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Vidyoday Bulletin

Science Shiksha Samvad
Special Edition

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Year 4

6th Edition

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6 pages

Hello, Namste to All !

Science Education Dialogue Program

Hello

It is our pleasure to share the institutional journey of the Vidyoday Mukhtangan Parivar for the last four years has reached a milestone this year.

As part of our ongoing efforts to improve the education of the children of sugarcane workers in rural areas of Kolhapur district and the informal education based on practical and experienced science, mathematics and life skills, we conducted Sunday Science Skill centres at Rukdi, Hatkanangle, Abdul during year 2016-2018.

In the year 2021, we will be conducting Science Education Dialogue (विज्ञान शिक्षा संवाद) with 12 teachers from 2 Zilla Parishad schools. In this, we will conduct meaningful conversation around teaching science subject with the teachers. The conversation will go around concepts like science toys, class experiments, projects, outdoor experiences. This endeavour will definitely benefit the students from all schools for sure. For this, Eklavya Foundation, (Hoshangabad, Madhya Pradesh) an organisation working on Science education, will play the role of a trainer collaboration partner for Shiksha Samvad.

This will provide an opportunity for school teachers to learn many new techniques for teaching and learning activity based science.

I am sure, your guidance and blessings will be with us as always,

Yours

Vinayak Mali,

(TISS, M.A. Elementary Education, Co-Founder, VMPF)

Sarsha Mali-Kumbhar, (MSW, TMV University)



'Science Education Dialogue' : Co-creating activity based Learning

Vidyodaya Muktagan Parivar Foundation is working for the holistic development of smart and needy children in rural areas and also for sustaining the learning curve of migrant children and will continue to do so in future as well.

The confidence gained while working with the children for the last 12 years is definitely useful in implementing the science education dialogue (विज्ञान शिक्षा संवाद) program with the Zilla Parishad school teachers.

To raise the motivation of government-organized teachers, becoming their friend and helping them for the overall development of the school and the students will be the anchor of our work in the coming future.

Science education dialogue is becoming a very popular activity among teachers. We don't call this initiative as 'training', we call it 'dialogue'.

We interact with teachers about activities that complement the school curriculum, class experiments, projects, science toys, extracurricular activities and insights from them.

While working with children, we will try to bring the 'hidden child' inside teachers back to life. We enjoy every session interaction. There is no doubt that, this dialogue will enrich our understanding of teaching and learning in the future and ultimately students will enjoy learning in future.

Yours

Sarsha - Vinayak,

Vidyodaya Muktagan Parivar Foundation.



Blowing Balloon, Learning Science

Today we received immense enthusiasm and response from teachers on day 1 of the dialogue. Learning from Problems (PBL), a teaching method is used to explain the concept of 'existence of air' for class 6th and 7th. The experiments showing correlation between water pressure and air pressure were conducted with 6 teachers from Zilla Parishad School, Shiradwad (Tal. Shirol, Dist. Kolhapur).



This conversation turned out to be a lot of fun. Lots of questions answered, discussed by teachers. The activities of balloon for air experiment were keenly observed by teachers. Today's session ended with creating more excitement for the next session.



Can Salt be made in the class?



In next Session, we discussed the concept of 'Water'. In this discussion, we explored the questions like what is water, what are its usage using Mind Map too. We performed an activity that answered the question on 'why the bottom of the dam is thick.'

While examining the various properties of water we crosschecked the facts like water is a universal solvent. We mixed oil and water with salt to show the saturated state of water.

Can salt from saltwater be made in the class? We did such experiment in this session. What is density? We understood this by using several examples. Many aspects such as water being a carrier, its capillary conduction properties, their inconsistent behavior and their siphon properties were discussed in this session.



When Teachers Create Experiments...

Session 4 was based on concept 'strength and type of force'. This time we did not show any experiment. Instead, we gave them a problem statement to design the experiment which was 'Make a parachute that floats in the air for the longest time.'

All teachers pushed their imagination and participated fully in group discussions. During presentation, some teachers literally stood on table to make their parachute fly for longest time in the air! Then we came together and discussed the short or long duration of parachutes in the air and why it happened so.



What is combined force? Our discussion travelled around concepts like Gravitational force, the story of Newton's discovery a brief understanding of his life. We did some experiments based on frictional force, static electric force. The session ended with a discussion on how the balloon rocket works.



While ending this session, we were overwhelmed and energized by seeing the enthusiasm of all the teachers. The science education Dialogue is achieving its objectives in a very healthy environment. Teachers showered their love and showed faith by actively participating in it.

Village is a Social Experimental Lab

Chat with Ratnappa Kumbhar, A Potter and Entrepreneur

Venue - Datta Vasahat, Kumbhar Mala, Abdul Lat

Tired of studying maths and science every week, all students echoed, demanding a trip walk somewhere this Sunday. We started seeking a place for trip. When asked them only, all said, let's see pottery work from village, Ganesh (Lord Ganesha) Festival is approaching. So we decided to visit a potter's Ganpati making workshop to see the pottery work.

Many of the alumni of our project are from the potter community. We took help of Alum Sumit and planned our visit with Mr. Ratnappa Kumbhar Kaka, an entrepreneur of Nirdhur Chul (Smokeless mudstove) in the village.



We had an eco-friendly cycle journey together and reached at Datta Vasahat.

Initially we visited Sumit Dada's Ganesha idol workshop. Ganesha idols, adored with attractive color combinations were getting ready for the upcoming Ganesha festival. All were lost in observing the idols. Many were engrossed in painting Ganapati's eyes. Mr. Ratnappa Kumbhar showed us all around.

Necessity is the mother of invention. He answered to the children's curious questions with ease. He was proud to share that, 90% of the stoves in Karnataka state provided by them. Many of the engineering students does case study on our stove as a project, he was politely sharing it with us. 'We have provided employment to many needy youth from the village', He said.

He also showed us the process of making a Ganesha template. As pottery skill handed over from one generation to another, they have embraced modernity. "My grandson is also painting Ganpati. We have the art of shaping clay in our blood", He expressed this feeling that we should be committed to this legacy and must carry it forward.

Finally, we expressed gratitude to Mr. Kumbhar and had our lunch at a scenic place. During the lunch, we discussed about the things we liked and learned today. This was a life changing experience for all students. They had 'food for thought' for next few days.

A Trip to Cemetery

Venue - Fadi Chowk, Abdul Lat

This week's discussion started with the question 'Are there ghosts, spirits exist in the world?' When asked, almost all the children answered 'YES'.

'Has anyone seen a ghost, a spirit?'

The children started giving examples given by the adults in their house.

"Our grandfathers have seen ghosts."

"A woman was possessed by a demon in our street."

"I don't want to go to the lake at night. It is said that there are ghosts here."

When we asked, "What do ghosts look like?" The students started saying that ghosts wear white clothes. The demons have crooked legs.

"Has anyone seen a ghost with real eyes?" The children did not have the answer to this question though.

'Seeing is believing' is an important value in Science that was introduced. The activity which has been going on for the last four years that enriches the experience of students and imbibe above value is 'a Trip to Cemetery'. On a fine Sunday, when we told them that, we are going to visit Cemetery, there was a mixed response. Almost all faces were fainted.



When we set our feet in the crematorium, Tilak Dada and Sammed Dada, dressed in white ghost clothes, already hiding to frighten us, came out shouting at us. Everyone started shouting, some almost ran away.

Everyone smiled when they realized that they were real human beings. Then we rounded up all of them in the crematorium and the 'real' learning started. We both told them various anecdotes that wipe away the misconceptions about the place. We then explained the students how the cremation is actually performed at the cremation site.



Many offerings, flowers, excerpts were lied at the place of cremation. Some biscuit box was also placed there. Prem, a student from batch dared to tear the two biscuit boxes and distributed the biscuits to everyone.

The fear from students' mind was less by this time. "We came to know that there is no Ghost as thing in this world. We will no longer be afraid of ghosts, we will tell people that there is no ghost." Reciting 'Seeing is believing', all started returning to home and we accomplished our objective of the trip.

Let's Contribute for A Child

With a lot of perseverance, we are trying our best to streamline Education in rural parts of Kolhapur. But, while doing the same, we are unable to pay our 'passionate, hardworking and creative' GSP Fellows. Our local funding was cut in March 2020 only and we are now on our own to take this 'edu-experiment' further.

Thanks to our well wishers, gentlemen/women who love what we do; who try to contribute for this noble work to flourish. Vinayak and his team is trying to reach out to find at least 40 supporters/donors for the same. He conveyed our hurdles to his network and received assurance of support of Monthly/yearly Rs.1000 from around 20 noble personalities.

We are very grateful to them and determined to keep flowing this innovative education stream for students that challenged economic backgrounds. We are in search of more such noble persons. It could be You who is reading and thinking of paying back to society through our endeavor.

Parents of our students mostly fall in the daily wage labor category. We are appealing to you and your empathetic network to take monthly economic responsibility of one child's education by donating to us in your capacity.

Monthly Donors

- Swati Dhuri
- Gridhar R.
- Vaibhav Mali
- Dinesh Vaidya
- Aangha Mansane
- Pravin Vagare
- Maitra Jivanche group

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- Ravindra Gurav
- Asha Dongre
- Mugdha Borkar
- Tanvi Butalia

Project site -

Abdul Lat, Shiradwad,
Tal. Shirol, Dist. Kolhapur.

- Account Name - Vidyoday Mukatnagan parivar foundation
- Bank - HDFC Bank
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