

PhD Programs - European Perspective



Professor K T Wann Former Deputy Dean of the University Graduate College

Professor of Cell Physiology
School of Pharmacy and Pharmaceutical Sciences
Cardiff University
Wales, UK



PhD Programs - European Perspective

Context: The big opening questions

What is a PhD? A short history

What subject areas is the PhD to be awarded in?

What kind of structure / length should the PhD have / be?

What do you want the program to achieve: what are the proposed outcomes?



1948

A brief history



1300 -1500's	Doctorates existed (Law, Theology, Medicine) (advanced scholarship)
1800's	PhD - University of Berlin (defined by a content which describes original research)
1861	PhD Yale (3 PhDs awarded)
1900	PhD Canada (Physics - University of Toronto)
1917	PhD University of Oxford (DPhil Mathematics 1921)

PhD (University of Melbourne)



What is a PhD in Europe?

The Dublin (2004) descriptors were developed and provide generic statements of typical expectations of achievements and abilities.



The Dublin descriptors were built on the following elements:

- knowledge and understanding
- applying knowledge and understanding
- making judgements
- communications skills
- learning skills



The goal of the PhD Program

(what is expected in Europe is encapsulated in the Dublin descriptors)

Award go to the candidates who:

- 1) have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field
- 2) have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity



The Dublin descriptors

Awards go to the candidates who:

- 3) have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication
- 4) are capable of critical analysis, evaluation and synthesis of new and complex ideas



The Dublin descriptors

Awards go to the candidates who:

- 5) can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise
- 6) can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society

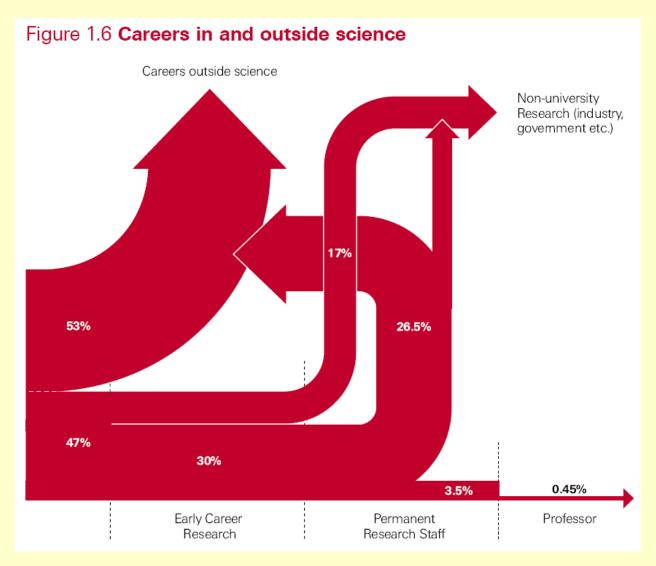


The current landscape has necessitated developments in doctoral education

- The PhD was traditionally the stepping stone to an academic career
- In the last 30 years or so the likelihood of achieving an academic position in Universities has however diminished
- There is probably still an overemphasis in Universities on the academic track and an under-valuing of other career paths
- Sample headlines
 - what is the stand alone PhD really worth?
 - the PhD is "broken" and needs a total rethink
 - ditch the current system



Academic employment landscape (UK)

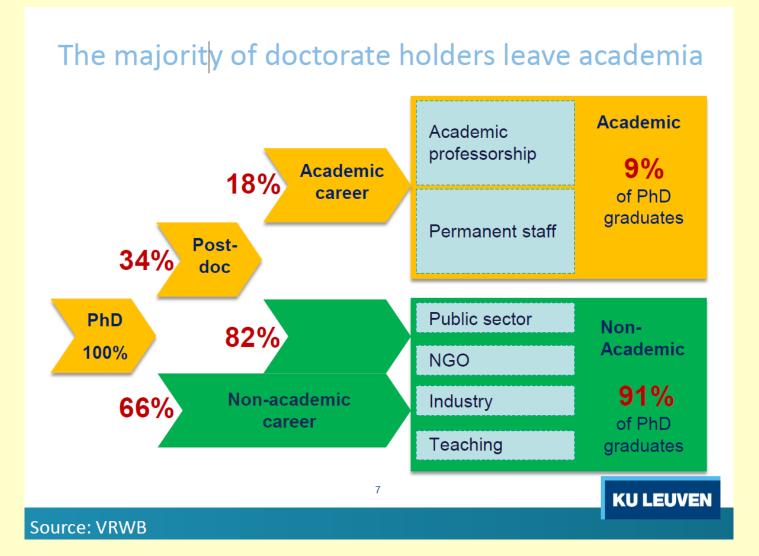


The Scientific Century: securing our future prosperity (The Royal Society, 2010)



Current academic employment landscape (Europe)







Developments in doctoral education

So-called Professionalisation of the PhD has been introduced where "transferable skills" are brought in and highlighted.

This professionalisation is intended to prepare the candidates for work / life outside of Universities

These developments require Institutional frameworks to support (e.g. careers services / doctoral schools)



Developments in doctoral education

Professionalisation of the PhD has created:

- different (but not separate) agendas for the PhD candidates and supervisors
- different demands on the supervisors

Such developments can be facilitated through rewards for achievement



Skills development and PhD supervisor awards







Delivery of training in transferable skills may require an Institutional structure like a Graduate College and staff to deliver workshops / training etc

Showcasing good practice in supervisors can help get buy-in. Recognise their contribution in an Award.



Some key considerations when trying to establish PhD Programs

- What is / are the University's research strength(s)? Which disciplines and themes?
- Will the introduction of PhD programs take account of any Institutional strategic mission (no buy in otherwise)
- What are the National funding agencies agendas? (horizon scanning for funds)
- How much will be handled centrally and how much will be dealt with at a local level?
- Does the University have adequate supervisory capacity and support structures?
- Does the university want a distinctive (different) PhD model?



Other key considerations

- What fee structure will the University adopt?
- How will the University advertise positions?
- How will interviewing and admissions work? Who will be responsible?
- Will there be structure in terms of generating a research plan, and periodic progress monitoring
- Will there be one supervisor per candidate, or two, or a supervisory team?
- What will be the format of the PhD thesis?
- What form will a final assessment take?
- What will a successful candidate look like?



Possible Thesis formats

Takes the form of a long narrative (perhaps a guideline of 80,000 words), with a series of chapters which tell a story. Peer reviewed publications included as an Appendix

There is a short narrative (perhaps 10,000 words) and the remainder of the submission consists of two, three or four papers published. The number required varies immensely

There is a general Introduction and each following section / chapter is a draft of paper yet to be published

Will the submission be both electronic and paper copy?



Defense of the PhD

(many models exist)

Who examines the Thesis?

Is there to be an oral examination (a *viva voce*) as in many countries in Europe?

Is there a public defense?

Is the viva a formality, or integral part of the examination process?

Is the Thesis graded (as in e.g. Germany and Austria)?

When is any feedback given?



Defense of the PhD

The examination process:

Who decides when the Thesis is ready for submission?

Is there a committee that evaluates the Thesis work (as in certain Institutions in France) before it goes forward to a defense?

Are the supervisors involved in the evaluation and scoring (where it exists)?

Are their exit routes if the candidate fails?



Quality Assurance – questions to ask

Which University body will have oversight of, or responsibility for, the quality of all the processes around the PhD program?

What will be the proposed duration of study?

Will there be mandatory structured training (e.g. a module to be taken and examined on)?

How will the competencies of candidate supervisors be assessed?

Will there be any supervisor training as in many European Universities?

Will the quality of the student experience ever be assessed?



Some final questions to consider

Will entry into a PhD program occur throughout the year, or will there be one, two or more fixed starting dates?

How much monitoring can be achieved electronically (depends on strength of IT support services)?

What happens when the supervisor-student relationship breaks down?

How many possible outcomes will there be from the examination process?

How will appeals against examination decisions be dealt with?