THE UNIVERSITY OF MANCHESTER

SCHOOL OF CHEMISTRY

Minutes of the Teaching Committee Meeting

held Thursday 23 March 2006 at 1530 in School of Chemistry, Room 7.28

Present: Professor JC Whitehead, Professor ML Turner, Dr DJ Berrisford, Dr AK Brisdon, Dr KR Flower, Dr RH Henchman, Dr JJW McDouall, Mrs DE Lovett.

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1. Apologies for Absence.
Apologies were received from Professors REP Winpenny, EJ Thomas, Dr S Heath and Mrs B Helm.

2. Minutes of Meeting held on 18 January 2006 (Paper 05/17).
Page 3 should read HE Curriculum Development. Otherwise the minutes were conformed as correct.

3. Any Matters Arising not covered in the Agenda.

(i) *Religious Observance* was now official and details could be found on the university's website.

(ii) *E-Learning.* Professors Whitehead, O'Brien, and Dr Wallace were to meet with the two of the Vice-Presidents, Professors Munn and Layzell, to inform them of the plans the School proposed to implement. This was scheduled for June 2006.

(iii) *Chemistry for our Future* HEFCE has awarded the RSC £ 3.6 million for the preliminary stages of this. It is anticipated that Manchester will take a part of this project.

4. Report from Director of Teaching.

(i) *CM2711/-CM2712*
Professor Whitehead reported that this was a difficult course for the students to undertake and whilst all of the 2nd year students had to do this module – they did not appear to be overly enthusiastic. The module had been timetabled just before labs and 147 students should have attended the lectures in the School of Chemistry at Brunswick Street. It was also felt that timetabling was an issue.

The Physical Group had suggested an intersectional 20 credit unit that would run throughout the academic year. It would be 16 lectures covering 3 topics to include Macromolecules, Materials and Computation with IOP taking

responsibility for the different strands. There would be one exam at the end of the year and the unit would be known as CM2710.
There was a slight complication in that forensic students only do part of the course but this could be resolved.

It was agreed that the idea be presented to the Heads of the Inorganic and Organic Sections.

(ii) *Changing Nature of Chemistry Course – Salters.* Professor Whitehead stated that this was a good report with a good website. There was an interesting article from the RSC with statistics about take-up of A-level subjects and about Chemistry entrants and another survey which came to the conclusion that the best results were achieved when taught by a subject specialist.

(iii) *Cancellation of CM1511 Quantitative Chemistry Maths tests.*
The AUT action had caused problems with courses run for chemistry by the Computer Based Assessment Unit. Ted Daly had refused to set up passwords for the tests. An email had been sent to students informing them that progression would not be disadvantaged. Professor Whitehead had spoken to the VP for Teaching & Learning asking if the School could progress students who had not been able to take the test. Professor Munn was unable to give a definite answer to this but there was to be a meeting with Heads of Schools where they would be informed of university policy.

There had been no problems in the preparation of examination papers or sending them to the External Examiners for their comments. The AUT had stated that External Examiners were allowed to carry out their duties.

5. Staff-Student Liaison Committee – 8 March 2006.

It was felt that the last meeting of this committee had been a positive event. The major business had been the results of the student questionnaire which had not added any great knowledge to what everyone already knew.

The students stated they would like to have as much course information as possible with particular reference was especially made to electronic material (or lack thereof) being available. Some individual courses were discussed but only briefly and the overall feeling was fairly reassuring. It was felt there were some inconsistencies in tutorials between different core areas and also different formats on examination papers. Dr Flower suggested that there should be consistency within each year group.

QAA would like over 60 % return on questionnaires but the return had been very poor. It was suggested that the School timetable a slot for students to complete their questionnaire. Dr Brisdon said he gave his students time to complete the questionnaire in the labs which worked well for 1st and 2nd year students. It was not so good for 3rd and 4th years. The students had been sent an email once the results of the questionnaire were available. The Committee agreed that the response needed to be increased and suggestions were made as to how this could be done. For 1st years it was thought “Communicating

Chemistry" was an ideal place as there was some spare time in the lab. Otherwise a core lecture would be best. Other ideas were for questionnaires to be distributed through tutors or project supervisors. Web based was also an idea and students who had not replied could then be tracked. Introducing incentives had already been tried by central office and this had not worked. It was suggested that maybe the student representatives could work on ideas. Thanks were given to Dr Brisdon for his work on the questionnaire.

6. Report of Lab Working Group (Professor M L Turner).

The idea was to bring all teaching onto one site. A group was chosen by Heads of Teaching Sections to specifically take an overview.

The key problems for the group had been:

- did not have a totally open playing field
- the timetable was gridlocked by subsidiary subjects
- difficulty in fitting in with the current timetable.

Dr Flower reported that last academic year some experiments were repeated in the same year. The experiments had been taken out and then put back in again. Lab provision was very piecemeal and did not reflect well that the labs were coherent.

Professor Turner said that Bristol University had exactly the same lab problems and were planning to address the problems in much the same way as the School of Chemistry. Bristol University was very keen to collaborate with the School for new lab practices. They already had lab manuals available.

The Plan.
Professor Turner had spoken to admissions and stressed the importance of the link between labs and lectures. Dr Flower stated that because there was not enough kit in the labs, the practical classes had to be run over 12 weeks.

Level 1
Professor Turner wants experiments mixed up. So the idea is to try and link practicals to the core. For example, an exam question in a core unit based on a lab experiment. Core unit lecturers would help design the lab experiment.

Professor Whitehead had interviewed students who had not realised that chemistry had so much practical work involved. Academics had to concentrate on introductory chemistry and try to get the students enthused about doing practical chemistry.

Level 2
Professor Turner stated that Semester 2 would emphasize teaching the student skills in the lab. The key approach would be to take five weeks in each six to practice their skills with demonstrators. Then different demonstrators would be responsible for assessing the students.

The experiments have to be open book. The idea would be to give the student a compound at the start of the year that they have to make. The making of the compound would then be based on what they have been taught.

The Proposal.
The proposal was that the students should do on-line pre-lab assessments before they enter the lab. There should be a database of questions to check the students know what they are doing and also to make sure they have read the script. This should include the COSHH form which should be filled in by the student before they come to the lab.

There was some discussion as to whether there should be a practical exam paper but Professor Turner said that once the contents of lectures for a module were known, then a question on the practical course should be included in the examination paper.

Level 3
This level would include lab experiments. The BSc/MChem separation would be removed and this would include student projects. There would be a randomized approach and projects would have more than one supervisor and at least two aspects (not all synthesis for example) and be research orientated.

The assessment schemes have to be explicit and transparent to both staff and students.

Administration
The administration of this plan would be done by a lab manager. This would be a new position and would run for 3 years in the first instance. This should also help to free up academic staff.

Professor Whitehead proposed that this report was sent by email to all academic staff and comments should be sent to Professor Turner or himself by 10 April 2006. John Robinson was to organise an afternoon session with technical staff to elicit a response.

If the ideas are to be implemented then plans have to be put in place quickly. Professor Whitehead thanked Professor Turner for his pivotal report. Teaching Committee commended the report.

8. Any Other Business.

None.

9. Date of Next Meeting.

To be arranged.