Review of the Student Learning Experience in Physics
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?

❑ always ❑ no ❑ sometimes

If **work is set before tutorials**, does the work consist of:

❑ essays (or equivalent)

❑ 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 students ❑ effective only for very few 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

❑ neutral

1.4.5 Workshops

30. Do you use workshops or seminars to deliver:

❑ problem solving skills ❑ IT skills ❑ technical skills (especially 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?

❑ lectures ❑ 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. In your current degree assessment scheme, 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:
a. your students? ❑ yes ❑ no ❑ hardly ever
b. your colleagues? ❑ 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 physics 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 Physics

60. Do you think that for physics students, studying non-physics/mathematics subjects is:

❑ essential ❑ useful ❑ unnecessary ❑ a waste of time

Section 4 Major theme – Curriculum and skills

4.1 Curriculum

61. 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 physics based job

❑ employers don't value it

other (please specify) _____

4.2 Transferable skills

62. 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

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

❑ yes ❑ no ❑ self acquired

64. Do you think transferable skills are better taught:

❑ within the department ❑ outside the department ❑ both

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

❑ embedded within physics modules ❑ through physics project work

❑ taught separately ❑ all of these ways

4.3 Curriculum review

66. Have you introduced new topics into your teaching programme:
❑ from your own research ❑ other workers' research ❑ your own scholarship

67. Which of the following topics do you think ought to be included in a physics degree course?
❑ health and safety ❑ employability ❑ advanced mathematics
❑ entrepreneurship ❑ advanced computing
other (please specify) _____

68. 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

69. 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

70. Would you like to see more option modules for undergraduate students based on modern research subject areas?
❑ yes ❑ no

71. Do you think that accreditation of degrees by the IOP is helpful?
❑ yes ❑ no ❑ don't know

72. Do you think that the IOP core syllabus for accreditation is too prescriptive, and stifles development of courses?
❑ yes ❑ no ❑ don't know

73. Do you think that the IOP core syllabus is necessary to maintain standards?
❑ yes ❑ no ❑ don't know

4.4 Careers in the curriculum

74. 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

75. 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, IOP)?
_____ 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

76. Does your university have a policy of encouraging attendance at teaching development activities?
❑ yes ❑ no ❑ don't know

77. If you approach your head of department/School about attendance at teaching development activities do you feel your interest is:
❑ encouraged ❑ accepted ❑ discouraged ❑ ignored

78. Do you consider that teaching development activities are:
❑ useful ❑ not particularly useful ❑ variable

79. Is your teaching style mostly in line with traditional methods of teaching?
❑ yes ❑ no

80. Do you think new teaching methods are necessary for the current student cohort?
❑ yes ❑ no ❑ don't know

81. 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

82. 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?	❑	❑	❑

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

	yes	no	not sure
a. significantly improved your teaching?	❑	❑	❑
b. enhanced student learning?	❑	❑	❑

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

❑ yes ❑ no ❑ not sure

5.3 Subject-based educational research

85. Have you ever read any research papers in physics education?

❑ many ❑ a few ❑ none

86. Have you ever undertaken research or scholarship into physics education for undergraduates?

❑ yes ❑ no

87. Have you ever published the results of research or scholarship in physics undergraduate education?

❑ yes ❑ no

Section 6 Major theme – Employability

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

❑ routinely ❑ sometimes ❑ never

89. 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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