

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. 2.	University Name of Department					
3.	Job title	Head of Professor	Department	Dire Stuc Rec	ector of dies/Teachin ader	g
		Senior Le Other	ecturer	Lec	turer	
4.	Age	20-29	30-39	40-49	50-59	over 60
5.	Gende	male	female			
	r					

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	I the unive	rsity, was c	attending a course	of teaching skills:
	not	mentio	one	recommend	obligator
	mentioned	d		ed	У
	a. If you attende	ed such a c	course, ho	w would you descr	ibe it?
	very	val	uabl	of little	of no
	valuable	е		value	value
	<b>b.</b> Was this cour	se:			
	gener	subject		included elemen	ts of
	al	specific		both?	
8.	Were/are you pr	ovided wit	h a teach	ing mentor?	
	yes no				
9.	Have you ever a	cted as a	mentor?		
	yes no				
10.	Do you ever disc	uss your pe	ersonal sty	le of teaching with	other members of your
	department?				
	yes no				
11.	Has any membe	r of staff in	your depo	artment been prom	noted on the basis of good
	teaching?				
	yes no	don't			
		know			
12.	Are you consulte	d over tec	iching cor	nmitments:	
<b>a.</b> loc	as to your teachi ad?	ng	yes	no	
<b>b</b> †	opics taught?		yes	no	
c.	methods to be us	ed?	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 bours
  - \_ 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 not provided
    - don't know
- 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?

a few course modules

alway	no	sometime	partial
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- s s notes If **you hand out lecture notes**, do you hand out notes: before after during
  - lectures lectures lectures
- 19. Are your lecture notes posted on a Website or Virtual Learning Environment (VLE)? alway no sometime
- **20.** Are there workshops/tutorials linked to your lectures? alway no sometime

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- 21. Do you allocate additional work/study material related to your lectures? alway no sometime
- 22. Do you recommend particular papers/sections of books for student reading (i.e. other than a book list)?

alway no sometime s s

#### 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
- **25.** Do you (or the Department) set work prior to tutorials?
  - no sometime

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alway

- 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 some 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	IT skills	technical skills (especially
skills		mathematics)
other transferable ski	lls (please	
specify)		

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#### 1.5 Assessment



yes

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

sometime no ς

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- 36. In the courses that you teach, do you provide written model answers to coursework? sometime yes no
- 37. Do you return marked examination scripts from the exams that you set? ves no

If yes, for which years of students do you return them? (please tick all that apply) **4**<sup>th</sup> 1 st 2nd 3<sup>rd</sup> 5<sup>th</sup>

38. In your current degree assessment scheme, estimate in what proportions recall and understanding are assessed:

% recall

no

% understanding

**39.** Do you think student participation is assessment driven?

- 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?
  - no yes
- 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 <b>yes</b> do you think it is:	fair	yes	nc
	helpful	yes	nc
	accurat	yes	nc
	e		



# 1.6 Feedback

- 44. Do you seek feedback from your students about your teaching?
  - every often seldo hardly time m ever

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

paper feedback electronic feedback form 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
- b. your yes no hardly colleagues? ever

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

a. b.	written feedback detailed individual	oral feedback overview of group
	feedback	performance
c.	during the course	at the end of the course
	(module)	(module)
d.	other forms of feedback (please	

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?

Lea	rning o	difficulties	Teaching		
			prol	olems	
ye	no	don't	yes	no	
S		know			

- 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 too
  - right 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"? ves no don't

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 written	presentation IT skills
communication	
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 outside the departmentdepartment

both



**65.** Do you think that transferable skills are better taught: embedded within physics modules taught separately all of these

through physics project work all of these ways



4.3 Curriculum review **66.** Have you introduced new topics into your teaching programme: other workers' from your own research vour own research 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 more exciting topics added research dull and less relevant topics more relevant to employment dropped **69.** Alternatively have you seen: more and more concepts packed into continued emphasis on students learning facts modules outdated material retained more challenging topics dropped reduced amount of labwork parts of modules becoming too specialised for an undergraduate degree 70. Would you like to see more option modules for undergraduate students based on modern research subject areas? ves no 71. Do you think that accreditation of degrees by the IOP is helpful? don't yes no know 72. Do you think that the IOP core syllabus for accreditation is too prescriptive, and stifles development of courses? don't yes no know 73. Do you think that the IOP core syllabus is necessary to maintain standards? don't yes no 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? don't yes no know Major Theme – Incorporating modern practice Section 5

# 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 variable useful
- **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? no

ves

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

seminar attended departmental initiative other (please specify)

training course reading a iournal

visiting speaker response to student feedback

### 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

teachina?

**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? ves no not sure

#### 5.3 Subject-based educational research

85. Have you ever read any research papers in physics education? many а none

few

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

ves no

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

ves no

#### Major theme – Employability Section 6

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

routinelv 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: Physical Sciences Centre Department of Chemistry The University of Hull FREEPOST HU5 88 Hull HU6 7BR