



Methods of Engaging Students (Session 2)

What are the goals of the lab?

- Learn to think “like a chemist”
- Become proficient in basic lab skills
- Generate curiosity
- “Cool” labs VS. Skills based labs
 - Find a happy medium

Engaging Students

- Make the labs a positive experience
- Limit lecturing at the beginning of lab
- Quizzes part-way through the lab
- Use of incentives to encourage participation in pre-lab discussion
 - e.g. use of balance/instrument first

Lab Design

- Visually interesting
 - Coloured products/reactions and things that go ‘boom’
- Use of relevant and/or real-world examples
 - Practical applications, coffee, pharmaceuticals, etc.
- Relate theory to what they can observe
 - Macroscopic to microscopic
- Use of new technologies in the lab
 - 3D glasses, new gadgets, etc.

Lab Design con't

- Synch the lecture and the lab
 - OR... Prof spends time in lecture discussing upcoming labs
- Topic oriented teaching
- Research style labs
 - Interdisciplinary labs
 - Independent projects
- Collaboration with industry and government