



RCA - PROJECT BASED LEARNING

BORN TO CODE

WHAT WE ALL KNOW

► Definition

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.

► Benefits of Project-Based Learning

1. Relevance to Real-world Scenarios:

Students work on projects that mimic industry scenarios.

Bridging the gap between theory and practical application.

2. Enhanced Problem-Solving Skills:

Encourages students to identify, analyse, and solve problems independently.

3. Collaboration and Teamwork:

Fosters teamwork and communication skills through group projects.

4. Portfolio Development:

Students build a portfolio showcasing their skills and projects.

RCA's approach

Agile methodology

Use of agile methodology to ensure team work, collaboration, adherence to industry standards.

Students are trained to be solution providers, and a good solution is one that puts the beneficiary at fore front.

Agile methodology helps students to engage clients during entire project life cycle

School level projects

- Min projects where students apply acquired knowledge and skills, very small both individual and group work.
- Every student is allowed chance to work on group learning project at least every term.
- Project must allow student to apply acquired knowledge and skills and go beyond.
- These are more of term sized projects

Industry level projects

Instructor's lead projects, where students work on real projects with clients. Well sized to ensure all full stack applicability.

School management identifies projects for the school and students to work

Students' ideas that are innovative and unique are also endorsed as industry level project

Main Issues we face in implementation of PBL

▶ Differing Skill Levels:

- *Students may enter coding schools with varying levels of prior knowledge and skills.*
- Intensive induction program – computer basics
- Under the hood approach on most of the technology stacks

▶ Difficulty in Assessment:

- *Grading individual contributions in a team project can be complex.*
- Agile approach helps in delegating team members and assign them tasks that instructors assess and evaluate

▶ Scope and Complexity:

- Designing projects that are too complex or ambitious can overwhelm students and lead to incomplete or unsatisfactory outcomes.
- Categorize projects as: Assignment level (small assignments for week sized), School level (min projects, month sized) and Industry level (big projects, can go beyond academic term)

Engaging the community

Impacting others

- ▶ Primary pupils are introduced to computer basics
- ▶ Current case study compassion pupils 20 pupils ongoing
- ▶ Public projects: Students and instructors work on government project supporting public institutions, delivering high caliber solutions

Our gains

- ▶ Students gain confidence and inspiration while teaching pupils and students from other schools.
- ▶ You learn more when you are teaching others
- ▶ Engaging the community and industry helps in widening student's capacity to identify solutions be it technological or ordinary like soliciting funds to help those in need

Outcome so far

2019 class – 1st cohort –
graduated last year

2020 class - 2nd cohort –
graduated this year

2021 class - 3rd cohort – they
are in the final year

- ▶ 1st cohort:
 - 90% of graduates has or have had a paid job/internship opportunity in last three months
 - 60% are employed while attending their undergraduate course.
- ▶ 2nd cohort:
 - 100% of students have had an opportunity to work on more than 2 projects,
 - 40% have a paid internship confirmed already starting in January 2024
- ▶ 3rd cohort:
 - 30% of students are currently working on big industry level projects
 - 80% have had an opportunity to work on industry level project

PBL Strategy

- ▶ School management negotiates MoU agreements with tech leading companies and institutions to provide internships to students
- ▶ School management searches, identifies, proposes innovative projects to public institutions
- ▶ Student led committee always reaches out to community around the school to identify ways to positively impact them.
- ▶ Imbedding PBE Assessments and scores as part of grades

Thank you!