

## **Best Practice 1:**

**1. Title: e-learning tools are used by teachers to facilitate effective teaching and learning.**

### **2. Goal:**

The main objective is to improve the quality of learning, effective listening and understanding of basic concepts with the help of available e-learning platforms. Thus, the quality of students with respect to real time applications and updates regarding latest technology is improved during Covid-19 pandemic situation.

### **3. The context:**

To improve students' capacity to study, to think critically, to solve problems, and to do research

### **4. The Practice:**

The Covid-19 pandemic jammed educational systems around the world, forcing almost complete closure of schools and institutions. To slow the spread of Covid-19, the majority of governments throughout the world have temporarily closed educational institutions. All aspects of education must adjust in order to maintain the process of teaching and learning. The online distance learning system paved a good way to keep the classroom active even though the institutions were closed to stop the spread of COVID-19. As the process of teacher learning shifts to virtual courses, it is one way that schools and teachers can provide students with e-learning that will be appealing to them.

Teaching using e-learning tools - Such as

- Tools like Cisco Packet Tracer, Gephi are used to demonstrate the concepts through simulation.
- Online platforms such as Google Colab and Google Classroom, Kaggle, Edpuzzle, Kahoot, Padlet are also incorporated in the teaching and learning process.
- Subject PPT slides are prepared by subject faculty and senior professors in the department.
- PPT prepared by outside experts.
- Audio and video lectures prepared by our college faculty members.
- Audio and video lectures available through NPTEL.
- Advanced digital notepads

### **5. Problems Encountered and Resources Required:**

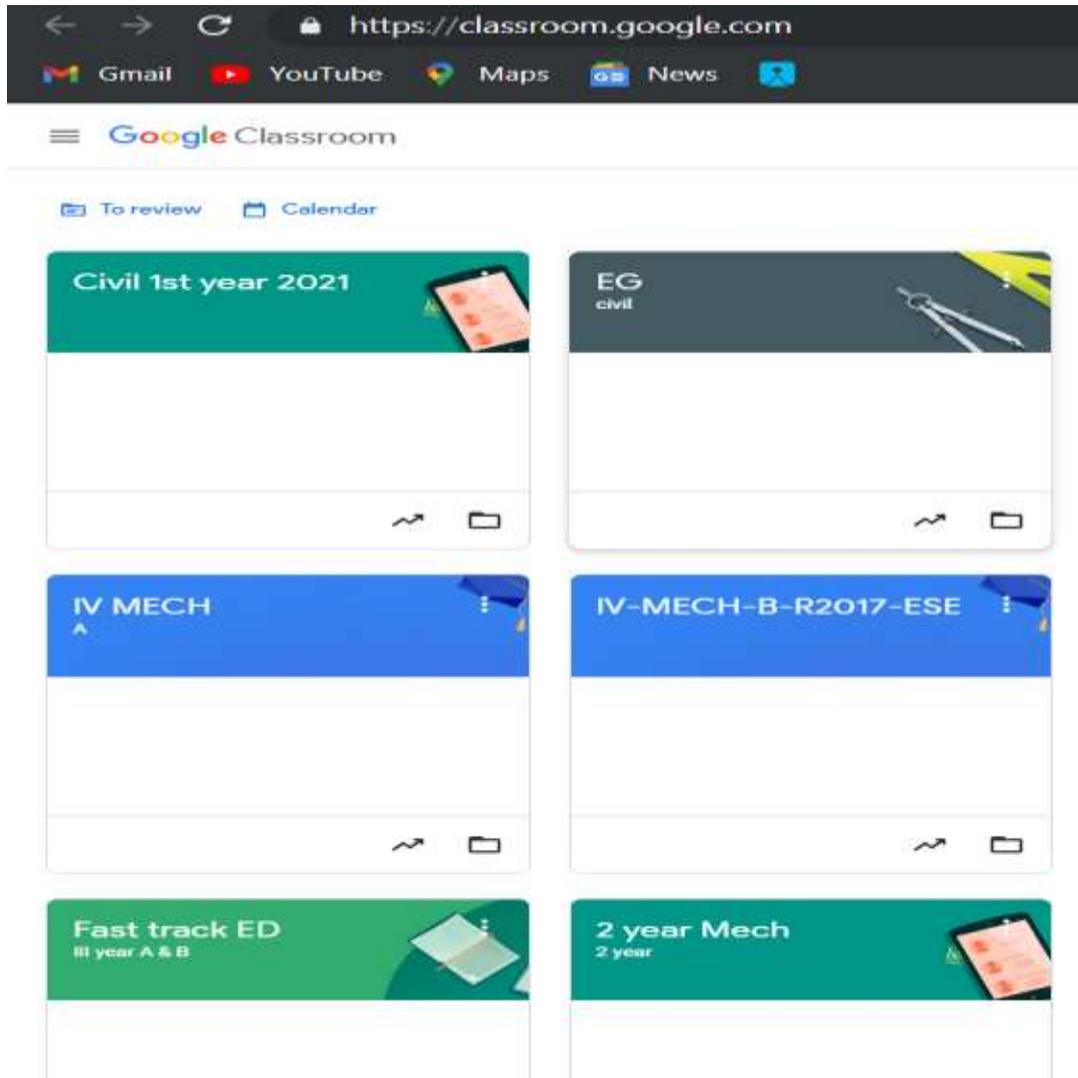
Network connectivity becomes the major issue as well as the teachers has to constantly upgrade oneself to integrate new teaching methodologies and should avoid himself from becoming resistant towards learning new software that can enhance his/her teaching ability. Lack of interest is identified in passive learners at the beginning of the new process. Laptop/Desktop/Android Phone with better network connectivity.

### **6. Evidence and Success:**

The students display



- Improved understanding of concepts
- Enhanced involvement in attending the lectures



*G. Mahendran*

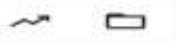
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**IA EXAM CELL**  
I-CIVIL



**1st year**  
CSE C



**IA EXAM (I-CSE C)**



**IA EXAM-IV-MECH C**



**III MECH**  
B MM



**II MECH**  
EM



Activate Windows  
Go to PC settings to activate



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IA EXAM-IV-MECH-C      Instructions      Student work

Status      100 points

All students

Sort by status

Tamed in

<input type="checkbox"/>	prasanth Subramanian	50	Draft
<input type="checkbox"/>	prasanth marappan	52	Draft
<input type="checkbox"/>	Raghul J	53	Draft
<input type="checkbox"/>	Rajamehari S	51	Draft
<input type="checkbox"/>	RAJARANJAN M	51	Draft
<input type="checkbox"/>	Rajkumar K	52	Draft
<input type="checkbox"/>	Ranjith Kumar	58	Draft
<input type="checkbox"/>	Rizwan Ahmed	52	Draft

IA-4 / IV MECH - C / ENTREPRENEURSHIP DEVELOPMENT

28      7  
 Turned in      Assigned

ED IA 4.pdf Turned in

ED IA 4 Turned in late

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My Doc - 751274.pdf Turned in

RAJARANJAN M

Rajkumar K

Ranjith Kumar

Rizwan Ahmed

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CamScanner 03-04-20... Turned in

New doc 24 Mar 2021... Turned in

CamScanner 03-04-20... Turned in

Sakthi B

Santosh Kumar

Santosh Parthiban

Santosh S

Santosh S



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## **Best Practise 2:**

### **1. Title: Virtual laboratory**

### **2. Goal:**

To offer remote access to labs across a range of engineering and science fields. These virtual labs would serve research academics as well as 1 undergraduate and postgraduate students. To spark students' curiosity and encourage them to do experiments through remote experimentation, this would assist individuals in understanding both fundamental and complicated concepts.

### **3. The context:**

By enabling remote and simulation-based experimentation through the internet, the Virtual labs built by professors from the best technological universities in the nation address the issues of a shortage of appropriate laboratory facilities and trained lecturers. There are virtual labs accessible for roughly 250+ laboratory courses and about 1750+ experiments across several disciplines. Students who receive training in a virtual lab can run creative experiments whenever they choose.

### **4. The Practice:**

The organization has been designated as the Nodal center for the Virtual Lab facilities sponsored by the MHRD and supported by all IITs and IISc. Both students and staff use this facility. This allows the students to do the lab experiments, applications of engineering concepts through online virtual labs and engages them with questions to clarify their level of understanding. Integrate the students with summative and formative assignments to assess the benefits of the learning materials. It will be also included in forth coming semester lab practices.

### **5. Problems Encountered and Resources Required:**

Network Connectivity is the major problem for few students. Lack of interest is identified in passive learners at beginning of the new process. Laptop/Desktop/Android Phone with better network connectivity.

### **6. Evidence and Success:**

It has been shown that students are very engaged in learning. When performing experiments in real time using experience gained from virtual labs, students were found to be more involved in developing their knowledge and application of the principles.



Virtual Lab  
**Proell Governor**

Top View

Free Body Diagram

Front View

VARIABLES

n(rpm) 100

mass(kg) 4

Height(mm) 268.642

CONTROLS

Show Graph

Go to Experiment

$\alpha$  stands for shaft; change rpm to see the change in height

Virtual Lab  
**Vernier Calipers**

Vernier Calipers

Select an object:

Sphere Iron block

Beaker Cylinder

Select what to measure:

Diameter

Length

Result

Enter reading (cm)

LC = 0.01cm

Dimens... S No. Main sc... Vernier... VSR\*LC Total re... Mean...



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