

Implementation of Project based learning through platform like Weengs & Avishkar:

Project-based learning (PBL) activity help the students to imagine, develop, and build practical solutions to problems. This activity develop student ability to think creatively and solve complex or unstructured problems, usually in small groups.

Objective:

- Easy available platforms within campus to showcase their ideas and problem statements.
- Assistance from the organization in developing the project model or prototype and assessing the student capacity for learning.

Figure 5.2.1 and Table 5.2.1, 5.2.2 represents different activities under PBL and their assessment by course coordinators.

Table 5.2.1: Number of students benefited through different activities conducted under PBL

Name of Activity	Aim	No. of students Benefited	Assessment tools	Relevance to PO & PSO
Ideathon	To develop student's abilities to identify the societal and engineering world problems and present the best solution on it.	26	PPT Presentation, working models, Posters	PO1, PO6, PO7, PO9, PSO1,PSO2
Mini Project	To develop student's abilities to transmit technical information clearly and test the same by delivery of Seminar based on the Mini Project.	165	PPT Presentation, working models, Posters	PO1-PO12, PSO1, PSO2
Survey	To develop student's abilities to understand process of surveying and prepare questions targeted to group of people.	60	Through oral discussion and report submission.	PO1, PO9, PO12, PSO1

Table 5.2.2: Year wise PBL data by course coordinators

Name of Activity	Name of Course coordinator	Aim	No. of students benefited	Assessment tools	Relevance to PO & PSO	Impact/ Outcome
Mini-Project (2020-21)	Dr. B S Gandhare	Analysis of Solar Vehicle	04	Participation in Techno event Weeing's	PO1, PO9, PO12, PSO1	Knowledge enhanced, team work, and technical problem solving capability increased
Mini-Project (2021-22)	Dr. Koli S R	Automobile System Design	04	Participation in Techno event Weeing's	PO1, PO9, PO12, PSO1	Knowledge enhanced, team work, and technical problem solving capability increased
Survey (2022-23)	Dr. B S Gandhare	Survey of 2-wheeler and 4-wheeler	60	Through oral discussion and report submission.	PO1, PO9, PO12, PSO1	How to prepare Google form survey, Questionaries' design, data collection and data analysis learning from students and getting field experience.
Mini-Project (2022-23)	Prof. D R Giram	Pneumatic operated metal cutting machine	70	Participation in Techno event Weeing's	PO1,PO2,PSO1	Demonstration of applications of pressurised air

WEENG'S- State Level Project Exhibition

Ordino Operated Automatic Vacuum Cleaner

Heat Transfer Augmentation In Forced Convection Using Inserts

Solar Operated Grass Cutter

Biodiesel Test Setup

Easy Weighing Pulley System

Solar Dryer

Department of Mechanical Engineering, SKNSCOE, Pandharpur

WEENG'S- State Level Project Exhibition

Solar Vehicle

Multipurpose Agricultural Machine

Electric Bike

Battery Operated Engine

Project done by students

Go-Cart

Solar Operated Spraying Machine

Parabolic Solar Concentrator

Oil Skimmer Machine

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Figure 5.2.1: Participation of students in Project Exhibition