

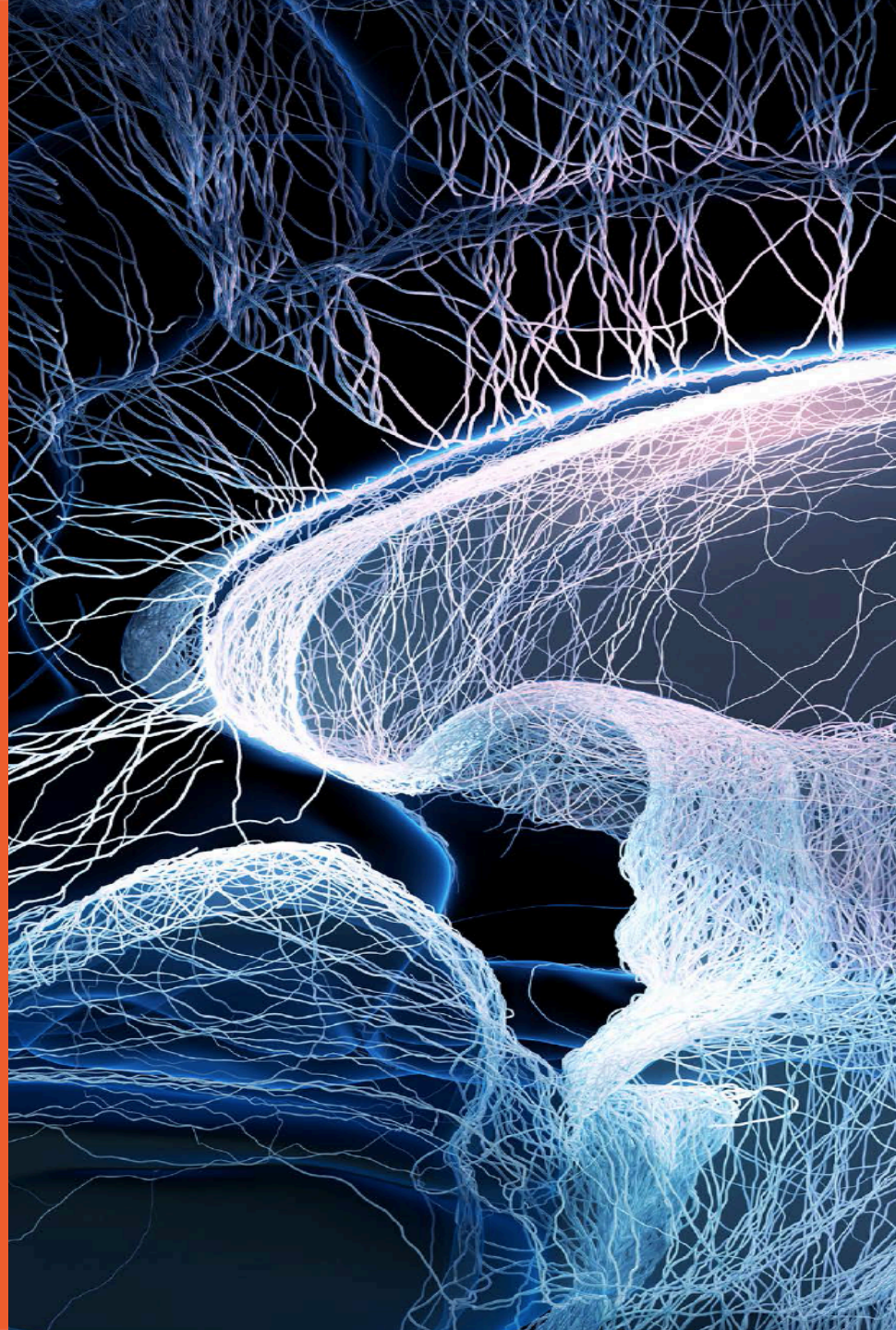
Reframing the PhD for Australia's future universities

An Office for Learning
and Teaching funded research project.
Project team:

Simon Barrie (Western Sydney)
Tai Peseta (Sydney)
Keith Trigwell (Sydney)
Peter McCallum (Sydney)

Lee Partridge (UWA) Joe Graffam
(Deakin) Dr Jeanette Fyffe (La Trobe)
Dr Alistair Kwan (Auckland)

Lynn McAlpine (Oxford), Paul
Blackmore (Kings College London) Ann
Austin (Michigan State)



The Australian context

- 31 % increase in doctoral student numbers in last decade, reduction in funding for HE
- >45% employed in HE, <55 % in industry – both contexts changing
- Employers (Industry and Academia) dissatisfied (somewhat) with current outcomes
- Academic supervisors (somewhat) dissatisfied with process & outcomes
- Students (somewhat) dissatisfied with the process & outcomes
- Sydney – 16% of total national HDR load

(ACOLA 2012: Coates & Goedegeburre 2010; Probert, 2014)

Australian Universities Renewing the PhD

- To maintain an excellent international reputation in changed context
- Strategic operational and pedagogical drivers for change:
 - more students (\$)
 - different students
 - new knowledge





The Australian PhD now

Research (apprenticeship) project – of variable forms (doing/training/learning)

Tendency to foster the development of deep but narrow expertise:

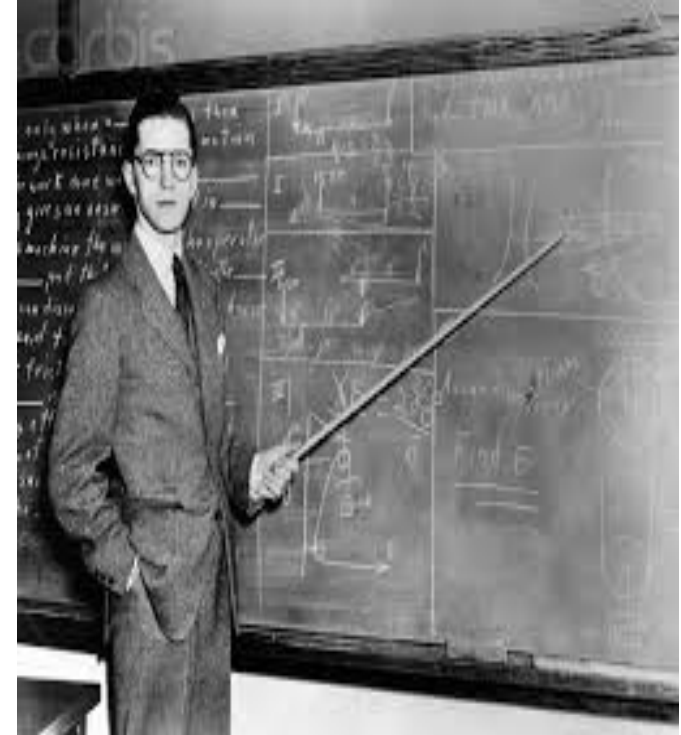
in a single field

in one area of content

in one methodology

in one context of application

By an individual



Are today's research problems like that?

Is tomorrow's teaching like that?

The research challenges of to(day)morrow

Today's world needs **research** leaders who can

- Work in multidisciplinary teams
- Accept conflicting world views
- Communicate across cultures
- Collaborate across methodologies

To.....Solve complex, poorly defined problems, in unfamiliar contexts with unimaginable parameters using innovative methods – and accept ambiguity in the solutions

This is also what undergraduate teaching has to develop – and incorporate





What employers (and PhD graduates) want



Why is learning about teaching important?

Both industry and academia need more from PhD

Developing research students' teaching abilities has been found to be important in nurturing their personal identity, and in broadening their subject knowledge and their discipline based communication abilities (Harland & Plangger, 2004)

2/3 of the doctoral students surveyed at Sydney and Oxford (SREQ 2014), indicated they felt teaching undergraduate students would help (rather than hinder) their future research.

Many of the graduate capabilities that populate employers' wish-lists, for example communication skills, capacity for empathy, collaborative skills, leadership of groups, interpersonal and problem solving skills - are developed in learning to be a university teacher.

What students say about learning to teach

| | | | | | | |
|--|------|-------|------|------|-----|------|
| Q37 I see university teaching as an important skill to acquire | N | stdev | mean | 4% | 14% | 82% |
| | 2428 | 42 | +58 | SD+D | N | A+SA |
| Q38 Teaching undergraduate students at Sydney during my research degree is one of my aims | N | stdev | mean | 16% | 23% | 62% |
| | 2430 | 58 | +37 | SD+D | N | A+SA |
| Q39 In the past year I have taught students in a Unit of Study at Sydney University | N | stdev | mean | 51% | 11% | 38% |
| | 2431 | 78 | -11 | SD+D | N | A+SA |
| Q40 It is clear to me how to find out about opportunities to teach undergraduates at Sydney | N | stdev | mean | 44% | 23% | 32% |
| | 2423 | 64 | -11 | SD+D | N | A+SA |
| Q41 I have felt sufficiently well-prepared to carry out a teaching role during my research degree | N | stdev | mean | 23% | 30% | 47% |
| | 2429 | 60 | +16 | SD+D | N | A+SA |
| Q42 I would like to do more teaching than I currently do | N | stdev | mean | 17% | 28% | 55% |
| | 2428 | 59 | +29 | SD+D | N | A+SA |
| Q43 I consider that teaching undergraduates in my field is likely to benefit rather than hinder my research | N | stdev | mean | 10% | 21% | 69% |
| | 2434 | 51 | +44 | SD+D | N | A+SA |

PhD renewal = Research Project + (something)

Add-ons to the research project: Personal learning plan, structured curriculum, co-curriculum, alternative pathways.

Transitional (in/out/stage) generic / employable skills modules & workshops

- Communication skills

- Information literacy skills

- Academic integrity

- Project management

- CV preparation

- Teaching *(explosion in provision of online skills training modules)*

Research coursework (proposal, methodology, ethics) *(coursework/pathways)*

Enhanced supervision (embedded skills development) *(outcome conception?)*

Learning communities & co-curriculum. Engage students in the academic (research and teaching) and industry (internships) communities for learning *(outcome conception?)*

DOES THIS 'CURRICULUM' APPROACH LOOK FAMILIAR?

A new perspective on doctoral education?

How might we look at this differently?

- Take a different career outcome focus Preparation for the ‘industry’ of HE
- Take a different curriculum element Learning to ‘teach’
- Take a different view on research trainingas ‘curriculum’
- Use a different methodology a conceptual approach
- Take a different view on (research + teaching) academic practice ...’Stewardship’

While we start with teaching – we do so in order to move on towards a consideration of doctoral education more generally

A new perspective on academic practice and doctoral education?

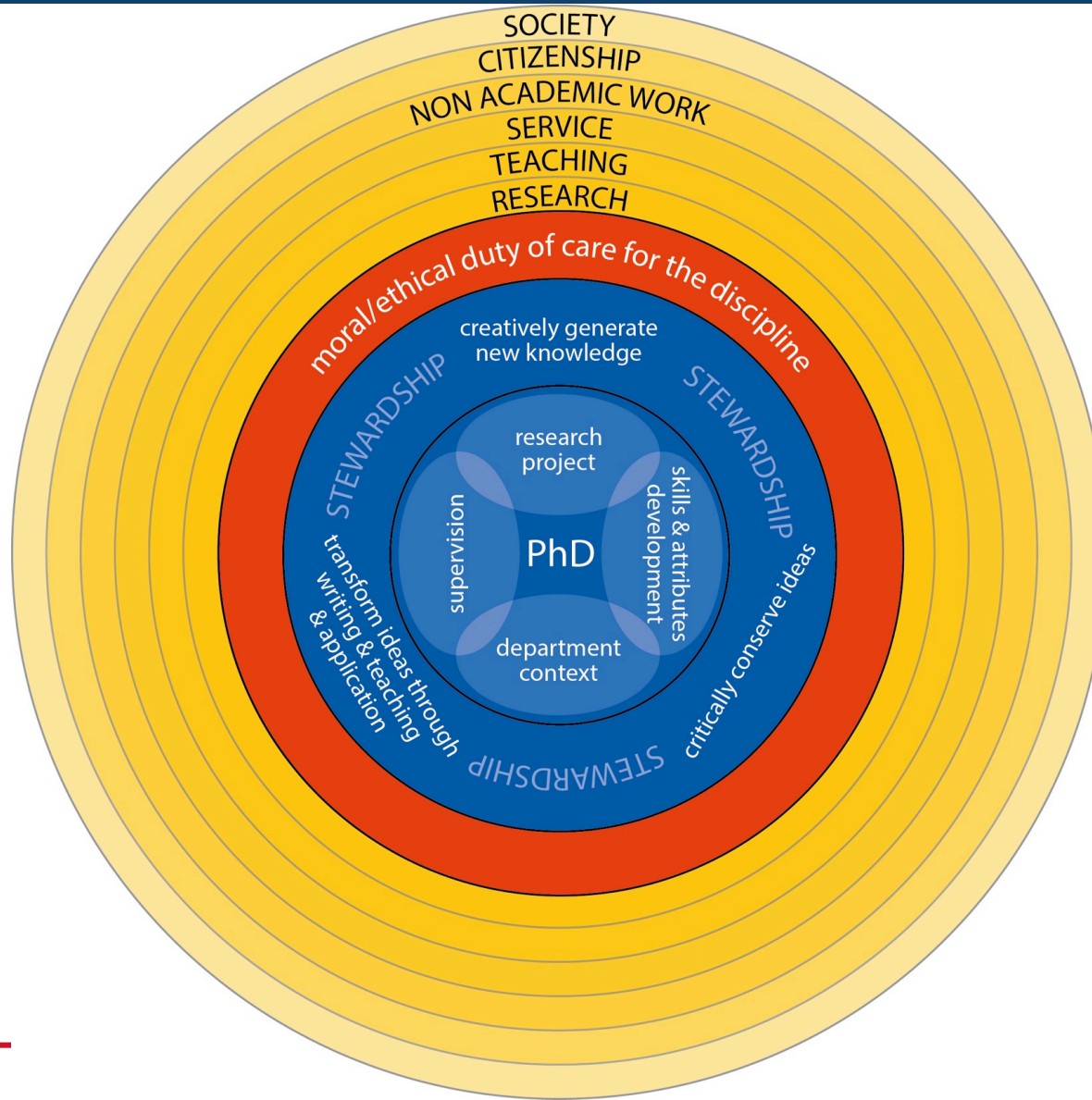
Stewardship of the discipline rather than teaching vs. research vs. service

As Stewards of the discipline academics '**creatively generate** new knowledge, **critically conserve** valuable and useful ideas, and **responsibly transform** those understandings through writing, teaching and application' (Golde 2006 p5).

The concept of 'Stewardship' involves both **competence with the roles and skills of a discipline** and a sense **of moral purpose**. It integrates teaching, research and service.







Stewardship in context



Four spaces of learning in the PhD

How might teaching development be imagined and enacted across four doctoral learning curriculum spaces:

-  research supervision
-  the thesis/research project
-  disciplinary communities for learning about research/academic work
-  skills/attributes workshops / courses.

Renewal of the PhD: Reframing and reintegrating the research 'heart'

1) The **research project** could be more like the problems we expect our graduates to solve:

- More collaborative – supervisory teams
- Multi-disciplinary teams (students and supervisors)
- Multi-methodology
- More complex – less defined

And oriented to developing students
'Stewardship' abilities

2) **Supervision** re-oriented to using the project and learning environment as vehicles for learning complex capabilities and ways of thinking – 'Stewardship of the Discipline'

3) '**Skills curriculum**' re-oriented to Stewardship'

4) Engagement with **discipline community** (co-curriculum) re-oriented to Stewardship'



1. A taxonomy of the available teaching development curriculum strategies (desktop research)
2. A draft curriculum framework describing how the core learning experiences in the PhD (the project, its supervision, skills development, and the disciplinary community) prepare research students for integrated academic practice.
3. Critique and redevelop the curriculum framework drawing on interview data from students (n=10), new academics (n=5), key stakeholders (n=3) in each university (detailed case studies of integrated curriculum)
4. Critical review and development of curriculum framework by invited experts (education researchers, stakeholders, and senior leaders) and develop proposal for re-integration of key curriculum elements within 3.5 year timeframe
5. Develop a new discourse of doctoral 'curriculum' through institutional conversations with 15+ Academic Boards

Thank you

More at: <http://www.itl.usyd.edu.au/projects/reframingPhD/>

