Review of the Student Learning Experience in Chemistry
Review Questionnaire for staff

Preliminary Data

Please complete the details below. No identification of individual departments, or members of staff, will be made in any report derived from this questionnaire.

1. **University** _____
2. **Name of Department** _____
3. **Job title**

Head of Department	Director of Studies/Teaching
Professor	Reader
Senior Lecturer	Lecturer
Other	

4. **Age**   20-29   30-39   40-49   50-59   over 60
5. **Gender**   male   female

6. **Are you submitted in the 2008 RAE?**   yes   no

Please answer this questionnaire as an individual, not on behalf of your department.

Section 1   Major Theme – Teaching, Feedback and Assessment

1.1 Developing teaching skills

7. When you joined the university, was attending a course of teaching skills:

   not mentioned   mentioned   recommended   obligatory

   a. If you **attended** such a course, how would you describe it?

   very valuable   valuable   of little value   of no value

   b. Was this course:

   general   subject specific   included elements of both

8. Were/are you provided with a teaching mentor?

   yes   no

9. Have you ever acted as a mentor?

   yes   no

10. Do you ever discuss your personal style of teaching with other members of your department?

   yes   no

11. Has any member of staff in your department been promoted on the basis of good teaching?

   yes   no   don't know

12. Are you consulted over teaching commitments:

   a. as to your teaching load?   yes   no

   b topics taught?   yes   no

   c. methods to be used?   yes   no

1.2 Student contact

13. How much formal teaching (lectures, labs, tutorials, workshops/seminars) do you participate in each week in this semester?

_____ Average number of hours

14. How many hours of informal contact (pastoral support, e-tutoring) do you have with students each week?

_____ Average number of hours

1.3 Learning outcomes

15. Learning outcomes are provided on the courses I teach, to students for:

all course modules   the majority of course modules

a few course modules   not provided   don't know

16. Do you draw students' attention to learning outcomes, and emphasise their value?

yes   no

1.4 Teaching methods

1.4.1 Lectures

17. Do you expect students to make their own set of lecture notes during your lectures?

yes   no   partial notes

18. Do you hand out lecture notes?

always   no   sometimes   partial notes

If **you hand out lecture notes**, do you hand out notes:

before lectures   after lectures   during lectures

19. Are your lecture notes posted on a Website or Virtual Learning Environment (VLE)?

always   no   sometimes

20. Are there workshops/tutorials linked to your lectures?

always   no   sometimes

21. Do you allocate additional work/study material related to your lectures?

always   no   sometimes

22. Do you recommend _particular_ papers/sections of books for student reading (i.e. other than a book list)?

always   no   sometimes

1.4.2 Tutorials (i.e. small group of students, 2-6, directed by tutor specific to that group)

23. Do you think it is essential for students to experience small group teaching?
    yes   no

24. What do you think is the optimum size for small group teaching?
    _____ students

25. Do you (or the Department) set work prior to tutorials?
    alway   no   sometime
    s   s

    If **work is set before tutorials**, does the work consist of:
        essays
        exercises (looking up material, algorithmic solving of standard calculations)
        problems (more open ended investigations that may not lead to definite answers)
        all but mainly essays
        all but mainly exercises
        all but mainly problems
        all evenly split

1.4.3 Problem Classes (other than tutorials)

26. Does your Department give classes at which students work on solving problems?
    yes   no   don't know

27. Do you personally give classes at which students work on solving problems?
    yes   no

28. How effective do you think such classes are at developing problem-solving ability?
    effective for all students   effective for most students
    effective for some   effective only for very few students
    students

1.4.4 Lab work

29. Do you think that the time students currently spend in the laboratory is:
    too long for the learning achieved
    too little for them to become a competent
    practical worker

1.4.5 Workshops

30. Do you use workshops or seminars to deliver:
    problem solving   IT skills   technical skills (especially
    skills   mathematics)
    other transferable skills (please
    specify)   _____

1.4.6 e-Learning

31. Do you regularly support student learning through:

a VLE   an intranet   student electronic forum   on-line tests

other form of e-learning (please specify) _____

32. Do you, in support of your teaching:

tell students how to access e-resources

expect them to find material from e-resources independently   both

33. Do you provide students with:

electronic text (e.g. material to supplement lecture notes)

technical resources (e.g. electronic 'toolkits'/maths handling software, calculators)

interactive material/animations   a list of useful websites

1.4.7 Other strategies

34. Do you use any of the following pedagogical strategies in your teaching? Enquiry-based learning/ Context-based learning/Problem-based learning.

yes   no

a. If **yes**, where have you implemented/delivered these materials?

lecture   tutorials   workshops   laboratories

other (please specify) _____

b. Were these materials created:

by yourself   internally   externally

c. Has using one or more of these strategies impacted on the way students are assessed in your department?

yes   no

If **yes**, please specify _____

1.5 Assessment

35. Do you find learning outcomes helpful in setting assessments?

yes   no   sometimes

36. In the courses that you teach, do you provide written model answers to coursework?

yes   no   sometimes

37. Do you return marked examination scripts from the exams that you set?

yes   no

If **yes**, for which years of students do you return them?(please tick all that apply)

1st   2nd   3rd   4th   5th

38. Is the assessment that you set:

mostly based on recall   mostly based on the understanding and application of concepts   a mixture of both

If **both**, estimate in what proportions recall and understanding are assessed

_____ % recall

_____ % understanding

39. Do you think student participation is assessment driven?

yes   no   don't know

40. Do you think your assessment regime reveals genuine student abilities?

yes   no   don't know

41. Is assessment the main mechanism for determining the extent to which students have become independent learners?

yes   no

42. Do you think assessment is an effective tool in *developing* independent learning?

yes   no

43. Do you have experience of using 'peer assessment'?

yes   no

If **yes** do you think it is: fair   yes   no

helpful   yes   no

accurate   yes   no

1.6 Feedback

44. Do you seek feedback from your students about your teaching?

every time   often   seldom   hardly ever

If you do seek feedback, which of the following methods do you use? (select all that apply)

paper feedback form   electronic feedback system

other (please specify)   _____

45. Do you find student feedback useful in improving your teaching?

usually   sometimes   hardly ever

46. Do you ever discuss the student feedback you obtain with your students?

yes   no   hardly ever

47. What do you think is the type of feedback most appreciated by students?
*Select **one** from each **line**.*

a.   written feedback   oral feedback

b.   detailed individual feedback   overview of group performance

c. during the course (module)   at the end of the course (module)

d. other forms of feedback (please specify)

_____

Section 2   Major theme – The Secondary-Tertiary transition

2.1 Student experience on entry

48. Are you aware of the content of current A level syllabuses?
    yes   no

49. Does this information, if available, affect your teaching on first year modules?
    yes   no

50. Do you use 'A' Level results to inform your teaching?
    yes   no

2.2 Potential problems at the School/University transition

51. Have you found that the range of knowledge and experience in your classes on entry is causing learning difficulties for some students, or problems for your teaching in the areas listed?

	Learning difficulties			Teaching problems	
	yes	no	don't know	yes	no
a. basic chemistry concepts					
b. laboratory experience					
c. *range* of mathematical ability					
d. *level* of mathematical ability					
e. IT skills					
f. project work					
g. problem solving					

52. Do you believe that the brightest students are being sufficiently challenged in your courses?
    yes   no   don't know

53. Do you believe that the weaker students are being sufficiently supported in your courses?
    yes   no   don't know

Section 3   Major Theme – Learning

3.1 Independent learning and project work

54. Do you think that the amount of project work for your undergraduates is:
    too little   about right   too much

55. Do you use your own research work in devising and running student projects?
    yes   no   sometimes

56. Do you believe that the quality of project work is reliably assessed?
    yes   no   don't know

57. How many hours do you expect a student to spend on academic work outside timetabled sessions?
    _____ hours (i.e. total per week over all modules)

58. Do you think your students understand what is meant by an "independent learner"?

yes   no   don't know

59. Do you think students have:
too much teaching and not enough independent study
too much independent study and not enough teaching
about the correct balance between teaching and independent study

3.2 Subjects outside Chemistry

60. Are non-chemistry modules:
optional   compulsory   not offered

61. If you offer a choice of other subjects when students begin your course, do students have:
free choice   free choice but recommendations
some choice, some compulsory   no choice

62. Do you think that for chemistry students, studying non-chemistry subjects is:
essential   useful   unnecessary   a waste of time

Section 4   Major theme – Curriculum and skills

4.1 Curriculum

63. Do you think students gain an advantage by taking a four-year 'M' course rather than a BSc?
yes   no   don't know

a. If **yes**, why do you think so?
leaves students better prepared for employment
leaves students better prepared for research degrees
value for money
gives a better educational experience
employers value it
more prestigious qualification
other (please specify) _____

b. If **no**, why don't you think so?
complicates timetable
increased teaching and admin workload
increased cost and debt for student
enough knowledge and skills can be learned for employment in three years
not all students intending to go into a chemistry based job
employers don't value it
other (please specify) _____

4.2 Transferable skills

64. Indicate which of the transferable skills below do you deliberately include in your teaching:
problem solving   presentation
written communication   IT skills
oral communication   learning how to learn
numeracy   information handling
group work

65. Do you think you have been given the necessary training to facilitate student learning of these transferable skills?

yes   no   self acquired

66. Do you think transferable skills are better taught:

within the department   outside the department   both

67. Do you think that transferable skills are better taught:

embedded within chemistry modules   through chemistry project work

taught separately   all of these ways

4.3 Curriculum review

68. Have you introduced new topics into your teaching programme:

from your own research   other workers' research   your own scholarship

69. Which of the following topics do you think ought to be included in a chemistry degree course?

health and safety   employability   mathematics
entrepreneurship   European legislation

other (please specify) _____

70. Over the years you have been teaching how do you think the curriculum has changed?

more modern   more linked to research   more exciting topics added

dull and less relevant topics dropped   more relevant to employment

71. Alternatively have you seen:

more and more concepts packed into modules   continued emphasis on students learning facts

outdated material retained   more challenging topics dropped

parts of modules becoming too specialised for an undergraduate degree   reduced amount of labwork

72. Would you like to see more option modules for undergraduate students based on modern research subject areas?

yes   no

73. Would you like to see more option modules in your course based on the application of chemistry to the solution of current world problems?

yes   no

74. Do you think that accreditation of degrees by the RSC is helpful?

yes   no   don't know

4.4 Careers in the curriculum

75. Do you think it is necessary in teaching your courses to take into account that students will go into different areas of employment?

yes   no   don't know

Section 5   Major Theme – Incorporating modern practice

5.1 Developing teaching skills

76. In the academic year 2006/7, how many days did you spend on a teaching development course/ conference/activity (organised by University, Department, or professional body, (e.g. HEA, RSC)?

_____ Number of days

a. If your answer is **not zero**, are you using (or intending to use) anything of what you learned in your teaching in 2007/8?

yes   no   don't know

b. If your answer is **not zero**, have you passed on anything of what you learned to colleagues in your Department?

yes   no

77. Does your university have a policy of encouraging attendance at teaching development activities?

yes   no   don't know

78. If you approach your head of department/School about attendance at teaching

development activities do you feel your interest is:

encouraged   accepted   discouraged   ignored

79. Do you consider that teaching development activities are:

useful   not particularly useful   variable

80. Is your teaching style mostly in line with traditional methods of teaching?

yes   no

81. Do you think new teaching methods are necessary for the current student cohort?

yes   no   don't know

82. Are you confident about introducing an innovative teaching method?

yes   no

83. Have you, within the last five years, produced any teaching material quite unlike the teaching you received, or quite unlike teaching you have delivered previously?

yes   no

If **yes**, what prompted you to make such a change?

seminar attended	training course	visiting speaker
departmental initiative	reading a journal	response to student feedback
other (please specify)		

5.2 Educational technology

84. Do you think that the introduction of presentational software (e.g. PowerPoint) has:

yes   no   not sure

a. significantly improved your teaching?

b. enhanced student learning?

85. Do you think that the introduction of educational software has:

yes   no   not sure

a. significantly improved your teaching?

b. enhanced student learning?

86. Do you think that the introduction of VLEs has significantly enhanced student learning?

yes   no   not sure

5.3 Subject-based educational research

87. Have you ever read any research papers in chemistry education?

many   a few   none

88. Have you ever undertaken research or scholarship into chemistry education for undergraduates?

yes   no

89. Have you ever published the results of research or scholarship in chemistry undergraduate education?

yes   no

Section 6   Major theme – Employability

90. Do you personally provide careers advice for your undergraduate students (e.g. within tutorials)?

routinely   sometimes   never

91. Do you support your students in keeping an academic portfolio/PDP/personal log?

yes   no

If you are prepared to take part in an interview (face-to-face ☐ or telephone ☐),

please add your name, telephone number and e-mail address below:

Name	
Telephone (daytime)	
E-Mail address	

Many thanks for taking the time to fill in this questionnaire.

Please return to:
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