

## COPHE’s Response on the

### Second Call for Comment and Discussion Paper, and Draft Standards for Research, Research Training and Learning Outcomes (Research Training)

#### Australian Government/Higher Education Standards/Research Training

*The Draft Standards for Research Training – May 2013* contain 8 major points with which it is difficult to disagree. For the most part this is true. There are a couple of points where COPHE would suggest change, and there is a table of suggested improvements at the end of this paper.

Principal supervisors are expected to be research active rather than experienced in doing research (and I would argue managing research). Though it is open to definition, research experience is not readily forgotten and doesn’t become obsolescent. Consider James Watson of DNA fame, who developed a leading research lab and forum but did little further research himself (McElheny V K 2004 *Watson & DNA*, Basic Books NY), instead he fostered others. Not all research active people are necessarily good supervisors, and ethical and personal characteristics can influence the research formation of students, confine the scope of their work, limit academic freedom, or exploit them.

1. The idea of “original contribution” from research is hard to define and some universities have backed away from doing so as they attempted to explain what they meant. A research degree is essentially an apprenticeship, done under supervision. On completion a person is judged as now being able to tackle a major project on their own. That doesn’t deny valuable contributions being made in the course of postgraduate research, but it is not now one’s major contribution in an academic career. Moreover, most examiners seem to place more weight on other attributes of a thesis than the contribution it makes. Research done for the Deans and Directors of Graduate Studies revealed that it ranked 5<sup>th</sup> out of 5 criteria.

Table 1 EXAMINER’S EXPECTATIONS AND RANKING OF CRITERIA

Criterion	PhD	Master
Contribution to knowledge	5	5
Literature review	2	= 3
Approach or method	1	1
Results	4	4
Communication	3	= 3

*Source: research for Deans and Directors of Graduate Studies Australia, sample >1200, interim results*

2. We would be concerned about limiting the number of external examiners to 1 for masters and 2 for doctorates. Given the variability in examiner’s assessment, one is increasing the risk of misjudgement and it would also obscure the problem of examiner inconsistency.

Further, it risks leading to increased appeals against outcomes, resulting in expensive reviews. Examiner inconsistency is a significant problem. There are ways in which it can be addressed (see the table at the end). Another issue is internal examiners, a practise open to abuse, and one I came across in two Group of Eight universities.

3. The sub-text is where the problems lie. There needs to be significant time spent on preparation before embarking on research-training, though there is usually impatience on the part of the candidates as well as the supervisors to roll up their sleeves and get stuck into it. Indeed, but I would qualify this statement. I see too many students who have taken ages to get going, and I am a strong advocate of finding ways to get them stuck in by doing. The preparation is a critical aspect of this and is addressed in a research management course I have developed precisely to address this problem.
4. A preparatory program should be a prerequisite for full candidature, perhaps as a US-style dissertation preparation course to focus on
  - an annotated bibliography,
  - a genuine literature review which is not merely chronological but penetrates to some critical depth,
  - a draft structural outline of the proposed study with sub-sections, and
  - a realistic assessment of access to necessary equipment.
5. The program above reflects a humanities approach and typical academic emphasis on the why of the study. More attentions should be paid to the how and the outcomes, that is: method, findings and dissemination of these findings. Requiring within the first semester of candidature a detailed proposal for a project that can be done in the minimum time of candidature is a way forward. It needs to be followed by a program of reporting to and review by a group that extends beyond the supervisor/s coupled with a willingness to take action on students who might be revealing problems that foreshadow failure to complete or perform satisfactorily. Many students fall into the too-hard or neglected baskets.
6. While this is done in some small private providers that offer research training (without government assistance), it is not generally a feature of older universities that have an unacceptable level of attrition from research degrees. Attrition is perhaps the major problem with postgraduate research. There are, nevertheless, examples within the university of exceptional performance in this area. Science has a much lower attrition rate than humanities. Three reasons would seem to explain this: well defined topics and closer supervision. Further, the lower attrition rate in science could also be linked to a higher likelihood of co-contribution, and also the involvement of external organisations in helping to monitor and define the research outcomes. Students in non-science areas usually tackling more complex topics with much more choice of methods are more likely to be left to their own devices.
7. Many of the newer universities have workshops and structured programs for inducting research staff into research degree supervision; hardly any in Australia prepare such staff for reliable and fair examination of theses. Variability amongst supervisors in knowledge of research and examiner's expectations, as well as variation in examiner's judgments, are notorious features of the system. More guidance by people with cross-disciplinary experience might broaden the horizons of staff and move them toward more consistency. See also comments on the reference points.

8. These issues are not new (see, for instance, Trigwell, K., Shannon, A. and Maurizi, R. (1997). *Research-coursework Doctoral Programs in Australian Universities*. Canberra: Australian Government Printing Service), but they do get rediscovered with each enquiry with little obvious implementation subsequently. Unfortunately, that seems to be the case. The large size of Australia Universities, dependence on overseas students, as well as continual restructuring to address resource issues and external demands, compounds the problem of development of academic management systems that deliver consistent outcomes at the staff and student levels.
9. In other words, what passes for research training standards at times would not pass muster at the undergraduate level. While the candidates are more mature, they are increasingly still very naïve about what constitutes research. A lot are. Among those who complete, the failure rate is only about 3%, and in my long experience some of these are wrongly failed even under very distinguished researchers. There are others that get through and are of mediocre quality.
10. Standards could be more specific about the intellectual context in which research is undertaken. For many in the past, postgraduate research was a very isolating experience, especially outside of science, with perhaps only the supervisor to interact with. Universities have now acted to improve this but to varying degrees. Students should be able to interact with departmental staff (not just fellow students) at will in formal and informal settings, make presentations to them each year, and participate in external conferences.
11. A further point on supervisors; one study suggested that 30% of students will complete with a different supervisor to the one they started with. There are various reasons for this. It is important to establish a good fit between supervisors and students. Second, there are two sides to supervision, one is the expertise in the field that is important for high quality work, the second is the ability to guide a person through a project, that is, project management skills exhibited and imparted. These are more generic and probably the most important. A good use of these skills can ensure that the student seeks the specialist advice that is essential to their work. In some fields the incidence of cross-disciplinary topics is increasing so the generalist supervisor may most appropriately be the lead supervisor. If competitive research grants are most often assessed by non-experts in a field, then a capacity to supervise outside one's area of expertise should also be possible. Most thesis topics are not that difficult to get one's head around, and since the results should be accessible to people in other disciplines (who might wish to use the findings or method), then it should be possible for a scholar to guide a person in the study, especially at the beginning of a research career.
12. In regard to reference points I note that the research methods literature itself is not used. I can understand this. It is obvious that attempting to define research standards to which all disciplines could adhere is impossible, hence the reference points are allowed to be discipline specific. As someone who has taught methods and supervises in the humanities, social sciences and natural sciences, I understand this response, though it is ironic. Perhaps there should be more emphasis upon cross-disciplinary in research training so that our graduates are well-rounded.

13. The ERA reporting system is encouraging game playing which distorts research incentives and outcomes that all about rankings. There are dubious links between institutions and researchers purely for the sake of counting points. Rankings, and the numbers that drive the, are all about perceptions of prestige and surely research standards need to recognize what is effectively a parallel universe.

14. Below is a first attempt to identify the main problems in postgraduate research and offer some possible solution

Main problems and solutions

<b>Problem</b>	<b>Possible solutions</b>	<b>Indicators</b>
High attrition rates, especially in non-science or inductive research	Adoption of science model, research training focussed on individual's topic to ensure application	Completion to enrolment ratios
Variation in examiner's evaluations	Provide clearer guidelines to examiners, ask for comment on more specific areas than 3 or 4 at present	Incidence of conflicting examiner's reports
Poor use of method in some disciplines, from sampling in economics and chemistry as well areas using people as sources of information	A congenital problem because disciplines often accept or do not their methodologies. Issue of sampling can be addressed at a cross-disciplinary level that highlights the core principle of representativeness, even of case study based research	
Limited and variable experience of supervisors	Education of supervisors, could be formal, use of cross-disciplinary student conferences, experience on review of examiner's reports, using own staff to explain their experience	Supervisor's experience, eg no of students completed, attrition, average time to completion
A problem of translation of ideas from generic research methods courses to individual circumstances and projects	Focus on the very fundamentals of research methodology, adapt to examples, expose to cross-disciplinary perspective to show how fundamental issue manifests itself in in different disciplinary contexts, e.g. observer's presence (participant observation in ethnography, undertaking research based on employment context, wildlife research)	Mean class size of research training and whether it is cross disciplinary. Ideal size is 6-20.
Acceptance of enrolments with poorly defined research proposals, usually a topic and some evidence for why the project might be done, but limited attention to how and deliverables	Make first semester of enrolment probationary and require a detailed research proposal mandatory for confirmation of candidature. Use templates drawn from commercial research that places emphases on outcomes and method. The why of research is fairly easy to assess.	Is a detailed research proposal required?
Limited emphasis on establishing a research proposal early in candidature	See above	

Absence of formal reporting mechanism and evaluation of progress and protocols for dealing with shortfalls	Require reporting to panel every semester on progress. Ask for brief progress report and the milestones anticipated for forthcoming semester. Act promptly on problems. These reports can be 1 or 2 pages and panel need only ask about 5 questions to have a major impact.	Is student research conference at least annual, is it cross-disciplinary
Topics which are often too ambitious, sometimes far too ambitious	Well-designed research methods unit and proposal requirement in first semester can make a very big impact	

Authors:

Tony Shannon, Senior Teaching and Learning Fellow, COPHE  
Richard Cardew, Australian College of Theology

With contributions from:

Kara Martin, Policy Officer, COPHE  
Adrian McComb, CEO, COPHE  
Tracey Rowland, Dean, John Paul 2nd Institute

Research Supervision Experience:

It includes reading over 2000 examiners reports across a wide range of disciplines; supervision of about 60 externally examined theses and research projects across a range of disciplines from history to science; many years of service on postgraduate and research boards; and a long period of service in a school with an outstanding research record particularly by students. Also teaching research methods (management) to students in the following schools/areas environmental (from science to philosophy), management (business), and construction management (building)