

Creating a Learning Environment

Presentation based on the book:
How to teach with your mouth shut
Author: Donald L. Finkel

Activity

- Write two or three most significant learning experiences you ever had? ie., list the events in which you discovered something and its significance remains for a long time

Continued..

- For each event written, ask yourself the following questions:
 - (a) Did the learning experience take place in a classroom or in a school/university?
 - (b) Was a teacher involved in the learning experience?
 - (c) If yes, what did the teacher exactly do in this particular learning experience?
 - (d) In general, what factors were instrumental in bringing about the learning?

Good teaching-one definition

- Good teaching is the **creating of those circumstances** that lead to significant learning in others.

Let the Parable do the talking!



Strength of parables

- Concrete, Specific, Narrative Organization
- Resist easy deciphering
- Their profundity engages your intellect

Let the Parable do the talking!

Teaching science and engineering using a 'parable'?

- Use puzzle, paradox, or perplexing problem

- A physics problem:

A canary is standing on the bottom of a very large bottle that is placed on a scale. The bird takes off and flies around in the inside of the bottle. What happens on the reading of the scale? Explain.

Let the class room environment do the talking

- Pre-school

Case 1: “Don’t run, don’t run! Don’t run!” (Teacher talking)

Case 2: Put a table in the path (environment talking)

- High School

Case 1: “Participate in the discussion, please!” (teacher talking)

Case 2: Arrange the chairs in circle and sit in one of those chairs (environment talking)

Power Vs Authority: Separation in a class room

- Authority: system delegates position to justify a course of action
- Power: ability to influence others action

Can you 'transfer' power to students and keep the authority with you, in the class?

The book suggests: Open ended seminars

The Debater's Paradox

- How people learn by discussing, if they are presently ignorant about issues they want to discuss?

Teaching with a colleague

- What happens when two teachers enter to the class room?
- Can two chemistry teachers enter to a class and start a conversation about free energy change (ΔG) and invite some of the students to participate in the conversation? What would other students think of this exercise?

What suggestions do you have about passive teaching (active learning)?

Comments from the participants:

- We should experiment on teaching
- Methodology may reduce students apathy
- 1h class may not be sufficient to execute all the activities
- Who gets the benefit? Average or below average learner?
- How do you engage the less enthusiastic ones?
- Extra effort from the teacher is a must.
- Why not club learners who need special care?