



# How teachers develop their teaching

*Richard Dunne, Educational Consultant*

## Introduction

This small scale study was commissioned by the LTSN Generic Centre to provide research-based evidence about the way HE teachers develop their teaching. The results were used to inform decisions about the provision of generic information about aspects of teaching through a web site, in particular the Generic Centre's work on the curriculum. A web-site which is to support the professional development of teachers in Higher Education needs to be responsive to the felt needs of practising academics in order to play a significant role in encouraging, supporting and leading development. This paper describes a small questionnaire and interview-based study designed to evaluate current perceptions. The survey tools developed for the study (appendix 1) can also be used as a basis for institutional workshop discussions.

The population of teachers in Higher Education is varied in its profile across subject disciplines, age, experience of teaching and course design, motivation, knowledge about teaching and formal qualification. Any analysis of attitudes and aspirations needs to be sufficiently extensive to respect this variation. For this reason, we adopted a questionnaire study as one part of an evaluation. This questionnaire has the potential for further use to build on the findings of this initial study.

The current perceptions of practitioners are important in informing web-design, but there is a problem that these perceptions can be rigidly circumscribed by the current teaching context. It is not always easy to speculate about what one wants with only limited experience of what is available. In order to create a 'future-looking' perspective, we have designed the questionnaire to collect data about respondents' own work alongside questions about what they think should prevail generally.

## The questionnaire

A questionnaire was designed to study the experience and perceptions of teachers. It sought to identify currently significant features in the development of teaching, as well as opinions about how significant it is thought these *ought* to be. A four point Lickert scale was employed to ascertain the 'current' perception and the 'aspirant' perception for each item.

The items were grouped in three sections.

*Section A: typical ways of working* (24 items) cited a range of typical contributors to professional development to elicit views of the importance of these (for example, 'receiving feedback from colleagues'; 'formal training').

*Section B: review processes* (8 items) explored respondents' experiences of review process (for example, 'Observation of lectures etc by colleagues'; 'Formal assessment ...').

*Section C: information, knowledge and processes* (18 items) sought detail of respondents' use of various forms of assistance in teaching (eg 'Advice from colleagues'; 'Documents from professional bodies').

In each section, respondents were invited to make further comments. A small sample of respondents were further interviewed to clarify the nature of their responses.

In order to explain the style of the questionnaire, an item is re-printed below:

<b>[A]</b>												
It would be helpful to know:												
(a) how you currently receive support in professional development for teaching etc.;												
(b) how appropriate you think different types of support would be in higher education.												
<b>Each of the following might contribute to professional development in teaching, learning, planning and assessment (ie each one could improve knowledge or performance).</b>												
Indicate the number that best describes what contribution each item has made in <b>your own</b> professional development (not simply included in your professional experience).				<b>Type an asterisk in the space below the number as an indicator.</b>					Indicate the number that best describes what contribution you think each item ought to make to professional development in higher education.			
1= no contribution    2 = a small contribution    3 = a substantial contribution    4 = a very important contribution												
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	Your own teaching and experimenting					<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
				7								
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	Designing a course or module					<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
				8								

This design allows analysis of the extent to which separate aspects of professional life are viewed as currently useful (current perception) and the extent to which 'more of the same' (aspiration) is perceived as being important.

The difference between 'aspiration' and 'current' perceptions offers a measure of satisfaction with current ways of working.

### The sample

An opportunity sample of 33 academics from three higher education institutions completed the questionnaire. Nine of these were interviewed. The range of subject interests was very wide and gave no opportunity to study any similarities in response within disciplines. Length of experience in teaching in higher education had a wide range. Some analysis has been undertaken of three groups: [I] (n = 13) relatively little experience (3 – 9 years); [II] (n = 9) medium experience (10-15 years); [III] (n = 11) long experience (16-21 years).

Questionnaire data were supported by telephone interviews with nine respondents (three from each of the three 'cohorts' I, II, III). Written data were analysed separately for the three cohorts but interview data were illuminative and not amenable to separate analysis.

### Summary of results

The three sections of the questionnaire are:

*Section A: typical ways of working (24 items)*

*Section B: review processes (8 items)*

*Section C: information, knowledge and processes (18 items)*

The three cohorts are:

[I] (n = 13) relatively little experience (3 – 9 years);

[II] (n = 9) medium experience (10-15 years);

[III] (n = 11) long experience (16-21 years).

	Respondent group I		Respondent group II		Respondent group III	
	Relatively little experience		medium experience		Relatively long experience	
	Current	aspiration	current	aspiration	current	aspiration
mean for A : typical ways of working	2.8	3.1	3.0	3.5	2.8	2.9
mean for B: review processes	2.0	2.5	2.0	2.5	1.9	2.5
mean for C: information, knowledge, processes	2.1	2.6	2.5	3.0	1.9	2.5
	I		II		III	
mean of difference for A	0.3		0.6		0.1	
mean of difference for B	0.5		0.5		0.6	
mean of difference for C	0.5		0.5		0.7	

These data suggest that each of the respondent groups (I, II, III) claims that developmental work is more important to them currently from *A: typical ways of working* than from either *B: review processes* or *C: information, knowledge, processes*. However, all three groups are optimistic about the contribution that could be made by B and C (the difference between 'current' and 'aspiration'). Respondent group III (those with most experience) are least optimistic about further contributions being made by currently typical ways of working.

### Detail about *Section A : typical ways of working*

Subject of item		1 = no contribution 2 = a small contribution 3 = a substantial contribution 4 = a very important contribution					
		cohort I		cohort II		cohort III	
		current	aspiration	current	aspiration	current	Aspiration
Your own teaching and experimenting	7	3.7	4	3.9	3.8	4	3.9
Designing a course or module	8	3.9	3.9	4	3.9	3.8	3.7
Observing others teaching	9	2.9	2.8	1.9	3.9	3.2	3.7
Reading textbooks or papers on teaching	10	2.4	2.1	3.9	3.6	2.5	3.1
Reading policy and course documents	11	1.9	2.2	2.7	3.2	3.3	2.4
Web-based information	12	2.4	2.9	3.2	3.6	1.2	3.1
Formal training	13	2.8	2.4	1.8	3.9	1.2	3.1
Participation in institutional staff development events	14	2.5	3.4	3.4	3.2	3.1	2.6
Participation in departmental development events	15	2.6	3.5	1.2	3.7	2.4	3.4
Participation in subject-based conferences and workshops	16	1.2	2.8	3.4	3.9	2.9	1.7
Course team and departmental meetings	17	3.2	3.7	2.9	3.5	3	3.4
Informal conversations with colleagues and friends	18	3.9	3.9	3.2	3.3	2.9	2.4
Involvement in working groups and projects	19	2.4	3.1	3.6	3.6	3.7	3.9

Producing course guides or module guides	20	3.9	3.9	3.2	3.8	3.6	2.9
Involvement in networks	21	1.2	2	3	2.9	1.3	1.5
Receiving feedback from students	22	3.2	3.5	2.9	3.4	2.9	2.4
Receiving feedback from colleagues	23	3.4	3.5	1.9	2.7	2.5	2.6
Engaging in a process like QAA review or course review	24	3.1	2.9	3.4	3.7	2.6	2.7

All cohorts reported learning a great deal from their own teaching and experimenting and saw this as it should be in higher education. A similarly high level of importance was attached to designing a course or module. Interview data was consistently clear that the important aspect of this was 'reflection' on what was being done rather than 'just the act of producing it'.

Cohort I attached rather less importance to 'reading textbooks and papers on teaching' than the other two cohorts and this tendency was repeated with respect to 'reading policy and course documents'. Web-based information was used less by cohort III than by the others but there was agreement that it should feature significantly in development of teaching. In general, respondents thought there should be more benefit than currently experienced from participation in staff development events.

Construction of course guides or module guides was seen as personally important and appropriate in general. Involvement in networks was less significant and only cohort II thought this should have greater importance than currently experienced. Receiving feedback from students and from colleagues was seen as having greater value by cohort I than the others.

The process of course review was seen as valuable but there was substantial concern during interviews that the experience of a QAA review was disturbing and needs reforming, even when it was conceded that there was considerable value attached to it.

The responses in this section reflect a widespread emphasis on development in teaching being very much a personal act (experiential learning) prompted by the formal requirement to produce appropriate information in handbooks and descriptions of modules.

### **Detail about Section B: review processes**

		1 = no contribution 2 = a small contribution 3 = a substantial contribution 4 = a very important contribution					
		cohort I		cohort II		cohort III	
Subject of item		current	aspiration	current	aspiration	current	aspiration
Observation of lectures, tutorials or seminars by, or of, departmental colleagues.	29	1.5	2.8	1.3	2.1	1.1	1.8
Observation of lectures, tutorials or seminars by, or of, colleagues from other disciplines or departments.	30	1.2	1.6	1.1	1.9	1.1	2.9
Observation of lectures, tutorials or seminars by colleagues from other institutions.	31	1.2	2	1.2	2	2	3
Formal assessment of lectures, tutorials or seminars against performance indicators by colleagues from your institution.	32	1.2	1.2	1.3	1.4	1.2	1.3
Formal assessment of lectures, tutorials or seminars against performance indicators by a team external to your institution.		1.2	1.2	1.3	1.9	1.2	1.1

Collection and analysis of detailed performance data about students.	33						
Informal collection of students' perceptions of teaching sessions, modules or courses.	34	2.1	3.4	3.2	3.9	3	3.2
Formal collection and analysis of students' perceptions of teaching sessions, modules or courses.	35	3.9	3.9	3.2	3.1	2.6	2.7
	36	3.4	3.9	3.2	3.7	3.1	3.9

For all cohorts relatively little significance was attached to observation of lectures, tutorials and so on as a contributor to development. The most important contribution was recognised as being in the responses of students, including performance data, informal collection and formal collection of students' perceptions. This was enthusiastically confirmed in interview data where respondents found 'students' opinions to be so revealing' and 'detailed breakdowns of marking' to be significant in planning future work. There was little comment on tracking trends from year to year but in some cases, when this was done, 'we could see the impact of a change of lecturer' and 'the difference made by working on study skills'.

### Detail about Section C: *information, knowledge and processes*

Subject of item		1 = no contribution 2 = a small contribution 3 = a substantial contribution 4 = a very important contribution					
		cohort I		cohort II		cohort III	
		current	aspiration	current	aspiration	current	Aspiration
Advice from colleagues in higher education.	41	3.1	3.6	3.1	3.2	2.2	2.1
Advice from acquaintances who are school-teachers or other professionals.	42	1	1	1	1.3	1.2	1.4
Cooperation with a School of Education.	43	1.2	1.2	1.2	1.3	1.2	1.2
Contributions from your institution's teaching development unit (or similar).	44	3.1	3.1	3.4	3.5	3.1	3.7
Personal experience of being taught.	45	3.7	3.8	3.5	3.2	2.9	2.4
Published texts about teaching in higher education.	46	1.2	1.3	2.2	2.1	3.1	2.9
Published texts about teaching in general.	47	1.1	1.1	1.3	1.4	1.4	1.3
Web-based materials about teaching.	48	1.3	1.4	1.8	1.5	1.4	1.6
Courses and conferences about teaching in higher education.	49	1.2	1.5	2.1	2.5	2.3	2.9
Certificated courses in teaching.	50	1.1	3.1	2.1	3.9	1.2	2
Existing course documents.	51	3.2	3.6	3.8	3.9	3.2	3.9
Policy documents from your own department.	52	2.7	3.4	3.1	3.8	1.2	3.6
General policy documents available throughout your institution.	53	2.4	3.4	3.4	3.9	2	3.6
Documents obtained from other HEI's.	54	1.2	1.9	1.3	3.6	1.5	3.6
Documents from professional bodies.	55	1.2	2	2.6	3.6	1.2	2.1
Documents from the Qualifications and Assessment Authority (QAA).	56	3.5	3.7	3.2	3.9	1.2	2
Data and other comments from local employers about their needs for employees' 'workplace skills'.	57	3.2	3.9	2.8	3.4	1.9	2.9
Data and other comments about the needs of national and international companies for employees' 'workplace skills'.	58	2.6	3.2	2.9	3.3	1.2	2.1

## **Discussion**

Cohorts I and II attached significant value to advice from colleagues in higher education although (perhaps not surprisingly) the more experienced cohort did not give this such a high rating. Very little importance was attached to current advice from school-teachers or other professionals, nor was this seen as likely to be important. However, there was considerable agreement that advice from a teaching development unit in the university was important, and should be, and this contrasts with perceptions of the value of cooperation with a School of Education. In two cases, where university staff had received training for school teaching, there was some optimism that cooperation could have benefits. Lecturers' personal experience of being taught was seen as providing a much more important contribution to the development of teaching; this being more important than either texts or web-sites about teaching.

The perceived importance of institutional policy documents seems to support a trend noted in section A that developmental work needs a framework to drive it – and this is in relation to both departmental and institutional documents, being of more importance (currently and in a future perspective) than documents from other institutions and from professional bodies. Documents from QAA seem quite highly rated except by cohort III. Similarly, there seems a reasonable enthusiasm for responding to local, national and international companies' call for 'workplace skills'. A recurring feature in interview data, however, was concern about the mixed messages about this and, especially, the perception that employers advocated one thing (practical workplace skills) and appointed on different criteria (quality of degree).

Interview data was accumulated after an initial analysis of questionnaire data. The questionnaire analysis gave strong indication of a pragmatic rather than theoretical approach to course design. This was explored in some detail during interviews. Interview data indicated strongly that pragmatism was less to do with a rejection of current theory than a lack of knowledge of theory. Several interviewees cited Kolb's 'learning styles' as underpinning theory but did not clarify how this impacted upon their daily work as teachers. The notion of 'deep and surface learning' was also a key organising principle that was seen as important but seemed not to affect practice in the long term. The inventory of 'learning styles' tended, it seems, to be used in an introductory course for students, causing considerable excitement, but lacked utility in the long term.

The absence of cooperation with Schools of Education was generally a case of seeing learning in higher education as being different 'because of the higher level' from learning in school. These schools were not seen as sources of theoretical knowledge that might have wide applicability.

Three interviewed respondents, all in cohort I, talked enthusiastically about support from the teaching and learning unit. In each case this support was valuable in organising lectures and conducting tutorials and, in one case, analysing student responses. In this sample, the teaching and learning unit was not perceived as addressing theoretical work about teaching and learning.

## **Conclusion from questionnaire and interview data**

Developments in teaching and learning are circumscribed by official and institutional requirements to formalise course and module descriptions. It is these that drive improvement by providing experience of writing modules, units and courses in sufficient detail for reflection. The process of improvement is viewed as one normally driven by reflection on practice augmented by advice from colleagues and memories of personal successes and failures in learning. Pedagogical theory was seen as unimportant compared to careful delineation of intended outcomes.

Assessment and evaluation is perceived as a key factor in driving improvements in teaching. In a small number of cases there was some suggestion that this is linked with 'deep and surface learning' where 'deep' is good and 'surface' is not so good, but it was not clear that assessment processes and the organisation of courses were specifically designed to achieve this.

## Appendix: The questionnaire

### Web-based materials for academics.

The *Learning and Teaching Support Network* (LTSN) is designing web-based resources for academics to use in designing courses. I have been asked to collect background information to support this development. I would appreciate your help by completing the following questionnaire.

The following questions are related to your teaching in higher education, not your research work.

Please note that each section is followed by space for additional comments if you wish.

Thank you for your help.

Richard Dunne

**Your responses will be treated in complete confidence.**

It would be helpful to have some background information:	
Name:	Institution:
a School / faculty / department:	
b Approximate number of years academic employment in this institution:	c Approximate <b>total</b> number of years academic employment in higher education:
d Please describe any teaching qualification you hold:	e Please describe any teaching experience you have had outside higher education:

**[A]**

It would be helpful to know:

- (c) how you currently receive support in professional development for teaching etc.;
- (d) how appropriate you think different types of support would be in higher education.

**Each of the following might contribute to professional development in teaching, learning, planning and assessment (ie each one could improve knowledge or performance).**

Indicate the number that best describes what contribution each item has made in **your own** professional development (not simply included in your professional experience).

**Type an asterisk in the space below the number as an indicator.**

Indicate the number that best describes what contribution you think each item ought to make to professional development in higher education.

1= no contribution 2 = a small contribution 3 = a substantial contribution 4 = a very important contribution

1	2	3	4	Your own teaching and experimenting	7	1	2	3	4
1	2	3	4	Designing a course or module	8	1	2	3	4
1	2	3	4	Observing others teaching	9	1	2	3	4
1	2	3	4	Reading textbooks or papers on teaching	10	1	2	3	4
1	2	3	4	Reading policy and course documents	11	1	2	3	4
1	2	3	4	Web-based information	12	1	2	3	4
1	2	3	4	Formal training	13	1	2	3	4
1	2	3	4	Participation in institutional staff development events	14	1	2	3	4
1	2	3	4	Participation in departmental development events	15	1	2	3	4
1	2	3	4	Participation in subject-based conferences and workshops	16	1	2	3	4
1	2	3	4	Course team and departmental meetings	17	1	2	3	4
1	2	3	4	Informal conversations with colleagues and friends	18	1	2	3	4
1	2	3	4	Involvement in working groups and projects	19	1	2	3	4
1	2	3	4	Producing course guides or module guides	20	1	2	3	4
1	2	3	4	Involvement in networks	21	1	2	3	4
1	2	3	4	Receiving feedback from students	22	1	2	3	4
1	2	3	4	Receiving feedback from colleagues	23	1	2	3	4
1	2	3	4	Engaging in a process like QAA review or course review	24	1	2	3	4

Please add any further comments (25 / 26 / 27 / 28):

**[B]**

It would be helpful to know:

- (a) What kinds of review process you have experienced in your teaching;  
 (b) What kinds of review process you think should be used in higher education teaching

Indicate the number that best describes what contribution each item has made in **your own** professional development.

**Type an asterisk in the space below the number as an indicator.**

Indicate the number that best describes what contribution you think each item ought to make to professional development in higher education.

1= no contribution 2 = a small contribution 3 = a substantial contribution 4 = a very important contribution

1	2	3	4	Observation of lectures, tutorials or seminars by, or of, departmental colleagues. 29	1	2	3	4
1	2	3	4	Observation of lectures, tutorials or seminars by, or of, colleagues from other disciplines or departments. 30	1	2	3	4
1	2	3	4	Observation of lectures, tutorials or seminars by colleagues from other institutions. 31	1	2	3	4
1	2	3	4	Formal assessment of lectures, tutorials or seminars against performance indicators by colleagues from your institution. 32	1	2	3	4
1	2	3	4	Formal assessment of lectures, tutorials or seminars against performance indicators by a team external to your institution. 33	1	2	3	4
1	2	3	4	Collection and analysis of detailed performance data about students. 34	1	2	3	4
1	2	3	4	Informal collection of students' perceptions of teaching sessions, modules or courses. 35	1	2	3	4
1	2	3	4	Formal collection and analysis of students' perceptions of teaching sessions, modules or courses. 36	1	2	3	4

Please add any further comments ( 37 / 38 / 39 / 40 ):

<b>[C]</b>												
It would be helpful to know:												
(a) What kinds of information, knowledge and processes <b>you have used</b> to develop your work with students;												
(b) What kinds information, knowledge and processes <b>you think should be used</b> in higher education to develop work with students.												
Indicate the number that best describes what contribution each item has made in <b>your own</b> professional development.				<b>Type an asterisk in the space below the number as an indicator.</b>					Indicate the number that best describes what contribution you think each item ought to make to professional development in higher education.			
1= no contribution    2 = a small contribution    3 = a substantial contribution    4 = a very important contribution												
1	2	3	4	Advice from colleagues in higher education.					1	2	3	4
				41								
1	2	3	4	Advice from acquaintances who are school-teachers or other professionals.					1	2	3	4
				42								
1	2	3	4	Cooperation with a School of Education.					1	2	3	4
				43								
1	2	3	4	Contributions from your institution's teaching development unit (or similar).					1	2	3	4
				44								
1	2	3	4	Personal experience of being taught.					1	2	3	4
				45								
1	2	3	4	Published texts about teaching in higher education.					1	2	3	4
				46								
1	2	3	4	Published texts about teaching in general.					1	2	3	4
				47								
1	2	3	4	Web-based materials about teaching.					1	2	3	4
				48								
1	2	3	4	Courses and conferences about teaching in higher education.					1	2	3	4
				49								
1	2	3	4	Certificated courses in teaching.					1	2	3	4
				50								
1	2	3	4	Existing course documents.					1	2	3	4
				51								
1	2	3	4	Policy documents from your own department.					1	2	3	4
				52								
1	2	3	4	General policy documents available throughout your institution.					1	2	3	4
				53								
1	2	3	4	Documents obtained from other HEI's.					1	2	3	4
				54								
1	2	3	4	Documents from professional bodies.					1	2	3	4
				55								
1	2	3	4	Documents from the Qualifications and Assessment Authority (QAA).					1	2	3	4
				56								
1	2	3	4	Data and other comments from local employers about their needs for employees' 'workplace skills'.					1	2	3	4
				57								
1	2	3	4	Data and other comments about the needs of national and international companies for employees' 'workplace skills'.					1	2	3	4
				58								
Please add any further comments (59 / 60 / 61):												