

CHAPTER A3

In Search of Professionalism *Jenny Willis*



Dr Jenny Willis spent 20 years teaching in the secondary sector, mostly in Inner London. For the last five of those years, she was deputy head teacher of a comprehensive school. Throughout these years, she led and managed extensive curricular change, and wrote teaching resources for herself and colleagues. In 1995, she moved into teaching and examining for the Open University (London) and worked as a Staff Tutor, appointing, inducting and mentoring language lecturers whilst completing an interdisciplinary PhD in socio-linguistics. In 2000, she joined the University Registry, as a part-time member of the Quality Assurance and Enhancement Office, with responsibility for supporting the Pro-Vice-Chancellor (Learning and Teaching). In addition to her formal role, she was separately contracted to analyse the annual Professional Training survey, completed by students on their return from a year on placement. This interest led to her being invited to join the team who, in 2004, wrote the successful bid for the University to become a Centre for Excellence in Teaching and Learning. Between 2007 and 2009, she worked with Professor Neil Ward to take the University's Professional Training

into a new era. This and her research based on the annual student feedback led to her winning a SCEPTRe Fellowship in 2008/09. Jenny is currently working as an independent consultant to SCEPTRe. She is an active contributor to national and international conferences and publications in the field of work-integrated learning / Co-op / professional development.

Summary

This Chapter describes the results of a research Fellowship undertaken with the University of Surrey's Centre for Excellence in Learning and Teaching (SCEPTRe). Its novelty lay in the way it brought together academic and administrative expertise. Annual feedback from students who participate in the University's year-long professional training work placement scheme, shows that it is a life-changing experience for many students. Through the experience students get real world practice in what being professional means. The research project aimed to explore how this change comes about and to identify what professionalism means when viewed through placement students' perspectives.

My proposition : equating with employability is simplistic and fails to address the complex mixture of knowledge, its practical application, generic skills, personal qualities and dispositions required of professionals. The Chapter discusses the difficulties of planning learning opportunities to support the development of these skills and characteristics and the contentious nature of their assessment. By comparing the intended learning outcomes with those that students perceive they have achieved during their professional placements, the research developed a conceptualisation of employability. This builds upon Eraut's (2007) notion of learning trajectories, and Barnett's (2003) recognition of the supercomplexity of today's world. The model can be used by curriculum planners and by learners and teachers to monitor individual professional development.

Key words

Assessment; boundaries; complexity; curriculum; employability; professionalism.

Background to the research

Institutional context

For over 50 years the University of Surrey has been at the forefront of the *work integrated learning* (WIL) movement in the UK through a curriculum model that requires programmes in all disciplines¹ to provide opportunities for learners to develop their professional capabilities through year long work placements that will lead to outcomes that are relevant to learners' programmes. The University uses the term Professional Training² (PT) to describe this type of WIL curriculum and it has proved to be successful in enabling our graduates to secure employment on completion of their degree. Surprisingly, given this long standing commitment there has been little attempt to systematically examine the basis for what appears to be a successful educational model. The work I will describe is part of an ongoing investigation

¹ With the exception of vocational health-related programmes that operate a fully integrated work-study programme

² <http://www.surrey.ac.uk/professionaltraining/>

coordinated and sponsored by the University's Centre for Excellence in Professional Training and Education (SCEPTrE) into the way the university is integrating academic study and real world learning in order to develop the capabilities and dispositions required to be a successful professional.

Personal context

My relationship with Professional Training had always been complex: I was employed part-time by the University of Surrey as an Assistant Registrar in the then-Quality Assurance and Enhancement Office. My former career as deputy head of a comprehensive school inevitably continued to influence me, not least my passion for student-centred learning, the policy and pedagogical decisions that can bring this to fruition, and the need for research to underpin policy and practice. By chance, 6 years ago, I was privately contracted to conduct the analysis and report for the annual student survey completed by students on their return from Professional Training (work-integrated learning, Co-op). This work was separate from, but complementary to, my formal role within the University but began a process of merging administrative responsibilities and academic interests.

Boundaries were further blurred when, in 2003/4, the Pro-Vice-Chancellor for Learning and Teaching offered me a consultancy to join the team who wrote what would be a successful bid for the University to host a Centre for Excellence in Learning and Teaching (CETL), leading to the creation of the Surrey Centre for Excellence in Learning, Teaching and Education³ (SCEPTrE) in 2006. In 2007, a combination of circumstances brought about a new direction for Professional Training (PT), under the leadership of Professor NI Ward, supported by myself as Secretary to the Professional Training and Careers Committee (the collegial Committee that oversees and regulates Professional Training). Our shared vision and enthusiasm enabled us to achieve much in a short time, by blending my formal responsibilities with my academic background. I had continued to be the private analyst for the annual survey, hence was accumulating a vast and rich data base of student feedback on their PT year. This and other research conducted within my formal role formed the basis of papers for conferences and journals. In 2008, building upon this background and in order to take forward my research, I won a SCEPTrE Fellowship, which I pursued in parallel to my work in the Registry. Unlike most Fellows, whose work is disciplinary-centred, I came with a university-wide perspective. But this advantage was counterbalanced by the fact that I was also implicitly threatening the neat divisions between administrative and academic roles. This awareness increased my sense of responsibility and desire for the outcome of my fellowship work to have a practical value.

Evolution of the research question

Student feedback on their professional training experience

Year after year, students had been effusive about the impact their PT experience had had upon them. They referred constantly to having 'matured', become 'more professional', feeling 'more motivated', 'more confident', but rarely explaining how this change had been effected. Gradually, working with SCEPTrE and unwittingly influenced by my own pedagogical background, we had begun to re-shape the annual questionnaire, edging it towards a balance between the needs of quality assurance and evaluation that would encourage deeper organisational learning and drive enhancement. This was in line with changing circumstances both within and beyond the University (see e.g. Jackson 2002) and sought to give more direction to metacognitive processes, enhancing students' critical reflection. Now, a marked difference began to appear in the nature of their comments, as these recent examples (from Willis, 2008) illustrate:

It made me realise I want to specialise in interpreting because I don't like translation on its own. I also wouldn't like to work in a translation agency, having seen what the working conditions are. (Languages student on placement in Spain 2007/08)

I have gained further knowledge in a field that I found very interesting. I have improved my organisational and timekeeping skills. I now have experience working with people at all levels and ages. I feel able to take more responsibility of my own education and feel a lot more confident in going into my final year. (Student of Microbiology & Biomedical Sciences, 2007/08)

³ The Higher Education Funding Council for England established 74 Centres for Excellence in Learning and Teaching in 2005. Funded for a 5-year period, they were part of a drive to raise standards in university teaching and learning.

I have gained a greater understanding for working as part of a successful department team. I have also learnt more regarding retail operations behind the sales floor tasks. I have become more open to people's opinions & ideas in the workplace this year. I believe I have grown in confidence too as a result of some situations I was put in during the PTY. (Business Management student 2007/08)

Political agenda for employability

The University⁴ has long been a leader in the field of work-based, and work-related learning (for a discussion of these and similar terms see Lee et al 2004; Yorke 2005; Tosey and McDonnell 2006). One of its novel features has been that work experience is available in all subjects, of whatever discipline. It involves a period of (usually paid) employment during the third of a four-year degree programme. Following a policy drawn up in accordance with QAA guidelines (latest edition, QAA, 2007), specific learning outcomes are agreed and performance is assessed and accredited, as discussed below (page 6).

As central drives have increasingly focused on employability and the needs of industry and the economy (e.g. DIUS, 2008:3; BIS 2009:7) it is hardly surprising to find the University drawing attention in its publicity to this record:

Holding an unrivalled graduate employability record for a decade, our distinctive position has been consolidated through an overhaul of the Professional Training Programme, resulting in a further increase in graduate employment for 2007/08. (www.surrey.ac.uk/)

Indeed, the Confederation for British Industry has recently cited the University of Surrey as a model of good practice for its

clear approach to employability which is set out in its vision statement. Students are encouraged to acquire life and work skills alongside their academic achievements. The university continues to develop and strengthen activities which allow students to develop these skills which will help them to stand out from the competition and make a valued contribution to society (CBI 09:26)

Defining and assessing 'employability'

Notions of employability and partnerships with industry were integral to the University's Royal Charter, conferred in 1966 (available at www.surrey.ac.uk/), and have been embedded in successive policies and strategies (e.g. Learning and Teaching Strategy 2004-2014, Strategic Objective ii). But what do we mean by 'employability'? What skills and qualities does it imply?

Writers recognise the complex and elusive nature of the elements the term comprises. For some, it is

a construct that goes well beyond the boundaries of 'key skills' and similar terms. It sits at the conjunction of a number of discourses that include the subject discipline(s) studied; both the individual and social psychology; communication; organisational sociology; and perhaps elements of management and finance. (Yorke and Knight, 2006:21)

One of these authors has subsequently attempted a finer definition:

Employers value graduates who have 'soft' skills, graduate attributes and complex achievements, all of which can be described as 'wicked' competences: an achievement, such as creativity or critical thinking, cannot be precisely defined, takes on different shapes in different contexts and is likely to keep on developing. (Knight, 2007:1)

The CBI has endorsed this mix of theoretical knowledge, practical experience and personal qualities in its recent call for UK universities to develop

⁴ The University of Surrey began life as Battersea Polytechnic, founded 1891, and became Battersea College of Technology in 1957. It was granted University status in 1966.

A set of attributes, skills and knowledge that all labour market participants should possess to ensure they have the capacity of being effective in the workplace – to the benefit of themselves, their employer and the wider community. Skills include self-management, team working, business and customer awareness, problem solving, communication and literacy, application of numeracy, application of IT.

Underpinning all of these attributes, the key foundation, must be a positive attitude: a 'can-do' approach, a readiness to take part and contribute, openness to new ideas and a drive to make these happen (CBI, 2009:8)

If the final sentence recognises the difficulty of achieving this ideal of 'employability' without student engagement, it makes no reference to the difficulties of producing a curriculum which facilitates the development of these skills, competences and qualities. Already, four years ago, writers were warning of the need to revise our perception of university programmes:

Curricula in Higher Education in the 21st century can be understood as intended educational processes that give expression to 3 domains – of knowing, doing, being. (Barnett and Coate, 2005:49)

And here, of course is the rub: academia has traditionally been concerned with disciplinary 'knowledge', based on an assumption of there being a solid, immutable base, on which future empirical facts can be built, and the acquisition of which can be tested objectively. Questions for curriculum design and assessment abound when the outcomes associated with employability are addressed. Should these fuzzy, 'wicked' competences be developed within the formal curriculum? If so, should this be through discrete units or through integration across a programme of study? Latterly, the government has even indicated (Burgess, 2009) that it is reconsidering the whole notion of curriculum, extending it to include the multifarious experiences, both formal and informal, whether having pre-determined or spontaneous learning outcomes, that students undergo during their university years. This would no longer be assessed through award of a final degree classification, but by recording the experiences, awards and so on, on a report card. Initiatives such as these challenge academic traditions and fears are expressed in terms of 'dumbing down' standards (e.g. BBC, 2003).

It is beyond the scope of this chapter to go into detail of the extensive range of issues surrounding definitions of apparently innocent terms such as 'curriculum' or 'work-based learning'; nor is it possible to explore more fully the literature on educational philosophy, curriculum planning and assessment. Interested readers are referred to a forthcoming report, (working title) *How do we develop professional capability through the undergraduate curriculum?: A Work Integrated Learning Perspective* (Willis, 2010).

Epistemological alliances

Over the years in which I have been the analyst for the annual professional training student survey, I have attempted not to pre-empt patterns in the qualitative data. Nevertheless, it has been consistently the case that the experiences students perceive to have been significant are congruent with a model for professional development proposed by Yorke and Knight (2006). According to this (USEM) model, there are four areas of development: Understanding (propositional learning), Skills (procedural learning), Efficacy Beliefs (e.g. self-confidence) and Metacognition (critical reflection upon the learning process). My reports for the first three years (Willis 2003/4 and 2005/6), derived an analytical model similar to that of Yorke and Knight.

More recently, my own thinking has been considerably influenced by the work of Barnett (2003, 2009) which relates professional development to *knowing, doing* and hence *becoming/being*. Another significant influence has been Michael Eraut who, as an advisor to SCEPTRe, has familiarised us with his longitudinal studies of how professionals learn in the workplace (Eraut et al, 2004; Eraut, 2007). He proposes eight learning trajectories along which professionals progress, subject to contextual factors and workplace relationships. The trajectories are: task performance; awareness and understanding; personal development; academic knowledge and skills; role performance; teamwork; decision making and problem solving; judgement. In other words, professional capabilities include knowing, doing, and personal qualities and dispositions, as for Barnett.

Whilst familiar with these and other models of professional development, I sought, as far as possible, to approach the emergent data from my research with an open mind and not to interpret it initially within an extant model.

The research questions

It was in this local and national context of 'employability', and against my experience of student feedback on their professional training that I formulated the questions for my Fellowship research. They were:

- Can we identify and draw benefit from the student PT experience in order to enhance the curriculum?
- What can we do at Level 3 to build on and extend the development of those who undertook a placement year?
- What can we do to enhance Level 3 for all students, including those who did not undertake a placement year?

The desired outcomes of the research were purely pedagogical, intended to inform curriculum planning and hence improve student learning in the sphere of professional development, both during a period of placement and within the curriculum experienced by all, including those who do not go out on placement. I had conducted research in 2005 and 2007 on the reasons why some students opt out of the opportunity for PT (Willis, 2009a), and in a period of recession, it was likely that the proportion of students not having a placement would increase.

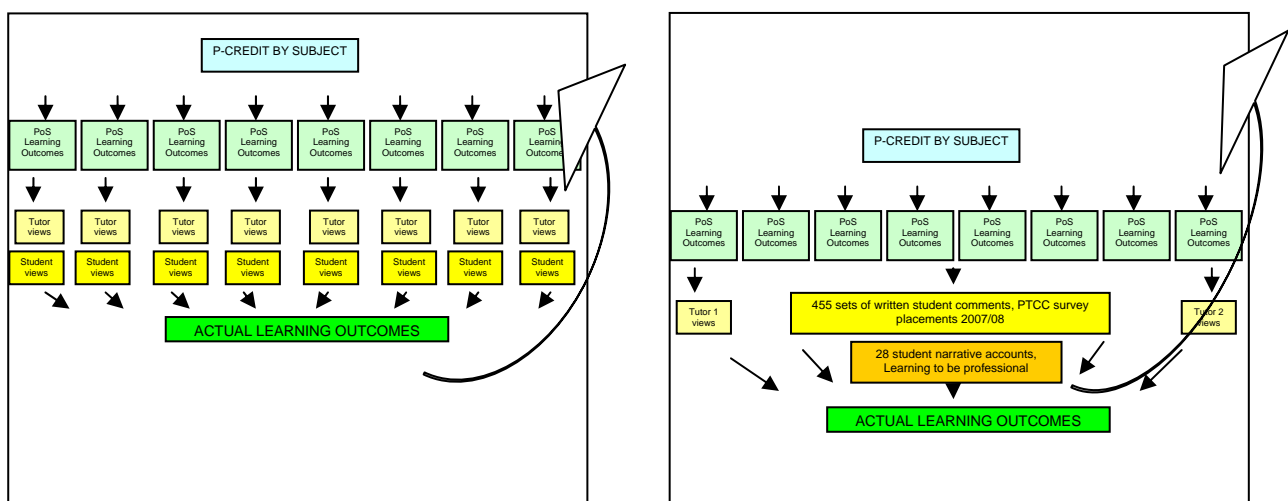
The remainder of this article looks at the research, its methodology and findings.

The research project

Methodology

My original intention was to produce a curriculum map showing how each subject interpreted the broad framework for professional training and assessment, in order to establish intended learning outcomes indicative of departmental notions of professional capabilities. I would then follow this up by interviewing academics within each department. Their views would be triangulated with the perceptions of students in order to compare desired and actual (perceived) learning outcomes. In the event, the scale of this was unmanageable, so I replaced the interviewing of staff with another data set showing student perceptions: there were 455 sets of qualitative feedback from the annual survey of students who had been on placement in 2007/08, which I had already transcribed and used for a different purpose. I now looked again at these, from this different perspective. Student views were also elaborated in extended narratives submitted for SCEPTRe's reflective learning competition 2008/09, Learning to be Professional. I had been a judge for this competition and was deeply impressed by the richness of these accounts⁵. The 28 narratives provided a data set with which to compare student experiences and perceptions of professional learning gained through work placement. Figure 1 summarises the intended and actual research instruments and process.

Figure 1 Intended (left) and actual (right) research instruments and process



⁵ These accounts and a synthesis can be accessed at: <http://learningtobeprofessional.pbworks.com/Student-stories-of-placement-experiences>

Departmental interpretation of University PT framework

As discussed above (page 3), the University's framework for PT is based on QAA guidelines and has been kept sufficiently broad to allow for variability between disciplines, whilst aiming at consistency of standards. To qualify as professional training, placements must last for a minimum of 30 weeks if unpaid, and 46 weeks if paid. They generally take place in the third undergraduate year, and have agreed learning objectives, which are assessed through various means by a University visiting tutor and by the workplace supervisor. 120 credits are awarded for successful completion of the placement year. In some subjects, these credits are scaled to contribute to the final degree awarded, but in most, the year is accredited by a separate award. At the time of writing this article, the original award, Associate of the University of Surrey, has been discontinued and a replacement is being considered, perhaps one which would give life-wide recognition as envisaged by recent government proposals cited above. Figure 2 shows the 3 general aims of the placement period, and the University assessment framework.

Figure 2 The University of Surrey Framework for Professional Training

Level P descriptor:

Develop and/or apply theory and develop skills independently in external educational settings or in practical and operational contexts;
Develop knowledge and skills which can contribute to subsequent project work and study;
Develop transferable skills and improvement in presentation, communication, team-working and interpersonal skills in a professional context.

Assessment must comprise:

[Areas below may be combined]	% of 120 P credits
Student performance in workplace assessed by employer	30-50
Student report(s)	30-50
Oral presentation by student	up to 10
Report by visiting tutor	5-20
Student participation in briefing and debriefing	up to 20
Additional academic work during placement	up to 30

By mapping the curriculum for the professional year, I would have an overview of how the University as a whole interprets this framework, and a clear summary of intended learning outcomes, hence an indication of what 'professionalism' is perceived to comprise. Table1 overleaf reproduces the findings.

The diversity of departmental arrangements was stunning, revealing tangentially differing values regarding whose role it is to conduct assessments and the nature of those assessments e.g. between Mathematics and Dance. In some cases, it appeared that mere attendance of a briefing gains credit.

While a useful starting point, the map raised as many questions as it answered. Most importantly, it did not provide evidence of how students are expected to achieve these professional learning outcomes. For this, I would need to turn to the students' own qualitative data.

Students' perceived professional learning outcomes – 1

Using a threaded approach for my analysis of the 455 questionnaires' qualitative data, I identified four key themes. These were:

- Development of personal qualities
- Development or acquisition of generic skills

- Development or acquisition of subject specific skills
- Application or acquisition of subject knowledge

Table 1 Map of University of Surrey Assessment and Accreditation of Professional Training, 2009

ASSESSMENT AND P CREDITS		ASSESSMENT MODE						
Faculty	Programme	By workplace	Student report	Presentation	By visiting tutor	Attendance of briefing/debriefing	Additional academic work	TOTAL P CREDITS
FAHS	Music	40	10 + 30	10	20	10		120
	Music & sound Recording	40	20 + 30	10	20			120
	Dance & Culture	*			* = 70	10	40 Reflection	120
	Economics L100	60	35	10	15			120
	Psychology	45	40	10	25			120
	Sociology	45	40	10	25			120
	Applied Psychology and Sociology	45	40	10	25			120
	Politics	50			20	5 + 5	40 Essay	120
	Foreign language	30	10*** + 60	With ***	20			120
	Foreign language	15	10 + 25		10			60 (20 weeks)
FHMS	Biosciences (1 placement)	40	10 + 50		20			120
	Biosciences (2 placements)	30	30 + 30		30			120
	Chemistry BSc	3 x 5 + 25	15 + 40	10	3 x 5			120
	Chemistry MChem	2 x 2.5		15 + ** IndustD	2.5 + 7.5		** Poster	30 P credits
	Nutrition/Nutrition Food Science	40	10 + 50		20			120
	Dietetics							
	Nursing Studies							
FEPS	Computing	**	40		** 30 + 35		15 log	120
	Mathematics		40		30 + 35		15 log	120
	Electronic Engineering	65	15 + 25				15 log + paperw	120
	Physics	30	45	5	20			% of 120
	MMAE / ETITB	45	25 + 25	5	20			=10% of degree
	Civil Engineering	45	25 + 25	5	20			=10% of degree
FML	Management	20	60		10	20 46 weeks	10 PTO module	120
	Law (per placement)	30	10		10	10		60

A few quotations will illustrate the nature of perceived learning.

Much more confident i.e. can now talk to people high up in the company, e.g. directors.
(Business Management Student)

I have learnt the value of confidentiality and flexibility within the workplace.
(Student of Applied Psychology and Sociology)

Learning how to conduct myself in the office and at client meetings has been invaluable. (Law Student)

Time management and meeting deadlines are absolutely crucial in this pressurised environment. I have changed. My punctuality has increased immensely. I have not been late nor have I missed any lectures so far. I am more driven to do well and be successful as I have been around many successful people. (Business Economics with Computing Student)

More aware of the various opportunities in industry in my Faculty. Challenge of applying theory to real problem solving in industry & general principles of work ethics and standards. I've seen and applied my education/knowledge in the real world hence see more purpose in my course subjects than I had viewed them in my 1st and 2nd years. I've certainly developed professionally as well.
(Chemical Engineering Student)

These outcomes are clearly reminiscent of the USEM model discussed above, but I worked on the data to extract student's own perceptions before comparing them with other models. 28 subsets were identified for personal qualities, 35 for generic skills, 45 for subject specific skills and 45 for subject knowledge. A matrix was produced for each theme, with the subsets tracked across the four Faculties (Figure 3). The details of each subset can be found in the project report (Willis, 2009b).

Figure 3 Matrix of student perceptions of outcomes from Professional Training by Faculty

Faculty	Personal Qualities	Generic Skills	Subject Skills	Subject Knowledge
Arts & Human Sciences	19	20	18	17
Engineering and Physical Sciences	12	26	14	19
Health and Medical Studies	6	18	12	16
Management and Law	12	20	10	7
TOTALS	28	35	45	45

I then tested the emergent issues against Eraut's learning pathways. I began by colour coding his 8 pathways. Figure 4 below shows the colour used for each trajectory and the details he lists within them.

Figure 4 Eraut's (2007) Learning Trajectories

Learning Trajectory	Details
TASK PERFORMANCE	Speed and fluency Complexity of tasks and problems Range of skills required Communication with a wide range of people Collaborative work
AWARENESS AND UNDERSTANDING	Other people: colleagues, customers, managers etc. Context and situations One's own organisation Problems and risks Priorities and strategic issues Value issues
PERSONAL DEVELOPMENT	Self evaluation Self-management Handling emotions Building and sustaining relationships Disposition to attend to other perspectives / to consult and work with others / to learn and improve one's practice Accessing relevant knowledge and expertise Ability to learn from experience
ACADEMIC KNOWLEDGE & SKILLS	Use of evidence and argument Accessing formal knowledge Research-based practice Theoretical thinking Knowing what you might need to know Using knowledge resources (human, paper, electronic) Learning how to use relevant theory in a range of practical situations
ROLE PERFORMANCE	Prioritisation Range of responsibility Supporting other people's learning Leadership Accountability Supervisory role Delegation Handling ethical issues Coping with unexpected problems Crisis management Keeping up-to-date
TEAMWORK	Collaborative work Facilitating social relations Joint planning and problem solving Ability to engage in and promote mutual learning
DECISION MAKING AND PROBLEM SOLVING	When to seek expert help Dealing with complexity Group decision making Problem analysis Formulating and evaluating opinions Managing the process within an appropriate timescale Decision making under pressure
JUDGEMENT	Quality of performance, output and outcomes Priorities Value issues Levels of work

In effect, I was simply replacing his details column with the issues cited in the student feedback. To do this, I needed to map each of the subsets against the Learning Trajectories. Figure 5 illustrates the principle for the first key theme, Personal Qualities. So, for example, confidence is related to aspects of personal development, role performance and judgement.

Figure 5
emergent
learning

PERSONAL QUALITIES Acquired/developed	TRAJECTORIES							
	1	2	3	4	5	6	7	8
Confidence			Yellow		Orange			Green
Incentive/motivation			Yellow					Green
Self-awareness/strengths			Yellow					Green
Maturity								
Responsibility					Orange			
How to handle new situations					Orange			
More focused / disciplined			Yellow					
Taking the initiative / proactive					Orange			
More altruistic		Pink						
Stand up for rights / assertive			Yellow					
Become a better person			Yellow					
More thorough	Cyan							
Better able to concentrate			Yellow					
More willing to learn			Yellow					Green
Confidentiality		Pink						
More patient			Yellow					
More common sense			Yellow					
Reliability			Yellow					
How to balance work/personal life								Green
Better work ethic		Pink						Green
Coping with pressure					Orange			
More open minded / flexible		Pink						
More productive	Cyan							
Independence			Yellow					
Stronger person			Yellow					Green
More realistic view of work		Pink						
Handle emotion			Yellow					
Tenacity			Yellow					

Mapping
themes against
trajectories

The same exercise was carried out for each of the four themes. Predictably, the elements relating to subject specific skills all fell in columns 2 (awareness and understanding) or 4 (academic knowledge and skills), whilst those for subject specific knowledge were, with rare exceptions, in column 2. The most interesting finding came from the analysis of theme 2, generic skills. The colour coding makes this immediately apparent, as can be seen in Figure 6 below.

When read horizontally, this visualisation enables us to see that the opportunity and responsibility involved in managing a project potentially provides students with experiences which will nurture learning across all eight learning trajectories. This is clearly a valuable finding for curriculum planning.

Figure 6 Mapping generic skills against learning trajectories

GENERIC SKILLS Acquired/practised	TRAJECTORIES							
	1	2	3	4	5	6	7	8
Team work						Red		
Working independently			Yellow			Red		
Inter-personal skills		Pink				Red		
Communication (oral, written, etc)	Cyan							
Time management, planning					Orange			Green
Organisation		Pink			Orange			
Networking	Cyan							
How to behave in the workplace		Pink						
Coping with pressure/ stress					Orange			
Leadership					Orange			
Punctuality					Orange			
Project management	Cyan	Pink	Yellow	Light Green	Orange	Red	Blue	Green
Report writing				Light Green				
Making presentations			Yellow					
IT skills				Light Green				
Adaptability			Yellow					
Problem-solving							Blue	
Active listening	Cyan							
Working 9-5			Yellow					
Multi-tasking	Cyan							
Coping with/behaving in meetings		Pink						
Interviewing skills				Light Green				
Research				Light Green				
International travel				Light Green				
Decision-making							Blue	
Negotiation								Green
Helping/supporting others					Orange	Red		
Conducting literature review				Light Green				
PDP e.g. CV writing			Yellow					
Assessing self and others		Pink						
Analytical skills				Light Green				
Assessing cost effectiveness								Green
Money management							Blue	
Minute taking				Light Green				
Observation skills				Light Green				

But an equally important finding emerged when the data for each of the four themes were collated and compared against the learning trajectories (Figure 7 below). Colour coding once more draws attention to the significant factors: reading Figure 7 vertically, it is apparent that generic skills address elements of each of the learning trajectories. This confirms that however elusive they may be to develop and assess, generic skills are central to professional development.

The figures in the cells of this matrix represent the number of emergent issues for each cell theme e.g. there were 2 aspects of personal qualities related to task performance, and 5 generic skills related to task performance.

Figure 7 Summary of emergent themes and learning trajectories

	Personal qualities	Generic skills	Subject skills	Subject knowledge
TASK PERFORMANCE	2	5		1
AWARENESS AND UNDERSTANDING	5	6	45	43
PERSONAL DEVELOPMENT	16	6		1
ACADEMIC KNOWLEDGE & SKILLS		10	45	1
ROLE PERFORMANCE	5	7		1
TEAMWORK		5		
DECISION MAKING/PROBLEM SOLVING		4		
JUDGEMENT	7	4		

Figure 7 is offered as a model for conceptualising professional development, but is not written in stone: individual circumstances will vary the detail, but by applying this principle, curriculum planners can attempt to build in appropriate learning experiences, and assessors and/or learners can analyse perceived outcomes.

Students' perceived professional learning outcomes – 2

Having tested the methodology, I now analysed the 28 *Learning to be Professional* student narratives. There were fewer sets of feedback to study here, but each narrative was qualitatively more detailed than the questionnaire comments. The different scale of this data source led me to look directly at the factors that the students identified, either explicitly or implicitly, as relevant to their learning to become professional, rather than to start with the four key themes found in the questionnaire feedback. 32 factors emerged. They were grouped loosely and were tracked across every narrative. Figure 8 illustrates the analysis for four of the narratives.

Figure 8 Student narratives: emergent factors

	1	2	3	4
Responsibility/trust				
Delegation to/training others				
Budget management				
Feeling valued				
Seeing through start to end				
Unpredictability, ad hoc tasks				
Variety				
Apply coursework/vice versa				
New skills/knowledge				
Challenge				
Demotivation through lack of				
Inspiring/enthusiastic staff				
Role models in workplace				
Networking				
Hospitality/socialising events				
Communication different levels				
Workplace behaviour				
Being part of team				
Independence				
Time management, prioritising				
Organisation				
Punctuality				
Attention to detail				
Job application processes				
Benefits of work experience				
Report writing				
Written skills				
Presentation giving				
Cultural awareness				
Volunteering additional tasks				
Additional qualifications				

Each student's narrative revealed a different combination of perceived learning. This is patently subjective, and the analysis could not evaluate the depth of learning claimed, nor its relative importance. Nonetheless, the most frequently cited factors claimed were:

- Being given responsibility/trusted (24)
- Feeling valued (18)
- Having a variety of work (20)
- Applying coursework/being able to apply workplace learning to their programme of study (20)
- Acquiring new skills or knowledge (23)
- Having challenging work (23)
- Learning to communicate with different levels/types of people (19)
- Being part of a team (26)
- Independent working/self-direction (19)
- Time management (19)
- Organisation (19)

As before, and using the same colour coding, the emergent themes were mapped against Eraut's eight learning trajectories. Figure 9 shows the resulting analysis. Column N totals the number of narratives where a theme is present e.g. 24 of the 28 narratives mentioned responsibility/trust, a theme that is related to trajectory 5, role performance. Once more, a lateral reading reveals the perception that seeing through a task from start to end (as in a project) supports potential learning along each trajectory.

Figure 9 Narratives: mapping emergent themes against learning trajectories

EMERGENT THEMES	LEARNING TRAJECTORIES								N
	1	2	3	4	5	6	7	8	
Responsibility/trust					1				24
Delegation to/training others					2	1			9
Budget management				1					3
Feeling valued		1							18
Seeing through start to end	1	2	1	2	3	2	1	1	9
Unpredictability, ad hoc tasks					4		2		10
Variety				3			3		20
Apply coursework/vice versa				4					20
New skills/knowledge				5					23
Challenge	2		2		5				23
Demotivation through lack of	3		3						1
Enabling career decision							4		17
Inspiring/enthusiastic staff		3						2	12
Role models in workplace			4					3	4
Networking	4		5			3			11
Hospitality/socialising events			6			4			12
Communication different levels	5	4	7			5		4	19
Workplace behaviour		5				6			16
Being part of team	6					7			26
Independence		6	8				5		19
Time management, prioritising					6			5	19
Organisation		7	9						19
Punctuality			10						6
Attention to detail								6	10
Job application processes		8		6					10
Benefits of work experience		9					6	7	10
Report writing				7					7
Written skills				8					10
Presentation giving				9					7
Cultural awareness		10							6
Volunteering additional tasks	7								9
Additional qualifications				10					3

Learning Trajectories Key

1 Task Performance 2 Awareness and Understanding 3 Personal Development 4 Academic Knowledge/ Skills
5 Role Performance 6 Teamwork 7 Decision Making/Problem Solving 8 Judgement

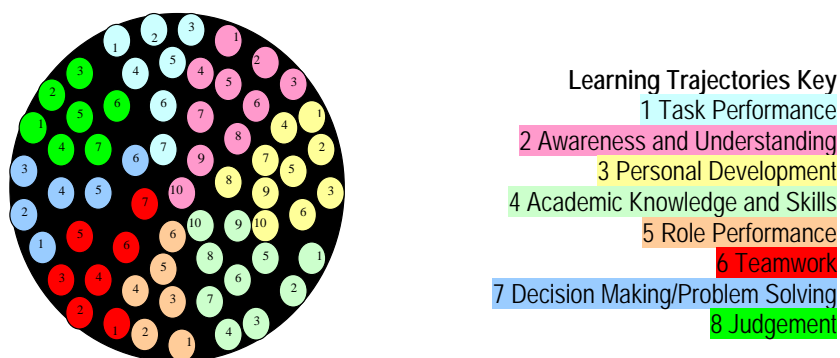
By reading down the columns, the number of themes mapped against each learning trajectory can be calculated e.g. there are seven in trajectory 1, task performance.

Towards a conceptualisation of professional development

My next step was to codify each of the 32 themes, according to their related trajectory. So, for example, in Figure 9 responsibility/trust belongs to trajectory 5, and becomes 5.1; delegation to/training others becomes 5.2, but it also belongs to trajectory 6, where it is coded 6.1. The figures in each of the coloured cells indicate the coding allocated.

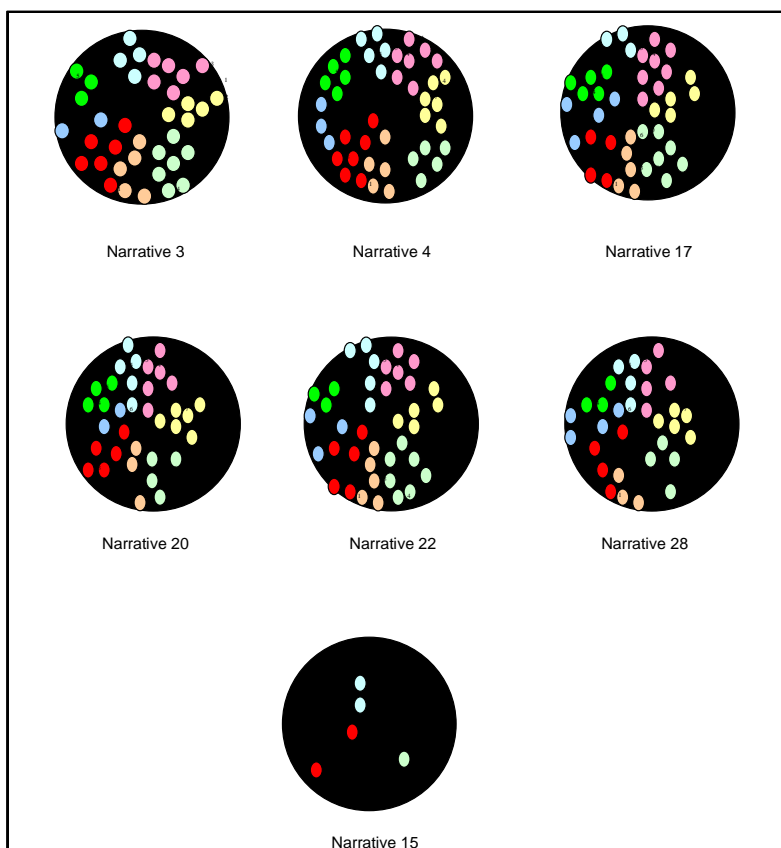
Once they were coded, I converted the 32 learning factors into a cord, a rope in which they can be plaited according to professional experience. If all factors are present, a cross-section of the rope would look as illustrated in Figure 10.

Figure 10 The rope of professional development



It is now possible to envisage each student's narrative, thereby having an image of their perceived professional development at that stage in time. Every experience will be unique, and will change over time. Figure 11 provides some examples of this diversity.

Figure 11 Individual perceptions of professional development



Narrative 15 reminds us once again of the subjectivity of perceptions: this student may, on the surface, appear to have experienced less professional development than the others, but in fact, her experiences were life-changing. Her perceptions were also very self-critical, and readers might have been more generous in their interpretation of her experience. The case study behind each of these images can be found in the fellowship report (Willis, 2009b).

Where next?

The research has provided insight into the experience of professional development, indicating some ways in which curriculum planners may offer opportunities for such development within the curriculum. The importance of projects as a means of encouraging development along all eight of Eraut's trajectories has been highlighted. The emergent factors have been found to confirm this model and also the need to recognise Barnett's three dimensions of professionalism: knowing, doing and being.

Unexpectedly, the analysis had led to a conceptualisation that builds upon previous research by Eraut. It aims to inform curriculum planners, by offering them a principle that can be adapted to local circumstances. This creates a scaffold on which learning opportunities conducive to professionalism can be built. Examples of how the model may be used and adapted are included in the report (Willis, 2009b).

The model also provides a means of visually monitoring professional development. Both individual learners and academic staff can use it to capture the perceived learning at a specific moment. By repeating this exercise, a longitudinal picture of individual development is created. The colour coding highlights areas where there may be a need to offer more or less opportunities, thereby balancing the potential for learning across each trajectory.

The subjectivity of this image has been noted, and cannot be avoided. Some internal objectivity lies in the same individual monitoring development over time, but even here, it is likely that perceptions and expectations will evolve and unconsciously different standards will be applied. It has also been acknowledged that the current absence of does not attempt to quantify the depth or importance of learning. A simple means of building this into the model would be to use gradations of shading within each colour e.g. pale tones for slight learning, up to dark tones for extensive learning. This would remain subjective, but adds a further dimension to the visualisation.

The model has been well received by colleagues both in the UK and internationally. It has been trialled in the pilot of a study into supporting and recognising students' part-time work (SCEPTrE, 2009) and has been adapted for use in a higher education institution in Portugal.

I began by recognising the additional pressures I felt, as a boundary-crosser, to produce a tangible outcome from this research. I am hopeful that I have achieved this and am building upon the experience to take forward my research into professional development across the whole curriculum. I would encourage others to follow SCEPTrE's example and take the risk to challenge traditional boundaries.

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