

Building as Learning Aid (BaLA)

School buildings are meant for children. They are designed for them, yet somehow do not relate to them in a holistic way. Each component of the school is somehow conceived in isolation, with little consideration about what the child is finally going to experience as a whole. This work is about making the building components active facilitator in the whole process of teaching-learning (which is the primary function of the school) for children and teachers (who are the primary users).

BaLA (Building as Learning Aid) is an innovative concept towards qualitative improvement in education, through intervention in school building infrastructure.

What is BaLA ?

BaLA is a way to holistically plan and use the school infrastructure. It incorporates the ideas of activity based learning, child friendliness and inclusive education for children with special needs (CWSN). At the core, it assumes that the architecture of school can be a resource for the teaching-learning processes.

Since buildings are the most expensive physical assets of a school, efforts should be made to derive maximum educational value from them. Thus, BaLA is about exploring uniqueness of three dimensional space as a child friendly learning resource for all children.

The building elements of normal concrete shapes are modified innovatively to involve children creatively. The different elements of BaLA may be located in interior and exterior spaces like classrooms, corridors and backyard so that a variety of learning situation are generated across the school space. The built structure of the school can also provide shelter during educational activities.

Approaches followed

There are two levels of this intervention:

- Develop the SPACES to create varied teaching-learning situations
- Develop the BUILT ELEMENTS in these spaces as teaching-learning aids

The Spaces can be

- Classroom
- Corridor
- Steps and staircase
- Outdoor space

The Built Elements can be

- Floor
- Wall
- Window
- Door
- Ceiling
- Platform
- Furniture

Examples of BaLA implementation

The different elements which have been considered and constructed by SSA in different schools of Gujarat are given below:

- **Mystery Wall** : Mystery wall in the school corridor offers opportunities of peeping and hiding. Children love to disappear and watch others from behind or play hide and seek or such other game.
- **Alphabet shape Board** : Alphabet shapes can be used to draw pictures of objects beginning with the same sound as the alphabet. This is a fun way of learning alphabets and recognizing their shapes. Children can use these alphabet pictures to write words and sentences. This can become an interesting language activity.
- **Pipe Phone in Grab Bar**: A grab bar on the ramp or in a corridor is a useful provision for differently able children. Not only it supports and guides their movements but it can be used as pipe phone. The pipe should be at least 5 cm. diameters, while the length can vary to suit its basic function. Both the ends should be hollow and all obstructions in the length of the pipe should be eliminated.
- **Grooved Writing Patterns on Walls** : Learning materials in a tactile medium are useful for all children, particularly for the visually, hearing or speech impaired. Grooved writing patterns on walls can help all the children to trace and strengthen their finger muscles. This will strengthen the movement required for writing an alphabet shape and enable feeling it (the shape) through finger or wrist movements.
- **Measurement Scales** : The length, width and height of the classroom, doors and windows can be pointed so that children know how much is 2m, 3m or 6m in the real world. Similarly a unit length of floor panel can be used to estimate the entire length of corridor. With a measurement scale pointed in the space around them, they can even measure themselves or objects that they use frequently.

- **Door Angle Protector** : Under the door shutter of class rooms Angle Protector is painted that can help to develop sense of angle measurement. The door shutter swings a range of angles when it opens. This can be made in a variety of ways – simply paint the angular lines, or make floor panels while repairing or making a new floor.
- **Fractions Aids** : It is always helpful if the children can see or touch physical object to understand the concept of ‘whole’ and its ‘parts’ of fraction. Fraction can be made on window grills, tiles on walls and floors.
- **Tangram Tiles** : Tangram tiles are based on the geometric puzzle of seven pieces. A square is cut into seven geometric shapes, which can be arranged in thousands of ways to create human figures, animals, geometrical shapes, alphabets and so on. The essential condition in a Tangram puzzle is that all the seven pieces must be used to make shape. This knowing can make geometry a lot of fun.
- **Planetary Orbits on Ground** : Children enjoy revolving around poles or anything that allows circular motion. The space around a flagpole or pillar is a suitable place to locate the design. The nine orbits can be divided into four quadrant to represent seasons. Each quadrant is further subdivided in three so that there are a total of 12 equal sections which can represent the 12 months of a rotating earth. It is the three-dimensional relationship of children (as planets) to the pole (as the sun) that will help them understand various concepts.
- **Map of Classrooms** : An outline map of a classroom may be made on a horizontal surface like teacher’s table or the floor. This will introduce them to a map by linking it to their immediate surroundings.
- **Map of the School on a Platform** : A large outdoor floor map of the school allows children to observe places, objects, routes and trees around them and locate them on the map. This can be made on a horizontal or vertical surface preferable in a central location from where children are likely to pass every day and see the entire school space. The map should be oriented in the same direction as the school.
- **Map of a State Country** : The large outlined map of a state/country lined with bricks and mud/sand filling the inside enables children learning by doing. Children can create their own mountains, valleys and rivers. They can make ships in the ocean and cars or trucks on land. In doing so they can also get a sense of the direction they are moving in. The experience thus generated to understand shapes and forms is likely to be more lasting than mere textbook information.