Blocks, Sand and Water

Blocks, sand, and water are standard learning areas in Kindergarten classrooms. They are ideal for learning because they help children to develop concepts in all of the learning areas in The Full-Day Early Learning-Kindergarten Program (Draft 2010) document and involve all aspects of child development. The educator team stimulates and extends children’s learning by the intentional choice of materials they place in each of these areas.

By their very nature, blocks, sand, and water have wide appeal. Each provides open-ended, play-based learning opportunities through which every child can explore, create, inquire, solve problems, and communicate. As children’s imaginations flourish, curiosity grows and their interests and abilities change, blocks, sand, and water continue to be engaging, creative learning materials.

Block, sand, and water play provide opportunities for children to learn the social aspects of working in a small group context. They learn to cooperate with others to solve complex problems, and to respect the contributions and work of others in the group.

Children develop small and large muscle coordination as well as eye-hand coordination when they stack and balance blocks, sift and mould sand, and pour water.

Playing with blocks, sand, and water helps young children’s development of critical thinking skills such as planning, predicting, organizing, testing, analyzing and communicating. Language development is extended and enhanced as children use rich language to describe how water and sand feel and behave, how many ways they are able to measure the height of their tower, their findings about the capacity of containers, the sizes and shapes of the blocks in their patterns and how balance and symmetry work in making their building stable. Block, sand, and water play also contribute to the development of skills and knowledge related to visual and spatial concepts which is important to learning in science and technology, mathematics and visual arts.
When children are learning through block, sand and water play, you might see them:

- observing using all of their senses, and recording observations;
- questioning, exploring, investigating;
- imagining, designing, building, representing, recreating;
- filling, sifting, pouring, mixing, molding, measuring, comparing, counting.

....or you might hear them:

- generating questions, making predictions and sharing theories;
- sharing and discussing thoughts and ideas with each other and with adults;
- explaining, suggesting and planning;
- using new vocabulary.

Effectives ways in which parents can support children’s learning through block, sand and water play

Some sample ideas:

At home:

- Everyday materials such as plastic containers and boxes of various sizes and shapes, and objects that can be used to hold water or mould sand, can be used in sand and water play. They can also become building blocks, on their own or combined with commercial building materials. Other materials such as small stones and pebbles, small pieces of smooth wood (or wooden blocks), scraps of material and yarn, can stimulate children’s imagination and creativity.

- With appropriate supervision, provide opportunities for children to play with water in the bath, in the kitchen sink, in a basin or baby’s bath or, weather permitting, in a wading pool. Provide containers (see above) to support exploration of properties of water and the concept of capacity.

- Similarly, sand can be contained in a basin or baby's bath or, weather permitting, in a wading pool. Containers and boxes (see above), and tools for digging and sculpting, such as old kitchen spoons or small garden spades, provide opportunities for moulding and building. Children can compare and contrast how sand has different properties than water, and how it behaves differently when moved from place to place.

- Children will enjoy exploring with each material individually and will then enjoy new discoveries as water and sand are mixed.

- Change the materials to provide new experiences for children. The water container can be filled with snow in the winter, and the sand container can be filled with rice, dried corn or beans. Children can then continue to compare how different materials behave using the same containers.

Talking With Children

Learning through play is supported when adults engage in the play, and listen and respond to what children say. Talk helps children to shape and articulate their thoughts and reinforces oral language.

Adults can elicit talk by:

- asking questions (“How did you make that work?”)
- noticing their learning (“I see that you figured out how to make your bridge go over your road.”)
- providing ample time for children to respond.
In the community:

- Provide opportunities for children to observe where “blocks” are used in various ways throughout the community. Compare the blocks you see with those used at home or in Kindergarten. Encourage critical and creative thinking by asking questions such as: “When we walk around the ‘block’ what does that mean?”

- Notice and name the different ways water is used in the community. Depending on the time of the year, talk about the different forms (states) of water you might see (e.g., snow, ice, clouds, hail, fog).

- Ask children to think about where they might find sand in the community (depending on where they live, they might respond: at the beach, in the sand pit at the park, at the garden centre) and how it is used.

Parents as partners in learning

Ask the educator(s):

- In what ways does your learning environment encourage children to take risks and try new things both in the classroom and outside (for example, to work in the blocks)?

- In what ways do block, sand, and water play support literacy learning?

- Are there ever times when one of these areas is not available for the children to use? Why might this happen?

- How do you decide what materials to put in the sand and water areas? Do these materials change? Why?

Ask a child:

- In what area of the classroom do you prefer to play? Why?

- In what ways can we do something like this outside of school?

- What materials in the classroom do you enjoy working with? Why?

- What learning area is your favourite? Why? Which learning area haven’t you been to yet? Why?

Learn more

For a list of resources, visit

http://www.edu.gov.on.ca/kindergarten/index.html

Or call:

Toll-free in Ontario,
1-800-387-5514

From Toronto and from outside Ontario, (416) 325-2929

TDD/TTY

This toll-free number provides accessible information for the hearing-impaired, in both English and French languages

1-800-263-2892

Parents are encouraged to share observations or information about their child with the educator team.