



***Education of the girl students from
marginalized tribal regions of Maharashtra***

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10th -14th July 2023,
8th International Conference on Women in Physics

Education in Tribal Regions of Maharashtra

Started in August 2021

Started in March 2021

Starting soon



CReST

Culturally Responsive Teaching
Work with teachers VIII-X

6 Schools involved

Anandi

Science Communication
For School Students VIII-X

6400 students from 60 schools

PhyLab

Physics Laboratory Development
For XI-XII Students

CReST: Culturally Responsive Science Teaching



Onsite: Interacting with school authorities, teachers and students. January 2023 field visit: Interacted with 40+teachers from 6 schools

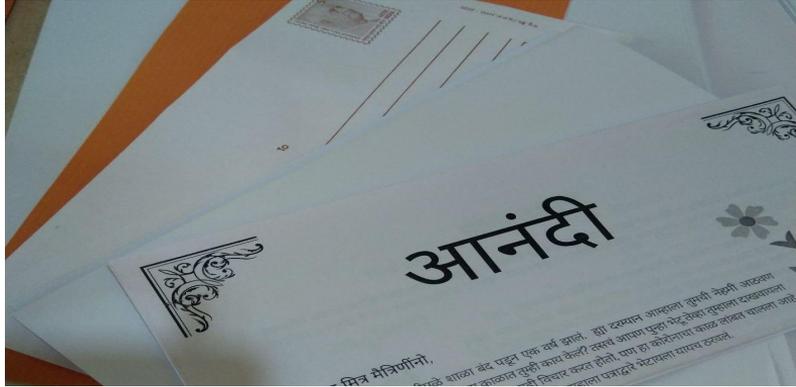
Understand the pre and post pandemic challenges.

‘Students do not have the experience the textbooks assume, while their own experiential capital is not acknowledged’
- Asmita Redij et. al. - episteme 9, (2022).

Forming cohort of Teachers and Researchers to address this gap.

- Create sensitivity among teachers
- Development of Teaching Modules

Anandi: Science Communication



First issue of Anandi, May 2021

Printed-Packed-Posted from Alibag amidst the deadly lockdown.

"My goal was to complete graduation after completing 10th from present school. But all my dreams seemed to have shattered."

- Student's response July 2021

To reach the unreached,

'Turned to paper newsLETTER'

To reduce the burden on the parent, provide diverse means of communication for teachers, keep students connected to school.

To complement the efforts by schools

First generation school goers lack a conducive atmosphere at home, face imposter syndrome early age. A small failure can knock them down.

Anandi is a place to **practice** the outcome of education research carried out at HBCSE. While building inclusive resources.

Each editorial based on a story from my field visits and interaction with students. Though based on real concerns, for now it has a fictional solution.

Starting a community library

Embracing diversity

Fighting blind faith, with fractal consequence

Resisting bullying

Challenges in continuing education

Scientific temper

“Students respond only when they relate to it.” We strive to work to ensure they do.



We were racing back to school from her family owned stall, half an hour late,

“We have to think of both the studies and stomach.”



Jan '22

Feb '22

Mar '22

Apr-May '22

Jun-Jul '22

2022



Aug '22

Sep '22

Oct '22

Nov '22

Dec '22

PhysLab: Experiential Learning

Coming Next



**Designing Physics Experiments.
Class XI-XII**

*Experiments/Practicals are integral part of
Science Learning*

*As we go to higher education. Not every
experience needed for a science classroom
be had in the surrounding world.*

*'Students have not seen Lens/prism,
circuits'*

*Experiment are done in last month b4
exams.*

***Developing a laboratory with frugal
resources is a challenge to teachers/
college professors.***

Collaborative work is a key to address big challenges. *Then why do we fail??*

We cannot teach in school what we have not practiced in workplace.

Reflection
Collaborative
Work/Education

We cannot practice at workplace what we have not learnt in school

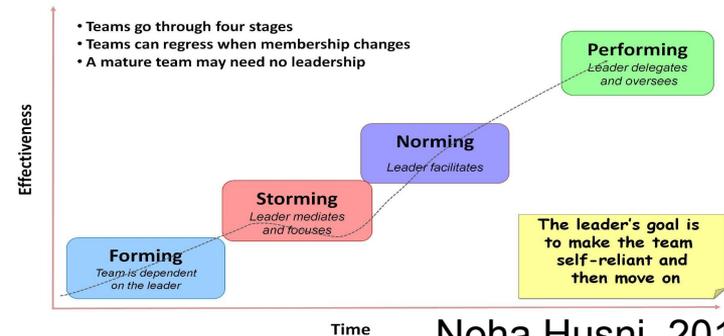
Role on women in building safe space for women and for all.

What are the hurdles?

**Opportunism
vs
Leadership**

Tuckman's Team Development Model

- Teams go through four stages
- Teams can regress when membership changes
- A mature team may need no leadership



Noha Husni, 2016:

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