HOW TO HAVE A GOOD FIRST YEAR EXPERIENCE IN CHEMISTRY – AS EASY AS FROM PART A TO PART B

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ABSTRACT

The challenge: First Year Chemistry classes are characterised by being an increasingly large cohort of students in multiple different degree programs; with very diverse incoming skills and knowledge base. This paper reports our research activities this year developing a series of workshop classes with a relatively high staff : student ratio to address student difficulties in this key foundation subject. The diversity of our student cohort is represented in the bar chart below:

The strategy: To provide a fortnightly structured workshop for active learning and engagement in conversations to develop chemistry language, content knowledge and skills: POGIL based activities incorporating small group work (3 students max), individual roles in group, quiz assessment, peer group marking, immediate feedback and tutor moderated marking. Compulsory workshops in two consecutive sections: Part A, 1 hr Non HSC CHEM students, Part B, 2 hrs all students.

We report:

the good: Student feedback and our observations indicating comprehensive networking of content and ideas via lectures, workshops, labs, assignments, appreciated by the majority of students.

the bad: insufficient understanding of the student body why this teaching mode had been adopted, some tutors struggling with managing workshops and adapting to this new model.

the ugly: the paradox that students were most productive when only one was writing but they report needing to make individual notes to take away. We look to this forum for ideas on this, our most pressing issue.