



# How to Engage Students



# Enthusiasm

- It's contagious
- Instructors who are passionate and enthusiastic about what they are teaching transfer that enthusiasm on to their students

# Relate lab to life

- As chemists we have a wealth of knowledge about how chemical concepts relate to real life
- Share with your students how they can use what they learn in the lab to explain things that happen around them
- Bring relevance to the lab
- Caffeine in tea
- Labs where students collect their own test samples (freshwater)



# Interesting Pre-lab Demos

- Generates student interest and can lead to engagement
- Example use beer to demonstrate Beer's Law
- Use new examples (not what students can already read in the text book)

# Bonus pre-lab question

- Worth 1 mark
- Question used to tie lab to real life or used to help students gain insight into the lab
- Ex. Explain how a pH meter works



# Reducing Stress

- Reduce length of the lab – look at each aspect and evaluate it's importance
- Pre-labs which prepare students for post lab
  - What kind of data tables and graphs would you need
  - What kind of data will you expect
- Reports due at the end of the period

# On-line Preparation

- Loncappa: bank of pre-lab questions
  - Personalize for each student (prevent copying)
  - Marks questions and provides instant feedback
- Labskills.co.uk



# Other

- Interview an expert
  - Provide a list of volunteer experts students can interview about a chemistry topic they are interested in
- Field trips – students can relate skills learned in the lab to what chemists in industry do