Unfinished recipes: structuring experimental work to teach experimental design skills

**Context**
- Lack of clarity around pedagogy of ‘inquiry’ in advanced laboratories
- Desire to teach students experimental design in a robust and structured way
- Incorporate evidence from research on learning, especially in lab education
- Design an approach that fits into an overarching curricular structure
- Research implementation, especially in terms of cognitive engagement

**Read our paper!**

**Outcomes**
- Much improved feedback from students and supervising staff
- Difficulties emerged with often simple activities - concentrations etc (procedural knowledge)
- Interviews (1): students liked preparing and preparation “set standards”
- Interviews (2): lot of evidence for cognitive engagement in the lab
- Interviews (3): students enjoyed “being a scientist”, learning “something valuable to me”