

# Workshop on Art and Science of Golden proportion-Part 2



**This was the third day, 5 days after the first session of two days. Children were eagerly waiting to make 'masks'. By this time we had finalized how to make it with corrugated board cut to shape. Children were shown how it would look. Ram face was already printed on the sheet. They have to finish the rest.**



Coloured bamboo sticks were shown. 'How colouring with natural dye was done', was explained to them. One could get yellow colour by boiling with Turmeric and pink colour by boiling with 'Alta' an ecofriendly liquid available in the Indian markets. Importance of eco-friendliness of bamboo and use of natural dyes was discussed. . They were also introduced to colour manual brought out by Bambu Studio of IDC. Each person got a bunch of sticks and a sheet with various lengths printed on it. They have to cut the sticks to given lengths to make the horns.





Golden spiral printed on the board with divisions marked made it easy for children to insert each stick to give the 3D shape of the horn.

Student volunteers like Sanjay helped them



children got the feel of golden spiral in 3 dimensions as they constructed the mask





DAY 3

**Studio Learning is a process , still new to the school system.**

**In the workshop Children got involved intensely, interacted with facilitators in full attention and **Tacit Learning** was taking place.**



DAY 3



**Joy of making the masks can carry  
the memories of Golden spiral in to  
their Future**





The story of Number monster made the activities in the workshop meaningful though children were quite happy to make the Mask on the 3rd day. Story created an anticipation for the activity on 4th day.

How to generate Cosmic energy?

I made them stand in a circle. We did some breathing exercises of Yoga. Then as I demonstrated children did some postures of Yoga, starting from moving their hands along 3 axes.

## DAY 4



Some children had problem to stand on one leg. almost none could stand on one leg and bend to stretch out. With flexible bodies at young age, it would be wonderful to start practicing YOGA postures, which can become great assets at later ages!





We introduced relationship of 'Centre of Gravity' of square board to golden proportion, which I came across on the internet. When you cut out a smaller square in the corner of bigger square you would get a 'L' shape. Biggest square you can cut out and still balance the 'L' on a pivot has an interesting property. The cut out square has golden proportion with the larger square. But this went above heads for the age group of children attending the workshop. Sanjay demonstrated with great enthusiasm. But there was little response.



Children were not exposed to 'centre of gravity' yet.

I demonstrated the relationship of balance and centre of gravity



DAY 4



To create Cosmic energy , children had to generate 'Fibonacci Mandala'

For this we gave big sheet of A0 size. They drew a biggest golden spiral to fit into the sheet. I had a team of my students and few volunteer alumini helping me . We introduced 1metre metal scale for drawing suares and rectangles and a 'beam compass' specially made outof bambbo strip ro draw radii. Exposures ot such instruments create aspiration to become engineers and designers when they grow up.

Each group were asked to fill up the large spiral with smaller golden spirals using templates and rubber stamps. Sketch pens were there for colour.

Each group got engaged. Many of them had exposure to Art related sessions in Pomagranate workshops earlier. Each group made a part of Mandala. Myself and Girish were just watching them. We thought, how easy it is to teach if we can bring an 'Art' activity' in to 'Learning'. Children were enjoying the process.

When they completed they were prouod of it  
The Mandala with 4 sheets put together (seen in the next page) was impressive.



DAY 4





**Fibonacci Mandala**

DAY 4

DAY 4

DAY 4

DAY 4

**Fibonacci Mandala**





Priya reinforced the significant factors of learning in the workshop with an authority of a School Teacher. Akshad had a telling influence on them as he knew many of them from earlier workshops.



Giving feed back on each of their work was important. I pointed out some issues from the point of Composition.



We had an interesting certificate. It was hand printed with a cut shell, revealing the Golden spiral. Sachin actually printed each of them in their presence. It was accompanied with a membership of a 'Golden Spiral Secret Society'. Why a Secret society no body asked. Children were happy with such narrative imaginary World!

No need to question everything!



DAY 4



*The End*