***Variety in Chemistry Education***

***Physics Higher Education***

***Conference 2015***

This form is for abstract submissions for presentations at ViCEPHEC 2015.

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*Abstract Title*: Lab skills portfolios

*Type of submission*: Flipped Presentation

*Abstract* (no more than 300 words):

Practical skills are notoriously difficult to assess effectively, while the retention of lab skills in fast paced undergraduate courses can also be challenging for students who are encountering a bombardment of new ideas, techniques and concepts. In this flipped presentation we will discuss the development of a practical skills portfolio for a foundation year chemistry course. The skills portfolio provides a framework for students to collate photographic evidence of their progress in developing a range of practical skills, while also requiring them to reflect on techniques and what makes them difficult. Another feature of the skills portfolio is that students are periodically asked to write a section of a lab report e.g. a method, on which they receive detailed feedback to support them in advance of writing a full report. Portfolios are submitted electronically via Turnitin, facilitating rapid marking and feedback.

We will present data obtained showing the benefits to both students and course tutors. As part of the flipped package, we will include example portfolios which can be easily adapted to suit other courses (note that the approach has been already adopted by a colleague at the University of Sheffield and a number of schoolteachers), and we believe that this is a highly transferable model. In the discussion session we will be happy to debate the relative merits of this system with relation to existing and other innovative practices.