



In this part, we will try to understand.....

- Why to study environment science again, despite a long session with this subject, over 4 to 5 years, at School?
- What is the difference between Environmental Education that you had at school **and** the one that you will go through now?
- What impact are you going to make as an aspiring Engineer towards developing strategies towards a sustainable environment?

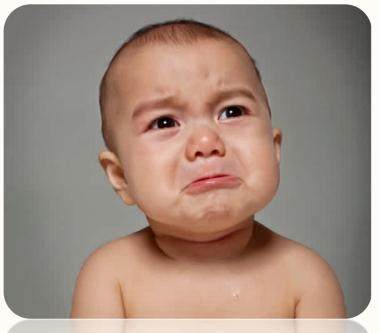
The EVS Course from Class 6 to 10.....



In Class 6.....What is this?

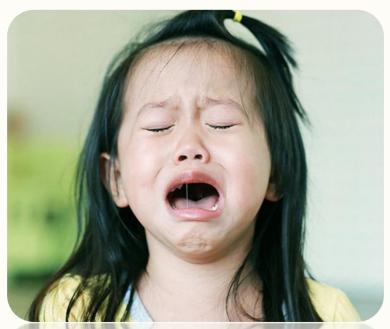


In Class 7 & 8.....
Why am I going through this??



By the end of class 10.....

Oh god, when will it stop??



But, I am sure you also enjoyed you school hood..





THAPAR INSTITUTE OF ENGINEERING & TECHNOLOGY (Deemed to be University)

And when you reached your dream college life today.....

Again, a course on Environment, i.e., **UEN002 – Energy and Environment**.....



As you were enjoying your school days.....



The same questions that you asked yourself, Mother Nature was also asking.....

.....What is this?



....Why am I going through this??



.....Oh god, when will it stop??



.....and more and more questions continued to get raised









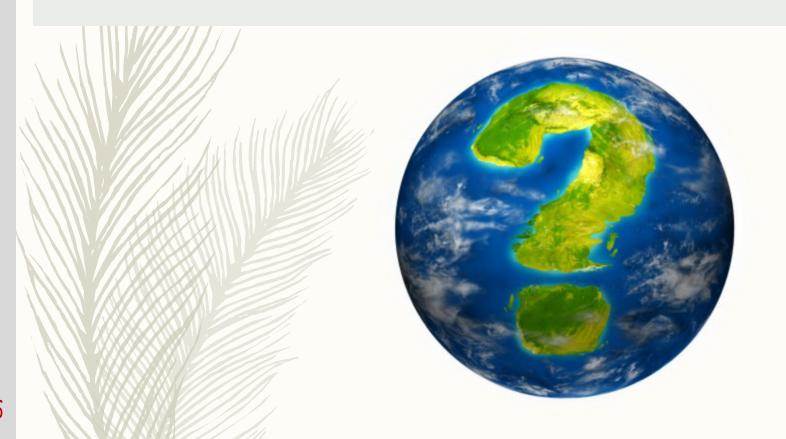




....Is this the education that humans had & is it worth.....???



And even today when you start enjoying the college life that you dreamt.....



.... These questions of our planet continue to remain unanswered.

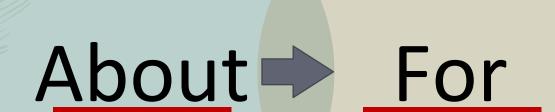
So, let us relook at the way we had Environmental Education.....





Learning about the environment in an objective, hands-off manner.

> @ School



Environmental
Education
For Sustainable
development (EESD)

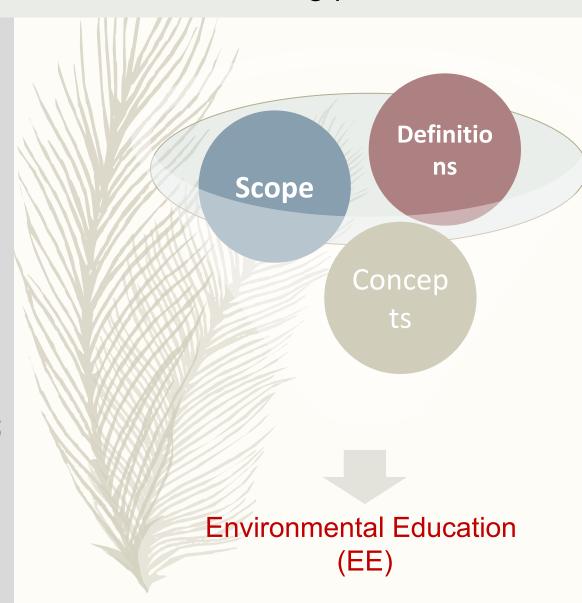
Learning how to strive towards sustainable living.

@ College

....& time to turn around and probably think that we should be learning *for* the environment rather than *about* it.

How does the learning process differ between EE and EESD?

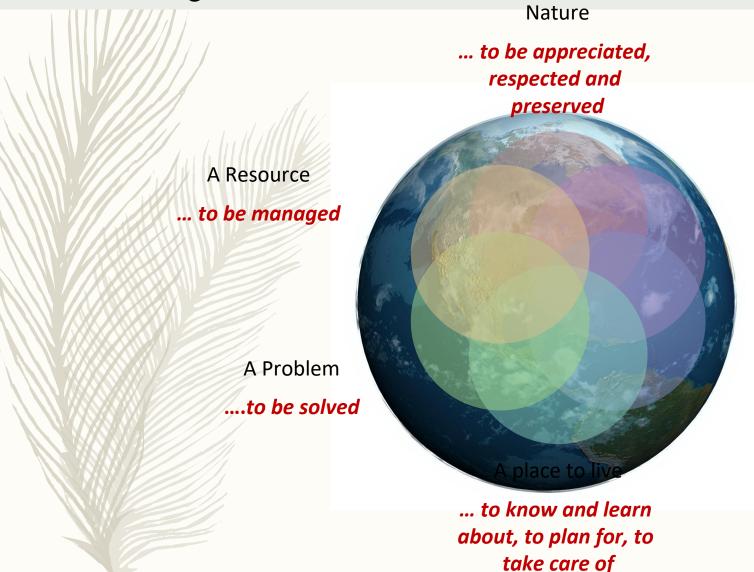




.....about learning the definitions, scope and fundamental concepts that are associated with our surroundings

This paradigm shift in learning process will, hence forth, involve understanding environment* as





A Community Project

...in which to get involved

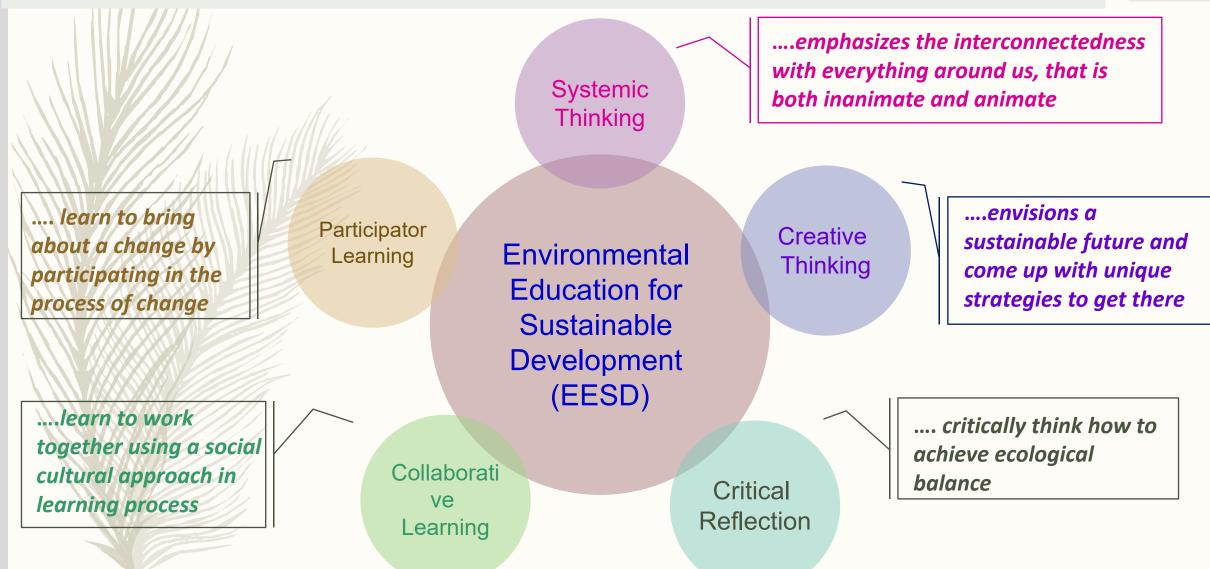
A biosphere

...in which we all live together, into the future

*Sauve, L., 1996, Environmental Education and Sustainable Development – A further appraisal, Can. J. Environ. Edn., 1: 7-34

How does the learning process in EESD change?





As an 'aspiring' engineer, what am I expected to learn and to contribute towards engineering innovations that are environmentally sustainable?



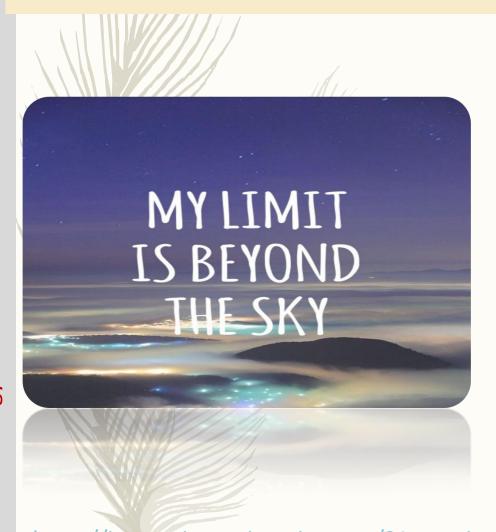
- 21 Sustainability Innovations and Initiatives that might just change the World.....
- 1. The Smoot free project: Jewelry from air pollutants
- 2. Zéphyr Solar: Bringing Electricity to Disaster Zones
- 3. The Green Building Initiative: Building Homes and Reducing Emissions
- 4. Groasis Waterboxx: Bringing Life to the Desert
- 5. Supermarket Herb Gardens: Less Waste, Better Taste
- 6. AirCarbon: A Sustainable Plastic For the Future
- 7. Desso Airmaster: Carpet That Cleans the Air
- 8. ENGIE Insight: Resources for a Sustainable World
- 9. Demetra: Reducing Food Waste Organically
- 10. B-Droid: Buzzing Toward a Brighter Future



https://interestingengineering.com/21-sustainability-innovations-and-initiatives-that-might-just-change-the-world

As an 'aspiring' engineer, what am I expected to learn and to contribute towards engineering innovations that are environmentally sustainable?





- 21 Sustainability Innovations and Initiatives that might just change the World.....
- 11. The Seabin: Cleaning the Oceans Safely
- 12. S.Café: Fabric Recycled from Coffee Grounds
- L3. Sundrop Farms: Energy Efficient Agriculture
- 14. The Veganbottle: An All-Natural Alternative to Plastic Bottles
- 15. PowWow Energy: Save Water and Money With This Innovative App
- 16. Eka 1 and Eka 2 Seeds: A Proposed Solution to Deforestation
- 17. <u>CloudFisher</u>: Converting Fog Into Drinking Water
- 18. Fairphone: The World's First Ethical Smartphone
- 19. Bakey's: A Delicious Way to Replace Plastic Cutlery
- 20. Outerwall EcoATM: Get Cash For Your Old Electronics
- 21. Waitrose Delivery Vans: Vans Fuelled by Food Waste

https://interestingengineering.com/21-sustainability-innovations-and-initiatives-that-might-just-change-the-world

Path forward....



Series of lectures by various teachers who will take you on a journey through diverse aspects of Environmental Sciences and Energy

Amit Dhir Head, School of **Energy & Environment**

Anoop Kumar Course Coordinator UEN002



Shilpi Verma



Vinod Kushwah



N. Tejo Prakash

Anita Rajor





Your Teachers for UEN002 – Energy & Environment



Path forward....

-the interaction, with your teachers, will also involve hands-on project assignments conceptualized by your own-selves, guided by your mentors, to propose and develop prototypes
- These assignments will be projects based on designing contemporary,
 appropriate and sustainable environmental and energy solutions
- The next set of lectures (Introduction Part II) will introduce you to the
 Objectives underlying this course, The Contents, Course Learning
 Outcomes, and the Evaluation Pattern