

Open Education Resource: Flipping the classroom with MOODLE

Work done as part of AICTE approved FDP on Use of ICT in Education for Online and Blended Learning

Team ID: 1108_005

Mentor Name: Kushal S Wasankar, k_wasankar@rediffmail.com Mentees: Kapil A Saner Pradip K Patil Sachin P Badgujar



SA IDP in Educational Technology, 2016.

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Introduction

FDP201x: Pedagogy for Online and Blended Teaching-Learning Process is 4 weeks workshop.

OER work is developing by Prof. Kapil Saner, Pradip Patil and Sachin Badgujar as a part of assignment. Topic is Clutch which comes under category of Theory of Machine. Our Team ID: 1108_005 and RC1108 of R. C. Patel Institute of technology Shirpur

OER is created on gnomio and Moodle (Moodle Cloud). Initially plane is just to develop on gnomio, but we to get grades and quiz conduction we decided to go for MOODLE.

Team ID: 1108_005 RCID - 1108

Team

Mentor Name: Kushal S Wasankar Mentees: Team Leader: Kapil A Saner Team Member 1: Pradip K Patil Team Member 2: Sachin P Badgujar

Section 1

Open Education Resource: Flipping classroom with Wordpress and MOODLE

About OER

Classroom is flipped by creating this OER with Gnomio and MOODLE lesion activities. This OER contains four lessons. Domain selected is mechanical and allied. Power Point Presentation is created and uploaded on Gnomio site and Quiz activity is plan to conduct on MOODLE page to check understanding of student level. Concept mapping is shown in pdf file of out of class activity.

OER is downloadable from link bellow : https://sachin.gnomio.com/MOODLE quiz Link:

Users with self-emailed base login.

- Target Audience: Second Year Mechanical Engineering students (Sem-IV)
- Tags: Transmission, Clutch, Theory of machine, cone, centrifugal
- OER developed in gnomio

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Learning Objectives

At the end of course learner should be able to

- 1. Identify the characterizing features of a clutch
- 2. Understand concept of cone & centrifugal clutch
- 3. Basic components of clutch

Helpful Documentation for Tool Use

- 1. Gnomio Design and development of Lesson Activity
- 2. Microsoft Office PowerPoint for slide and animation developement

Section 2 Design Decisions

Nature of Decisions taken

We consider Content Decisions, Pedagogic Decisions and Technology Decisions to

create this OER.

1. Content Decisions

Session covers – Theory of Machine- Clutches Pedagogic Decisions

2. Pedagogic Decisions

Cognitive Levels -

Out of Class Activity with lower cognitive level

SN	Out of class Learning objective	C- Level
1	Define Clutch.	Understand
2	To understand modes of transportation.	Understand
3	Concept.	Apply

In-Class Activity with higher cognitive level

SN	In class Learning objective	C- Level
1	Objective MCQ questions on Clutch.	Analyze
2	Presentation on different topics of clutch.	Evaluate

Assessment Strategies

Out of Class Activity with Multiple choice questions

SN	Out of class Learning objective	Assessment	
1	Define clutch.	MCQ 1, 2,5	
2	Types of clutch.	MCQ 3, 4	4
3	Types &f Descriptive.	Identify as submission	

In of Class activities used are TPS and PI

SN	In of class Learning objective	Assessment
1	Select appropriate material for particular application	Peer Instruction
	Of clutch	

^{3.} Technology Decision

Out of Class Activity tool decided are as follows

SN	Tool	Use
1	Microsoft Office Power point	Slide show is created with office as licensed copy of Microsoft office16 is available in college. .You can also use Apache open office tool as freeware.
2	Gnomio and Moodle	Gnomio and Moddle 3.3.2 (gnomio.com) is use to develop self-learning lesson.

Section 3

OER Description

Active OER

You can access active OER of "**Cone & Centrifugal Clutch**" in the Gnomio with link provided as follows:

(https://sachin.gnomio.com/)

1

Lesson Setting

1. GNOMIO For gnomio lesson Screenshots shown as follows:

Step 1 : Go to https://gnomio.com/ log in

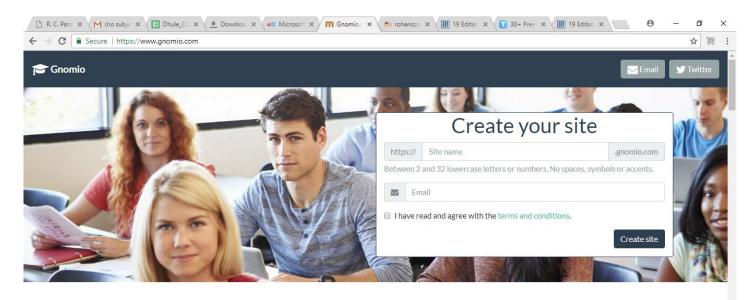
Step 2 : Create wabpage - Manage > Site Pages > Add (ref-snap 1)

Step 3 : Adding data to - Put name of page at place of Tile and add content at bottom place (ref-snap 2)

Step 4 : To add feature Image - Go to Page setting > Add featured image > update

(ref-snap 4) > Add > Media (ref-snap 5) >Add > New > browse file to upload> select>

Open > insert



Discover Moodle and teach with Gnomio

Gnomio is not a company. We are just a few Moodle fans offering free tools for the e-learning community.

With us you can discover the most widely used open source learning tool, and create your own online learning community.

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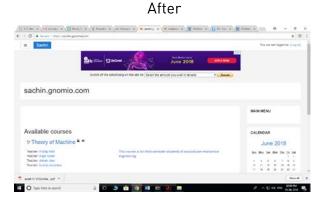


Before





Snap 1





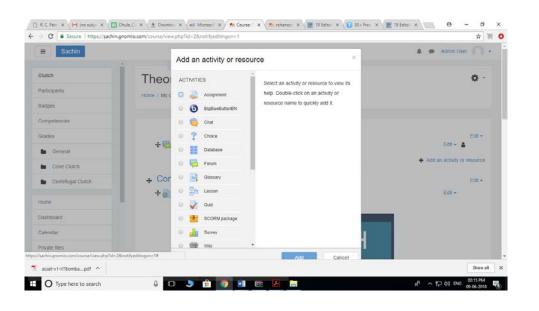
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Snap 4

Step 5 : To Add Link- Click on >Insert link (ref-snap 6) > Put link in new window > add link (ref-snap 7)



Snap 5

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Page 8

2. Gnomio course

For Gnomio lesson Screenshots shown as follows:

Step 1: Go to > <u>https://www.gnomio.com/</u>>Create your own page then admin will sent you your id and password to account.

(for example:-Click on link <u>https://sachin.gnomio.com/</u> enroll for course using emailed-base to log in)

Step 2: Go to Setting > Turn editing On (ref- Snap 8) >

Step 3: Add new course (ref- Snap 9) course > Add General and course information

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Snap 6

Step 4 : Select Site admistration > Accounts > Add new user> Fill User details with ID password

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Snap 7

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Snap 8

Step 5 : After user creation- Go course administration > user > Enrolled users Click on enrolled user> add created user> student

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Snap 9

Snap 10

Step 6 : Click on Profile (man Pic- adjacent to Admin user) > Switch role to > Teacher

Step 6: Edit Topic name by clicking it > press Enter key

Step 7: Add any file (ref- Snap 11)

Step 8: Add Quiz > fill details> Add each details> save and display> edit quiz> Add new question > select from question bank

FDP201x

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Snap 11

How to use this OER

For using this OER-Gnomio, use admin id and password as follows and change to admin role or ask admin administrator to restore backup in your course.

Admin ID – admin

Password – Sachin@123

For using this OER-Gnomio, save page as html.

Section 4

Evaluating Effectiveness of OER

Effectiveness of OER is done by

1. Student

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Snap 12

Gnomio Reports and grades (Refer - Snap 19) which we provide in site

View	Setup	Scales	Outcomes	Letters	Import	Export				
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2. Consumer

Survey is provided before and after course. Provision to send feedback on course is also made for consumer on Moodle

Precourse survey						
Fill course						
All questions are required and must be answered. Relevance						
Responses	Not yet answered	Almost never	Seldom	Sometimes	Often	Almost always
In this online unit			0			
1 my learning focuses on issues that interest me.	۲	۲		٥	Ø	0
2 what I learn is important for my professional practice.	۲	٥	0	Ø	0	Q
3 I learn how to improve my professional practice.	۲	٥	ø	0	ø	۲
4 what I learn connects well with my professional practice.	۲	0	0	Ø	Ø	0
Reflective thinking						
Responses	Not yet answered	Almost never	Seldom	Sometimes	Otten	Almost atways
In this online unit						
5 I think critically about how I learn.	۲	٥	0	٥	0	٢
6 I think critically about my own ideas.	۲	0	0	0	Θ	Θ
7 I think critically about other students' ideas.	۲	۲	0	٥	0	0
8 I think critically about ideas in the readings.	۲	ø	0	0	0	0
Interactivity						
Responses	Not yet answered	Almost never	Seldom	Sometimes	Often	Almost always
In this online unit						
9 Lexplain my ideas to other students.	۲	0	0	0	0	0
10 I ask other students to explain their ideas.	۲	0	Ø	0	0	0
11 other students ask me to explain my ideas.	۲	0	0	۵	0	0
12 other students respond to my ideas.	۲	٥	Θ	٥	۵	٥
Tutor support						
Responses	Not yet answered	Almost never	Seldom	Sometimes	Often	Almost always
In this online unit						
13 the tutor stimulates my thinking.		0	0	0	0	0

Snap 14: Pre course survey questions

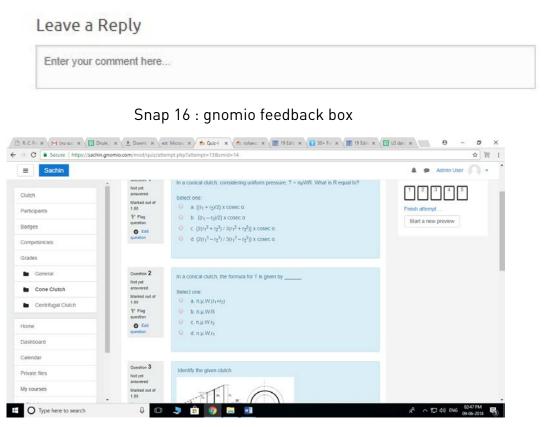


Post course servey	View 1 survey responses
Answer following	
At what moment in class were you most engaged as a learner?	
Section 2	
At what moment in class were you most distanced as a learner?	
Section 3	
What action from anyone in the forums did you find most affirming or helpful?	
Flip Classroom	
What action from anyone in the forums did you find most puzzling or confusing?	
Discussing	
What event surprised you most?	

Snap 15: Response on post course survey on course effectiveness

Gnomio

On gnomio also we provide box to leave reply as feedback on course as consumer level



Snap 17 : Quiz snap

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Section 5 Consolidated Log of Team Work

The consolidated log of team work is as shown below:

Activity	Team Member	Amount of Time
Discussion	S P Badgujar	Every Monday and Friday- 2 hours for three
	P K Patil	week
Tool Exploration	S P Badgujar	2 Hrs
	P K Patil	4 Hrs
OER Creation	S P Badgujar	10 Hrs
	K A Saner	6 Hrs
OER Documentation	S P Badgujar	6 Hrs
	P K Patil	4 Hrs
Individual Reflection	S P Badgujar	2 Hrs on Sunday of each week
(Diary Logging)	K A Saner	1 Hour on Saturday of each week
OER Evaluation	S P Badgujar	6 Hr
	K A Saner	9 Hrs

- -

Section 6 Building a Community of MOODLE and Flipped Classroom Adopters

Now we provided link to fill google form as survey to join our Moodle society at RC1108 on gnomio page. In future (January 2018) our plan is to create wiki from generated contacts.

Gnomio page link

https://sachin.gnomio.com **Google form survey link** <u>https://docs.google.com/forms/d/e/1FAIpQLScey49pWMSCXT1-0Gg4XE67es8sZ4_xH2-</u> <u>v9yS2436IkEDF3A/viewform?c=0&w=1</u>

> RC1108: R C Patel Institute of Technology, Shirpur- Place to discussion on Moodle for Teachers



FDP 101x and 201x by IITBombayx inspire us to take this initiative to form society of teachers how use Moodle for teaching process. We welcome you to fill google form (link provided below). Plan is to build Society on wiki in future. You can also live to reply below in word press.

Google form link – https://docs.google.com/forms/d/e/1FAIpQLSflFYp1N2kWLoBSrRDPmTTZK_lKg4 EPvPSNYQkqxHpaRZYb2Q/viewform?usp=sf_link

Snap 25: Webpage for Moodle Society

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Summarizing OER

I come to know lot of new tool like Webpage and Moodle among Fdp101x and 201X course. This OER is result of effort and motivation of IITB team. Leave your coment on our website listed below. Thank you for reading.

https://sachin.gnomio.com/user/index.php?id=2

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Works Cited

- 1. R. S. Khurmi, "Theory of machine", S Chand Publication
- 2. Youtube (online) ,Video link-

https://www.youtube.com/watch?v=MvYxI5mzX8w https://www.youtube.com/watch?v=_yWKWW0EoRk



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Apex –1: OER Moodle site Snap

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Cluich	Time remaining	4 days 8 hours	
ite administration		View all submissions Grade	
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