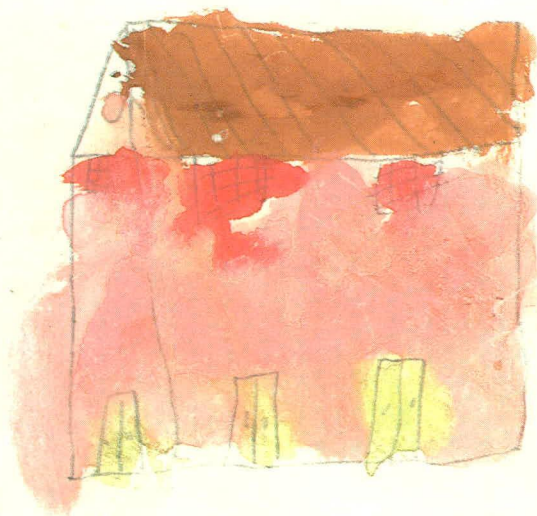




Shades of Nature



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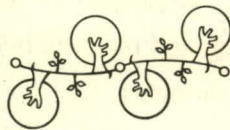
Our sincere thanks are due to Ms. Kalaiselvi (P.G. Teacher) for teaching us the art and technique of natural dyeing. Her guidance and assistance were of immense help to us. We are grateful to Ms. Mina Swaminathan for her indispensable guidance and encouragement from the initiation of this booklet. Our thanks are also due to Mr. Raja Samuel for his continuous assistance and S.Jazeela Banu for her secretarial assistance till the completion of the report.

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Why Painting in the Balwadi?

Drawing (with lines) and painting (with colours) are two important activities in the balwadi to further children's growth and development. The child by nature is inquisitive and imaginative, and easily attracted towards all the objects and happenings around him. This boundless curiosity and urge to learn is the key to creative development, or the ability to create new things, encouraging imaginative thought and familiarising the child with the various media for expression.

Children as young as 3 - 3 1/2 years old love to draw and paint. It is through this medium that they are able to express their feelings and ideas effectively. Besides, in such freedom a child can learn at her own pace.

The process of creating something is far more important than the end product. At this stage, when children have not yet started using spoken language as an effective mode of communication, drawing and painting become important outlets for their emotions and thoughts.

Apart from satisfying the creative urge, painting also opens up new learning experiences and has the following impact:

Painting...

- promotes development of the finer muscles.
- facilitates eye-hand co-ordination that aids children in learning to write later on.
- develops the ability to make new things and imaginative thought.
- helps' children to express their thoughts and feelings.
- above all, builds the child's self confidence.

Why so little Painting?

Despite its immense educational value, painting by young children has always been seen as an urban phenomenon and an upper / middle-class luxury. This is partly due to the cost of the artificial colours as well as their limited availability in cities and towns. At the same time, popular arts and crafts using local materials have not found their way into school curricula. This has probably resulted in a situation where children in under-privileged settings, rural or urban, have little or no opportunity to paint or access to the inputs required to indulge in creative activities like painting, drawing and colouring. This raises the issue, are there low-cost easily available indigenous colours for educational use?

Using Natural Colours

To increase access to colours for painting, we can turn to our rich tradition of natural colours prepared from low-cost locally available materials. Using natural colours and dyes has been centuries old tradition of painting in India. A variety of colours have been made by using the rich abundance of the naturally and locally available materials like flowers, seeds, bark of the plants, roots, leaves, outer layer of fruits, the flesh of the fruits, etc.

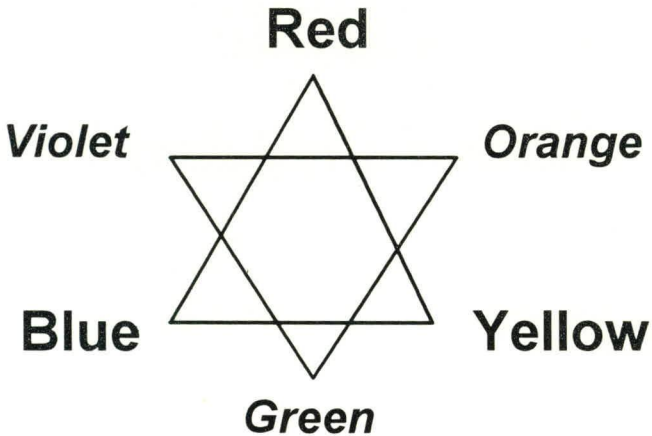
The colours obtained from these sources are non-toxic, cost effective, easily available, and can be prepared as and when needed. The soothing naturalness in the colours thus obtained is lacking in the commercially available colours.

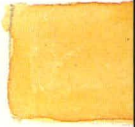
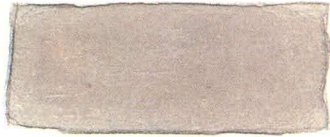
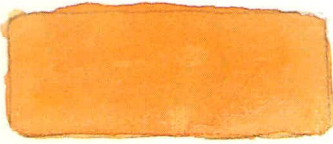
Some of the colours like the primary colours of red, blue, yellow can be extracted directly from the plant source whereas secondary and tertiary colours like green, violet, orange, brown, grey etc. can be obtained by various combinations of these primary colours. All these beautiful colours can be obtained at hardly any cost and with material available everywhere. It only requires time and energy.

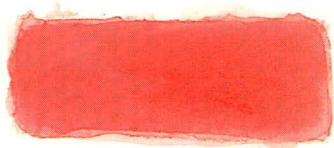
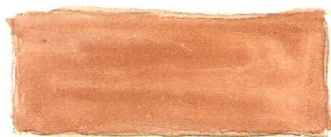
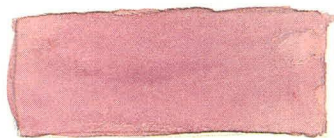
The Colours

According to Prang's Colour chart, colours can be divided into four types:- Neutral colours, primary colours, secondary colours and tertiary colours. Black and white, called neutral colours, can be obtained from a direct source. The primary colours consist of red, blue and yellow. These colours can also be obtained from a direct source. The secondary and the tertiary colours are obtained either directly from other sources or from a combination of the three primary colours.

Colour Triad







How to prepare the colours

Neutral Colours

Black and white are universal colours and can be directly obtained from locally available materials

Black

Materials required: Rice husk, *vasambu* (Sweet flag, a root), soot of the lamp.

Method: Roast the rice husk until it becomes black ash. To this ash add a little water and boil for 2-3 minutes and mix smoothly. *Vasambu* (a medicinal root) can also be used. Roast in direct heat for 3-5 minutes, until the edge of the root turns black. Now rub this root on to a container or plate and add a little water to the ash. The soot of the lamp can also be taken and mixed with a little of water to obtain the black colour.

Shelf life: 4- 6 months

White

Materials required: Rice flour, *namakatti* (pipe clay).

Method: Make a smooth powder of the *namakatti*. To 1 tsp. of this powder add 2 tsps. of rice flour. Mix thoroughly and add water until it becomes semi-solid. The white colour is now ready for painting.

Shelf life: Rice flour can be stored in an airtight container for 3 months, *namakatti* for 4 - 6 months.

Primary colours

Red

Materials required: Juice of fresh beetroot, *Kavi* (red oxide)

Method: Scrape the beetroot. Add a little water to the scrapings and squeeze the liquid into a container. Add 2 tsps. of *Kavi* powder to 3 tsps. of extracted beetroot juice. Mix thoroughly.

Shelf Life: The beetroot juice can be stored in an airtight container for 2-3 days, and the *Kavi* powder for 4-6 months.

Blue

Materials required: Blue laundry powder used for whitening clothes, readily available at the market, blue ink.

Method: The blue powder can be directly used with the addition of little water. The blue ink can also be directly used.

Shelf Life: 4- 6 months

Yellow

Materials required: Skin of pomegranate, dried thoroughly, Lime

Method: Boil two to three small pieces of the dried pomegranate skins in approximately 100 ml of water for 10-15 minutes. The water in which it is being boiled slowly changes to a pleasing yellow colour. Cool the extracted colour for 10

minutes. Three drops of lime juice can be added to get a darker shade of yellow. Other materials that can be used are fresh marigold flowers boiled in 25 ml. of water, or onion skins boiled in a little water to obtain the same colour.

Caution: Use an old vessel for boiling, as these dyes might sometimes permanently stain the vessel.

Shelf life: Dried pomegranate skin can be stored for 4-6 months.

Secondary and tertiary colours

Green

Materials required: Yellow colour, blue colour

Method: Use the already extracted yellow and blue colours. To 3 tsps. of the yellow colour add 2 drops of blue. The colour obtained would be an attractive green

Light green

Take 1 tsp. of rice flour, add 20 ml of water in order to make a thick liquid. Add 1 tsp. of this semi-solid preparation to 3 tsps. of the already obtained green colour.

Orange

Materials required: Juice of carrot, *namakatti* (pipe clay)

Method: Scrape the carrot. To the scraped carrot add a little water and extract the liquid out of it. Grind the *namakatti* into a powder. To 3 tsps. of the extracted carrot juice add 1 tsp. of

ground *namakatti* powder. Mix thoroughly. The colour is now ready for use. Orange can also be obtained by mixing the already extracted red and yellow colours, by mixing 2 tsps. of red colour with 1 tsp. of yellow.

Violet

Materials required: Red and Blue colours.

Method: Prepare the red and blue colours as mentioned earlier. To 1 tsp. of red colour add a drop of blue.

Brown

Materials required: *Kattha* (root), *Vasambu* (sweet flag, root).

Method: *Kattha* is a reddish coloured root which can easily be powdered. Grind the *kattha* to a smooth powder. Boil 2 tsps. of the *kattha* powder in 50 ml of water for 2 minutes. Allow it to cool. Burn the *vasambu* until the edges of it turn black. Rub this root against any container in order to collect the ash. Add a little water to this ash and mix thoroughly. The black colour is ready. To 2 tsps. of the cooled *kattha* extract add 1/4 tsp. of prepared *vasambu* extract and mix. The brown is now ready for use.

Shelf Life: *Kattha* can be stored for 4 to 6 months.

Grey

Materials required: *Vasambu* (sweet flag a root), rice flour or *namakatti* (pipe clay)

Method: *Vasambu*, a brown hard root, on burning in direct flame, turns to a black ash. This ash could be collected in a

container by powdering it with the fingers. Add a little water to this to bring it into a liquid form. Make a liquid of rice flour by adding 50 ml. of water to 2 tsp. of rice flour and mixing thoroughly. To 1 tsp. of *vasambu* add $\frac{1}{2}$ tsp. of rice flour.

Some hints for better results

Mordant: *Kanji* or gum could be added to bind the colours, enhance them and give them a shiny finish. Prepare *kanji* from sago, maida or rice. Add two tsp. of the powder to 150 ml of water and boil for 5 minutes. If stored in an air tight container, the colour will keep well for 2 to 3 days.

Brushes: Brushes can be made using the broomsticks taken from dried coconut leaves and tying a little of cotton to the tip of the stick. For thicker brushes, the twigs from any other trees can be used. These have to be flattened on one side, depending on the thickness required.

Paper: Not much need be spent on paper for this activity. Any rough paper can be used for these paintings. Papers easily available at the centres like brown covering sheets, cardboard sheets, note book covers, old newspapers, used office papers etc. can be used.

Conclusion

Several more colours and shades can be created by experimentation with various materials and a variety of colours can be obtained from a combination of these basic colours.

Children should be allowed to experiment with different shades and colours that they could create all by themselves. The child who experiments with a medium often finds he has made something new and exciting.

Young children see the world with clear, fresh eyes and put a great deal of their thoughts into their painting which often merges into fantasy and make-believe. The enjoyment for the children comes from the different patterns they make. Playing with these varied shades and colours provides an opportunity to relate to nature and environment more effectively.

The joy of achievement a child experiences every time she makes something satisfies her and consolidates her confidence in herself. Such simple materials and activities can play a big role in helping the child grow and develop into a confident, curious, competent and expressive being.

