Report of state-based workshops

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Overview
As part of the project dissemination and as a means of contributing to the findings, five workshops were conducted in state capital cities, details of which are provided in this report. The main findings from the workshops are summarized below.

An informal survey of University Deans and Directors of Graduate Research (DDoS) had suggested that 75% of DDoGs had or were thinking of introducing coursework into their PhD programs. However, the term ‘coursework’ appears to be inappropriate at the doctoral level in Australia and the terms ‘Integrated doctoral curriculum’, ‘Structured program’ or ‘Structured approach’ are suggested as more appropriate. Within the structure, alignment was very important where courses align with milestones, expectations, administration, student systems, graduate outcomes, and assessment.

A particular concern arose throughout the project and at the workshops related to the potential loss of a focus on the individual candidate with formal coursework.

While not specifically articulated at any one workshop, previous work by the Project Leader and discussions in workshops and presentations suggest that the aims of an Australian doctoral education are to enable candidates to:

• Produce quality research
• Be well rounded researchers who can clearly articulate the knowledge and skills that they have developed during candidature
• Identify how their doctoral education supports future endeavours including employment, career development and contribution to society, and
• Know the world and themselves as learners and researchers.

Introduction
Five workshops were conducted in different state capitals involving participants from 54% of Australian universities (Table 1). The aim of the workshops was to share the findings of the project to date and then to seek participant input into what the findings might mean in practice. The Project Leader and manager coordinated the workshops in conjunction with key personnel in each of the host universities.

Table 1: State-based workshops by location, university and participants

<table>
<thead>
<tr>
<th>Location/State</th>
<th>Universities represented</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>USyd (New South Wales)</td>
<td>USyd, UWS, CSU, UoW, UNSW</td>
<td>19</td>
</tr>
<tr>
<td>UWA (Western Australia)</td>
<td>UWA, ECU, Murdoch, UoND</td>
<td>13</td>
</tr>
<tr>
<td>VU (Victoria)</td>
<td>VU, La Trobe, ACU, RMIT, Deakin, Monash, UniMelb</td>
<td>44</td>
</tr>
<tr>
<td>QUT (Queensland)</td>
<td>QUT, Griffith</td>
<td>21</td>
</tr>
<tr>
<td>UniSA (South Australia)</td>
<td>UniSA, Adelaide, Flinders</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>127</td>
</tr>
</tbody>
</table>
Workshop format
The first 50-60 minutes of the workshop included an overview of the project and a report on findings to date (see Appendix G: Powerpoint presentation from workshops).

Following a break to allow participants to catch up and meet with colleagues from other universities, participants were invited to work in small groups to discuss the issues outlined in the presentation. Some university groups chose to work in institution-specific groups and others chose to work in mixed groups.

From the different sources of data (focus groups, workshops, interviews and surveys) the following general issues and concerns were raised.

It was clear that participants have been very concerned not to treat all PhD students the same. As a result many universities who are introducing some form of coursework are moving towards adopting a needs analysis and a learning plan approach to enable each candidate to have a personalised program. For example, as part of its learning plan Edith Cowan University is developing an online tool, which also doubles as an online portfolio. This tool will integrate with milestones such as confirmation of candidature.

Workshop participants also indicated that the term ‘coursework’ meant many different things to them, for example: research processes, advanced discipline-specific knowledge, employability, and the US model. There was also considerable variation regarding the timing of coursework from being in the first year only through to throughout candidature. Issues were raised with regard to funding any coursework, particularly if it were to be used as an exit option (e.g. Graduate Certificate) model. Another issue raised in the research was the possibility that any form of coursework might extend the already tight timeline for completion. (Note: There is some research that shows that coursework can reduce, rather than extend completion times, particularly when the coursework is framed around helping with the actual PhD research. See Humphrey, R., N. Marshall and L. Leonardo (2012)).

One particular advantage of coursework that was discussed related to part-time students, where it was suggested that coursework might be even more important in building cohorts for these candidates. However, there were challenges for staff in providing for off-campus/part-time candidates.

Comments regarding the Professional Doctorate compared with the PhD suggested that there were examples where some universities had extended their Professional Doctorate coursework to all doctoral programs.

Specific Issues raised in the state-based workshops
The main issues discussed in the workshops are elaborated below.

What is coursework in the Australian doctoral context?
Each workshop commenced with a discussion of what the participants thought coursework in the PhD was or meant, for example: When I say 'coursework in the PhD' what springs to mind?

- Marking
- US model
- Resource implications: setting it up, administration, who pays?
- Adding things to the PhD and extending timelines
- Making sure it truly at doctoral level i.e. Level 10
- What is the end point?
- Generic vs discipline-specific
- Academic vs employability
- Timing i.e. Pre-, early-, mid-, late-, post-candidature
- *Thank goodness* because we've got all these students coming in ill prepared vs. *thank goodness* because we have a chance to value add and equip our excellent candidates.

**Possible motivation for introducing coursework**

There was considerable discussion about why we are ‘fiddling around’ with something that's been working for 50-60 years? A specific comment that gained considerable support related to developments:

> Things have changed. In 1948 when the PhD was first awarded in Australia we were driving 1948 Holdens. But now we are driving 2014 cars (power steering, airbags, seatbelts etc) can we expect the award to stay the same?

1948 model or 2014 model

It was also suggested that you can't remove a PhD program and discussions of it from the context in which you are placed, in other words it would be difficult to say what the ideal PhD would look like if they were starting from scratch without institutional and governmental barriers (or staff preconceptions). Therefore, possible reasons for the changes included:

- There is a sense that students are going into PhDs without the same discipline and methodological backgrounds that they might have had 10-20 years ago particularly given the decrease in Honours enrolments;
- Funding models are requiring attention to completion;
- More people are doing PhDs now than 20+ years ago with greater diversity and so more actual supervision required;
- Many academics in Australia have come from the USA and Europe and so are looking to implement what they know and understand;
- Student Associations suggest that developments might be student driven as they are feeling a little tentative about commencing a PhD and having coursework can assist in formal ways;
Using coursework as a filter where it supported confirmation milestones and provisional enrolment and that coursework could be thought of as a threshold requirement.

There seems to be a range of different courses at different universities for example:

- At VU there are no credit points, no cost, but coursework is compulsory. Two units are provided: conceptualising research and research integrity/ethics - both related to the candidate’s own project. The assessment is integrated into the thesis. It was reported that while there is a massive workload in coordinating and tracking assessment the assessment has changed candidates’ level of engagement with the content (so much deeper than from a workshop) and they present their work at the annual postgraduate conferences. While at the start there were many requests for recognition of prior learning, now there are very few because candidates see the benefit of it.

Curriculum

In line with a curriculum model there were many comments about the need for structured alignment for example with candidature milestones, supervisor expectations, administration, student systems, and graduate outcomes and assessment. Issues related to Australian doctoral examination processes were raised at each workshop, however, the topic was deferred as it was considered likely to have side-tracked the overall discussion. The notion of a core curriculum was also raised i.e. Are there ‘must-have skills’ for all candidates or at least all in a particular discipline: What are they? How are they delivered/received? This discussion lead to the question of the level of coursework where some participants suggested that most of the coursework on offer currently is at Masters and Honours level and so does not accord with AQF.

As a result of this discussion the rest of the report follows the curriculum outline.

The purpose/aims of doctoral education and the coursework within the program

A number of reasons were put forward to support the aims outlined on page 57. A common one related to the idea of ‘the PhD being bigger than the thesis, the thesis may be only 20-40%, the development of the whole researcher is the rest’. So for example, Monash University has explicitly worked on building the researcher, not just the thesis. Ancora Imparo—towards the Monash PhD. Helpful models that were suggested were the League of European Universities Doctoral degrees beyond 2010:

- The UK Researcher Development Statement and Framework [http://www.vitae.ac.uk/researchers/291411/Manage-your-career-with-the-Vitae-RDF-Planner.html](http://www.vitae.ac.uk/researchers/291411/Manage-your-career-with-the-Vitae-RDF-Planner.html) and
• The University of Adelaide’s RSD Framework

Participants in the workshops identified the following as benefits of coursework:
• Cohort building or development of a cohort, especially at a satellite campus;
• Developing advance disciplinary knowledge;
• Developing generic skills;
• Providing opportunities for candidates to learn how to do research in more areas than just their own, as it is likely that they may not get work researching in their own field;
• Focus on research methods and advanced disciplinary knowledge: “Sometimes research seems too abstract for new students and so teaching methods early in candidature is a good idea” (Workshop Participant).

Learning outcomes for Individuals
Perhaps the strongest issue to arise from the study was the desire to maintain the individual nature of the doctoral learning experience for example:
• To what extent can coursework be generic or tailored ... supervisor(s)-student relationship is vital to filling in gaps and steering students to the best training for them
• ‘Beneficial research’ should be part of a long term plan or program i.e. joining a research team, being aspirational and aligning yourself as a student in that place
• Given each candidate has different motivation, including career goals, it will be important to address these issues early in candidature and then assess in an ongoing basis taking into account that aspirations of individuals are likely to change as they recognize and develop capabilities
• An issue raised was that it is not just individuality for candidates but also recognising the challenges that different universities face as well as the great variability across disciplines.

While the AQF learning outcomes were generally agreed to be suitable, there was discussion around the rather limited nature of the outcomes in comparison with other frameworks such as the Vitae’s. However, the AQF outcomes were used as a basis for the discussion http://www.aqf.edu.au/aqf/in-detail/2nd-ed-jan-2013/ (note: page 63).

Readiness, Recruitment/Candidate pre-requisites
What is the influence of readiness? Should we expect candidates to be ready to undertake a PhD or is it something we see as our role as supervisors that we teach candidates to be researchers? ‘Research readiness’ of students is important to determine. However, why do we keep talking about PhD students needing to be 'ready' to do a PhD?

If we were brilliant what would we be doing at university? If you knew how to research why would you be undertaking a PhD as a way of learning? It doesn't mean that you have a deficiency, you are here to learn. (Participant comment)
Content
With regard to content there was considerable variation regarding content across and within the groups and even within universities with some of this variation being of a disciplinary nature, however, there was general agreement on the following:

• Research methods;
• Research Integrity and ethics;
• Contextualising and conceptualising research;
• The philosophy of ‘science’/knowledge (in its broadest sense).

Learning activities
There was considerable interest in the different ways in which learning activities could be provided. The work of the previously funded ALTC Research Graduate Skills Project http://www.gradskills.anu.edu.au was very helpful here. In particular, the way of conceptualising the different ways in which doctoral candidates can experience learning was shared with participants at each workshop (see Appendix H).

It was suggested that the threshold concepts approach could form the basis for a learning plan/milestones.

Pedagogy
One of the issues that gained interest was the notion of ‘pedagogic continuity’; are we simply replicating the pedagogy that we experienced? In fact, this point was taken further with the suggestion that some supervisors might be threatened with the introduction of coursework as it might expose their relatively limited expertise.

In order to meet the needs of providing coursework within a restricted financial environment there were suggestions for trying to find economies of scale which included:

• Combining student cohorts
• Sharing teaching across the faculty
• Cross-institutional work-shopping/training
• Discipline-specific training
• Mapping of what is available and ensuring that each student compiles their own map of what they need to do linked with milestones
• Semi-structured rather than more formal training
• Student-organised training.

However, as others were quick to remind the group, coursework in the PhD needs to be at AQF level 10.

One group suggested that they had the ideal solution: self-directed learning with a map and a plan. For example at QUT a student can do one year of coursework, as long as that does not interfere with milestones. Plus there are the ATN eGrad School offerings e.g. project management, research methods. So there is a combination of coursework units, research, eGrad school units http://www.egradschool.edu.au.
Assessment
In keeping with an aligned curriculum there was discussion about assessment in doctoral education, e.g.: “It will be interesting articulating to the examiners the new model and formalising policy. For example, if students do the coursework will they have a shorter word limit in the thesis” (Workshop participant). In the ensuing discussion, the idea of shortening the thesis was generally discounted. There was general agreement that the skills developed during candidature contributed the final outcome although the question was raised: Does the assessment of the thesis actually allow us to comply with the AQF of showing what a doctoral student should know/do?

There was general agreement that there could be some form of preliminary assessment where candidates could demonstrate competence rather than having to undertake all core requisites. Also, participants considered that there should be some ongoing monitoring of candidate and project development particularly involving self assessment. However, whatever is put in place should not be graded but be more along the lines of the confirmation of candidature processes.

Evaluation
The question was asked: If we were to introduce some form of structured approach to the doctoral curriculum how would we know we were doing it well? Possible answers included:

- Improved completion times and rates;
- Comments from thesis examiners;
- ‘Happier’ supervisors and candidates;
- Improved ratings in PREQ/internal surveys;
- Fewer grievances;
- Improved graduate employment outcomes;
- Increases in publications during and immediately following candidature.
- One example is the University of Melbourne that asks examiners to provide a second report to the institution on what skills the candidate demonstrated within the thesis.
- Another thought is whether candidates get the career they want? Does that tell you about indicator of success of the degree?

Organisational issues
There were a number of organisational issues that were discussed as being important in any decisions related to coursework or a stronger, integrated structure to the doctoral curriculum. It was also suggested that any discussion needed to consider the demographics of students coming through e.g. age, type of enrolment, and previous experience. The main issues included:

- Enrolment dates that are fixed at the census dates, or where candidates can enroll any time. The flexibility of enrolment can make it difficult for students regarding coursework especially where there is a cohort view of candidature;
- Placing research training back before the PhD so that the PhD is only three years as demonstrated by the Macquarie model;
Ensuring that candidates are not unnecessarily repeating work;

Opportunities for collaboration, e.g. the ATN eGrad School, and Inspire (ECU);

Whether the decision to incorporate coursework into the PhD should be left to the candidate? This has particular implications for international students who are sponsored by their home country;

Convincing industry funded partners that coursework won’t take researchers away from the project;

The possible risk of stifling creativity through the tightening of completion times.

Funding
There was general agreement that ideally any coursework would be paid for through Research Training Scheme (RTS) funding since this is for research-training, but how the funding is allocated is often unclear and staff reported that they did not know how it was distributed. Various funding issues were raised, for example, in one university you can apply for a scholarship for one course – but that is all, if you want to do any other courses then you pay.

Workload recognition was another issue, for example: Victoria University is looking at resourcing supervisors to provide advice and support tailored to individual candidates, LaTrobe is looking at having a central point of advice through the graduate school, and RMIT is placing increased emphasis on supervisors and academic units to address candidate learning.

Involvement of supervisors
One of the matters that received considerable discussion was the importance of involving supervisors in any developments: “Unless you get supervisors on board, it won’t work. There must be buy-in from staff” (Workshop participant) There was also the issue of ensuring that supervisors are aware of the support that is available; for candidates and helping supervisors evaluate the benefits of coursework. An example of how supervisors have been involved included Murdoch that has set up a system where there is an Advisory Committee for each candidate which is independent and additional to the supervisors.

Possible ‘Learning Plan’
Learning Plans were seen as one way in which universities could support the individual learning of each candidate as well as provide a structure within which that learning can occur. A participant reported trialing the Vitae Research Development Framework and found it very helpful, especially as it is very visual. It was suggested that this could be further developed through social media.

Other issues
As to be expected there were a number of “other” issues including:

We can’t say that we’re a first rate university if we don’t get some of the basics right in terms of systems to facilitate the underlying processes that would support research education.

(Workshop participant)
A concern raised related to the competence of academic staff to provide some of these services and yet there are very few academics in Australian universities who might be considered as truly expert in research methods in comparison with their US and European colleagues. There was also concern that too much coursework might make the PhD ‘just another degree’ and that we might be inflating the base requirements for entry into many industry groups. A further concern was that candidates might use coursework as a form of procrastination, in that they will just do more and more coursework and not get onto their actual research. With regard to international students there was a concern that they might not want to come to a University that runs coursework in the PhD. Furthermore, what happens when candidates object to doing certain courses even when universities might think that they will eventually benefit?

A number of other issues were raised. For example, coursework can be about innovation as it can take away from ‘simply’ replicating the supervisor’s methodology with effective coursework that can see a range of options. There was also comment that the development of clear pre-entry requirements and preparation is very important along with the strengthening of confirmation of candidature. This comment was made in relation to the increasing use of confirmation of candidature as the main assessment focus for the curriculum e.g. Research Methods, Occupational Health and Safety, statistics etc.

Discussions related to interdisciplinary research degrees suggested that there can be some real difficulties with inter-disciplinary research, partly because supervisors may not have the range of skills and knowledge required, and also it is difficult to find appropriate examiners. However, questions were raised as to what sort of coursework can be developed to support interdisciplinary research? For example we could have activities that are designed to help candidates with their ‘creative juices’ to encourage ways of thinking. Further suggestions included whether we should be moving from the implicit to explicit with inter-disciplinary research. An example given was the Southampton Doctoral Training Centre on Web Science run by Les Carr where they have a very explicit approach to interdisciplinary research education.

**Conclusion**

The analysis of the research and discussions at the five workshops suggests that there is general agreement that the learning experiences of doctoral candidates in Australian universities could be considerably enhanced by the development of an integrated doctoral curriculum.

This curriculum would align university aims for its doctoral education, candidate learning outcomes, content, activities, pedagogy and assessment in ways that conceptualised the doctorate as a program, which enabled each candidate to:

- Produce quality research
- Be able to clearly articulate the knowledge and skills that they have developed during candidature
- Identify how their doctoral education supports future endeavours including employment, career development and contribution to society, and
- Know the world and themselves as learners and researchers.
References

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