Faculty guide for Project-based learning

Introduction:

Project-based learning is a teaching method centered around a project in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.

It is based on principles of adult learning and a way of active learning.

Project-based learning emphasizes learning activities that are long-term, interdisciplinary and student-centered.

Steps:

Step 1: Identify and clarify driving question or challenge.

Step 2: Define the problems to be discussed and need to know about the question under consideration.

Step 3: Enquiry and Innovation: Doing research and getting hand on experiences by taking interviews, creating awareness, etc

Step 4: Apply 21st. century skills

Step 5: Student's voices and choices

Step 6: Feedback and revision

Step 7: Project presentation

Process:

1. Student groups determine their projects, in so doing, they engage student voice by encouraging students to take full responsibility for their learning. This is what makes PBL constructivist. Students work together to accomplish specific goals.

2. Students use technology as a tool to communicate with others regarding information gathered by teachers, a book, research or broadcast. Technology makes it possible for students to think actively about the choices they make and execute. Every student has the opportunity to get involved either individually or as a group.

3. Instructor role in Project Based Learning is that of a facilitator. He/She develops an atmosphere of shared responsibility. The Instructor must structure the proposed question/issue so as to direct the student's learning toward content-based materials.

4. The instructor must regulate student success with intermittent, transitional goals to ensure student projects remain focused and students have a deep understanding of the concepts being investigated.

5. The students are held accountable to these goals through ongoing feedback and assessments
6. The instructor uses these assessments to guide the inquiry process and ensure the students have learned the required content.
7. Once the project is finished, the instructor evaluates the finished product and learning that it demonstrates

Faculty Guide
Project Based Learning

Faculty:---------------------- -   **Duration: 2months: 8 weeks**

Duration	Activity	Person	Logistics
1 -2⁻ week	<u>Driving question or challenge</u> Discuss two three major topics with references, look at the feasibility and finalize one topic for project	Students and facilitator	References, reading
3 week	<u>Need to know</u> Plan the working in team. Assign specific objectives to be fulfilled by the members	Students	References, books, cases etc
4-5week	<u>Inquiry and Innovation</u> • Create research question • Study design with appropriate framework • Analyze the results • Take specific measures for eg. Awareness, some innovations in diagnosis etc…	Students doing research under faculty guidence	Survey using google form Interviews Field work Role play Flash mobs Street play etc

6-7 week	21st century skills • Prepare presentation using variety of A-V aid • Creating innovative ways of presenting data	Students of technology group	Powerpoint slides, videos
8 week	Student voices and choices with Feedback and revision • Presentation in flow • Taking feedback from colleagues, seniors, guide, other faculty members • Revisions as per recommendations	All team members	Powerpoint slides
	Publically presented product.		Symposium competition Paper publication Poster presentation at conference

Refereces:

1. https://en.wikipedia.org/wiki/Project-based_learning
2. *Project-Based Learning,* Edutopia, March 14, 2016. Retrieved 2016-03-15

3. *Yasseri, Dar; Finley, Patrick M.; Mayfield, Blayne E.; Davis, David W.; Thompson, Penny; Vogler, Jane S. (2018-06-01). "The hard work of soft skills: augmenting the project-based learning experience with interdisciplinary teamwork". Instructional Science. **46** (3): 457–488. doi:10.1007/s11251-017-9438-9. ISSN 1573-1952.*
4. **^** Markham, T. (2011). Project Based Learning. Teacher Librarian, 39(2), 38-42.

Student evaluation of the Project Based Learning Course

Students to respond using a 5-point scale.

Scale - from 1- strongly agree to 5 strongly disagree

1 - Strongly agree, 2 - agree 3 - neutral 4 – disagree 5- strongly disagree

1. The course helped me to learn to obtain information from a variety of sources.
2. I feel that I can apply the general principles I learned to other similarproblems.
3. I am comfortable with working in groups.
4. I do not feel reluctant to confess my ignorance on specific issues.
5. I am confident that I can analyze a research problem.
6. I am confident that I can set appropriate learning objectives.
7. I feel comfortable sharing information with others.
8. I can assess my own performance adequately.
9. The written project summary helped me relate the concepts covered in that project.
10. Compared to other classes in my course,

     1 - learned much more than usual,to 5 - much less than usual.
11. On the whole, the amount of effort required in the course was:

     1 - greater than usual, to 5 - less than usual.

12. Overall I would rate this course:

     1 - excellent to 5 - poor.