

## MES's Pillai College of Engineering, New Panvel

### A REPORT ON PROJECT BASED LEARNING (PBL)

Class: Third Year Department: Computer Engineering Sem:V Academic Year:2020-2021

**Objective**—Project-based learning is an instructional approach designed to give students the opportunity to develop knowledge and skills through engaging projects set around challenges and problems they may face in the real world.

#### PBL is "learning by doing."

The truth is, many in education are recognizing we live in a modern world sustained and advanced through the successful completion of projects. Or, as Swiss Psychologist Jean Piaget put it, "knowledge is a consequence of experience."

It's true! Your weekend chores, an upcoming presentation, or organizing a fundraising event—they're all projects.

For most modern workers, it will be a series of projects that mark their career rather than years of service to a specific organization. "Solving real-world issues that matter is important to us as adults—and it's important to our students,"

In short, if we are to prepare students for success in life, we need to prepare them for a project-based world.

What are the Essential Elements of Project-Based Learning?

Although definitions and project parameters may vary from school to school, and PBL is sometimes used interchangeably with "experiential learning" or "discovery learning," the characteristics of project-based learning are clear and constant. In essence, the PBL model consists of these seven characteristics:

- Focuses the student on a big open-ended question, challenge, or problem to research and respond to and/or solve.
- Brings what students should academically know, understand, and be able to do into the equation.
- Is inquiry-based.
- Uses 21st-century skills such as critical thinking, communication, collaboration, and creativity, among others.
- Builds student choice into the process.
- Provides opportunities for feedback and revision of the plan and the project.

• Requires students to present their problems, research process, methods, and results.

## Methodology

- 1. Create a groups (4-5 students in each group)
- 2. Identify the Problems
- 3. Provides solution to the problems.
- 4. The students work in groups and assign and distribute various aspects of work so as to realize the project based on a timeline of about 2 to 3 months.

5. Queries and doubts are clarified by interactions with the PBL coordinators and subject experts.

- 6. Prepare the project report.
- 7. Present the Project to the experts.

#### **Judges for the PBL Demonstrations**

- 1. Prof. Mansi Kulkarni
- 2. Prof. Shubhangi Chavan
- 3. Prof. Sangitha Selven

#### **PBL Coordinators**

| Division A | Prof. Sheetal Gawande |
|------------|-----------------------|
| Division B | Prof. Suhas Lawand    |

#### **PBL Topics**:

| Sr.<br>No. | Division A                                    | Division B  |  |
|------------|---|---|--|
| 1          | Online Portal for Health<br>Checkup           | Fitness Management System   |  |
| 2          | Website for laptop suggestion.                | College Registration System                                       |  |
| 3          | Online portal for salon appointment.          | Online Pharmacy Store   |  |
| 4          | Online ordering system for<br>College Canteen | Stray animal helper   |  |
| 5          | Industrial Visit<br>Management System         | Scheduler for offline shopping,<br>prioritizing social distancing |  |

| 6  | Online portal for society essential commodities. | Smart Task Manager - An<br>activity/task scheduler for<br>organizations following<br>work from home pattern |  |  |
|----|--|---|--|--|
| 7  | Attendance Manager                               | Mobile<br>Comparison Website.   |  |  |
| 8  | Agriculture Management<br>System                 | Grocery shopping website  |  |  |
| 9  | Online Digital Library                           | COVID-19 prevention commodities purchasing website  |  |  |
| 10 | Online Portal for a Local<br>Pottery Shop        | A Resume Building Website   |  |  |
| 11 | NGO and Fundraising based Application            | Home Inventory System   |  |  |
| 12 | Online Electricity Bill Pay<br>Portal            | Web application for Construction company  |  |  |
| 13 | online fuel delivery app                         | Website for mental health consultancy   |  |  |
| 14 | Website for Hiring<br>Caretakers                 | Online database related to films,tv shows and more.   |  |  |
| 15 | College Management<br>System                     | Online Course and Examination<br>Management System  |  |  |
| 16 | Stock Market Tracker                             | Online Car rental system  |  |  |
| 17 | Regional Temple<br>Information and booking       | Project Management System   |  |  |
| 18 | Online Turf Booking                              | E-commerce website for children   |  |  |

# Schedule of Mock

| Review | Date    | Mode                   |
|--------|---------|------------------------|
| 1      | 3/12/20 | Online via google meet |
|        |         |                        |
| 2      | 4/12/20 |                        |

#### Winner Of PBL

| Sr.No | Name of student               | Title of Project                              | Section | Rank |
|-------|-------------------------------|---|---------|------|
| 1     |                               | Agriculture Management System                 | Α       |      |
|       | Rhugved Kale                  |   |         |      |
|       | Varun MK                      |   |         |      |
|       | Akash Parthe                  |   |         |      |
|       | Spandana Shetty               |   |         |      |
| 2     | Anant Vishwakarma             | Online Portal for Health Checkup              | Α       |      |
|       | Niranjan Badgujar             |   |         |      |
|       | Prasad Badhan                 |   |         |      |
|       | Siddharth Shah                |   |         |      |
| 3     | Alex Sebastian<br>Vettithanam | Online ordering system for College<br>Canteen | Α       |      |
|       | Aditya Sivaram Nair           |   |         |      |
|       | Sidharth Nair                 |   |         |      |
|       | Mohanish Ghate                |   |         |      |
| 4     | Srivenkatesh Nair             | Fitness Management System                     | В       |      |
|       | Abhinav Menon                 |   |         |      |
|       | Manish Pillai                 | 1   |         |      |
|       | Sujith Kurup                  |   |         |      |