

Session #1: Lab Exams and Lab Assessment

Problems:

- Same pre- and post-lab material; student copying is rampant
- Grade infatuation
- Marking burden on instructors
- Lab anxiety
- Students are visual learners, yet don't read lab manual, text

- Use of online pre-lab material, “dry pre-lab” using Late Night Labs or LabSkills (Bristol, UK)
 - Setup is quick and easy
 - Immediate feedback
- Use a take-home pre-lab exercise, and have a pre-lab quiz consisting of one or two of the pre-lab questions....easy to mark and confirm students understand a couple of key concepts
- Pre-lab flow-chart can help
- Unique grade distribution: 1/3 for pre-lab quiz, 1/3 for purity/yield and 1/3 for lab report
- Music in labs helps!

- Lab notebook or logbook can alleviate marking procedure/observation section of lab report AND improve students' note-taking skills (important and relevant!)
- Rather than students handing in their book for marking (pain!) a novel approach was taken by Shirley Barlow (SIAST):
 - Random Lab Book exam...give students unique writing instrument (odd-colour highlighter for example) and give them 5 pieces of data to look for in a short period of time (i.e. "Highlight the volume of HCl did you use to titrate your 2nd limestone sample in Experiment 4")