REINVENTING ORGANIC CHEMISTRY TEACHING LABORATORIES Paul C Taylor and Joanna V Geden

1. Aim

To reinvent the role of Warwick Chemistry undergraduate teaching at Levels 1 & 2, with the aim of putting learning through practical experience at the front end of the undergraduate learning experience.

2. Objectives

- To evaluate comparatively students' attitudes to laboratory teaching through "traditional" and "enquiry-based" laboratory classes.
- To reinvent the Organic Chemistry units at Levels 1 (ca 100 students) & 2 (ca 80 students) to make them enquiry-based in nature.
- To exemplify the possibility of using laboratory classes as primary methods of exposing students to new aspects of theory.
- To disseminate the experience gained through the rest of the Department, Faculty, Institution and wider HE sector.

3. Progress

- An outstanding researcher, Dr Jo Geden, has been appointed. Jo has a PhD in Chemistry from Warwick and a good deal of teaching experience.
- The Level 1 Organic Chemistry lab has been "reinvented" and 100 Chemistry students have just completed the course. Jo provides a clear summary of this work in the accompanying document.
- Standard "questionnaire" feedback on the Level 1 lab has been collected.
- Work on the Level 2 lab has begun, but awaits the results of the evaluation of Level 1 (vide infra).

4. Short Term Plans

- In the next two weeks we will complete the evaluation of the Level 1 reinvented lab as detailed in Jo's report.
- The results of the evaluation will be used to hone the Level 1 lab and to inform reinvention of the Level 2 lab ready for 2007.
- We will hold a dissemination event in the Department of Chemistry, to encourage uptake of the successful approaches throughout the Department.

5. Medium Term Plans

• Dissemination across the University and beyond is envisaged.

6. Interim Summary

The reinvention of the Level 1 lab appears to have been a great success, showing how the aims of the Reinvention Centre can be realised without disruptive curriculum revision.