

## Isai Ambalam School Newsletter



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In the last newsletter, we shared our experience with online classes and worksheets and engaging in doubt clearing sessions till the end of October 2021. From Nov 2021 regular classes started for the children from 1st to 8th grades and the children did many mini projects on various topics.

This year we focussed more on Siddha and Ayurveda topics.

### Garden Project



All the children learnt about different kinds of spinaches. Children were very interested in learning about the different types of spinach, grains and their health benefit. We were finally able to benefit from the land we have leased

### Force and pressure

When I (Vasanth) taught force and pressure concepts to 8th grade, they were interested in doing the experiments that are in the textbooks. These experiments took them systematically through the thinking process of pressure.

In the first experiment, a balloon was tied with a water tube at one end and another end was open to fill it with water. They observed that the taller the water column the more pressure it exerts on the balloon. They also tilted the water column and observed that this is only when the column is vertical inferring that this pressure is exerted in a downwards direction.

In the second experiment, a water bottle had a hole on one side and it was connected with the tube along with a balloon. They filled the bottle with water and observed the balloon bulge and inferred that pressure exerts on the walls of the container also

next to the school. Each grade of children were allocated their beds and they made boundaries and beds to plant different types of spinach. The bed size was about 3 m and its width was about 1 m. We made 20 beds and in each bed, they started planting different kinds of spinaches and grains. They ploughed the soil so that it is soft and the spinach can grow really well. While the children were in the garden teacher used to ask them to name the different types of spinaches and grains in Tamil and the importance and why we eat them.

The children said that the entire process of how to make a bed and also how to make the soil soft in order to make the grains grow well. They were able to synthesize the entire process and also why we need to give water every day to the plants and if you don't give water they will die. Children understood these concepts. Every morning the children came to the garden and they watered the plants and the plants were growing really well.



Few children went back home and said what have done in school and their parents were really happy that their children are learning things in a practical way. They harvested spinach and gave it to the school kitchen. They cooked the spinach for lunch and it was served to all the children and teachers. The fresh spinach tasted really



Then they made holes in three different vertical positions of the bottle. After completing this experiment they came to the conclusion that the pressure in a liquid is different at different depths. Pressure increases with the depth.

At last, they did experiments on verifying liquids exert equal pressure at the same depth. For that they took a water bottle made holes on equidistance on the same circumference area at a particular depth.

### **Sundial clock**

As part of learning about time the children, we introduced not only how to read a clock, but took them back in time before clocks. We talked about the water clocks and how the sun was used to tell time. We also showed children a few videos about measuring time and how it evolved. We also told when it is daytime in India, and it is a night in the US. These children were able to understand that it's because of the Earth's rotation that day and night happen. Children found the concept of Sundial interesting and wanted to build their own Sundial.



While building the Sundial we revisited a few Maths concepts like angle, degree



good. All the children and teachers wanted to have healthy food and lifestyle around the school as well as in their home.

### **Manjal (Turmeric)**



The 3rd and 4th-grade children did a project on Manjal (Turmeric). The children brought Manjal from their home and planted it in their garden. They learned the scientific name and medicinal uses of our daily life. They became aware of how it cures wounds and that it is not necessary to take medicine for simple ailments. They brought Manjal powder from their home and prepared natural colors and painted for their drawings. They learned the formation of different colors. They learned how to make Kumkum.

### **Pirandai**

and also learned about latitude and longitudes. How to split angle using GeoGebra. They learned about sectors and how to split a circle. They learn to add and subtract two different times. They used GeoGebra to discover and learn these concepts. Then we made a sundial based on the degree to be used at Auroville using cardboard.



### **Time Zone Clock**

While the children were comfortable with the idea that when it is day in India it is night in the US they tended to treat time as an absolute and had a slightly difficult time digesting 'local time'. We spent some time on the concept of time zones in the 7th grade at the Isai Aambalam school. We started with a question that

Adiyaman was travelling from New Delhi to New York to meet his best friend Kabilan. His flight left New Delhi airport on Friday at 9.30 am. He traveled for 24 hrs, but when he reached New York the time was not 9:30 a.m. on

The children from third grade collected pirandai (medicinal plants) and planted them in the school and learned the uses of pirandai and prepared pickles and distributed them to their class children and teachers. They sang Pirandai songs with actions.



### Daily routine

To make the awareness of the daily routine work we prepared a chart with pictures and learned when to wake up? How to brush their teeth? How to take bath? How to eat their food? How to have a regular motion (bowel movements)? And what causes if we do not go motion daily? As part of this, they came to know about the Brahmanugurtham? When to wake up and how to start our daily life with good habits.

Saturday, but 11:30 p.m. on Friday.

What happened?

The conversation took place as follows, as soon as this question was asked

Vishwa: Kabilan's watch was not working?

Facilitator: No. It Worked.

Jyotisha: The plane was going faster than expected on the day?

Facilitator: No, It went as usual.

Chandrika Piriyan: Adiyaman might be used the time machine?

Facilitators: (Surprised) No.

Then, we introduced the Time Concept. Some questions they raised after understanding

Surender: How many time zones do we have in India?

Prem: If a place is located in the middle of 2-time zones then how to find the time zone of that particular place?

Deepika: Is there a time zone clock like the clock? After finding out the answers to the above questions, we planned to make a time zone clock as suggested by Deepika. They had to know about the circle to do that. So, we took the kids outside and divided them into four groups. Then we told them to draw a circle and divide it into 24 equal parts.

They drew the circle but said that they could not divide the circle into 24 equal parts in the trial-and-error method. We were taught about the circle and how to divide it into equal parts. They understood and did the time zone clock.

Chandrika Piriyan made a different design. We were amazed at his creativity. We realized that the energy of



## Jnanendriyas

The children came to know about the 5 sense organs referred to us as ears, eyes, nose, tongue, and skin. They understood that all these parts are involved in the association of knowledge. They did multiple activities for all 5 senses. They have created songs using the 5 sense organs.



## 7 Segment Display

Vasanth and Pratap took a session on electronics for the 8th graders. First, they learned about Seven Segment Display(SSD). Children worked in a group of 2 in which boys and girls were mixed together. We asked them to figure out which pin is connected to which LED. We introduced breadboard and multimeter.

of children is immense and that miracles can be revealed in the right environment is created for it.

## Karthigai Deepam

Karthigai Deepam is a very old Tamil festival. It is celebrated in Tamil Nadu with much dedication. Rows of agal lamps are lit in and every around every house. Maavalis are spun. Swargapanais are lit in temples.



This year, as children returned to school in November, we started the year by celebrating the month of Karthigai in different ways. Children learned poems about Karthigai Deepam, and children from the older classes made many Maavalis in school using the palm tree flower that is found in plenty in our area. Maavalis are beautiful fireworks. They are made at home usually. They are environmentally friendly, there is no harsh chemical involved. Children also created a play narrating the different stories about the Karthigai Deepam celebration.

It was a warm, light-filled return to school after a long covid time.

Children learned to create their own jewels for the play. They acquired the crafting skill incorporating their creativity in making their jewels. As teachers, we observed a few competencies like team building and concentrating to work efficiently. They





Then we introduced all the components that are required for lighting up their names using the seven-segment display. We had asked them to draw the structure of the seven-segment display and pin connection for each LED. Once they had found the pin connections, we introduced the breadboard to them.

Then children wrote their names in their notebooks as to how they can look in the seven-segment display. Initially, children needed our support. Then they understood how to light up their name using SSD. Children learned how to use a multimeter and check the voltage of the 9V battery. They learned the use of a 1k resistor and how to use it in the breadboard. Children were fully engaged for 2 hours and they didn't get distracted by other things. I was inspired by the children when they were fully involved in the activity. I learned that when I plan and give everyone time to learn with their hands, it helps them to be engaged and concentrate on what they were doing.

### **Craft Mela in Auroville**

Most of the students are much interested in craftwork. 5th & 6th-grade students got an opportunity to participate in Endangered Craft Mela. 15 children participated. There were a lot of activities and each student selected the activity based on their interest and joined. The children have learned to collaborate with different people in Auroville to share their learnings.

### **Language project**

The 7th-grade teacher wanted to take a grammar class differently she asked children to make a model of a forest with animals and trees. Then she divided the children into two groups and one group of students asked questions related to prepositions and adjectives. The other group of students tried to answer the questions using the objects used in the project. The students learned the uses of prepositions and adjectives in sentences. They framed simple sentences. In the end, students combined all their sentences and prepared a story. Everyone learned to tell that story.



They enjoyed making this model and students were engaged when grammar was taught by this model.

### **Sun project**

Everyone loved to participate in the palm leaf craft activities. In the palm activity, students learned to make stars, parrots, fish, baskets, earrings, heart shape, pouch, long-winged bird...etc.



Some of them learned wood carving and chains with coconut shells. Some students talked with craft people to get more clarity. Some of them did the Stone carving and candles, some of them learned tailoring and they made cloth shopping bags. A few students did bracelets with leather and thread. A few students learned how to make rope. Some of them learned how to make a pencil knife using the long iron- nail and some of them made a basket using bamboo.

We were very happy that everyone mingled with children across schools. Their concentration and involvement were amazing. Their communication and problem-solving skills have improved a lot. They were taking care of each other, sharing their happiness, singing a song with other children, and eager to learn new things. They came to know that we should bring back our old Art & Craft traditional culture. We should not let it get destroyed.

After coming to school they did an exhibition by displacing all the materials they made. All the classes visited the

learned how to deliver their dialogue.

They learned to overcome stage fear.



The third-grade children did a project on the Sun and learnt about the 4 directions (East, West, North, and South). They learned through experiments about how the day and nights are formed, the rotation of the Earth, learnt to write 20 to 30 sentences using celestial objects. They wondered where the sun goes in the night-time. They sang a song about the sun.

The school blog is available at:  
[tinyurl.com/iaschool/](http://tinyurl.com/iaschool/)

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