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Experiences at Anubhava Science Centre

Founded by Geetha Arvind, the Anubhava Science Centre has been conceptualised with the aim to provide an experiential and explorative learning environment for children in the field of science and to promote rich learning experiences. You can reach Geetha at geetha.arvind@gmail.com or on Anubhava's website: www.anubhava.net

Anubhava propels the child to "inquire". The environment is equipped with experiments on various science topics such as air, water, magnets, electricity, kitchen science, physical chemistry, static electricity etc. The materials required for each experiment are provided along with the instruction sheet. Children in the age group of 8-12 years have the freedom to explore any topic. The children are assisted towards finding scientific reasons behind their observations through questions and clues. The children in the age group 5-7 yrs are initially exposed to various experiences through demonstration, discussion and interaction. Subsequently each child performs the experiment on her own and is assisted in recording the observations.

It is a joy to see kids engrossed in carrying out various experiments every session. When children are puzzled by their observations, they start applying concepts that they have learnt about the topic and analyze whether it corroborates the logic of their observation. This is a great opportunity for children to amaze themselves, build confidence and reinforce and apply what they have previously learnt.

Pace of Learning

Experiential learning leaves a deep rooted impression in a child, sometimes as a short term exhilaration and enjoyment, sometimes as a long lasting attitudinal shift in being able to build an inquiring mind. It is difficult to evaluate the extent of this learning on a daily basis. However child's learning against the intended learning outcome is mapped through i) discussion after the experiment to help children understand what was done, to know what they observed; ii) discussions to figure out the reasons behind what they observed; observing the child perform the experiment; iv) allowing expression drawing and writing observation reports

Jyoti attends 5-7 age group sessions. For the first few sessions there was no clue whether she understood anything. It was difficult to do so as this method intended to help children learn in their own pace and style. It was a challenge to pursue our efforts and observations patiently without expecting immediate results. Three months later, one day Jyoti was offered to perform any number of experiments from the set she had covered so far. She went on experimenting and had explanations ready for each experiment. That was incredible compared to our assessment of her in the first few sessions. This firmed our belief in the learning method advocated by Anubhava.

Freedom to Repeat

It was a great sight to watch Somu repeat the same experiment a number of times. He was not bored of repeatedly boiling the water in a test tube and inverting it in a beaker with water to figure out how water was re-entering the test tube. He reached a stage when he realized that he internalized enough and was completely open to an external explanation. On hearing the explanation, there was a big smile on his face indicating the sense of satisfaction in learning and articulating what he was looking for.

Freedom to Choose

Ram enters the centre saying "I got the reason why it happens...". He chooses another experiment and says "last time I saw one girl was getting confused while doing this experiment." Ram headed towards the "dancing moth balls" experiment. He wondered why the moth ball that went up sank and came up again! These questions probably bothered Ram and made him choose this experiment when he came to the centre.

Learning Environment

Sheela has been attending the centre for last 4 months. During the first couple of months she appeared nervous and stiff. In the recent couple of weeks, she is found to be at ease in the centre and is comfortable doing activities. Couple of days back, her mother mentioned that "Sheela goes to other extra-curricular classes. But this is one class which she loves to attend and enjoys very much. Not that she likes science, may be she likes this environment."

Gopal started coming with his mother to drop his sister to the class for 2 months. It was his mother's idea for him to join Anubhava. He finally agreed to just sit and watch. On one of the days, I demonstrated an experiment and asked him the reason for his observations. His mind started working, he volunteered to try it himself and followed by that started attending formal sessions.

Anubhava has been an experience for me. It is very important to give the required space and time for a child to learn in her/his own pace, especially till the child is comfortable. Also, our immediate assessment of a child need not be absolute. Freedom to repeat provides an opportunity for a child to explore himself at his own pace. Providing help to the child at right time makes a difference in their absorption level. Giving the freedom to choose an experiment motivates children to do and learn from within.