

## Some implications of European initiatives for doctoral supervision



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### Abstract

There has been a significant and welcome emphasis on doctoral education in the last five years and there is wide agreement that ‘original research’ is the key definition of what doctoral education is about. However this term ‘original research’ requires further explanation and there is a need for clearer statements about what defines doctoral level work. This article reviews some of the recent European initiatives on the doctoral process and begins a discussion about what that might mean for supervisor development. It looks firstly at one way of framing good practice in a one to one supervisor relationship, and then identifies who might be involved in creating a supervisory team. It reviews the impact of the growth of graduate schools and the pressures to create collaborative centres of excellence for research, and looks at the implications for supervisor development.

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## 1. The last five years in doctoral education in the EU

### Early stage researchers

It is now recognised that doctoral students (also called early stage researchers or ESRs for short) hold many of the keys to the development of the university and research worlds as a community (using the word 'community' in its widest sense). There is now evidence of an international desire to protect and develop these researchers, whereas until recently this desire has often been an individual or departmental one.

### Multidisciplinary research teams

The relationship between student and supervisor is still central to the doctoral process (see section 2.2 below) but the doctoral student or ESR is no longer the property of the individual academic or supervisor, working in splendid isolation. They may be employees as well as students, they frequently work in teams, they may be supervised by teams and belong to Graduate Schools which might be interdisciplinary or even inter-university. Skills of networking and cross-cultural competence, of marketing and project management are recognised as being crucial if the output of original high quality research is to be maximised.

### Bergen Communiqué

The desire to increase the number of ESRs was agreed by European Ministers in the Bergen Communiqué (2005) as part of the Bologna process. While the Communiqué emphasised the need to avoid over-regulation of doctoral programmes, Ministers also said that they recognised that the normal workload for a doctoral programme would last 3-4 years and that they wanted programmes to meet the wider needs of the employment market.

### Recruiting high quality students

The ambitious Lisbon Agenda set a target of 3% of the European GDP to be spent on research and development (Kok 2004). Recruiting high quality students and ensuring that funding is in place is a key function of universities. The master student remains the main point of entry for doctoral research programmes, but it is not the only point at which students can begin their PhD, and institutional flexibility is important on this point. Research suggests that high quality supervisors take an active and proactive role in recruiting high quality students (Lee 2008, 2009).

### New doctorates emerging

New doctorates are emerging as a response to demands from the global labour market. These are known variously as professional doctorates, practitioner doctorates, industrial doctorates and European doctorates. They include taught courses and a shorter thesis which is usually focused on the application of new knowledge to professional practice. They are particularly (but not exclusively) appropriate for experienced employees who can undertake part-time study. The debate about the purpose of the doctorate is being widely held in the UK

(Park 2007) and has led to a search for agreement about the competencies and attributes required of the ESR.<sup>1</sup>

Doctoral schools are becoming established, and these inevitably shift the emphasis from an individual to a more structured programme (Woodward, Denicolo, Hayward and Long 2004). An EUA Trends survey showed that by 2007 29% of universities in Europe had established doctoral schools. There is a shift from individual based to structured programmes, and 49% of other doctoral programmes included a taught course, leaving only 22% of doctoral programmes offering only individual tutoring by the supervisor (Crosier, Purser and Smidt 2007).

**Shift to structured programmes and doctoral schools**

It is much easier to run research methods programmes for a cohort of doctoral students, than to ensure that each individual supervisor teaches these methodologies and methods to their student. A concomitant advantage of this approach is the development of what Hockey (1994) called the 'research subculture'. Students supporting students in their enquiry is a phenomenon being encouraged in the undergraduate curriculum by those with a constructivist and enquiry-based learning approach to curriculum design, and it provides an equally useful mechanism for many ESRs.

**Encouraging research**

There are several key studies of differences and similarities between the disciplines (Becher and Trowler 1989; Donald 2002; Golde and Walker 2006; Golde 2007). There is a difference between different disciplinary practices – otherwise known as signature pedagogies (e.g. journal clubs, laboratory research teams, reading lists) and the core of the analytical process, plus the view being taken of what 'knowledge' actually is. Knowledge can be seen as largely stable and clearly verifiable (e.g. some maths), or emergent, tricky and political (e.g. human sciences) different teaching skills may come to the fore for each.

**Disciplinary similarities and differences**

Another very interesting study of critical thinking, problem solving and communication skills found some significant differences between the disciplines of history, physics, economics, law and medicine. Several academics from each discipline were interviewed and the resulting analysis found that (for example, looking at problem solving) historians were interested in causality; physicists defined problems as well and ill structured, and used mathematics for solving and were concerned about rigour; economists used economic tools and applied theory to practical or policy issues; law was concerned with critical

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<sup>1</sup> For further discussion on the topic of the professional doctorate, please see Eggins, H. (2009): *The Professional Doctorate: a response to 21<sup>st</sup> century requirements for European Higher Education?*, article C 4.4-5 in this Handbook.

thinking and practical applications, and medicine required contextual thinking, deductive, diagnostic and therapeutic skills (Jones 2009).

Initial research on disciplinary differences, and the use of the conceptual framework outlined in Section 2.2 below, indicates that different disciplines may have slightly different preferences but they all recognise and use each of the different approaches.

### A brief history

#### Some key markers

A number of key events have marked the period leading up to and following the Bergen Communiqué of 2005. In 2004 the EUA launched the first project under its Doctoral Programme, and also in 2004 the 'Dublin Descriptors' described the qualities desired of doctoral education. The Salzburg Principles, a set of ten basic principles for the third cycle, were published in 2005 and fed into the Bergen Communiqué, also in 2005. The London Communiqué, at the following Bologna process meeting of Ministers, was published in 2007, and in 2008 the EUA launched the Council on Doctoral Education<sup>2</sup>.

#### Salzburg Principles

The Salzburg Principles reinforced the emphasis on original research carried out under a senior scientist, within a high quality scientific environment of strong research groups and as a full-time professional experience. They also emphasised the crucial role of supervision and assessment and instigated a code of conduct for the recruitment of researchers which asked for regular follow-up of the student's progress. They promoted innovative structures to meet the challenge of interdisciplinary training and the development of transferable skills and called for appropriate and sustainable funding for both quality programmes and candidates.

#### Banff Principles

In 2007 an international group of graduate educators met in Canada, and published the Banff Principles, which included a desire to improve the quality of graduate programmes, employability of postgraduates and, crucially, to encourage inter-university collaboration.

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<sup>2</sup> For a full discussion on the place and development of the doctorate in the Bologna process, please see the following articles in this Handbook: Scott, P. (2007): *The global context of doctoral education*, article C 4.4-1; Chambaz, J., BiauDET, P. and Collonge, S. (2007): *Developing the doctorate*, article C 4.4-2; Bitusikova, S. and Wilson, L. (2008): *Doctoral programmes in Europe*, article C 4.4-3.

The key points for doctoral supervisors are:

- Research is going to be concentrated in research intensive institutions. It will require critical mass and provide opportunities for collaboration between institutions.
- The principle of original research remains at the heart of the process. Key issues are transparency and quality of provision.
- There are three implicit or explicit contracts: between the institution and the supervisor, the supervisor and the student, and the student and the institution. These need to be understood.
- There is a move towards team supervision which affects elements of these 'contracts'.
- Doctoral students are expected to have transferable skills when they graduate and to have understood their employability.

**Handout C 4.4-6-1    The key points for doctoral supervisors**

## **2. The professional development of supervisors and supervision**

This section looks at what could be included in the professional development of supervisors. It proposes some ways that to explain how work at doctoral level can be recognised, proposes a framework for a conceptual approach to doctoral supervision, and explores the development of supervisory teams and graduate or research schools.

### **2.1 How can work at doctoral level be recognised?**

Seeking the twin virtues of transparency and quality means that one can no longer rely upon an examiner reading a thesis and saying "I know work at a doctoral level, when I see it".

### 2.1.1 Increasing emphasis on benchmarking and generic skills

#### QAA benchmarking statements

In the UK, the Quality Assurance Agency (2008) states in its benchmarking statements that doctorates should only be awarded to students who have demonstrated:

- The creation and interpretation of new knowledge, through on-going research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline and merit publication;
- A systematic acquisition and understanding of a substantial body of knowledge that is at the forefront of an academic discipline or area of professional practice;
- The general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline and to adjust the project design in the light of unforeseen problems;
- A detailed understanding of applicable techniques for research and advanced academic enquiry.

### 2.1.2 Defending “doctorateness”

#### Identifying innovation and scholarship

Trafford and Leshman (2008) suggest that “doctorateness” is demonstrated by combining a high level of innovation and development, with a high level of scholarship and interpretation. The sorts of questions that illuminate this quadrant are below.

Can the student:

1. Defend “doctorateness”?
2. Critique and analyse?
3. Conceptualise findings?
4. Develop conceptual frameworks?
5. Synthesise concepts?
6. Establish links/concepts?
7. Design research and operational fieldwork?

#### Handout C 4.4-6-2 Questions to identify innovation and scholarship

These are not the only questions to be covered in the assessment, but Trafford and Leshman argue that they are typical of the questions which distinguish what they call “doctorateness” from other research.

**2.1.3 The Dublin Descriptors**

The “Dublin Descriptors” have provided generic level descriptors for first, second and third cycles of higher education. An abstract of the descriptors at doctoral level is in the table below:

**Generic levels descriptors at doctoral level**

Generic skill	Application at doctoral level
Knowledge and understanding	<ul style="list-style-type: none"> <li>a systematic understanding of their field of study and mastery of the methods of research associated with that field</li> </ul>
Applying knowledge and understanding	<ul style="list-style-type: none"> <li>is demonstrated by the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity</li> <li>is in the context of a contribution that extends the frontier of knowledge by developing a substantial body of work some of which merits national or international refereed publication</li> </ul>
Making judgements	<ul style="list-style-type: none"> <li>capable of critical analysis, evaluation and synthesis of new and complex ideas..</li> </ul>
Communication	<ul style="list-style-type: none"> <li>With their peers, the larger scholarly community and with society in general, able to engage in dialogue about their areas of expertise (broad scope).</li> </ul>
Learning skills	<ul style="list-style-type: none"> <li>expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement.</li> </ul>

**Table C 4.4-6-1** Extract from the “Dublin Descriptors” (JQIA 2004)

There is a lively debate about the similarities and differences around research, views of knowledge, epistemology and ontology and critical thinking in the disciplines. This is relevant to supervisor development because their supervision will be influenced by the position that they take on these issues, for example about knowledge and whether it is atomistic, discovered and/or emergent (Jenkins, Healey and Zetter 2007).

**2.2 What is best practice in one-to-one supervision?**

This framework arose out of researching the conceptual models that academics have when approaching supervision (Lee 2008a, 2008b) and is now being extended to look at the conceptual models that academics have when teaching postgraduate students. Just as research has found variations in students’ approaches to learning, it has also

**Emergence of a conceptual framework**

found variations in academics' perceptions of context when teaching. There are also links between students' approaches to learning and teachers' approaches to teaching (Ramsden 2003, Prosser and Trigwell 1999). Cause and effect still have to be explored, but it can be surmised that the supervisors' approach to their doctoral student will have an impact on how that student will approach their research, and that the academics' approach to teaching postgraduate students will have an impact on how those students develop.

The research process behind this framework (which included interviews with supervisors in the UK and at Harvard University) is described in Lee 2008a and 2008b.

**Examination of different values, beliefs and concepts**

This framework enables examination of different values, beliefs and concepts. Its underlying premise is that an experienced academic will be able to move through and to any area, and, in relation to thesis writing, will set tasks as they become appropriate. As the student gains competence from each perspective, s/he will move through understanding the epistemology of the discipline to embodying an ontological perspective.

**5 main approaches identified**

Five main approaches were identified. They intertwine in a complex manner and, although they are disentangled here to aid analysis, it is not maintained that they are independent of each other.

The new academic will want to concentrate on mastering the processes involved in the functional approach, but once they are mastered they (and their students) will gain immeasurably from working with the other approaches as well.

The framework is integrative in that it includes organisational, sociological, philosophical, psychological and emotional dimensions. The five approaches to supervision that were identified were:

**Functional**

This approach is very important in helping the student to complete to a deadline. The academic is aware of all of the procedures and timetables that need to be followed and keeps appropriate records. They agree a project plan with the student and monitor progress. They are clear about the assessment criteria that are going to be applied for examining, and can communicate them to the student. They have an ethical approach to teaching and supervision and meet the requirements of departmental, institutional and European codes of practice.



Elements of the functional approach to supervision include:

- Understanding the level of work required
- Recruitment of students
- Obtaining funding
- Induction and arranging co-supervision
- Probation or transfer arrangements from M Phil to PhD
- Project management
- Research ethics and following relevant codes of practice
- Record keeping and preparing relevant material for postgraduate research boards
- Arranging the examination process

**Elements of functional approach**

### **“Enculturation”**

This refers to the process of socialisation or acculturation into the discipline, the working milieu (e.g. the academic department and the university) and the national culture. A person is “enculturated” when they are comfortable being or working at all these levels. They have learned the traditional content of a culture and assimilated its practices and values. Their membership of the relevant groups is accepted and others may seek their advice on such matters. It usually requires a long period of study and an ability to acquire tacit knowledge.

**Process of socialisation**

### **Critical thinking**

This approach has four aspects to it:

1. An understanding of different beliefs about knowledge and an ability to assess statements in relation to those beliefs;
2. An ability to define and evaluate the argument in a manner appropriate to the relevant discipline or discipline(s);
3. An ability to solve problems in a logical manner, and
4. To be able to reflect metacognitively on performance.

**Four aspects**

### **Emancipation**

In this approach the academic wants the student to find their own direction and values and to decide to apply them to their research. They offer support and challenge at appropriate times and are careful not to impose their own agenda. Supervision meetings will be

**Finding own direction and values**

characterised by the supervisor offering and seeking information and seeking the student's opinions. Occasionally they may decide to allow a student to fail at a particular task and then help the student to identify learning from that experience.

### Relationship

#### Characterised by friendship

Here teaching and supervision will be characterised by friendship. The academic and student will anticipate and normally avert unnecessary conflict. Problems will be solved with goodwill, and overt rationalisation will not always need to be expressed for either party to do what is requested. Appropriate boundaries will be observed but the student and supervisor may introduce each other to friends and family.

#### Complementary and permeable approaches

These different approaches are complementary, and the boundaries between them are permeable. They form a useful basis for disaggregating different beliefs and actions in the teaching and the supervisory processes. The five approaches can be placed in a diagram which moves from left to right, and they show how the academic can move from the purely professional to a more personal relationship.

If the academic is working on a functional approach, they will be acting professionally; if they are working from a place of a mutual relationship, then they will be acting more from their personal self. Both selves can combine and provide perfectly satisfactory supervision, but from the research it appears that the supervisor who is outstanding will be able to work from any of the five approaches as it becomes appropriate.

	Professional self <span style="float: right;">→ Personal self</span>				
	Functional	Enculturation	Critical thinking	Emancipation	Relationship development
Supervisor's activity	Rational progression through tasks	Gatekeeping	Evaluation challenge	Mentoring, supporting constructivism	Supervising by experience, developing a relationship
Supervisor's knowledge & skills	Directing, project management, negotiation	Diagnosis of deficiencies, coaching	Argument, analysis	Facilitation, reflection	Emotional intelligence
Possible student reaction	Organised, obedience, negotiator	Role modelling	Constant inquiry, fight or flight	Personal growth, reframing	Emotional intelligence

**Table C 4.4-6-2** A framework for concepts of research supervision (Lee 2008 a and b)

This framework can be interrogated in several ways, for example: each approach can be looked at in terms of problem-solving or moving the student from dependence to independence; supervisors can look at the professional and personal tensions that each approach might cause them; the model can be used as a way of identifying different approaches to academic writing; co-supervisors can each identify their strengths and any gaps in their overall strategy and supervisors and students can use the framework to share their expectations (Lee 2009).

### Using the framework

A pedagogy of research supervision is beginning to be formed out of a conceptual approach to the subject. That pedagogy builds on: the literature about communities of practice; various handbooks for supervisors (a practical, functional approach to supervision); the philosophical underpinning of the analysis of the argument; the language of transformative learning and of mentoring; and the need to pay attention to relationships in teaching and learning. It includes concepts such as constructivism, inter-cultural learning and metacognition. It is intended to introduce an holistic developmental pedagogy.

### Pedagogy of research supervision

## 2.3 How can supervisory teams be formed?

The EUA (2005) report on doctoral programmes recommends co-supervision as a way of encouraging transparency and cites the University of Leeds as an example of good practice:

### Co-supervision

*At the University of Leeds (UK) the candidate is assigned to a team of supervisors in one or more schools. As a minimum, the team consists of a principal supervisor and an advisor. In addition, the candidate has access to a postgraduate tutor. The candidate is entitled to a minimum of twelve meetings with the supervisory team.* (EUA 2005 p .23)

Figures C 4.4-6-1 and -2 below summarise the advantages and disadvantages of creating and being part of a supervisory team. For teams to work well together they do need to meet, to understand their respective roles and perspectives.

Advantages of creating and being part of a supervisory team:

- The student can access a range of advisers
- New supervisors can observe practice and be mentored
- If one supervisor leaves, the student will not be completely bereft
- Problems can be discussed from a range of angles and sometimes more creatively solved
- The primary supervisor can delegate some functions
- Placement/industrial supervisors can feel more included
- Personality clashes between student and supervisor can be less oppressive
- Working as a member of a supervisory team can contribute to and enhance your own research

**Fig. C 4.4-6-1 Advantages of creating and being part of a supervisory team**

Disadvantages of being part of a supervisory team:

- The student can become forgotten because every member of the team thinks they are someone else's responsibility
- Supervisors often have different views on how supervision should be carried out
- The student can be confused by receiving conflicting advice
- Team meetings can take time
- If this is the only method of supervisor training, new supervisors will have only seen one piece of research through from start to completion before taking primary responsibility for their own student (and team).

**Fig. C 4.4-6-2 Disadvantages of being part of a supervisory team**

### 2.3.1 Who can be included in a supervisory team?

Potentially there are a large number of people involved in helping the postgraduate researcher. If these people work well as a team, the load can be lightened for the individual supervisor and the research experience can be enhanced for the ESR. The team can include: the primary and secondary (or co-) supervisor(s), work-based or industrial supervisors, advisers, Director of Postgraduate Studies, postgraduate teaching assistant co-ordinator, laboratory assistants/technicians, postgraduate administrator and post-doctoral researchers. The ESRs themselves can be included as part of the team, and certainly their support for each other can make the whole experience much more successful. Some of the terms used to describe team roles may be unfamiliar and they have been further explored in Lee 2008b.

**Potential supervisory team members**

Other members of the university or college team are also key to the student experience, but are often not recognised as such. These include those organising transferable skills training, departmental co-ordinators of teaching assistants, the careers and library services, student counselling and financial advice centres, the student union postgraduate representative and the housing officers.

**Others important to student experience**

### 2.3.2 How much influence does the supervisory team have?

The influences on the doctoral student are difficult to identify. McAlpine and Norton (2006) describe a nest of influences around the student, with the department and disciplinary context at the centre. The institutional and societal contexts are their next sets of influences. Stimulated by this, the author proposes a slightly different model (see Fig. C 4.4-6-3), where some of the main influences are disentangled (although in practice they are overlapping and if it were possible they would more accurately be represented as a complicated Venn diagram.) The main message from this diagram is that the supervisor, the supervisory team and the department are vital, but the student is also working in a wider context where personal, political and cultural issues can also have a major impact.

**Main influences on doctoral student**

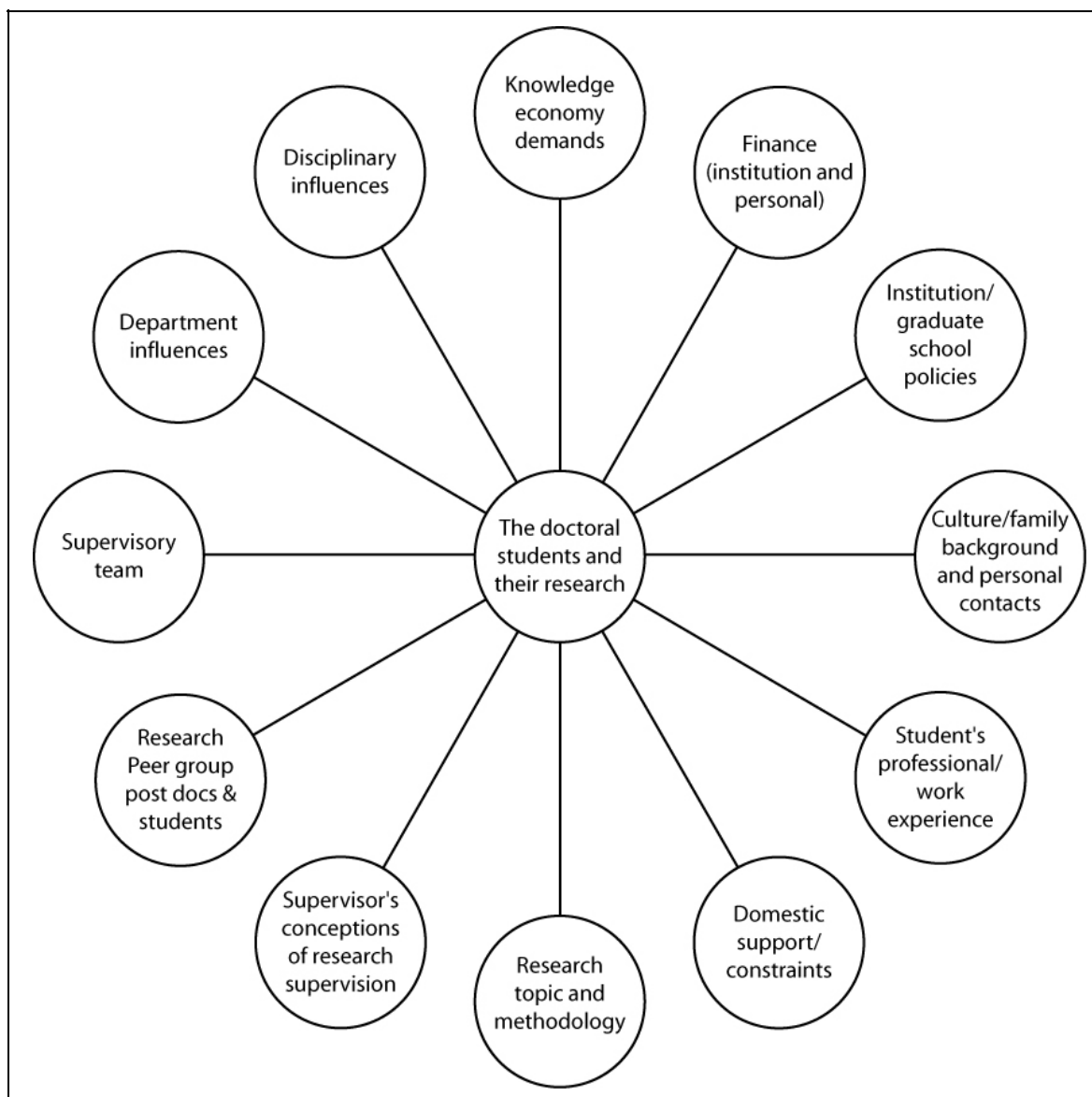


Fig. C 4.4-6-3 Influences on the doctoral student

## 2.4 The role of graduate schools

### Graduate school has become dominant model

In the UK, the older universities are more likely to have larger numbers of postgraduate students (ESRs) and therefore more than one graduate school. However they are designed, it is true to say that the graduate school has become the dominant model (Woodward *et al.* 2004). Supervisors within the graduate school model will have more

opportunity to be kept up to date with latest initiatives and students will have access to broader research methods programmes, information about transferable skills programmes and probably better information about functional and social activities.

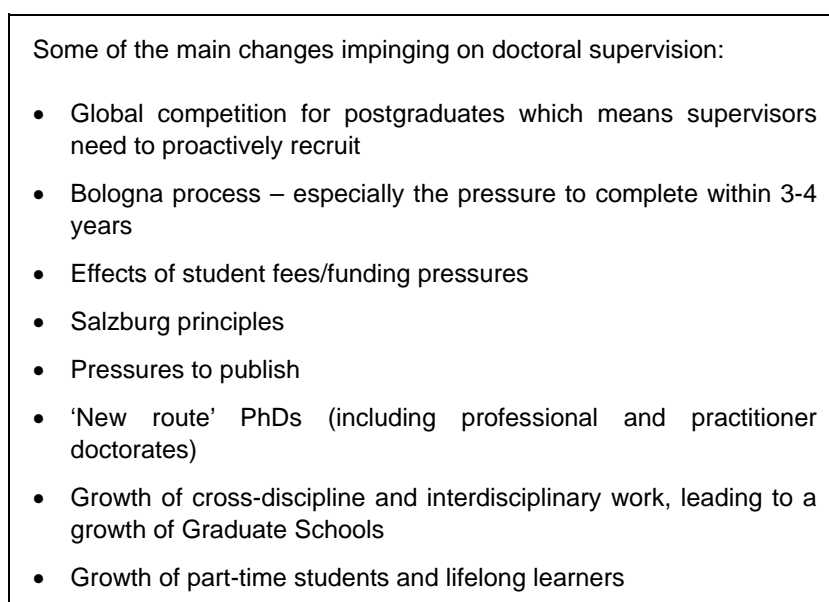
The burden of offering careers guidance can also be somewhat lifted from the shoulders of the lone supervisor in the graduate school.

Those who dislike graduate schools often do so because they want or need the independence that supervising on their own gives them. They frequently say that they do not want their student undertaking 'irrelevant' courses.

Graduate schools come in many shapes and sizes. They may have physical premises or be 'virtual', they may have substantial budgets or almost none. They may have a remit for including masters students or not, and they may or may not be mini-universities, with the expectation that they will organise their own marketing, registry and degree ceremonies. The review of graduate schools in the UK lays out a wide menu of options (Woodward et al 2004).

**Graduate schools have  
range of functions**

The developments that have been discussed above are only some of the issues that supervisors and their universities have had to face. Figure C 4.4-6-4 contains a longer list of these changes.



**Fig. C 4.4-6-4**

**Some of the main changes impinging on doctoral supervision**

### 3. The implications for supervisor development

#### **Supervisors will need new skills**

It is clear from the themes above that supervisors will need to acquire new skills. For some, the pressure to ensure students complete in 3-4 years is going to be difficult, others may find working in teams requires new competencies and a willingness to adapt to other disciplinary or institutional cultures. At the author's workshops, many supervisors find an obligation to look at employability and give careers advice is something quite alien and uncomfortable. Most experienced supervisors have managed budgets and funded research, but it is likely that in many cases the sums of money will become much larger, and the requirements to manage these sums of money will become more complex. Supervisors may need to explore opportunities to delegate functions that they have not yet mastered themselves.

The framework of approaches to supervision which is described in Table C 4.4-6-2 above can be used to give a neutral language to discuss many complex issues and to broaden the range of options that a supervisor has in dealing with them.

#### **Encouraging supervisors to deal with new issues**

The most effective use of this framework in terms of supervisor development is to be constructivist and to encourage supervisors to analyse how they could deal with different issues in terms of the five different approaches. It is most powerful when a supervisor works on a problem facing them or a problem that they fear arising. For example, Table C 4.4-6-3 below demonstrates what a supervisor might do if faced with a student who is too dependent or who is seeking careers advice.



	Functional	Enculturation	Critical thinking	Emancipation	Relationship development
The student who is too dependent on the supervisor	Time limit meetings, stick to a prepared agenda, set goals and monitor progress towards them.	Encourage student to seek answers elsewhere first e.g. peers and post-doctoral students	Analyse the stages that a student goes through in order to become independent	Explore how student has become independent in other aspects of life?	Discuss and set boundaries until a relationship of equals becomes possible
The student who wants to undertake risky fieldwork	Take legal advice on the university's responsibilities. Keep records of all advice given to the student	Find examples of others who have worked in this area to discuss	Undertake a detailed risk analysis	Explore how the student feels about the worst and best possible outcomes	Share personal concerns for their safety/efficacy
The student who wants careers advice	Recommend the careers office, careers fairs and web sites	Identify vacancies in the discipline	Ask students to chart others' career paths	Explore the student's motivation and criteria and help them to develop own network.	Disclose own career path

**Table C 4.4-6-3** Examples of different approaches to solving problems (Adapted from Lee 2009)

There are many opportunities for practical applications of this work in academic or faculty development. There are a few accredited programmes for doctoral supervisors run around the world (Pearson and Brew 2002, Pearson and Kayrooz 2004, Bills 2004, Cryer *et al.* 2003). The University College of the Arts in London runs a 5 day accredited programme. Brew and Peseta (2004) introduced a reflective and assessed recognition module which encouraged supervisors to write a case study illuminating aspects of their supervisor practice that they wish to explore.

**Supervisor development programmes**

There are also a range of workshops, e-learning and blended learning programmes run for supervisors; most of these are voluntary. An independent organisation 'The Missenden Centre' runs two day programmes, divided into programmes for the arts and the sciences. In 2003 the University of Edinburgh introduced a requirement that staff had to undertake at least one day of continuing professional development every five years in order to remain in good standing as a supervisor (Taylor and Beasley 2005). Manathunga (2005) describes both her 'learning circles' and 'compassionate rigour' programmes as

**Workshops, e-learning and blended learning**

taking account of pedagogic principles such as activating prior knowledge, scaffolding and fading. The framework in Table C 4.4-6-2 proposes enabling supervisors to move beyond these principles to look at intent, values and behaviours.

#### **Supervisor training in Sweden**

Sweden has made training for doctoral supervision compulsory. In July 2007 a Swedish Higher Education Ordinance was passed saying that all PhD students have the right to have a trained supervisor. In 2003 Umeå University made it obligatory for supervisors to attend a training programme; they cannot be promoted to become a Reader without completing this training.

The University of Kalmar and Växjö University, also in Sweden, are merging to form the new Linnaeus University, but together they already run a 9 day programme for new doctoral supervisors in groups of 24. The programme includes an introduction to policy issues, recruitment, procedures, linking their own experience as students to their practice as supervisors and discussing individual cases and case studies. Much of the training is similar to academic leadership programmes, for example they use a 360 degree evaluation to give feedback to their professors and cover topics such as teamwork, collaboration, conflict management and conversation training. They also have a two-day 'freshen-up' programme for experienced professors.

#### **Mentoring by experienced supervisors**

In the UK the QAA (2007) review found that several universities included a session on supervision in their postgraduate programmes in teaching and learning for new academics. They also found references to mentoring by experienced supervisors, however there is a need for more evaluation of this provision. The frequent practice of 'see one, do one' as the only form of supervisor development is insufficient. This gives the academic little conceptual background with which to cope with any issues that did not arise during their first encounter with a postgraduate research student.

#### **Need for action research**

Action research into supervisory development as a development activity itself would be a valid institutional procedure (including identifying disciplinary similarities and differences) and it would be useful for the results of such research to be fed back as appropriate into policy.

Doctoral students can have unarticulated and developing expectations of the supervisory relationship. Negotiating functional matters, such as frequency of meetings, boundaries, authorship and resources, are important early on in the relationship. A model is needed that enables a transparency of intent to enter into the ongoing supervisor/student relationship and into relationships between co-supervisors. Whilst most of the language and concepts in the framework proposed in Table C 4.4-6-2 appear acceptable and stable, it would be useful to

investigate further whether disciplinary groups have different priorities and values when supervising ESRs. A common understanding of the concepts of supervision could enable a deeper and more effective process.

### 3.1 Observations on developing supervisors

In the author’s experience of running supervisor workshops and residential programmes, understanding context is vital for identifying the most useful development activities. It is also important to recognise that the conceptual models that supervisors hold in approaching research and teaching, models often forged because of their own experience, have a profound influence on how they will supervise. This suggests that a constructivist approach will build on and develop those core beliefs.

**Understanding the context**

Finding a conceptual model which offers a neutral language and an opportunity to explore new ways of supervising students, seems to offer a very helpful framework for supervisor development, but the facilitator needs to work from the orientation of encouraging a shared experience. Supervisors are usually very experienced academics and they are willing to learn and happy to contribute but they are not to be patronised.

**Sharing experience**

### 3.2 Some options for developing supervisors

There are a range of approaches which meet the needs described above: action learning sets, workshops and accredited and assessed programmes may all have their role to play. Involving supervisors in policy development, encouraging research into good practice, holding regular updating and briefing sessions and establishing mentoring programmes are also all good practice.

**Range of approaches**

Good supervision is defined as meeting institutional, departmental, disciplinary and individual objectives. The journey towards improving standards of supervision can be pursued in four different ways: monitoring within institutions, developing policy and strategic guidance, developing supervisors (including those discussed above) and some practical ‘quick win’ activities. Figure C 4.4-6-5 identifies some suggestions for exploration under each of these headings.

**What is ‘good supervision’?**

The harmonisation encouraged by the Bologna process and the ambition of the Lisbon agenda mean that it is crucial to support supervisors and their line managers, Deans and Vice Chancellors as they enter this brave new world.

**Monitoring within institutions**

- Monitor number of meetings between supervisors and students, and agree some range of a minimum acceptability according to discipline and stage of study.
- Have an agreed format for keeping records of meetings
- Monitor progress rates, completions and appeals and look for trends
- Ask students and supervisors to complete an exit questionnaire
- Evaluate supervisors' training sessions
- Decide whether monitoring to be carried out at departmental, school or faculty level

**Strategic guidance**

- Review rules for supervisory teams; e.g. that one of the team has to have had experience of three successful completions
- Discuss the role of strategic committees: Are they about quality assurance, recruitment, etc?
- Shift funding to reward completion
- Get senior management buy-in to any change
- Ensure monitoring carried out or reviewed by top university committees
- Build recognition of supervision into appraisal, workload and promotion models
- Follow the discussion on the university administrators shared listserv for further ideas
- Have a national/European college for supervision

**Developing supervisors**

- Ensure current QAA guidelines are discussed and embedded
- Help supervisors to build and participate in a good research culture (difficult and therefore even more necessary for part-time and international students)
- Combine training/development activities for supervisors with help for getting grants
- Create awards for good supervision

**Tactical suggestions for early successes**

- Have a good induction programme which meets the needs of students whenever they start
- Have a clear contact point for all for when crises emerge
- Have a good Personal Development Planning system
- Empower students to drive the agenda: make clear what they can expect from supervisors
- Develop supporting materials for students and supervisors on-line

Fig. C 4.4-6-5

Summary of some options for improving the quality of supervision

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