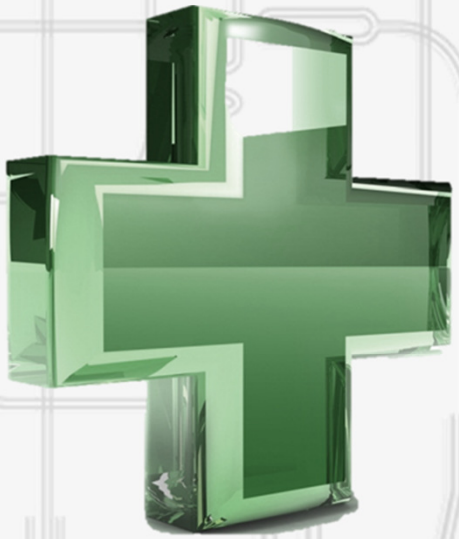
Virtual Chemistry for Pharmacy Practical - STEM Presentation



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Developed by:
Peter Rainger
Sam Butterworth
Youcef Mehellou

PROGRESS INDICATOR

Project Brief

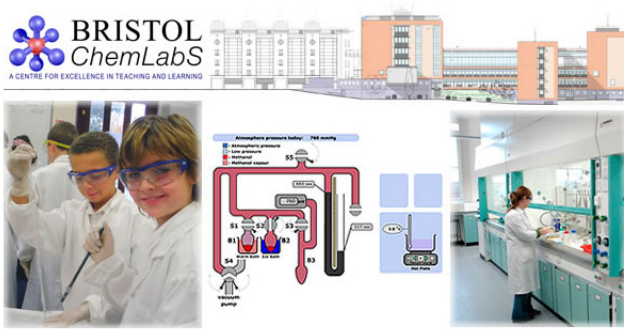
- To design, develop and run a 10 virtual practical's on chemistry for pharmacy
- To facilitate the development of online support materials through the VLE
- To facilitate the use of interactive teaching methods using ‘clicker’s

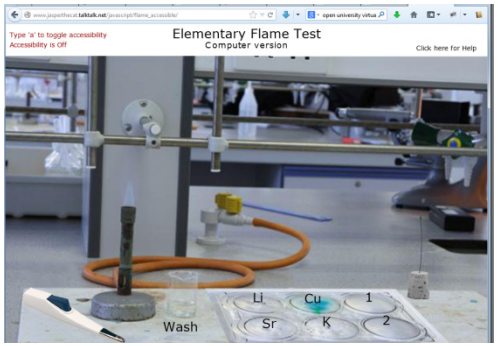
The background

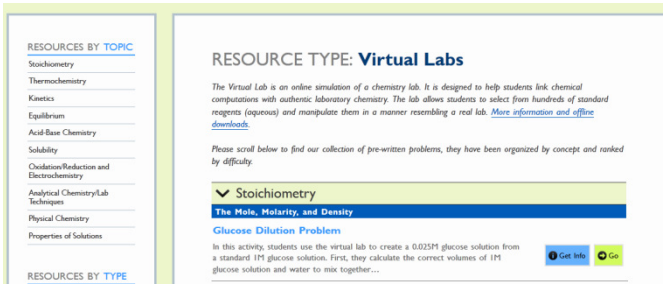
- A new Mpharm Programme still going through GpHC accreditation with 80 new students
- A brand new ‘virtual lab’ teaching space
- No capacity for ‘real lab’ chemistry teaching
- Two Modules (Y1 CP and Y2 CP) each with 5 practical needing to show curriculum integration
- One forward thinking Pharmacy professor, two new medicinal chemistry lecturers and one instructional designer up for a challenge!

Literature Review and Pre-development Research

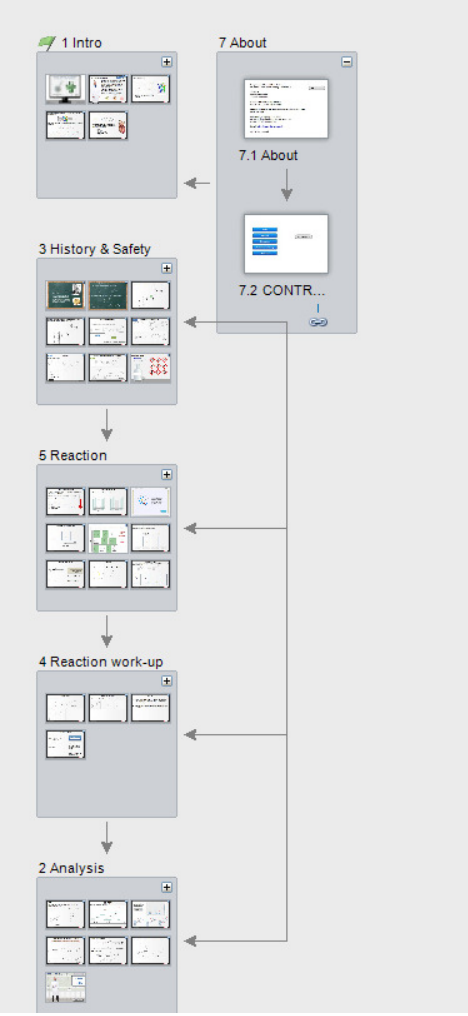
- Bristol Online Labs
- (OU) OpenScience
- Stock experiments e.g ChemCollective
- Numerous ‘virtual’ chemistry textbooks
- Chemistry attitudes and expériences questionnaire (CAEQ)

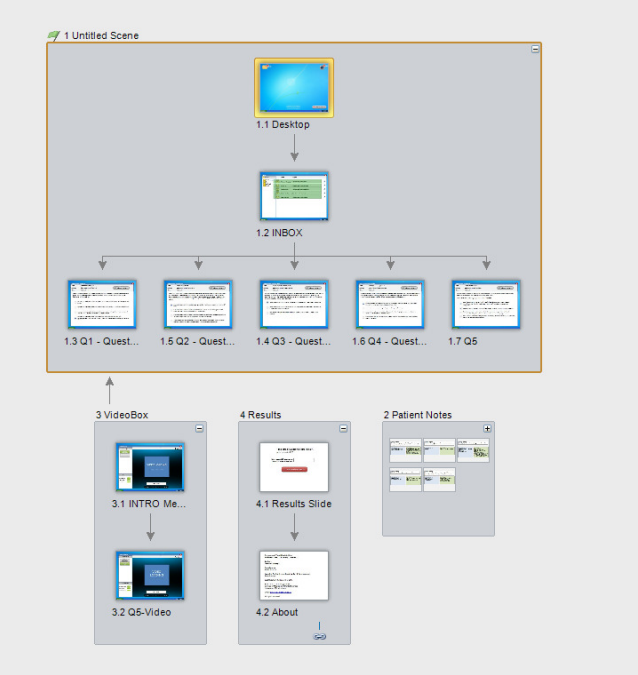






Developing the ‘Learning Design’





Technical Development

- Articulate Storyline a new breed of rapid e-learning development tools (6 months old)
- University investing in Canvas at the beginning of our development
- Roles in development and innovation for CBL

Demonstration Time!

- Fingers crossed!

Blended Learning

- The Mpharm programme purchased 80 clickers and there use is being piloted across the first year.
- Data from each use is being saved for analysis at the end of the year.
- Staff development on MCQ design and the user of clickers was delivered to support the work
- Canvas is being developed to support ‘banks’ of formative MCQs and to host mini-revision lectures

Evaluation Strategy

CHEMISTRY EDUCATION
RESEARCH AND PRACTICE IN EUROPE
2002, Vol. 3, No. 1, pp. 19-32

RESEARCH REPORT
Attitudes

Richard K. COLL,[1] Jacinta DALGETY,[1] and David SALTER[2]
[1] *University of Waikato, Department of Chemistry (New Zealand)*
[2] *University of Auckland, Department of Chemistry (New Zealand)*

THE DEVELOPMENT OF THE CHEMISTRY ATTITUDES AND EXPERIENCES QUESTIONNAIRE (*CAEQ*)

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second revision 20 February 2002; in final form/accepted 1 March 2002

ABSTRACT: In this paper we describe the Chemistry Attitudes and Experiences Questionnaire (CAEQ) developed to measure first year university chemistry students' attitude-towards-chemistry,