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The Google Earth Sustainability Program for teachers was one of the finest workshops that I attended in my fifteen plus years of being an educationist. I enrolled for the program with lot of expectations as both TERI SAS as well as Google Inc. has a very good reputation, and I was not disappointed at all.

The workshop that was started on 2 June 2020 and concluded on 22 June 2020 was a great learning experience for me.

I have always been fascinated by technology and thus found the Google earth tools very interesting. We were given training for Google Maps, Google Time-lapse, Google Voyager, and Google Expeditions AR & VR. Each of these was taken up by professionals from Google Earth Inc.

In today's world where the learners are quite techno-savvy, learning these tools will keep us, the educators abreast with our generation Z. Not to forget that these teaching aids are totally eco-friendly as they do not require any raw material unlike the conventional teaching aids made of paper/ cardboard/ plastics etc.

I have developed quite a few teaching aids with the help of these Google Earth Creation Tools and have also used these in my online classes, which are the new normal in this COVID era.

I have also conducted training sessions along with a colleague of mine, who was a part of this program, in both the branches of the school I am currently working with. I also helped a team of my students to prepare a presentation for a student webinar using these Creation Tools, for which they received a lot of appreciation.

Some of the ready-made materials which I came across during this program were really very nice and I intend to use them in my lesson plans in the future. Here are a few examples:

While exploring Google Earth Engine Timelapse, I came across a few projects that can be very effectively used in Secondary level Biology classes that follow the CBSE curriculum.

Following are a few examples:

(1) The following link is for viewing Time lapse Around the World: Urban Growth- Naypyitaw, Myanmar

<https://earthengine.google.com/timelapse#v=19.75702,96.12534,10.275,latLng&t=2.8&ps=50&bt=19840101&et=20181231&startDwell=0&endDwell=0>

Feedback: This can be incorporated in class 9 lesson plan while taking up the topic “Improvement in Food Resources”

This can be used as an Energiser.

Incorporating this in your Lesson Plan as follows:

Students can be shown this time lapse, followed by discussion on how does urbanization affect the availability of agricultural land. The discussion should be guided in such a manner that students themselves come up with the solution that to feed the ever increasing population it's imperative that we improve upon our techniques to manage our food resources at all levels, production, protection and storage.

Found some similar projects (2) and (3)

(2) The following link is for viewing Time lapse Around the World: Urban Growth-Dalian, China

<https://earthengine.google.com/timelapse#v=39.02445,121.65743,9.586,latLng&t=0.92&ps=50&bt=19840101&et=20181231&startDwell=0&endDwell=0>

(3) The following link is for viewing Time lapse Around the World: Urban Growth-Las Vegas, Nevada, USA

<https://earthengine.google.com/timelapse#v=36.13712,-115.13706,8.761,latLng&t=2.21&ps=50&bt=19840101&et=20181231&startDwell=0&endDwell=0>

After exploring Google Earth Voyager, I came across many interesting stories. Some of these stories can be very effectively used in Secondary level Biology classes.

Following are a few examples:

(1) The following link is for viewing Scientists at Work: Fossil Timeline

<https://earth.google.com/web/@44.5933409,-119.6213695,735.23144306a,0d,35y,60h,90t,0r/data=Cj4SPBlgZTliYTAyZTE1NTMwMTFIN2FkNmYwZDJmYTfkN2ZiN2MiGGVmZWVhX2hobWlfc2NpZW50aXN0c18xMyIwCixBRjFRaXBNZ3VHNXRyZFpRSFkJclhfSndrWnJOWXFDR0cwS0dlcXA3WkhIRBAF>

Feedback: This can be incorporated in class 10 lesson plan while taking up the topic “Evidences of Evolution”

This can be used as an Energiser.

(2) The following link is for viewing Scientists at Work: Lions of Mozambique

<https://earth.google.com/web/@-18.7899237,34.52989166,26.71857312a,374184.26684439d,35y,0h,0t,0r/data=Cj0SOxlgZTliYTAYZTE1NTMwMTFln2FkNmYwZDJmYTFkN2ZiN2MiF2VmZWVhX2hobWlfc2NpZW50aXN0c18x>

Feedback: This can be incorporated in class 10 lesson plan while taking up the topic “Our Environment”.

This can be used for introducing the topic.

(3) The following link is for viewing Scientists at Work: Exploring Earth’s Keystone Species

<https://earth.google.com/web/@20.65536863,-83.46343293,-6547a,29269798d,35y,2h,0t,0r/data=CjASLhlgZTAxODEyNzA5MmFjMTFIOTgwYzNhYmZhYzkzZGYyM2UiCnZveV9zcGxhc2g>

Feedback: This can be incorporated in class 9 lesson plan while taking up the topic “Diversity in Living Organisms”.

This can be used for Introducing or for Summing-up the topic.

(4) The following link is for viewing Scientists at Work: Exploring Earth’s Ecosystems

<https://earth.google.com/web/@-4.16313601,-54.27886769,-106.18764164a,2707779.76765d,35y,-120.73141085h,30.99841124t,0r/data=Cj0SOxlgODc1NjY2Nzg4MWJmMTFlnzk3MzI5ZGI4OGI2N2Y1NTYiF2VmZWVhX2hobWlfc2NpZW50aXN0c18w>

Feedback: This can be incorporated in class 10 lesson plan while taking up the topic “Our Environment”.

This can be used for Introducing or for Summing-up the topic.