Project-Based Learning (PBL) Process Guide

#### 1. Introduction to PBL

Project-Based Learning (PBL) is a structured learning method where students identify real-world problems, research solutions, and develop projects under mentorship. This guide outlines the steps involved in the PBL process, including registration, planning, execution, and review phases.

## 2. Getting Started with Your PBL Project

### 2.1 Forming a Group & Registering

Interested students form a group and initiate the project process.

Each student must register individually on the STREAM website to become a verified participant.

### 2.2 Ideation Week Program

Participants attend the Ideation Week Program at school to learn about project methodologies.

They use the "Identifying Problem" Worksheet, available for download from the STREAM website, to brainstorm and choose a project topic.

#### 2.3 Problem Identification

Students identify a real-world problem based on research, discussions, or personal observations.

They may select problems from the Driving Question Board on the website.

#### 2.4 Coordinator and Mentor Assignment

A project coordinator (who can be a teacher, college student, or parent) is assigned to oversee the project.

The coordinator must register on the STREAM website and get verified to officially guide students.

Based on the project's category, the coordinator assigns a mentor who will provide additional support.

## 3. PBL Idea Development Phase

### 3.1 Research & Literature Review

Students conduct a detailed inquiry into their chosen problem and upload their project idea (which may include the problem statement and potential solutions).

A literature review is completed using the Literature Review Worksheet and uploaded to the system.

# 3.2 Project Categorization

Projects are classified into categories such as:

- 1) Engineering Projects
- 2) Experimental Research

- 3) Non-Experimental Research
- 4) Qualitative Studies

## 3.3 Initial Review & Approval

The BRC (Block Resource Coordinator) evaluates the project idea and assigns a coordinator to guide the students.

Students may be asked to revise and refine their project idea if necessary.

First Review Report is submitted for approval before proceeding.

## 4. PBL Planning Phase

# 4.1 Methodology & Design Finalization

Students work with their mentor to finalize the project's methodology or design.

They use worksheets, diagrams, and pictures to document their methodology and upload the necessary files.

## 4.2 Requirement Gathering & Resource Allocation

Based on the methodology, students gather the necessary resources from the STREAM Hub or external sources.

Students prepare a Gantt Chart (project timeline) and upload it for approval.

#### 4.3 Consultation & Second Review

The coordinator requests consultation from the selected mentor.

The mentor reviews the project plan and provides feedback.

A Second Review Report is submitted, marking the end of the planning phase.

#### 5. PBL Execution Phase

This phase varies depending on the project category (Engineering, Non-Engineering, Experimental, etc.).

## 5.1 Prototype Development & Testing

Students build a prototype or develop a research framework based on their project plan.

They conduct user testing and feedback collection.

If necessary, the prototype is modified and improved.

# 5.2 Data Collection & Analysis

Students gather experimental data (if applicable).

Data is analyzed, interpreted, and documented in preparation for the final presentation.

#### 6. Final Review & Presentation

#### 6.1 Third Review & Final Submission

Students submit their project report for a third and final review.

Reviewers provide feedback and confirm if the project meets the required standards.

## 6.2 Project Presentation

Students present their final project to teachers, coordinators, and peers.

They provide supporting materials such as Empathy Maps, Hashtags, and relevant files.

## 6.3 Key Rule: No Project Rejection

No project will be rejected outright.

If a project does not meet the required standards, students will be guided to rework and improve it with the help of a coordinator.

## 7. Important Notes for Students

All participants must be verified to proceed through each phase.

Project mentors and coordinators play a crucial role in guiding students.

Each phase has a review process—students should actively engage with their mentors for better outcomes.

Continuous improvement is encouraged—projects can be refined at any stage based on feedback.

#### 8. Summary of the PBL Process

Registration & Ideation  $\rightarrow$  Find a problem, form a team, and register.

Idea Development → Research, categorize, and submit the first review.

Planning → Finalize methodology, gather resources, and submit the second review.

Execution  $\rightarrow$  Develop, test, collect data, and analyze results.

Final Review & Presentation → Submit the third review and present the project.

#### 9. PBL - Frequently Asked Questions (FAQs)

#### **General Questions**

- ? How do I find a project topic?
- Use the Driving Question Board on the STREAM website or discuss ideas with your mentor.
- ? Can I work on an individual project, or do I need a team?
- PBL is designed for group work, but in special cases, an individual project may be allowed with coordinator approval.

- ? Can I change my project after submission?
- Yes, but only before the Second Review and with mentor approval.
- ? What if I miss a submission deadline?
- You can request an extension from your mentor or coordinator. Extensions are granted case-by-case.

**Mentors & Coordinators** 

- ? What is the role of a mentor?
- Mentors guide students in research, methodology, and project execution. They provide feedback during review phases.
- ? How do I contact my mentor?
- You can message your mentor via the STREAM website in the PBL portal. If your mentor is unresponsive, notify your project coordinator.

**Project Submission & Review** 

- ? How many review phases are there?
- ✓ There are three review phases:

First Review – Initial project idea approval.

Second Review – After methodology and resource allocation.

Third Review – Final project submission.

- ? What happens if my project is not approved?
- Projects are never rejected outright. You will receive feedback for improvement and a chance to resubmit.
- ? How do I submit my final project?
- Upload the final report, presentation, and supporting documents in the PBL portal.

# 10. PBL Troubleshooting Guide

Issues and Possible Solutions:

If you Can't access PBL portal --> Wait for verification from HOI. If delayed, contact support.

If your Mentor is not responding --> Send a follow-up message. If unresponsive for 3+ days, contact the coordinator.

If the Project rejected --> No project is fully rejected. Follow feedback from reviewers and resubmit.

If Project Submission errors occur --> Ensure all required files are uploaded correctly. Use PDF format where applicable.

If you Can't see review feedback --> Refresh the page or check notifications. If missing, contact support.

## 11. PBL Rules & Deadlines

- ✓ Verification Required: Only verified students can submit and present projects.
- ✓ All project submissions must include:

Research & Methodology

Supporting Documents (Diagrams, Empathy Maps, Gantt Chart, etc.)

Final Review Report

✓ Deadlines & Extensions:

Projects must be completed within the school year unless an extension is granted.

Extensions require mentor & coordinator approval.

✓ Plagiarism is strictly prohibited:

Students must submit original work.

Plagiarism will result in project revisions and possible disciplinary action.

Teamwork Expectations:

All team members must contribute equally.

Roles should be clearly assigned within the team.

Final Presentation:

All members must participate in the final presentation.

If a student is absent, their section must be covered by teammates.

#### 12. PBL Contact Support

- For PBL Issues & Assistance:
- Email: pbl-support@stream-ecosystem.com
- Phone: +91-XXXXXXXXXXX
- \* For Technical Issues (Portal, Submission Errors):
- Email: tech-support@stream-ecosystem.com
- Contact Form: STREAM Ecosystem Contact Page

Response Time:

General inquiries: 48 hours

Urgent project issues: 24 hours

STREAM Ecosystem Learning Management System LMS Guide

#### 1. Introduction

The Learning Management System (LMS) is an online platform where students can access free courses, learn from renowned professors, complete assignments, and earn certificates. To access the LMS, students must first register on the STREAM Ecosystem website and get verified by their HOI (Head of Institution).

- 2. Accessing the LMS
- 2.1 Registration & Verification Process

Students must register on the STREAM Ecosystem website to gain access to the LMS.

After registration, they must wait for verification by their HOI (Head of Institution).

Verification may take some time—students should wait for confirmation before attempting to log in.

If you cannot access the LMS, it means your verification is still pending.

2.2 Logging into the LMS

Once verified, students can log into the LMS using their credentials.

The LMS provides access to a wide range of free courses across multiple subjects.

- 3. Enrolling in Courses
- 3.1 Finding and Selecting a Course

After logging in, students can browse through available courses.

All courses are taught by renowned professors and educators.

To start learning:

Click on "Courses".

Find a course that interests you.

Click "Enroll" to register for the course.

3.2 My Courses Section

Once enrolled, the course will appear under the "My Courses" section.

Click on a course to start learning.

- 4. Course Progress & Completion
- 4.1 Tracking Progress

Each course card in the "My Courses" section shows a completion rate indicator.

The progress bar updates automatically as you complete lectures and assignments.

4.2 Completing a Course

To successfully complete a course, students must:

Watch all video lectures in each chapter.

Complete all assignments at the end of each chapter.

Move on to the next chapter once assignments are completed.

Finish all chapters to receive a completion certificate.

5. Certificates & Achievements

# 5.1 Earning a Certificate

After completing all video lectures and assignments, students will be awarded a certificate of completion.

The certificate is issued by the STREAM Ecosystem LMS.

Students can download and share their certificates from their profile.

5.2 Earning Badges

High performers in assignments will earn special badges.

These badges enhance student profiles and highlight academic achievements.

- 6. LMS Troubleshooting & Support
- 6.1 Common Issues & Solutions
- X Cannot access LMS?
- ✓ Your verification by the HOI (Head of Institution) is still pending. Please wait.
- X Course content not loading?
- Refresh the page or try logging out and logging in again.
- X Certificate not issued after course completion?
- Contact the STREAM Ecosystem support team via the Contact Us page.

#### 7. Summary of LMS Process

Register on STREAM Ecosystem  $\rightarrow$  Wait for verification by HOI.

Login to the LMS  $\rightarrow$  Browse free courses and enroll.

Complete Video Lectures & Assignments → Track progress through My Courses.

Earn Certificates & Badges → Recognized achievements for top performers.

If issues arise  $\rightarrow$  Contact support for resolution.

# 8. LMS Frequently Asked Questions (FAQs)

## **General Questions**

- ? How long does verification take after registration?
- ✓ Verification by the HOI (Head of Institution) usually takes a few hours to a few days. If delayed, contact your institution's admin.
- ? I registered, but I still can't log in. What should I do?
- If you haven't been verified yet, you won't be able to log in. If the issue persists after verification, try resetting your password.
- ? Are all courses free?
- Yes, all courses on the STREAM Ecosystem LMS are free for students.
- ? Can I enroll in multiple courses at the same time?
- Yes, you can enroll in multiple courses and learn at your own pace.

# **Course Progress & Completion**

- ? How can I check my progress in a course?
- The completion rate is displayed on the course card in the "My Courses" section.
- ? What happens if I fail an assignment?
- You can retake assignments until you pass. There are no penalties for retakes.
- ? Can I retake a completed course?
- Yes, you can re-enroll in a course and restart it from the beginning.

## Certificates & Achievements

- ? When will I receive my certificate?
- Certificates are issued automatically upon completing all lectures and assignments.
- ? How can I download my certificate?
- Go to your profile, find the course, and download the certificate.
- ? Do certificates expire?
- No, certificates remain valid permanently and can be used for academic or career purposes.

## 9. LMS Troubleshooting Guide

Issue and Possible Solutions:

If you Cannot log in to LMS --> Check if you have been verified by your HOI. If already verified, try resetting your password.

If your Course is not appearing in "My Courses" --> Refresh the page. If still missing, verify if you have properly enrolled.

If Videos are not loading --> Use a different browser, clear cache, or check internet connectivity.

If Certificate not issued --> Ensure all videos and assignments are completed. If still missing, contact support.

If Badges not appearing in profile --> Badges are awarded after assignment grading. Allow up to 24 hours for updates.

#### 10. LMS Rules & Deadlines

✓ Course Enrollment & Access:

There are no time restrictions for enrolling in courses.

Students can pause and resume courses at any time.

✓ Course Completion Requirements:

Students must watch all lectures and complete all assignments.

Skipping assignments or lectures will result in incomplete status.

Certificate Eligibility:

Certificates are only awarded if all course materials are completed.

A certificate is automatically generated upon completion.

Badges & Achievements:

High scorers in assignments receive achievement badges.

These badges enhance student profiles on the STREAM Ecosystem LMS.

Plagiarism Policy:

Assignments must be original work.

Any detected plagiarism may result in course disqualification.

#### 11. LMS Contact & Support

\* For LMS Account Issues (Login, Verification, Password Reset):

Email: lms-support@stream-ecosystem.com

★ For Course & Assignment Issues:

Email: course-support@stream-ecosystem.com

Contact Form: STREAM Ecosystem Contact Page

★ For Certificate & Badges Queries:

Email: certificates@stream-ecosystem.com

Phone: +91-XXXXXXXXXXX

Response Time:

General queries: 48 hours

Urgent technical issues: 24 hours

# **Customized Greetings:**

### General Greetings:

"Hello! Welcome to the STREAM ecosystem. How can I assist you with your LMS or PBL today?"

"Hi there! I'm here to help you navigate through STREAM. What can I do for you?"

"Good day! Whether it's LMS or PBL, I'm ready to answer all your questions!"

Friendly Reminders:

"Remember, every step in STREAM counts towards your learning journey!"

"Take your time to explore the resources in STREAM, and feel free to ask questions anytime!"

**Encouraging Messages for Students:** 

"Keep up the great work in your projects! The STREAM ecosystem has everything you need to succeed."

"You're doing awesome! Don't hesitate to reach out if you need guidance on your LMS or PBL."

Funny Greetings:

"Don't worry, I've got your back in the STREAM ecosystem—whether it's LMS, PBL, or just some motivation!"

"I'm always here for you—like the best study buddy in the STREAM ecosystem!"

Interesting Things Relevant to STREAM Ecosystem:

Fun Facts About Learning:

"Did you know? The STREAM ecosystem combines powerful tools to make your learning and projects more engaging!"

"Fun fact: PBL encourages you to learn by doing, helping you develop valuable skills that last a lifetime!"

Helpful Tips for LMS & PBL:

"Pro tip: For smoother navigation in LMS, organize your tasks in phases to keep track of your progress!"

"In PBL, collaboration is key. Don't hesitate to reach out to your peers for brainstorming!" Interactive Quotes or Challenges:

"Challenge time: How would you explain the benefits of the STREAM ecosystem in one sentence? Get creative!"

"Motivational quote: 'Learning is not the filling of a pail, but the lighting of a fire.' – William Butler Yeats"