

Classroom Design and Routines

Designing Physical Space

Young children learn by doing and actively engaging with materials, equipment, and people in their learning environment. Creating a physical space that recognizes the developmental needs of five year olds provides a context in which optimal learning occurs. The choice and organization of classroom materials in the learning environment influences the way in which a kindergarten teacher guides a student's development and sets the expectations for student engagement.

Beliefs about how children learn and the environment in which they work should complement one another. The physical design of a developmentally appropriate classroom allows for experiences in areas for reading, writing, listening, dramatic play, art, numeracy, block, science, technology and an area for large group meetings. Ensuring a balance amongst these various learning areas is an important component in the organization and planning of the physical space in a kindergarten classroom.

While classrooms may look different, the space should accommodate these learning areas so that children can learn to move independently throughout the room for the purpose of using the equipment and materials. The physical environment should anticipate individual, small group, and whole group involvement that provides a balance between teacher and student-initiated activities.

Movement experiences are essential for all kindergarten students and they should not be limited to the physical space in the classroom or contained within discrete subject areas. Learning must be connected across the curriculum and the real world in meaningful ways while experiencing the outside world. This is possible by participating in field trips and extending the learning to areas such as the gymnasium, music room and the outdoors. These learning areas do not have to be elaborate. Some of the best learning experiences grow out of trips in and around the school such as visiting another class to watch role plays, singing or poetry sharing, finding the signs on the rooms throughout the school, watching the snow plow clean the street, observing a bird eating from a birdfeeder, examining playground equipment, observing falling leaves, walking across the street to a wharf, a general store or a supermarket and picking flowers to give to a sick friend. The experience should allow for participation, close up viewing/observation, touching and questioning within the child's level of thinking and reasoning while reinforcing, extending and enriching a student's learning.

Throughout the school year, learning areas will change to reflect children's interests, learning outcomes, projects and themes. Key learning areas such as reading, writing, listening, math and science may operate throughout the kindergarten year while other areas may rotate based on curriculum expectations. Kindergarten children should be provided large blocks of time daily to be involved in learning activities within these areas. This may include a system of rotation which provides children the opportunity to make decisions on their own learning based on the specified learning areas. It is important to introduce materials gradually in the learning areas and to give children time to become familiar with the materials to understand their purpose. The teacher needs to ensure that children do not roam aimlessly from area to area or visit the same area exclusively. The organizational structure and daily routines of the classroom should make children feel safe while supporting and encouraging them to take risks and to work cooperatively with others to become confident and independent learners. The kindergarten teacher circulates to observe and document children's learning as they are involved in learning activities. Some of the activities may require direct teacher involvement and instruction through questioning and scaffolding.

Consideration to the materials displayed throughout the room is necessary in the design of the physical space of the classroom. Displays which clutter student's learning spaces should be avoided. An aesthetically pleasing environment celebrates and values children's work by including displays of their work. This allows the kindergarten child to feel valued for his/her contributions to the learning environment in which he or she belongs. Overcrowded walls cause much work for the teacher and too much stimulation for students. Less is often more.



Considerations for Classroom Design

Consider the idea of dividing the classroom into areas for wet, dry, active, quiet, clean and messy activities.

- Place similar areas within close proximity of each other. For example, a block area and a dramatic play area are active areas which could be placed near each other whereas a reading area would need a more quiet space.
- Arrange materials in each area which can be easily accessed by children.
- Use baskets, bins, and drawers for storage and label them at a child's eye-level.
- Use furniture to define space and create boundaries for specific areas. A rug defines space and reduces noise.
- Place block areas and dramatic play areas in corners.
- Utilize wall space to display children's work rather than commercial materials. Display work at the children's eye level.
- Include floors, tables, walls and other areas in and around the classroom for workspace.
- Add materials to areas gradually as needed rather than overwhelming with too much at once. Eliminate unnecessary materials.
- Place areas requiring clean up in close proximity to a water source with available materials for children to access and to assist with clean up.
- Some areas may require close proximity to a storage space for brushes and paints.
- Create interactive areas that promote oral language development by positioning structures such as art easels beside each other so that children can interact and share while engaging in a similar activity.
- Vary the amount of space required for each area depending on the materials being used. For example, the block area will require a larger area for building structures.
- Establish the classroom design to ensure routines for courtesy, safety, and clean up.
- Take advantage of natural light where possible.
- Engage in discussions at the beginning of the school year regarding the ideal and reasonable number of students working in a learning area at one time. Keep in mind that some areas should offer more flexibility based on materials, space and interest.

Learning Areas and Suggested Materials

A number of learning areas exist in a kindergarten environment. Some areas will remain the same throughout the year and others will change as the need arises. This available space will influence the management of these areas in the classroom. A description of each area and a list of suggested materials is included for consideration. This list may help the beginning teacher in the initial classroom set-up. It may trigger ideas for new items to include in classrooms that have been established for a period of time. Many of the items may be collected as treasures from items discarded by others. A simple request to parents with an itemized list may fill your learning areas quite quickly.

Large Group Meeting Area

Essential to a kindergarten classroom is a large group meeting area where all students gather as a community of learners with their teacher. This provides them with an opportunity to communicate with one another and take ownership of their learning environment. This area is also a place for students to respectfully share and listen to each other's ideas, accomplishments and challenges. During this time the teacher provides direct instruction to the whole group, models new experiences, facilitates sharing of learned experiences, and provides encouragement for their learning. Time in this area allows children the opportunity to share their opinions and thoughts and establish routines and expectations for daily activities.

Suggested materials to include in a large group meeting area:

- flip chart stand
- big book stand
- rug or individual carpet mats
- audio player
- flannel story board



Reading Area

Opportunities are available in this area of the room for students to make personal choices and experience print materials for enjoyment. Students should have time provided for daily access to familiar and favourite reading materials which may include picture books, nursery rhymes, informational text, child/class-authored books, concept books, big books, magazines and newspapers. This area allows opportunities for students to engage in literacy experiences with a partner or independently.

Suggested materials to include in a reading area:

- carpet ends/mats
- cushions
- book display case
- selection of children's literature
- flannel story board and stories
- puppets
- reading wands for pointing to words
- fly swatter with a hole cut in the centre to highlight words
- bean bag chairs or child-sized furniture, and an adult-sized rocking chair
- word wall



Listening Area

This area provides rich opportunities for developing oral language. Activities in this area provides opportunities for students to learn how to listen attentively, develop phonological awareness and to make meaning from the language they hear spoken. Students may enjoy listening to stories with read-along books, music, poems and chants. Recordings of students reciting poetry, chants, rhymes, or songs should also be included. Rather than including all available resources in the area at once, a limited choice of 2-3 selections may be presented at one time. Gradually add or change titles to make this area more manageable. As children become more independent in this area, create a listening library catalogue to encourage self-selection of past choices and favourites. This area is most effective when children can work independently and make choices for their listening selections in a prepared area with an established routine.

Suggested materials to include in a listening area:

- audio player with colored stickers to mark the play button green and the stop button red
- headphones
- table and chairs
- selection of stories with audio
- variety of CDs that contain various types of music, songs, sounds, and rhymes
- container for book and audio storage
- individual folders, plastic bags, or envelopes for each book and audio selection



Writing Area

A designated area and ample time to explore writing is essential in the literacy development of a kindergarten student. Exposure to writing tools and materials will allow opportunities for print exploration and the development of writing skills. Many of the items placed in this area will provide a purpose for children to write. A grocery flyer may inspire a child to make a grocery list while a recycled envelope may create a reason to write a letter to place in another student's mailbox. The stage of each child's writing development will be reflected in his/her work. All children should be encouraged to read their writing and reassured that their printed message is meaningful.

Suggested materials to include in a writing area:

- different types and sizes of paper such as note pads, stationary, copier paper
- variety of writing utensils such as pens, pencils, markers, crayons and leads
- class set of mailboxes made from milk cartons with the lids removed
- fly swatters for highlighting words on charts and posters
- index box with cards with familiar and favourite words
- individual white boards, markers and eraser
- sentence strips, index cards, sticky notes
- recycled invitation and greeting cards
- booklets of paper stapled together
- used, new and recycled envelopes
- alphabet chart and number cards
- cookie sheet for magnetic letters
- magnetic letters and boards
- stamps and stamp pad
- student name cards
- picture dictionaries
- bills and receipts
- table and chairs
- word books
- word walls
- clipboards
- stencils
- flyers



Numeracy Area

This area provides children with a variety of math manipulatives, games and motivating materials which support learning outcomes for mathematics. Activities which encourage active involvement such as counting objects, dramatizing number chants, pouring liquids in containers or comparing quantities on a pan balance scale to determine the concepts of more and less allow students the opportunity to actively participate in their learning. The physical arrangement of materials in this area should allow students to have easy and open-access to the materials that are used to support ongoing Math topics. Expectations to return materials to designated locations will promote independence and organization within the classroom. Storage containers should be labelled with pictures of manipulatives to help maintain an organized space.

Suggested materials to include in a numeracy area:

- carpet squares, styrofoam or plastic trays to hold manipulatives or define individual work areas on the floor or on a table
- overhead counters, two-sided coloured counters and counters that vary in colour, shape and size
- patterning materials such as sorting beads with string and cards and patterning blocks
- plastic bags with zippered closures containing centre cards and required materials
- index box with words from the word wall which can be transported to different areas
- muffin pans, ice cube trays and plastic fruit tray containers for sorting
- sorting objects such as buttons, beans and other everyday items
- math word wall and bulletin board display of student work
- baskets or dish pans for storage of manipulatives
- snap cubes, blocks and other building materials
- set of 3D Geometric Solids and 3D objects
- magnetic numbers and cookie sheets
- foam number cubes and dice
- table cloths with patterns
- matching, sorting and sequencing games
- printed wallpaper patterns
- jumbo dominoes
- pan balance
- chain links
- puzzles



Science Area

Opportunities for children to explore, experiment, manipulate, inquire, discover, and observe things in their environment are encouraged in this active area of the classroom. The science area encourages students to use all of their senses while experiencing materials. Changing materials regularly will keep this area exciting for students and increase their opportunities to learn through discovery while exploring their world. The preparation time required to plan activities for this area will vary and students will benefit from experiences which are both simple and complex. It is important to facilitate the learning by creating an area which allows students an opportunity to construct their own learning through experimentation with the materials provided.

Suggested materials to include in a science area:

- a water table
- a sand table for sand, rocks, leaves or soil
- rocks and shells
- magnets
- magnifying glasses
- natural materials
- balance scales
- thermometers
- classroom pet or fish tank
- spinning tops and wind up toys
- plants
- seeds
- watering can
- spray bottle
- turkey baster
- funnel
- safety goggles
- eye droppers
- measuring cups
- dish pans for water exploration

- jars for insects
- book display with science and nature magazines, and picture books
- containers for collecting and classifying materials
- any materials and equipment that encourage exploration and discovery
- pulleys, weights, levers, ramps and wheels
- wrenches, bolts, screws, nuts, pliers, screwdrivers
- tweezers, chopsticks, scoops, tongs, weigh scales
- measuring tapes
- level
- bubbles and wands



Technology Area

Depending on the availability of equipment, opportunities for students to use technology may occur in a designated area of the classroom. Learning experiences which integrate curriculum outcomes should actively engage the student in an activity. The selection of software and web sites must be developmentally appropriate during computer time and the activity should encourage creativity and independence. Technology lends itself to many opportunities for numeracy and literacy experiences when the area and activities are designed appropriately for the kindergarten child. Use of a digital camera and/or a tape recorder allows students the opportunity to document and extend their learning.

Suggested materials to include in a technology area:

- computer
- printer
- computer desk or table
- age-appropriate software
- accessible storage for software
- multi-coloured and white paper
- digital camera
- tape recorder
- computer microphone



Art Area

Designating an area in the classroom where students can express themselves using a variety of art materials is important. Students should be encouraged to express themselves creatively through their own art. The completion of original creations prompt students to use their ability to problem solve and think creatively. Opportunities for children to use their imagination are not maximized when they are required to complete identical crafts made from reproducible templates. An art area should provide opportunities for students to explore, experiment and represent their feelings and ideas through their own creations. The blank page is powerful.

Suggested materials to include in an art area:

- a supply of paper: plain paper, butcher paper, newspaper, wallpaper, leftover laminating film, and aluminum foil
- long-handled brushes, sponges, flat brushes, round brushes, roller brushes



- feathers, fabric scraps, beads, glitter, pom-poms, buttons, ribbon, yarn
- easel with a shower curtain taped underneath to catch drips and spills
- an attached pencil, pen or marker to record signature on artwork
- no-spill plastic paint cups, empty yogurt or pudding cups
- a table covered with layers of newspaper or plastic tablecloth.
- tempera paint, water colour paint, finger paint
- clothes line to display artwork
- open-ended art activities
- paper cut into shapes
- painting smocks
- drying rack
- play dough
- glue



Dramatic Play Area

This area encourages children to interact, experience and re-create real or imaginary situations. Outcomes pertaining to adult roles in the family and the community are achieved as students develop the social skills required to interact in these roles through imaginary play. Literacy and numeracy experiences are rich as children engage in real-life experiences through role-play such as designing table settings in a restaurant, recording orders, tabulating a bill for a customer, changing a tire in a garage, or checking groceries at a grocery store. A dramatic play area can be transformed into many different locations within the community. Changing props regularly keeps the interest of the students. The area may be transformed to reflect specific locations in the community or home at different times. A request to parents for items which are no longer needed may help in the collection of props for this area of your classroom. The professions of some parents or their relatives and friends may help in gaining easier access to materials that might be difficult to include in prop boxes with specific themes.

Suggested materials to include in a dramatic play area:

- mops and brooms shortened to a child's height
- message board
- writing pads and writing utensils
- grocery flyers and lists
- empty food boxes, plastic food models and baking ingredient containers
- recipe books with visuals
- aprons, tablecloths, and oven mitts
- mixing bowls and beaters
- telephone book and telephone
- dress-up clothing and accessories
- laundry basket and small towels
- kitchen furniture, dishes, pots and pans, cutlery etc..
- full-length mirror
- dolls and doll furniture
- ironing board and iron
- small household appliances and dishes

- puppet stage and puppets
- feather duster
- coat tree
- prop boxes for specific themes (construction, baby care, post office, hair salon, medical centre, school, restaurant, garage)



Block Area

Building with blocks helps students to develop mathematical concepts such as size, shape, number, and quantity. It develops an awareness of scientific principles and engages them in problem solving and social learning as they engage with each other when building structures. A designated corner area of the classroom will have less traffic flow and provide wall space for shelving to store blocks. Avoid using bins for storage since it is often difficult for students to retrieve blocks of specific sizes and shapes when they are not visible. Shelves are more user-friendly in this area. Sorting the blocks according to shape and size is a great practice for students when they are expected to return the blocks on the shelves after their play has finished. Limiting the number of students in this area at one time allows students the necessary space required to build creative structures.

Suggested materials to include in a block area:

- a rug to define space, add comfort, and absorb sound
- shelves to store blocks with signs depicting block shapes for easy retrieval and clean up
- a classroom set of wooden unit blocks
- props such as wooden people figures, cars, trucks, and traffic signs
- measuring tools such as tape measures, rulers, and yarn
- hammers and screw drivers for the workbench
- index cards, pencils, and tape to make signs.
- a digital camera to take photos of completed structures prior to disassembling the structure
- paint brushes and rollers
- plastic helmets
- clipboards to sketch structures prior to disassembling the structure
- Straws and Connectors©
- Legos©



A Kindergarten Day at a Glance

Establishing daily routines provides kindergarten children with the security of knowing the daily operation of the kindergarten classroom. Many outcomes of the kindergarten curriculum are reinforced once daily routines are practised. The chart below includes a sample of typical activities outside the specific learning areas which are linked to curriculum outcomes and may be included in a daily routine. Familiarity with curriculum outcomes in all content areas is important to effectively integrate children's learning.

Activity	Examples of Linking Daily Routines to Outcomes
<p>Arrival & Welcome</p> <ul style="list-style-type: none"> Allow the children an opportunity to sign in upon arrival. There are multiple ways to do this. Children may locate their name on a name card, print it on a chart, or place a clothes pin on an in/out board. Children may be given an opportunity to respond to a question of the day which is posted in a designated place in the classroom. For example, the students may be asked if they can find something in the classroom that has a particular shape and bring it to the opening circle time or they may be asked their favorite colour. 	<p>Students will be expected to</p> <ul style="list-style-type: none"> understand that print carries a message. (English Language Arts-<i>Reading and Viewing</i>) compare quantities one to ten using one to one correspondence. (Math) begin to recognize some high frequency sight words. (English Language Arts-<i>Reading and Viewing</i>) respond to and give simple directions or instructions. (English Language Arts-<i>Speaking and Listening</i>)
<p>Opening</p> <ul style="list-style-type: none"> This is a great way to establish routine and expectations. This time would include whole group instruction, shared reading, modeled/guided writing (morning message or helper news), sharing, daily plans and schedules (calendar and weather chart). Introductions to new games and activities in various learning areas can be included during this time. New centres can be discussed and students can be involved in deciding which areas they will visit. 	<p>Students will be expected to</p> <ul style="list-style-type: none"> participate in conversation and small and whole group discussion. (English Language Arts-<i>Speaking and Listening</i>) understand basic concepts of print including directionality, word, space, letter and sound. (English Language Arts-<i>Reading and Viewing</i>) demonstrate an understanding of repeating patterns. (Math) students will develop an awareness of rules and why they are made. (Social Studies) use personal observations when asked to describe weather characteristics. (Science). identify traditions, rituals and celebrations connected to their personal experiences. (Social Studies) begin to ask and respond to questions, seeking information. (English Language Arts-<i>Speaking and Listening</i>) listen to the ideas and opinions of others. (English Language Arts-<i>Speaking and Listening</i>) respond to and give sample directions or instructions. (English Language Arts-<i>Speaking and Listening</i>)

Activity	Examples of Linking Daily Routines to Outcomes
<p>Snack Time</p> <ul style="list-style-type: none"> This is an appropriate time to incorporate healthy living outcomes, learn self-help skills, and provide opportunities for children to play and interact cooperatively. 	<p>Students will be expected to</p> <ul style="list-style-type: none"> identify and practise skills that will help students resolve conflict. (Social Studies) understand that healthy foods, as defined by <i>Eating Well with Canada's Food Guide</i>, give the body energy and help it grow. (Health) understand that one's interaction/play affects one's feelings and those of others. (Health) identify personal hygiene practices and their contribution to a healthy body. (Health) demonstrate the ability to make healthy food and beverage choices. (Health)
<p>Activity Time</p> <ul style="list-style-type: none"> This may be small group or individuals actively engaged in selected learning areas. During the day these activities will be play-based and are both teacher-guided and child-initiated and should be done in large blocks of time. 	<p>Students will be expected to</p> <ul style="list-style-type: none"> demonstrate that they are becoming aware of social conventions in group work and cooperative play. (English Language Arts-<i>Speaking and Listening</i>) understand that one's interaction/play affects one's feelings and those of others. (Health) <p>Depending on the activities being explored, additional cross-curricular links may be achieved.</p>
<p>Closing</p> <ul style="list-style-type: none"> The closing provides opportunities for the teacher and children to bring closure to the events of the day. During this time, children comment on the activities of the day, share learning, and help plan for the next day. The teacher engages the children in reflection and discusses things that they might want to share. 	<p>Students will be expected to</p> <ul style="list-style-type: none"> express feelings and give simple descriptions of past experiences. (English Language Arts-<i>Speaking and Listening</i>)
<p>Dismissal:</p> <ul style="list-style-type: none"> This is a time to establish a routine, encourage their independence, promote appropriate dress for weather and reinforce safety practices. 	<p>Students will be expected to</p> <ul style="list-style-type: none"> follow a simple procedure when instructions are given one at a time. (Science) detect consistency and patterns in weather events and use language to describe these patterns. (Science) identify appropriate safety practices in, on or around motorized and non-motorized vehicles. (Health) demonstrate concern for the safety of self, others and surrounding environment. (Physical Education)



