

Engaging Undergraduates in RESEARCH and INQUIRY: A Scholarly Dialogue

Fungi in Our Environment

Course Instructor/Project leader

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Project/Course Objectives

To enable students to explore fungi in their environment and develop the following skill-based outcomes:

- Enhance active learning
- Apply logical thinking to solve problems
- Practice team work for collaborative learning
- Develop good presentation technique.

Inquiry Based Learning Activities

- Students were divided into small groups of 4-5 members.
- Each group selected “a problem related to fungi in their environment”. After framing the learning issues and collecting relevant information separately, each student prepared their own Power Point based on the group discussion (via a group blog).
- A PowerPoint presentation based on the group synthesized work was presented.



How did you assess the effectiveness of students' learning?

- A group blog was created to capture the interactive process in each group.
- Each group member evaluated the efforts and contribution of his/her peers in an evaluation form.
- The final group Power Point presentation was assessed by the entire class based on a standard rubric.
- Students measured their own achievement of learning outcomes via a questionnaire at the end of the exercise.

What were the major outcomes of this project/course? Do they match with your objectives?

For this 4-week exercise,

- 31% of the class acknowledged that the PBL exercise helped them to engage in deep learning.
- From a scale of 1 to 10, students perceived they had achieved all the learning outcomes varying from an average of 5.8 before the exercise to 6.9 after the exercise.
- The outcome on “practice team work skills for collaborative learning” had the highest score of 7.0.
- “Practice active learning skills to construct knowledge” showed the biggest improvement (from 5.2 to 6.7).