

DEVELOPMENTS IN POSTGRADUATE EDUCATION AND THEIR IMPLICATIONS FOR RESEARCH SUPERVISION

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Biographical Note

Anne is a psychologist and academic developer with a background in consultancy and education who has spoken at conferences and led seminars and workshops on doctoral supervision at a wide range of universities across Europe. In addition to various papers, she has written a Society for Research into Higher Education (SRHE) Guide for Supervision Teams. The approach to supervision that her research has proposed is being used as a tool for supervisor development.



The Rialto Bridge is an emblem of what I am going to describe. We want our doctoral students to pass over a bridge whilst they are working with us: from dependence to independence.

My proposition is that there is a pedagogy of supervision, not that *this* is it in its entirety (I am sure there are many other aspects) but that there is a pedagogy of supervision, that it has relevance for other levels of the curriculum, and that this pedagogy of supervision provides an entry point for academics to become involved in the scholarship of research, teaching and learning. I argue that the framework I am about to describe is an entry point: this is one of the ways of looking at the teaching research nexus.

I want to explore a conceptual approach to doctoral supervision, to look at some of the ways that this applies to other levels of the curriculum, and to discuss some approaches to developing supervisors.

Why is supervision such a hot topic? We know that there is global competition for postgraduates; we know that in the UK and Ireland we are doing quite well at the moment but that China is building universities at the fastest rate imaginable and we need to maintain our distinctiveness. We know the Bologna Process is impacting on us and of course the Salzburg Principles are part of the Bologna Process. Going back to the Salzburg Principles is useful if we want to understand some of the roots of what is happening to PhD education now. In the Salzburg Principles we began to realise that we needed critical mass in doctoral education, and we saw the beginning of serious encouragement of interdisciplinary research; it was there too that we saw employability becoming one of the big issues. These issues are all playing out now in different scenarios through different funding councils and different governments across Europe. We know the effects of student fees and funding; I know that your undergraduates here in Ireland still have the bliss of not having to pay fees (and it does change the landscape when they do), but of course they do still have to pay fees for postgraduate education. If some students go to places like Norway or to

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Through the maze

- Global competition for postgraduates
- Bologna
- Effects of student fees/funding
- Salzburg principles
- Publication/ref pressures
- 'New route' PhDs
- Growth of cross-discipline and interdisciplinary work
- Growth of part-time students and lifelong learners

Holland, not only are they paid for doing their PhDs, they can become members of staff; they can have pensions and they are, indeed, employed as academics.

We know that there have been many changes in academia: the pressure to publish and the worries about forcing academics to publish on narrower issues, read by fewer and fewer people. We know that new-route PhDs are controversial and that now there are a lot more courses for PhD students to do; in some cases this used to be a time for students to concentrate solely on their research, but it is rarely 'research only' now. We know that the professional and employability demands on PhDs and other doctoral programmes have increased. The numbers of part-time students and lifelong learners – who are sometimes called, rather disparagingly, 'hobby PhD students' – have also increased. (I actually think that hobby PhD students are some of the most exciting to teach because they are primarily driven by intrinsic motivations.)

The proposition for a framework for concepts of research supervision came from interviews that I carried out initially at Surrey, then at other universities across the UK and then with some supervisors at Harvard (they call them advisers), so you may also see an American flavour coming through. This was a qualitative study supported by the University of Surrey. I interviewed this increasing network of supervisors who were referred to me as being good or even excellent and inspirational. The selection process was very pragmatic. I asked students and academic colleagues to refer people to me and to recommend people. (There is another study to be done on how to identify good supervisors for a study like this).

The first theme that emerged from the data was a **functional** approach: this was demonstrated by supervisors taking doctoral students in a rational progression through tasks. I want to let some of the supervisors speak for themselves so there are some quotations illustrating each of these approaches.

Now the functional approach might lead you to ask: 'were all my interviewees supervising Science PhDs?' No, they were not. Surrey is predominantly a Science and Engineering university but we do have, and I did include, people from Arts, Humanities and Social Sciences. It is interesting to find that these approaches to supervision are generic to all disciplines. An example of a typical quotation from someone working from the functional approach would be: "At every meeting we used to write up notes. We both would sign them and I would give them a copy so we'd have a common understanding of what we had talked about".

The next heading, **enculturation**, is about people becoming members of the discipline. Here the supervisor is not necessarily the fountain of all knowledge but is the gatekeeper to further

A framework for concepts of research supervision					
	 Functional	 Enculturation	 Critical Thinking	 Emancipation	 Relationship Development
Supervisors Activity	Rational progression through tasks Negotiated order	Gatekeeping Master to apprentice	Evaluation Challenge	Mentoring, supporting constructivism	Supervising by experience, developing a relationship
Supervisor's knowledge & skills	Directing, Project management	Diagnosis of deficiencies, coaching	Argument, analysis	Facilitation, Reflection	Managing conflict, Emotional intelligence
Possible student reaction	Organised Obedience Negotiation skills	Role modelling, Apprenticeship	Constant inquiry, fight or flight	Personal growth, reframing	A good team member, Emotional intelligence

Functional

- "I have a weekly timetabled formal slot for them and follow-up if they do not turn up"

Enculturation

- "I would feel I had failed if they did not stay in the field"

Critical Thinking

- "I use 'magic' words to help them identify the thread in their argument eg. arguably, conversely, unanimously, essentially, early on, inevitably etc."

Emancipation

- "Your job as a supervisor is to get them knowing more than you"

Developing a Relationship

- "I always say to them you can go through a love-hate relationship with me. It will probably be more hate than love most of the time, but if we can come out of it at the end still talking to each other, possibly even friends or colleagues in the future, that for me is a good outcome"

information and contacts. The phrase 'gatekeeper' is borrowed from general practitioners (family doctors). These supervisors have an idea of what they want the successful PhD student to look like, so their role is one of diagnosis of gaps of the deficiencies and of coaching the person until they reach this stage of being. Some of the quotations which exemplify this are: "I feel I have failed if they didn't stay in the field" and "My students all know their academic grandfather". There is also another whole issue about the enculturation of international students and at the moment I am just acknowledging that this exists and that we need to think about it, but I am not going to explore it further in this presentation.

Enculturation can include: encouraging the student to read biographies of significant academics; creating together the list of essential works to be mastered - that elusive thing, the canon - which turns out of course to be an individual exercise but it creates a challenging discussion.

The third approach that emerged was **critical thinking** and I guess that is what a lot of us think that doctoral education is really all about. When I spoke to these excellent supervisors about this area, you could see their thinking changed. It was almost as if they were visualising the brains of the students and completely depersonalising them. So this is a completely different aspect of doctoral education. They said things like: "They need to explain to me why, what and how", and "I ask them to email me a question about their project every week"; and this supervisor went on to say, "And I told them that if they don't, I will forget them".

I rather liked the idea that one interviewee introduced, the idea of giving his students 'magic words' to help them to identify the thread in their argument. I spent some time looking for magic words and thought they were an endearing concept and probably particularly helpful for students working in a second language. So the critical thinking approach is about encouraging a meta-cognition and an ability to critique their own ideas. "I expect them to learn how to learn, how to reason and how to start into something new" - this is an interesting quotation because it highlights doctoral education as being connected to transferable skills.

The fourth of five possible themes or approaches to research supervision was **emancipation**. This is very different to both enculturation and functional approaches. A supervisor who is working through an emancipatory approach will not be bound by a directive which says that full-time doctoral students have to complete in three or four years: for them it is the journey that is important. It is a radical humanistic perspective where the journey is as important as the completion. It is focused on mentoring and supporting and it is not focused on saying, 'You've got to become a member of this discipline and you have to act like everybody else in this discipline'. Of course this highlights the challenge, that we want people to be good in our discipline but we also want them to be original. The supervisor operating from an emancipatory approach gains satisfaction from facilitating personal growth in students and I think we can probably all share some of that motivation.

This final theme of **relationship building** was much more problematic to synthesise. The other four approaches I could see all had a professional attitude, a set of skills behind them. But of course we know that when you work with a PhD student intensely, over a period of time, a relationship develops and what is happening when that happens? I think we are in the contested land of emotional intelligence and in the interviews supervisors were talking about: the need to enthuse; the need to give more of yourself than was strictly demanded; the need to encourage and inspire; to recognise achievement and to give pastoral support.

We cannot use just one approach when supervising doctoral students because each has advantages and disadvantages.

The functional approach has clarity and consistency but can be rigid. The enculturation approach encourages communities of practice, it encourages participation and it encourages identity development but it can be very confining too. 'You're either one of us or you're not', can be the subliminal message if it is taken too far. Critical thinking can be very rational and can expose fallacious thought but it can be personally belittling if it is handled in a particular way. Emancipation of course can help, in particular, personal growth and independence. The negative side of emancipation is when supervisors are unaware of their own agendas or that they might be abusing power. Relationship development can create lifelong partnerships but there is a potential for harassment. I have had supervisors say to me, "I felt devastated when my students graduated and never contacted me again. I expected them to want to contact me". I have had other supervisors say to me, "I expect my students to stay in contact with me and I expect, at the very least, to get a Christmas card every year".

Going back to my opening slide of the Rialto in Venice, we were talking about acting as a bridge between the knowledge and the student. Of course eventually the student becomes independent and flies across the Grand Canal. We always want to move students from dependence to independence and this slide suggests that we can do this in at least five different ways. The top line across the dependence and independence matrix is probably really about scaffolding certain approaches and then the bottom line is about fading, where we remove ourselves from the scene and encourage postgraduates to be more independent.

Some of you may be familiar with Angela Brew's work. She was at the University of Portsmouth and currently works in Sydney. She did some very interesting work on conceptions of research and what academics perceive that research all about. I can map her four domains – Domino, Trading, Layer, and Journey - onto these four approaches – Functional, Enculturation, Critical Thinking, and Emancipation; however I could not map the relationship development one to her

Advantages and Disadvantages					
	Functional	Enculturation	Critical Thinking	Emancipation	Relationship Development
Advantages	Clarity Consistency Progress can be monitored Records are available	Encourages standards, participation, identity, community formation	Rational inquiry, fallacy exposed	Personal growth, ability to cope with change	Lifelong working partnerships Enhanced self esteem
Disadvantages	Rigidity when confronted with the creation of original knowledge	Low tolerance of internal difference, sexist, ethnicised regulation (Cousin & Deepwell 2005)	Denial of creativity can belittle or depersonalise student	Toxic mentoring (Darling 1985) where tutor abuses power	Potential for harassment, abandonment or rejection

Dependence and Independence					
	Functional	Enculturation	Critical Thinking	Emancipation	Relationship Development
Dependence	Student needs explanation of stages to be followed and direction through them	Student needs to be shown what to do	Student learns the questions to ask, the frameworks to apply	Student seeks affirmation of self worth	Student depends on supervisor's approval
Independence	Student can programme own work, follow own timetables competently	Student can follow discipline's epistemological demands independently	Student can critique own work	Student autonomous. Can decide how to be, where to go, what to do, where to find information	Student demonstrates appropriate reciprocity and has power to withdraw

Links to conceptions of research <small>(Brew 2001, Lee 2008)</small>					
	Functional DOMINO	Enculturation TRADING	Critical Thinking LAYER	Emancipation JOURNEY	Relationship Development
IN THE FOREGROUND IS	Solving problems in a linear fashion	Publications, grants, social networks	Data is linked together with hidden meanings	Personal existential issues, linked to career	
RESEARCH IS	Process of problematising or solving problems	A market place for exchanging ideas	Discovering hidden meanings	A personal transformative journey	

work, despite the fact that it so clearly exists from the interviews I carried out. This is why I have said it is more problematic.

What do students want? I interviewed students as well and found that they all want different things at different times. This slide maps some of the things that they wanted: clarity, evidence of progress, they want belonging, direction, the ability to think in new ways, the ability to analyse and recognise flaws in arguments, career opportunities, etc. So that is the framework explained from several different angles.

Next I want to argue that the framework can be applied to teaching graduate students and undergraduate students alike (Table 1). I am arguing that developing creativity is important at all levels of education. There is the part of the curriculum where the lecturer creates the knowledge, which is often taught through transmission-based teaching. Then there is the part where the student creates the knowledge and the role of the lecturer is to facilitate the construction of knowledge.

What do students want? Identifying student motivation, objectives and needs					
	Functional	Enculturation	Critical Thinking	Emancipation	Relationship Development
What students might be seeking	Certainty Clear signposts Evidence of progress	Belonging Direction, Career opportunities, Role models	Ability to think in new ways Ability to analyse, to recognise flaws in arguments	Self awareness Autonomy Self actualisation	Friendship Nurturing Equality

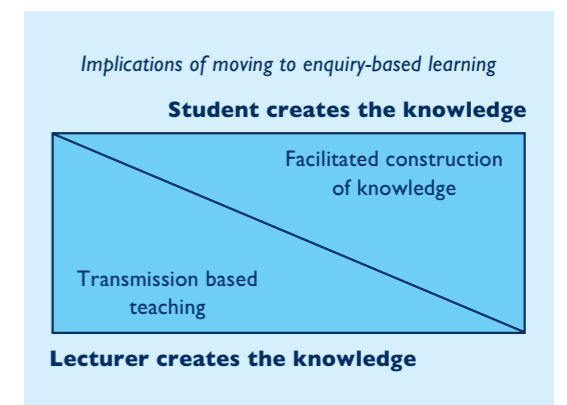


Table 1: Can this apply to teaching postgraduate students?

	Functional	Enculturation	Critical Thinking	Emancipation	Relationship Development
Are these the skills of teaching at masters level	Curriculum design	Induction of students	Giving students the tools for self and peer assessment	Introducing research in the curriculum.	Participating in and, initiating social events
	Lecturing and small group teaching/tutoring skills	Organising departmental seminars, and conferences	Comparing the criteria for validity in own subject with others	Supporting enquiry-based learning	Reflection on appropriate self-disclosure and boundaries
	Giving feedback and assessment	Finding and sharing examples of good practice in the discipline	Attending/organising journal clubs	Engaging with personal development planning	Skills in managing conflict
	Quality assurance			Encouraging metacognition and reflection	

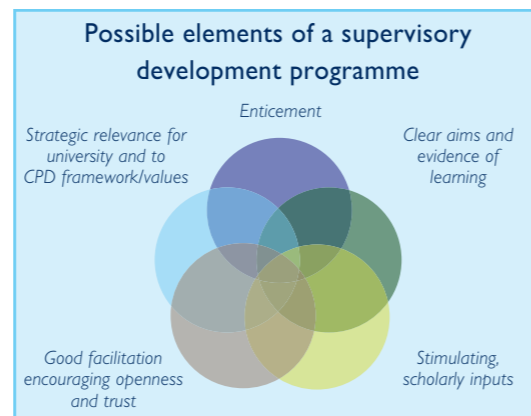
Returning to the framework as it applies to doctoral supervision, it appears that there are some core beliefs. The supervisors I interviewed frequently demonstrated an ability to operate from two of the five possible approaches. They might well be *able* to operate across all five but most frequently they operated from two. There are some core beliefs going on underneath each approach about how we think people learn and also their values. So performativity here refers to performing to the organisation's objectives, or perhaps to some sort of quality assurance agency's objectives. The value underneath enculturation is about belonging and people wanting to belong, and 'communities of practice' is a very powerful phrase there. The value underlying critical thinking is that we give primacy to rigour. The value underlying emancipation is autonomy and the value under relationship development is agape, a form of selflessness, friendship and love. We probably all have these different values operating when we work with our students, it is a question of which is in our repertoire at any particular time.

Core beliefs and values					
	Functional	Enculturation	Critical Thinking	Emancipation	Relationship Development
Beliefs about how people learn	Absorbing Regurgitating	Emulating Replicating	Theorise Analyse	Discovery Constructivism	Being affirmed
Values	Performativity	Belonging	Rigour	Autonomy	Love Agape

If this is a useful framework for helping academics to consider the options open to them as supervisors and lecturers, how can we introduce it to them? Below are some suggestions for a range of approaches to developing supervisors:

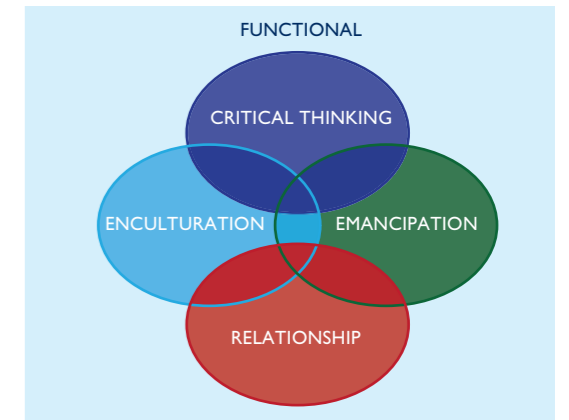
- Action learning sets (cf Balint Groups);
- Workshops (for example, Leeds Metropolitan University, Edinburgh, University of Surrey);
- Residential courses (for example, Missenden Centre);
- Scholarly seminars (for example, at Portsmouth);
- Researching and reflecting on good practice (Brew and Peseta, 2004);
- Involvement in developing/updating policy;
- Developing a bank of case-studies – (some can be actor-led for example, Forum Theatre is used at the University of Umea);
- Mentoring programme (recommended in the QAA code of practice) and opportunities for individual support;
- Accredited and assessed programmes (for example, SEDA, HEA or part of PGCert/PG-CAP).

Finally, I want to discuss possible elements of a supervisory development programme? Well, I find enticement is very important: coffee and biscuits, lunch is very good; residential programmes in elegant venues even better. I used to run programmes from a not-so-small stately home and people always remembered those programmes because they just visualised themselves back in that wonderful setting. But coffee and biscuits do well too. Programmes have to be linked, of course, to the university



context, policies and plans, to continuing professional development (CPD) frameworks and to values, all of which is complex. I think CPD for academics (in research management, teaching and learning) is something we've only just started to work on. UK Vitae are currently consulting on a Researcher Development Framework which is a new initiative in this field. It looks at the stages that researchers go through, from being early career researchers to being star researchers or Nobel Prize winners across a whole series of about twenty-four different domains. The framework will be available on their website [http://www.vitae.ac.uk]. It was derived from research that was carried out mainly in Glasgow and Manchester but a team have been looking at the chart in some detail to populate it

My last slide is to indicate that this framework is not actually a matrix: it is more of a Venn diagram, and it admits that these approaches overlap. I certainly acknowledge its limitations, but the matrix is a useful working tool because in workshops you can take each column and say for example: 'Okay, I've got this problem. If I were just working in the functional approach, how would I handle it?' And ditto for the others. Then your participants can reach a place where they can say, 'Now I've got five possible ways of dealing with this programme. What combination is going to be the best?'



So, I have made my proposition: that this framework is a useful pedagogic tool and that we can use it to help supervisors to develop themselves and we can also explore applying it to curriculum design and other levels of the curriculum as well. Thank you very much.

RECENT PUBLICATIONS

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