Integrating OERs for Science Education

Basic information

Title: Integrating OERs for Science Education

Author
> Dr. Deepa Verma
> Assistant Professor, VIVA College, Virar (W), Maharashtra, India.

Mentor
> Dr. Colin de la Higuera,
> Professor in Computer Science at Universit´e de Nantes, France

Hub coordinator
> Mr. Igor Lesko
> Director of Operations, Open Education Consortium, Port Elizabeth, South Africa.

Link of the course (developed material):
https://courses.mookit.co/course/iose

Motivation for the work

Personal Experience
Lack of awareness for the OER

Target Audience

Students, Aspiring science educators, teachers and Educators involved in higher education, Instructional material and content developers of school, colleges and universities

Goals of the project

Promoting the use of OERs as part of science education.
Empowering educators
Creating awareness and Supporting OER movement

Related SDG goal

4 QUALITY EDUCATION

Ensure inclusive and quality education for all and promote lifelong learning

Science Education

- Like global scenario Indian context has similar challenges when it comes to science education.
- Efforts by govt. to create enthusiasm amongst students for science education is commendable.

MOOCs: Indian scenario

- 2nd largest number of users enrolled in various MOOCs (US being at 1st Position)1.
- MOOC platforms that are being used in India for offering courses : NPTEL, mooKIT, IITBX, and SWAYAM. NPTEL being oldest while others have been launched just 4/5 years ago, Swayam being the latest.

1. Shah, D. (2016, Jul 8). MOOC Tracker –Never Miss a Course, Notification/Reminder service for MOOCs, Class Central. Accessed from https://www.class -central.com/report/mooc – tracke *(18) (PDF) An Overview of MOOC in India*. Available from: https://www.researchgate.net/publication/320038196_An_Overview_of_MOOC_in_India [accessed Jun 28 2019].

Course specifications

Length of the Course: Three Weeks
Schedule: May 20, 2019 to June 9, 2019.
Workload: 3 to 4 hours per week
Level: Introductory
Language: English; **Prerequisites:** None

Sources for Reference Material

YouTube Videos – CC licensed
Wikipedia and web link materials
Research papers and Articles
Additional web links for related material
Pixabay
PxHere

Content Developed

Survey form
Animated video
Video
PPT with voice over
Blog
PDF document
Quiz
Assignments

COURSE DETAILS

Pre –enrolment form – google form – for collecting information about the participants
https://docs.google.com/forms/u/1/d/1WsoMillG3kneGgh0IQZgt7i7kgMgKIHG6xO1b3VaO84/edit?usp=drive_web

COURSE DETAILS

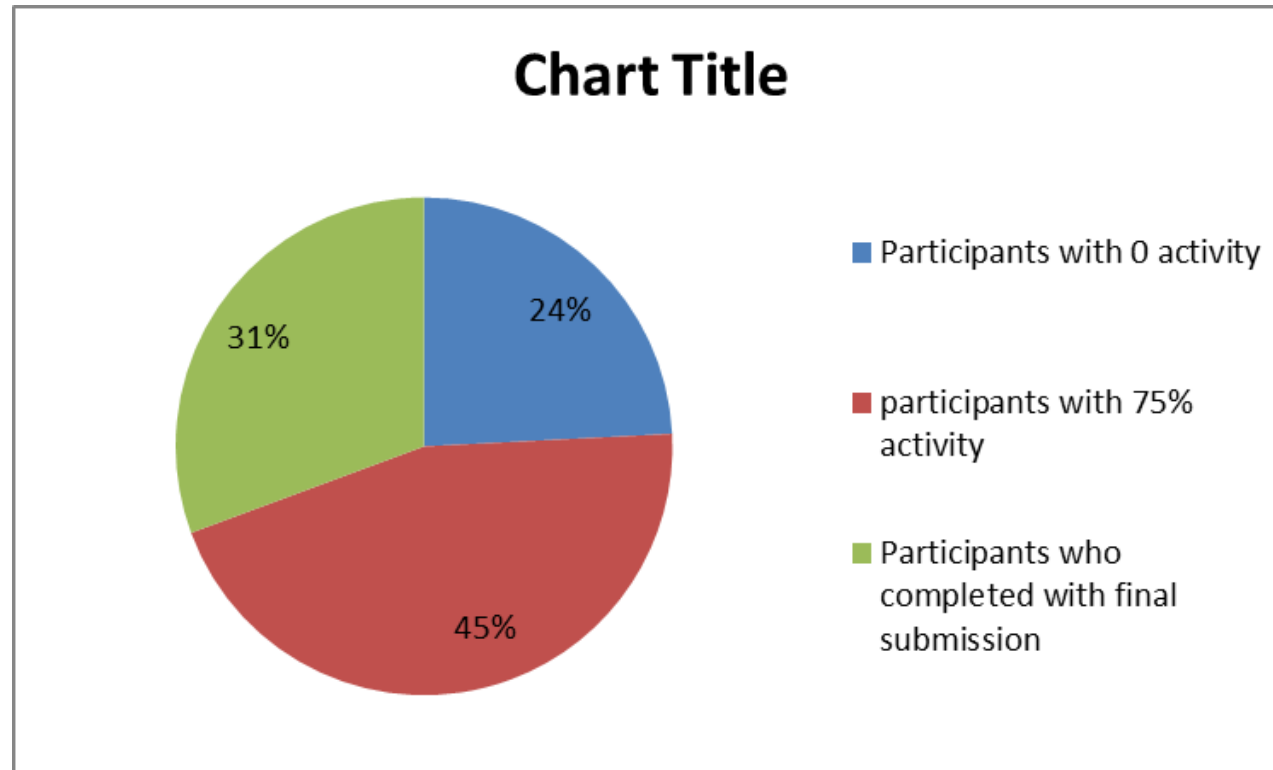| WEEK 1 (20th May 2019 – 26th May 2019)	WEEK 2 (27th May 2019 – 2nd June 2019)	WEEK 3 (3rd June 2019 – 9th June 2019)
Module 1 : Science Education • Evolving Nature and Perspectives • Aims and Objectives of Science Education • Challenges and Limitations of Science education • Assignment	**Module 2 : OER : Concept, Need and importance** • What is OER? • Why OER? • Types of OER • OER Licensing • Tools used in Developing OER • Quiz	**Module 3 : Ways of integrating OERs in Science education** • Need of OER in science education • Ways to integrate OERs in Science Education • Assignment • Feedback

Course Flyer   https://youtu.be/x-dun1dn9Jc

Course Statistics

- Total no. of Participants Enrolled = 62

- Participants who Completed the entire course : 19

- Participants with Zero Activity = 15

- Participants who completed more than 75% of course but incomplete activity/ submissions: 28

Chart Title

- Participants with 0 activity — 24%
- participants with 75% activity — 45%
- Participants who completed with final submission — 31%
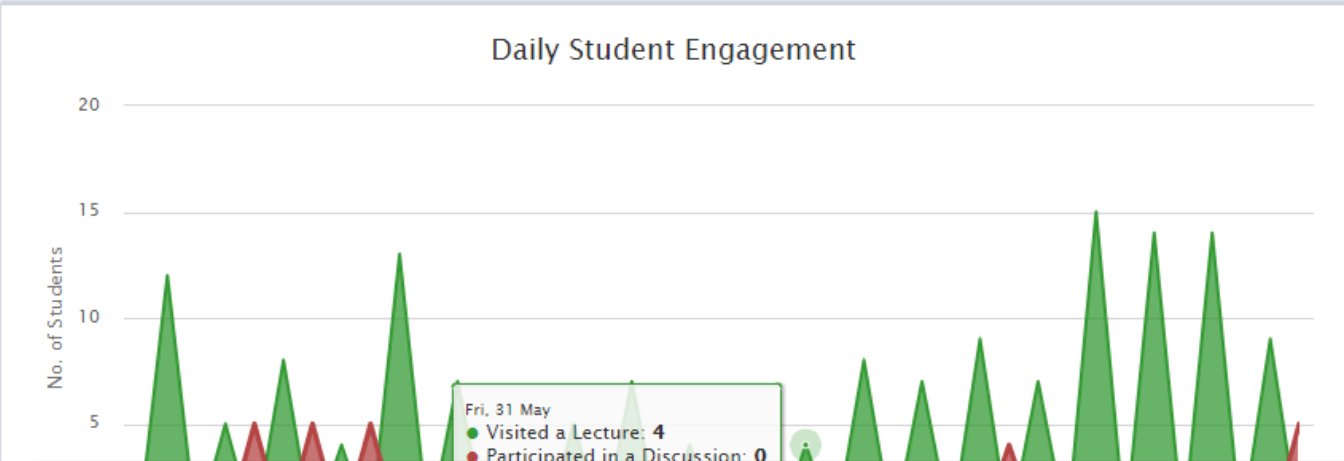
THE STATISTICS !!!

1

CONCEPTUALIZATION, PLANNING AND FINALIZATION OF THE CONTENT OUTLINE
Skype sessions / emails – Mentor & Hub-coordinator
Finalisation of modules – 3 weeks- 3 modules- 12 Hours

3

EXPLORATION OF THE CONTENT
Pre-course Survey form
Selection of learning platform for easy use and access
Content Outline and depth
Keep them Engaged
Help – me !!!!
Time Alerts
What did you learn and how was it ??

2

STRUCTURING , DETAILING AND FINE TUNING OF THE CONTENT
Simple Content
Keep it short
Pace it out !!!
Assignments; quiz; Discussion forums; in video quiz;
Additional resources

PROJECT IMPLEMENTATION

Integrating OERs for Science Education

MANAGE   ANALYTICS   MY ACCOUNT   BACK TO PORTAL

Lectures
Announcements
Resources
Forums
Hangouts
Assignments
Quiz
Users

+ Add Lecture

▶ Week 1
▶ Week 2
▶ Week 3
▶ CONCLUDING SESSION

path blockers - Google Search   Lectures | Integrating OERs for   VIVA COLLEGE   VIVA Staff Portal   Channel Videos - YouTube Stu

https://courses.mookit.co/manage/iose/

Type here to search

3:11 PM
7/3/2019

Access Content

NEXT

by Rutu Raja about 3 weeks ago   3 replies
Feedback   3 weeks ago

by Praveen about 3 weeks ago   3 replies
Certificate   3 weeks ago

unpublished

Search   Search by author

🔊 General Discussion   🔊 Lectures and Assignments

General Discussion Forums

Users
Quiz
Assignments
Hangouts
Forums
Resources
Announcements
Lectures

Integrating OERs for Science
Education

MANAGE   ANALYTICS   MY ACCOUNT   BACK TO PORTAL

https://courses.mookit.co/manage/iose/forums

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1,000+ Free Exploration at Gr...

3:32 PM
7/3/2019

WHAT DID THEY SAY !!!

Integrating OERs for Science Education
Users Online : 1

📇 Forums

< Go Back to Forums

Thank you mam !

rsb181902   Posted on 9/6/2019 18:22

It was my great experience with such a great faculty.   No Likes
The quality, content and voice clarity is too good it can be easily understood.   ⬆ Like

Once again thank you for providing us a such a wonderful opportunity.

Posted in **GIST OF THE COURSE**

★ Unsubscribe   ↰ **Post Response**

Responses:

dverma4180@gmail.com   10/6/2019 00:34   1 Like
Hello,   ⬆ Like
Thanks for the feedback. All the best.   ✏ Edit
Teacher

Integrating OERs for Science Education
Users Online : 1

📇 Forums

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Thanksgiving

Shabib   Posted on 9/6/2019 21:15

Dear Deepa Mam, it was an enriching experience to know what are OERs and how   No Likes
they can be created. I can say now that with the basic knowledge acquired, now I can   ⬆ Like
proceed to design and create OERs in my subject Microbiology so that the
knowledge, information is there with an open access where students can acquire it
and gain benefit.

Posted in **GIST OF THE COURSE**

★ Unsubscribe   ↰ **Post Response**

Responses:

dverma4180@gmail.com   10/6/2019 00:28   No Likes
Hello Shabib,   ⬆ Like
I would also like to extend thanks to you, you have constantly   ✏ Edit
expressed your opinions and ideas. I wish you al the best for your
Teacher

Comprehensive explanation of science

Praveen Shah

No Likes

⬆ Like

Dear mam,

It's wonderful explanation of different perspectives of Science and its classification with so many examples.

Regards

Dr. Praveen Shah

Posted in **Science Education**

Integrating OERs for Science Education
Users Online : 1

👥 Forums

Reflection on Tools for OER

Shabib

Posted on 6/6/2019 00:19

No Likes

⬆ Like

Good and comprehensive video which covers some of the user friendly softwares which can be considered while creating OERs. I think there must be many more and these are some of the common ones more used.

Just one question : Should a creator be compulsorily familiar with technical programming language knowledge or any other technical content?

I wish to know because my subject is Microbiology and I have basic knowledge of MS-Windows but is there a need to also learn some computer language?

Posted in **Tools for OER Development**

★ Unsubscribe

↰ **Post Response**

Responses:

dverma4180@gmail.com

6/6/2019 00:43   No Likes

👥 Forums

Good OER Resources and Overall Course

noddy18

Posted on 7/6/2019 17:38

No Likes

⬆ Like

Hello mam,

Your videos are very informative.

I would also used it for my students.

It has also shown me how can i make my student learn with innovative and interactive videos and other resourses.

the tools which use shown us in the videos are quite intresting and useful these tools can be used when i make my own OER.

Also i would add that the resource i.e. additional as well the study material provided is very informative.

★ Subscribe

↰ **Post Response**

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Reflection on Ways to Integrate OERs in Science Education Part I

Shabib
Posted on 8/6/2019 21:20

Good video which emphasizes that its not just a creation of OER but one must be also carefull of the legal aspects of different copyright licences and norms.

No Likes

⬆ Like

Posted in **Ways to Integrate OERs in Science Education Part I**

★ Subscribe

↰ **Post Response**

< Go Back to Forums

New methods of science education

rsb181902
Posted on 26/5/2019 10:49

Can anyone give your new ideas about to improve the science education in today's world.?

No Likes

⬆ Like

Posted in **Introduction to Course & Know the mentor**

★ Unsubscribe

↰ **Post Response**

Responses:

Shabib
26/5/2019 12:15

In order to emphasize science education in todays world following things can be considered:

1) Focus on school primary and secondary education as its beginning let them explore creativity, inculcate curiosity, have project based learning.

2) At higher education level rather than only focussing on theory and summative assessment let there be Research Based Pedagogical

No Likes

⬆ Like

Teacher

Hello,

Next video is about Why OER !! It will be uploaded in due course of time.

dpak11c
30/5/2019 21:16

With such high speed world, everyone needs to find answers to their curiosities immediately. Open learning will help everyone to access and find out answers in the quickest way possible i.e. at their fingertips.

Vinodkumar
31/5/2019 18:49

OERs are truly important for learners, educators and researchers

It helps the learners to learn new things at their own pace. It also helps lifelong learners that find difficult to learner for the formal education pattern i.e. schools or colleges.

For the educators

Educators has large number of learners from all over the world. This makes the educator to reach global level.

How did it happen !!!!

- Satisfaction and incentive to contribute in the OE4BW project

- Support the OER movement.

- Being a Science Teacher myself

The Path blockers !!!!

! Selection of Platform
! I am Bored (learner context)
! Appropriate OERs ??????
! Engagement of Learners

Making it Safe !!!

- ✓ mooKIT, IIT, Kanpur
- ✓ Length of videos of shorter duration & releasing the content at intervals
- ✓ Screening of content and timely guidance from the mentor as well as the Hub-coordinator
- ✓ Activity based and motivating the learners

Refining Learning Objectives

Explore more user friendly platforms

Keep it short

Include more activity

Make it more inclusive

OE4BW

- **True to the title -** gave opportunity to me and people alike
- Has developed a greater sense of responsibility in me as an educator and has given me a new insight about how I can make use of my ideas and knowledge to reach to the masses and be a real educator in its truest sense.

Mentor – Thanks to Prof. Dr. Colin de la Higuera

- One of the most encouraging mentor that I could think of having.
- Gave me full freedom to explore my creativity and making me realise that I can do it.
- Regular inputs from him ensured that I was always on my best thinking capabilities
- Very Humble, down to earth , approachable and generous enough to accept delays and this was something which pushed me further to follow up and complete things timely.
- I owe my course completion to him and his timely inputs.

Hub coordinator– Thanks to Mr. Igor Lesko

- Igor was like a catalyst between me and my mentor and he ensured that everything was taken care of form both the ends.
- He managed to take out time and reply and give his inputs even when he was traveling
- Very encouraging and accommodating person and a patient listener.

WHAT DID THEY DO !!!

FUTURE PLANS

- Content modification
- Explore other platforms
- Extended Duration of course
- Blended mode

SUGGESTIONS

- Provision of an interactive platform wherein developers connect with each other and can help each other by having fruitful interactive sessions. This will help the developers to explore their ideas and capabilities in a more structured manner..

- Induction course (short duration) to guide first time developers

THANK YOU!!!

Lets' make the world a better place – a place with equal rights, access and opportunities !!!

Developed as a part of UNESCO OPEN EDUCATION FOR BETTER WORLD Mentoring Programme

Integrating OERs for Science Education

Course from 20th May, 2019 - 9th June, 2019

Course Duration : 3 Weeks

- **Science Education**
- **OER - Concept, Need and importance**
- **Ways of integrating OERs in Science education**

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To enroll for course   https://courses.mookit.co/course/iose

Watch our promotional video Click Here

Fill your Pre–registration Form Click Here

- Free and Open course
- Available for everyone from any part of the world
- Certificate of Participation/ course completion certificate

BACK

Developed By: Dr. Deepa Verma   **Assistant Professor , VIVA College, Virar, INDIA**   **dverma4180@gmail.com**