student.
4. The class can be challenged to beat their time, race against a second team, or the last student can run to the front and begin the chain all over again.

Extensions/Variations

• Have students pass the item from side to side twisting at their hips to pass the item to the person behind them (a good stretching activity).
• Have students walking forward during the activity adding extra teamwork to try to stay close together and not break the chain.
Capture the Flag

This is a well-known game that requires many gross motor skills including running, walking and dodging. It does require some strategy skills so will need to be simplified for younger ages to fully participate in.

Materials

- A defined area for boundaries
- Two distinct items to be the flags for each team.
- Pinnies to identify teams

How to Play

1. Divide students into two teams and designate a side of the playing area.
2. Ask the teams to hide their flag – it should be visible, but can be partially hidden behind a tree or other obstacle depending on the playing area.
3. The teams need to steal the other teams flag and return it to their own playing area.
4. If a student in tagged then they must go to a “jail” – usually an identified location where their teammates must risk being tagged to rescue them from. Once freed from the jail the students must return to their own team before attempting to steal the flag again.
5. Encourage students not to stand and “guard” the jail or flag.
Extensions/Variations

• Have more than one flag per team to allow the game to go for a longer period of time. The stolen flags can be added to the other teams flag area and be stolen back or can removed from the game.

• Have a “jailbreak” if one teams players are stuck in jail.

• Have specific students designated as taggers and stealers, being sure to switch the groups after each game. This will aid in teamwork with younger ages, to take out the challenge of trying to do both stealing and tagging.
Nature Pictures

This is a great quiet activity to encourage fine motor skill development and pincer grasp in students. It can also be used to explore the environment and use creativity to create an image with environmental items.

Materials

• Access to the environment for items (grass, leaves, twigs, etc.).

How to Play

1. Students search the environment and collect items that they can use to create a picture. This can be focused to only specific items or any items the students would like.
2. Students use their found items to create a picture carefully placing the items where they would like them.

Extensions/Variations

• Have students make their picture on waxed paper to then iron their finished picture between the two pieces.
• Create a whole class picture with all students adding to a large image.
• Have students try to create a certain image such as a face, animal, etc. (curricular connection).
Action Poems, Songs and Rhymes

These songs, poems and rhymes are good ways to practice skills as they have movements that go along with them and encourage both gross and fine motor skill development. The students should mimic what you are doing to practice the skills and learn the movement and rhyme for themselves.

Materials

- Knowledge of a poem, song or rhyme and the actions to go along with it.

How to Play

1. Sit or stand with students in a small area. Students may need to face a partner, or to learn can practice with the air.
2. Have students copy your actions and sing along if they know it.

Extensions/Variations

- Have students create their own actions to their favourite poem, song or rhyme.
Actions Songs, Poems, and Rhymes to develop Fine Motor Skills

The actions can be adjusted to suit the needs of all students and the environment. This is only a small sampling of rhymes, songs and poems.

We’re Going on a Bear Hunt

This song is best performed while walking or allowing movement in an area. Encourage students to use sound effects

Chorus:
We’re going on a bear hunt (marching feet)
We’re going to catch a big one (show the size with hands)
What a beautiful day (look around with a hand over eyes)
We’re not scared (show a brave face, hands on hips)

Uh-Oh! Grass
Long wavy grass (move body to show waving grass)
We can’t go over it (show hand going over)
We can’t go under it (show hand going under)
Oh-No! We’ve got to go through it (move hands as if parting grass)
Swishy, swashy, swishy swashy, swishy swashy

Chorus

Uh-Oh! A river
A deep, cold river (use arms to show depth)
We can’t go over it (show hands going over)
We can’t go under it (show hands going under)
Oh-No! We’ve got to go through it (pretend to swim)
Splash, Sploosh, Splash, Sploosh

Chorus

Repeat above pattern of the rhyme with your choice of new lines:
Mud – thick, oozy, mud - squelch, squirt, squelch, squirt
Forest – a big, dark forest – stumble, trip, stumble, trip
Snowstorm – a swirling, whirling snowstorm – whoo, hooo, whoo, hooo
Desert – a dry, hot desert – pant, pant, pant
Spider webs – sticky, creepy spider webs – sticky, sticky, sticky,

At the end finish with:
A cave – a narrow, gloomy cave – tiptoe, tiptoe, tiptoe
What’s that? (point in a direction)
One shiny wet nose! (point to your nose)
Two big furry ears! (touch your ears)
Two big goggly eyes! (point to eyes)
It’s a bear!
Quick back through the cave – tiptoe, tiptoe, tiptoe
(Return back through each location and repeat the sounds)
We’re safe! (fall to the floor)
We are never going on a bear hunt again!
**Two Little Birds**

This is a rhyme and action poem for copying while students are standing in a circle or group. Students enjoy it when you substitute in their names.

Two little birds sitting in a tree (stand like a tree, one finger on each hand)
My name’s Lucy (bend one finger)
My name’s Lee (bend other finger)
Hello Lucy (bend the second finger)
Hello Lee (bend the first finger)
Goodbye Lucy (bend the second finger and tuck it away)
Goodbye Lee (bend the first finger and tuck it away)

**The Ants Go Marching**

Use this song and actions to walk between destinations, pausing to allow students to change their lines into the right numbers.

(Walking single-file)
The ants go marching one by one, hurrah, hurrah (shout and raise a fist)
The ants go marching one by one, hurrah, hurrah (shout and raise a fist)
The ants go marching one by one,
The little one stops to suck his thumb (pretend to suck your thumb)
And they all go marching down to the ground (shrink towards the ground)
To get out of the rain, BOOM! BOOM! BOOM! (scatter or duck down)
Repeat the song replacing with a new number each time for the students to walk in lines of that number. Numbers can go up by one, multiples, decrease or practice skip counting.

The last chorus:
The ants go marching ____ by ____ , hurrah, hurrah (shout and raise a fist)
The ants go marching ____ by ____ , hurrah, hurrah (shout and raise a fist)
The ants go marching ____ by ____ ,
The little one stops to shout “THE END” (all students shout)
And they all go marching down to the ground (shrink towards the ground)
To get out of the rain (sit on the ground)
Clapping Games

Clapping games are great ways to develop hand eye coordination in students and practice their social skills, memory and attention. Many other clapping games are available.

Materials

- Different clapping rhymes and clapping patterns.

How to Play

1. Teach students the rhyme and clapping pattern.
2. Have students practice the rhyme and clapping pattern in partners.

Extensions/Variations

- Have students create their own clapping pattern to teach the class.
- Have students make up their own silly rhyme and clapping patterns.
- Have a challenge where partners try to practice a clapping rhyme and see which partners can get through with no mistakes.
Clapping Songs to develop Motor Skills and Coordination

The actions and clapping patterns can be adjusted to suit the needs of all students and the environment. This is only a small sampling of clapping songs available.

A Sailor went to Sea

This is a partner clapping game that involves the whole body movement and clapping of the hands with a partner.

Verse:
A sailor went to sea, sea, sea, to see what he could see, see, see, But all that he could see, see, see, was the bottom of the deep blue Sea, sea, sea.

*During the repeated words, the students should clap both of their hands with their partner’s hands in time with the words. For the other lines the students should clap their own hands together, then clap their right hand with their partner’s right hand, then clap their own hands together again and then clap their left hand with their partner’s left hand.

You then continue to the rhyme changing the repeated word and action:

- Knee, knee, knee – hit their knee three times
- Head, head, head – hit their head three times
- Snap, snap, snap – snap their finger
Extensions/Variations

- To add a challenge for memory the students might be asked to repeat all the lines of repeated actions words they have said as they go along. For example the second verse would end with “was the bottom of the deep blue knee, knee, knee” and then the students would repeat the action for “sea, sea, sea” that they finished the previous verse.

**Double This Double That**

This is a very simple, quick hand and arm game with a partner that will help to develop motor skills in the wrist and fingers as well are requiring memory to keep the pattern.

**Verse**

- Double Double (hands in fists – touch sides of fist with partners fists x2)
- This This (palms open – clap both hands palms with partners x2)
- Double Double (same as previous)
- That That (back of hands – clap both backs of hands with partner x2)
- Double This (partner clap with fists, partner clap with palms x1)
- Double That (partner clap with fists, partner clap with back of hands x1)

**Extension/Variation:**

- Once the students have mastered the moves, increase the tempo.
- Play in a round. Have students face each other in a circle and once they have completed the rhyme with one partner they move to the next partner.
Tic-Tac-Toe

This is a quick but complicated clapping routine without lyrics. It will develop motor skills through the use of hands, arms, and fingers.

Routine

• Start with own hands together.
• With hands together, clap the back of your left hand to the back of your partner’s left hand, then the same on the right and once again back to the left.
• Keeping the back of your left hand touching your partners. Clap your right hand into your left hand, then your right palm into your partner’s right palm above your left hands, back to clap your own hand and then below to clap your partner’s right palm and grab the right palm like a handshake.
• Then move your left hand below the right hands and grab like a handshake.
• Take your right hand and slap your right hip
• Snap the fingers once on your right hand.
• Clap your right palm with your partners right palm, then clap the back of your right hand with your partner’s right hand.
• Release your left hands and clap your own hands together again to start over.

Extensions/Variations

• Challenge students to get faster with each round
• Have students come up with their own set of claps.
Concentration 64

This is a good hand clapping game to develop motor skills while reviewing curricular content. It is good for practicing vocabulary, spelling, simple math, etc.

Introduction

Concentration (clap one hand up and one hand down against partners, then reverse the hands to clap again).
Sixty-four (clap your own hands together three times).

I’ll go first (clap one hand up and one hand down against partners, then reverse the hands to clap again) *one student says this line*.
(No lyrics but clap own hands together three times).
And I will follow (clap one hand up and one hand down against partners, then reverse the hands to clap again) *second student says this line*.

The category is (clap one hand up and one hand down against partners, then reverse the hands to clap again).
______________ (Clap own hands together three times).

One student at a time names things that fit the category as they clap one hand up and one hand down against their partners, then reverse the hands to clap again.
Both students clap their own hands three times together and then the next student will name a thing on the next partner-clapping round.
Examples of Categories

• Count by 2’s, 4’s, 5’s, etc.
• Spell “forest” (each student adds to the word in turn)
• Forest animals (bear, squirrel, ants, etc.)
• Months of the year (January, February, etc.)
• Types of Rocks (metamorphic, sedimentary, etc.)
• Types of Trees (Fir, Pine, Spruce, etc.)

Extension/Variation

• Students can try to increase their speed.
• Students can challenge another partner group, with the other partners giving the category to name and checking answers.
Development Information

Kid Sense: developing a brighter future.

Understood for learning & attention issues
https://www.understood.org/en

Gesell Institute of Child Development
https://gesellinstitute.org/pages/screening-assessment-tools

British Columbia: Inclusive Education Resources
https://www2.gov.bc.ca/gov/content/education-training/k-12/teach/teaching-tools/inclusive-education

New South Wales: Support the Development of Children
https://sielearning.tafensw.edu.au/MCS/CHCFC301A/12048/chcfc301a/chcfc301a_welcome.htm

Games and Activities

Rhythms of Play: Raising creative nature-loving kids.
https://rhythmsofplay.com/

Playworks
https://www.playworks.org/resource/twelve-games-to-teach-students-social-emotional-learning/
Kootenay Boundary School District: Take Me Outside
http://kbee.ca

Outdoor Classroom Day
https://outdoorclassroomday.com/

**Outdoor Education Information**

British Columbia Ministry of Education: Environmental Learning and Experience Curriculum Maps
https://www2.gov.bc.ca/assets/gov/education/kindergarten-to-grade-12/teach/teachingtools/environmental-learning/ele_maps.pdf

British Columbia Ministry of Education: Environmental Learning
https://www2.gov.bc.ca/gov/content/education-training/k-12/teach/teaching-tools/environmental-learning#exper

British Columbia Teachers Federation: Environmental Educators Provincial Specialist Association
http://eepsa.org/resources/

Child and Nature Alliance
http://childnature.ca/

Outdoor Council of Canada
https://www.outdoorcouncil.ca/Outdoor-Training