

Lab in a Cab

Tagline: Igniting Scientific Curiosity

"Lab in a Cab"(Jnana Vistaar) is a mobile science laboratory that brings fundamental science experiments to schools, fostering scientific temper, curiosity, and awareness among students.

Objectives:

- Popularizes and orients students to fundamental sciences
- Inculcates scientific thinking and curiosity through interactive working models
- Educates students about opportunities in science, technology, engineering, and mathematics (STEM) fields

Implementation:

- Identifies scientific needs of nearby schools and targets specific student groups
- Collaborates with school coordinators to design and demonstrate simple, syllabus-relevant experiments
- Utilizes a mobile laboratory to showcase experiments, promoting hands-on learning
- Assesses program impact through feedback and response sheets

Goals:

- Foster scientific awareness and curiosity among students
- Develop problem-solving skills and critical thinking
- Encourage pursuit of STEM education and careers
- Enhance collaboration between institutions and promote community engagement

Consolidated report

Month	Department	Conducted date	Name of the school
August	Physics	25-08-2022	S.D.M Highschool, Dharmasthala
	Chemistry	28-8-2023	S.D.M English medium school Belthangady
	Biotechnology	31-8-2023	S.D.M English medium school (state), Ujire
	Botany	-----	-----
	Psychology	31-8-2023	Government Highschool, Kalmanja
	Home Science	31-8-2023	S.D.M English medium school (state), Ujire
	Computer science	-----	-----
September	Physics	22-09-2023	S.D.M Highschool, Belthangady
	Chemistry	-----	-----
	Biotechnology	14-09-2023	S.D.M. Kannada Medium Highschool, Ujire
	Botany	14-09-2023	S.D.M English Medium School (CBSE) Ujire
	Psychology	11-09-2023	S.D.M. Kannada Medium Highschool, Ujire

	Home Science	-----	-----
	Computer science	-----	-----
October	Physics	-----	-----
	Chemistry	31-10-2023	S.D.M Kannada Medium High School, Dharmasthala
		31-10-2023	S.D.M Kannada Medium High School, Ujire
	Biotechnology	-----	-----
	Botany	-----	-----
	Psychology	-----	-----
	Home Science	-----	-----
	Computer science	30-10-2023	D.K.Z.P. Government High School, Halepete ,Ujire
November	Physics	10-11-2023	SDM Kannada Medium High School,Belal
	Chemistry	-----	-----
	Biotechnology	-----	-----
	Botany	27-11-2023	Government Higher Primary School, Kanyady- II
	Psychology	-----	-----

	Home Science	-----	-----
	Computer science	28-11-2023	SDM Secondary School, Ujire
January and February	Physics	29-01-2024	Govt Higher Primary school, Guripalla
	Chemistry	-----	-----
	Biotechnology	-----	-----
	Botany	08.02.2024	Govt. PU College Nada
	Psychology	-----	-----
	Home Science	-----	-----
	Computer science	-----	-----

10/11/2023	<ul style="list-style-type: none"> As a part of popularization of basic sciences, Department of Physics conducted Lab in Cab (Jnana Vistara) programme in SDM kannada Medium High School,Belal on 10/11/2023. Physics experiments related of Light such as Reflection/Refraction/lenses/ Multiple reflection/ total internal reflection were conducted. Also experiments on wave propagation, Electro magnetic induction were demonstrated. Simulation experiment on Dispersion, Electric circuit making, momentum were also demonstrated. Mr. S N Kakathkar, Ms Apeksha Jain and Namratha Jain S were the resource Persons. Around 25 students were benefited. Students of the school found it very interesting and were oriented towards basic sciences.
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Name of the department	COMPUTER SCIENCE
Staff Incharge	Ms. Akshatha K
Date and Time of the Programme	28 November 2023. 02.15PM to 3.30 PM
Place of the Programme	SDM Secondary School, Ujire
Nature of Programme	Conducted
Level of Programme	District Level/State Level
Type of the Programme	Lab in Cab Programme

<p>Brief Report</p>	<p>Students were given a piece of introductory information regarding Artificial Intelligence and recent applications. The main motto of the session was to interact with the students, therefore we arranged a competition just to analyze the knowledge they acquired from the talk given. The IT Quiz and Puzzle competition was structured by the students of 2nd BCA and 3rd BSc. Students interacted well and it was a successful session.</p> <p>Beneficiary : 9th Standard Students</p> <p>Resource Persons: 1. Ms.AkshathaJain Assistant Professor, Department of Computer Science SDM College,Ujire</p> <p>2. Ms. Akshatha C H Assistant Professor, Department of Computer Science SDM College,Ujire</p> <p>3. Ms. Bhavishya ,III BSc</p> <p>4. Ms. Sweekar , II BCA</p> <p>5. Mr. Vaishali , II BCA</p>
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Programme:	Lab in Cab
Title:	Importance of Nutrition and Health
Date:	31-08-2023
Time:	2.00pm to 3.30pm
Place:	SDM English Medium School (State), Ujire
Resource Person:	Ms. Shobha S
Beneficiaries:	8th standard students



Objectives: To make them aware about healthy food habits and role of nutrients in our body.

Programme in Details:

Department of Home Science conducted a Lab in Cab programme in SDM English Medium School (State), Ujire on 31th August-2023 at 2.00pm to 3.30pm for 8th

standard school children on the topic “Importance of Nutrition and Health” Ms. Shobha S, HOD in Home Science interacted with the children and demonstrated on nutrient rich food items and also explained about food guide pyramid. The programme was successful and 50 numbers of children are benefited by this session.

Under the best practice of the college Lab in Cab, the faculty members of the Department of Biotechnology visited the SDM High School on 31/08/2023. The faculty members addressed the students of 10th standard about the scope of science specially Biotechnology and demonstrated experiments related to Blood grouping and Plant tissue culture that grabbed the attention of the students towards science. Students positively responded and expressed their satisfaction on listening to new concepts of science and they also expressed that the activity made them to think about science in their career. The intention of the activity was to popularize science.



Abhijeeth S Badiger explaining about blood grouping technique



Demonstration of fermentation

Under the best practice of the college Lab in Cab, the faculty members of the Department of Biotechnology visited the SDM High school Ujire on 14/09/2023. The faculty members addressed the students of 10th standard about the scope of science specially Biotechnology and demonstrated experiments related to Blood grouping and Plant tissue culture that grabbed the attention of the students towards science. Students positively responded and expressed their satisfaction on listening to new concepts of science and they also expressed that the activity made them to think about science in their career.



Mr. Abhijeeth S Badiger addressing the students about the facts and scope of Biotechnology



Mr. Abhijeeth S Badiger demonstrating the Blood grouping

Lab in Cab – SDM High School Belal

Under the best practice of the college Lab in Cab, the faculty members of the Department of Biotechnology visited the SDM High school that is situated 17Km away from the college at a rural village Belal, Belthangady Taluk on 28/10/2021. The faculty members addressed the students of 8th, 9th and 10th standard about the scope of science specially Biotechnology and demonstrated experiments related to Blood grouping and Plant tissue culture that grabbed the attention of the students towards science. Students positively responded and expressed their satisfaction on listening to new concepts of science and they also expressed that the activity made them to think about science in their career.



Mr. Abhijeeth S Badiger addressing the students about the facts and scope of Biotechnology

Date and Time of the Programme	29-01-2024 10 a m to 1 pm
Place of the Programme	Govt Higher Primary school, Guripalla
Type of the Programme	Extension-Lab in Cab
Brief Report	<p>As a part of popularization of basic sciences, Department of Physics conducted Lab in Cab (Jnana Vistara) programme in Govt Higher primary school Guripalla</p> <p>Physics experiments related to Light such as reflection/Refraction/lenses/ Multiple reflection/ total internal reflection were conducted. Also experiments on wave propagation, Telescope were demonstrated., Mr S N Kakathkar and Ms Namratha were the resource persons. 34 students were benefited. Students of the school found it very interesting and were oriented towards basic sciences.</p>



Date : 30-10-2023

School Visited : D.K.Z.P. Government High School, Halepete ,Ujire

Time : 11.00 AM to 1.00 PM

Topic Discussed : Artificial Intelligence

Beneficiary : 9th and 10th Standard Students

Total number of students attended: 80

Resource Persons:

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| 1. Ms.Akshatha K
Assistant Professor,
Department of Computer
Science
SDM College,Ujire | 2. Ms. Divya Yadav
Assistant Professor,
Department of Computer
Science
SDM College,Ujire |
| 3. Ms. Riya ,III BSc | |
| 4. Ms. Ruchitha , III BSc | |
| 5. Mr. K Kiran , III BCA | |

Programme details:

Students were given an introductory information regarding Artificial Intelligence and recent applications. The main Moto of the session was to interact with the students, therefore we arranged a competition just to analyze the knowledge they acquire by the talk given. The IT Quiz and Puzzle competition was structured by the students of 3rd BCA and 3rd BSc. Students interacted well and it was a successful session.

Name of the Department: Chemistry

Incharge = Ms. Ganavi D

Date and Time = 31/10/2023, 2:00pm to 4:00 am

Place = SDM High School, Kannada medium. Ujire

Nature of the Program = Conducted

Level of the program = College level

Type of the program = Lab in cab

LAB IN CAB

Department of Chemistry organised lab in cab to 10th standard students of SDM High School, Kannada Medium. Ujire on 31st October 2023. Mrs. Ganavi demonstrated few interesting experiments to the students and gave scientific justification behind superstitious beliefs. About 150 students were actively participated in this programme.

Report: Lab in Cab – February 2024

Department: Botany

Date: 08.02.2024

Place: Govt. PU College Nada

Department of Botany has organised the Lab in Cab programme in the month of February 2024 for II PU students of Govt. PU College Nada. Mr. Abhilash K.S, Ms. Manjushree K., Assistant professors of the Department had participated in the programme.



Experiments like **‘Suction due to Transpiration’**, **‘Liberation of oxygen during photosynthesis’** had been demonstrated. **Anatomy of Dicot leaf and Monocot stem and monocot root**, **‘Preparation of stained**

temporary mount of onion peel cells’ had been demonstrated, explained and visualised by the students using compound Microscope.

In addition to this, faculty members had given valuable information in the field of Plant Science. Mr. Jinnappa, Attender had given the technical support. Nearly 80

students have benefitted from this programme.

All the students, teaching faculties including the Principal, Mrs. Lilly of Govt. PU College Nada had provided all the arrangements required for the program. The programme concluded with a micro-formal way.



Demonstration of experiments and observation by students.

18-08-2023	<p>As a part of popularization of basic sciences, Department of Physics conducted Lab in Cab (Jnana Vistara) programme in SDM Kannada Medium High School on 18-08-2023. Physics experiments related of Light such as Reflection/Refraction/lenses/ Multiple reflection/ total internal reflection were conducted. Also experiments on wave propagation, Electro magnetic induction were demonstrated. Simulation experiment on Dispersion, Electric circuit making, momentum were also demonstrated. Mr. S N Kakathkar, Ms Namratha Jain S were the resource Persons. Around 150 students were benefited. Students of the school found it very interesting and were oriented towards basic sciences.</p>
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25-08-2023	<p>As a part of popularization of basic sciences, Department of Physics conducted Lab in Cab (Jnana Vistara) programme in SDM English Medium(CBSC) High School on 25-08-2023. Physics experiments related of Light such as Reflection/Refraction/lenses/ Multiple reflection/ total internal reflection were conducted. Also experiments on wave propagation, Electro magnetic induction were demonstrated. Simulation experiment on Dispersion, Electric circuit making, momentum were also demonstrated. Mr. S N Kakathkar, Ms Apeksha Jain were the resource Persons. Around 45 students were benefited. Students of the school found it very interesting and were oriented towards basic sciences.</p>
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Lab in Cab Report

Date: 11.09.2022

Place: SDM DKZP High School Ujire

Time: 2.45 pm to 3.45pm

Topic: Intelligence and Perception Assessment

Resource Person: Dr. Vandana Jain

Beneficiaries: 10th Std. Students (110 Students)

Facilitators: Mr. Suresh K, Headmistress, SDM High School, Ujire



Name of the department/committee	Physics
Incharge	S N Kkathkar
Date and Time of the Programme	22-09-2023 10 a m to 1 pm
Place of the Programme	SDM Highschool Belthangady
Nature of Programme	Conducted
Level of Programme	NA
Type of the Programme	Extension-Lab in Cab
Brief Report	<p>As a part of popularization of basic sciences, Department of Physics conducted Lab in Cab (Jnana Vistara) programme in SDM Highschool, Belthangady. Physics experiments related to Light such as reflection/Refraction/lenses/ Multiple reflection/ total internal reflection were conducted. Also experiments on wave propagation, Electromagnetic induction, surface tension, Telescope were demonstrated., Mr S N Kakathkar and Ms Revathi were the resource persons. 50 students were benefited. Students of the school found it very interesting and were oriented towards basic sciences.</p>



Date and Time of the Programme	29-01-2024 10 a m to 1 pm
Place of the Programme	Govt Higher Primary school, Guripalla
Type of the Programme	Extension-Lab in Cab
Brief Report	<p>As a part of popularization of basic sciences, Department of Physics conducted Lab in Cab (Jnana Vistara) programme in Govt Higher primary school Guripalla</p> <p>Physics experiments related to Light such as reflection/Refraction/lenses/ Multiple reflection/ total internal reflection were conducted. Also experiments on wave propagation, Telescope were demonstrated., Mr S N Kakathkar and Ms Namratha were the resource persons. 34 students were benefited. Students of the school found it very interesting and were oriented towards basic sciences.</p>

