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Assessment of Postgraduate Studies:
Are we missing the mark?

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Abstract

The first author had the privilege to examine master's dissertations, as well as doctoral theses on design and design-related topics presented at six universities in South Africa. He furthermore supervised postgraduate students at four universities and served on a variety of postgraduate and ethics committees. This exposure and access to various examination reports and postgraduate assessment criteria provide an informed perspective of the scope, depth and outcomes of, as well as the assessment practices surrounding postgraduate studies in South Africa. Examination reports from examiners outside South Africa are, in general, more favourable with mark allocation than the examination reports issued by South African examiners. The marked difference between local and foreign examination reports served as a catalyst for a small benchmark study. The resultant benchmarking study considered a sample of theses and dissertations from leading tertiary institutions that offer postgraduate programmes in design and art. The question that guided this benchmarking exercise was "Is the scope and content of South African postgraduate work appropriate when compared to our international peers?" This paper reflects on the scope, the content, and the direction of a selection of dissertations and theses submitted at leading institutions abroad. As such, a small sample of theses and dissertations from leading institutions in the United Kingdom, Australia, Hong Kong, and the United States provided the basis for the benchmarking exercise. An analysis of the scope and content of the dissertations and theses has shown that some of our peers may have a different focus than we do here in South Africa. Some postgraduate work is primarily practice-based, while the candidates' written component provides the context for their practice. Some dissertations and theses appear as a designed book, richly illustrated with practice-based artefacts. Not all the studies follow the IMRAD model (Introduction, Methods, Results, and Discussion). Also, some works are notably more concise and condensed than what is customary in South Africa and seem to deliberately avoid unnecessary wordiness. Should we move from the traditional dissertation and thesis towards a practice-based approach, and do we have the required supervisors and examiners with the necessary academic and practical expertise to do so? If so, then the next step for us would be to develop a framework and standards to adapt to the ever-changing, ever-evolving academic environment.

Keywords: Postgraduate studies, benchmarking, assessment

Introduction

The first author had the privilege to act as a postgraduate supervisor for students at four universities and furthermore examined postgraduate work from six universities. When compared to postgraduate examiners abroad, South African examiners differ widely in their assessment of a dissertation or thesis. Examiners outside South Africa, notably, seem to allocate higher marks when compared to South African examiners. South African dissertations and theses differ widely in length and the type of resources that postgraduate students cite. These vary from mostly journal articles, while others rely more heavily on books and accessing information on a variety of available websites. Postgraduate work ranges from practice-led, applied and qualitative research to quantitative hypothesis-testing studies. The variation in postgraduate work and the often-divergent opinions that arise during assessment raises questions about consistency in terms of the quality, content and scope of our postgraduate studies and research outputs. How, in addition, do our dissertations and theses and our assessment practices compare to our international peers? Is our IMRAD model appropriate for postgraduate studies in design and related creative fields?

Several scholars posed similar questions on the subject of assessment and the scope and content of postgraduate studies completed in arts and design. Paltridge, Starfield, Ravelli and Tuckwell (2012), for example, considered the macrostructures of doctoral studies in the visual and performing arts. Their sample consisted of 30 doctoral texts that ranged from 50 000 to 80 000 words. Paltridge et al. (2012, p. 339) found that the theses contained components that one would find in a traditional thesis, "but the components are typically much less discretely divided or specifically named". In their conclusion, they remark that the creative doctoral thesis does not necessarily conform with the traditional thesis format and writing practices and that there are several options for students to present their work, and that there is no unalterable justification or absolute rationale why a thesis should fit in a preconceived format (2012, p. 342).

Kroll and Webb (2012, p. 171), in a related paper, debate the examination of doctoral theses, the capacity of examiners, standards, rigour and ethics. They highlight that examiners, apart from academic expertise, for example, must have proficiency in the practice. Concerning examiners, they remarked that there is a lack of knowledge when it comes to assessment, standards, outcomes and diverse assessment practices. One of their suggestions is that supervisors and examiners must develop "very precise and defensible standards for research in our disciplines, and for the evaluation of research: standards that are not simply about reproduction, but that accommodate and value the creative innovations one would hope to regularly emerge in creative doctoral research" (Kroll & Webb 2012, p. 172).

Mäkelä's (2007) paper on the role of an artefact in practice-led research provides a constructive reflection on the role of an art or design artefact in the research process. She emphasises that an artefact is mute and cannot convey or transfer knowledge. It is simply a method for collecting and storing knowledge. A researcher is to break this muteness and so provide a voice to the artefact. The written component of a dissertation or thesis provides this voice.

This paper aims to raise questions regarding the content and scope of work produced by postgraduate students in design and related fields. We conducted a small benchmark study where we looked at the content and scope of dissertations and theses produced at overseas institutions. The insights gained from this benchmarking exercise allow us to reflect on work produced in South Africa, and so make some inferences about the scope and content in question.

We will first provide a brief reflection on the national outcomes of master's and doctoral studies and the assessment of research and postgraduate studies, before reporting on the

benchmark study. This paper delimits itself to a discussion on the results and precludes an in-depth discussion and arguments for and against practice-led or practice-based research. For an extensive exposé on practice-led research, see the resources published by Edith Cowan University (2019), the ideas put forward by Laurie (2015) about subjectivity and individualism problems in practice-led research, and Faber's (2010) edited book about approaches to practice-led research in art and design. Speakers at the 2018 DEFSA workshop on practice-led research presented examples of practice-led research. Campbell (2018) presented a paper on student work that produced innovative industrial products, Bullock's (2018) presentation touched upon her MTech degree and medical devices and Pacheco (2018) presented a detailed and richly illustrated presentation about an off-grid food processing system.

Master's and doctoral requirements

The South African National Qualifications Framework (NQF) provides a framework for the classification and registration of national qualifications as per the NQF Act, 2008 (Act No. 67 of 2008). The Council on Higher Education (CHE) is responsible for the higher education sub-framework and pitched master's and doctoral degrees at levels 9 and 10, respectively. The aim of the NQF, among other things, is to ensure that South African qualifications are appropriate, of acceptable quality and that they meet acceptable standards (South Africa 2014 & CHE 2013). The CHE's (2013) publication provides the minimum number of credits required, as well as the purpose and characteristics of master's and doctoral degrees. All South African master's and doctoral degrees must conform to these requirements.

Master's degrees, for example, must train students to develop knowledge at an advanced level. Both types of master's degrees, consisting either of coursework coupled with a dissertation of limited scope or a master's degree that consists of writing a full dissertation, must contain a significant research component, i.e. a research project must be undertaken. Students at this level must master several skills such as: "be able to reflect critically on theory and its application […], deal with complex issues […], critically appraise research […], make sound judgements using data and information […] and communicate their conclusions" (CHE 2013, p. 36). A doctoral degree typically prepares candidates for an academic career. Research must be at an advanced level leading to a thesis. The difference between a master's and a doctoral degree is that a doctoral candidate must "demonstrate high-level research capability and [...] make a significant and original academic contribution at the frontiers of a discipline or field. The work must be of a quality to satisfy peer review and merit publication" (CHE 2013, p. 40). The CHE also allows for creative work, such as public performances and public exhibitions, as a component in the partial fulfilment of the requirements for a degree. From this, it follows that the purpose, outcomes and characteristics of South African postgraduate studies are similar.

Similarly, university examination requirements typically require an examiner to produce an examiner's report. The report must comment on and examine the work in terms of its orientation, the aim, the research methods, a review of the literature, the actual research, the results, the recommendations and the conclusion to the study. Postgraduate studies that include a creative component typically display this work in a public space and are examined by using criteria set by the supervising department. Students who complete postgraduate work in a fine art environment most often produce a body of work and an accompanying dissertation or thesis.

Universities in South Africa examine postgraduate studies dissimilarly. Some use external examiners exclusively, while others use a combination of internal and external examiners. The Department of Higher Education and Training (DHET), in addition, rewards universities by providing a monetary subsidy based on a weighted count of master's degrees, doctoral

degrees, articles published in scholarly journals, books, book chapters and conference presentations published in conference proceedings (South Africa 2003), and more recently on creative output (South Africa 2017). The caveat is that articles must appear in approved journals (South Africa 2003 & 2019) and that books, chapters in books, and conference proceedings are further subject to quality peer evaluation and scholarly criteria. One of the shortcomings is that this subsidy system does not differentiate between the impact and the quality of an article. An article in an obscure local journal receives the same subsidy as an article in high-impact journals such as *Nature* or *Science*. In this regard, and what South Africa should consider, is how the United Kingdom assesses the quality and impact of research produced at their universities. Review panels assess submissions based on the impact of their publications, exhibitions and performances and look at the impact the study has outside of academia. The United Kingdom's Research Excellence Framework (REF) provides guidance on the impact of research and how researchers can monitor and improve their impact after the completion of a study (REF 2019).

The process

We used the Quacquarelli Symonds (QS) World University Rankings database as a guide and then collected and analysed the scope and content of dissertations and theses from selected art and design university departments. The QS database highlights top-performing universities worldwide. This database collects, analyses and compares data on 48 different points of reference, such as the institution's strengths, location, and the age of institutions (QS 2018). The database allows a visitor to select a level of study (postgraduate) and the subject of interest. For our purposes, 'art and design' were selected, and the database then listed universities in ascending order that offered postgraduate studies in art and design. The next step was an attempt to access the universities' institutional repositories to search for, and download, art and design dissertations and theses. It was not possible to access and download dissertations and theses from all the university websites listed in the search results. The first five universities that allowed downloadable work was the Royal College of Art, RMIT University, the Hong Kong Polytechnic University, the University of Northumbria at Newcastle, and the Rhode Island School for Design. The convenience sample comprised of 20 theses and dissertations that were completed between 2010 and 2018 and covered fine art, film, digital art, photography, graphic design, performing art, textile design, music, painting, dance, and jewellery design.

We collected data regarding the number of supervisors and the length of the theses and dissertations based on word count, the number of pages excluding addendums and figures, the reference count, the article count reflected in the reference lists, the type of references, chapter division and the type of work that the students produced.

The results are presented in the tables below. Cells in the tables that are empty indicate that it was not possible to extract the relevant data due to password-protected PDF files. The list of students and their work is given in a list preceding the references. The number next to the student corresponds to the number in the tables below.

The results

The numerical values of the scope and content are presented in Table 1 and Table 2 on the next two pages.

Table 1. The scope of the 20 dissertations and theses

Student no.	Qualification	Year	Institution	Discipline	No. of supervisors	Page count, excluding addendums	Word count	No. of chapters
1	PhD	2018	RCA	Fine art	1	58	39 883	5
2	PhD	2011	RCA	Sculpture	2	96	40 616	4
3	PhD	2015	RCA	Film	2	239		4
4	PhD	2011	RCA	Film	3	128	43 531	3
5	PhD	2015	RCA	Digital art	3	102	49 565	4
6	PhD	2016	RCA	Photography	2	105	33 240	7
7	PhD	2017	RMIT	Photography	3	108	33 134	7
8	PhD	2016	RMIT	Performing arts	2	150	45 815	6
9	MFA	2009	RMIT	Textile design	2	34	9 651	4
10	MA	2007	RMIT	Music	2	38	11 332	5
11	PhD	2012	RMIT	Painting	2	137	32 940	4
12	PhD	2010	RMIT	Dance	2	296	81 217	9
13	PhD	2016	HKPU	Textile design	3	124		7
14	PhD	2018	HKPU	Design	2	150		6
15	PhD	2014	HKPU	Design	3	408		10
16	PhD	2016	UNN	Textile design	3	246	56 772	9
17	PhD	2018	UNN	Business & Design	2	48	18 158	7
18	MFA	2017	RISD	Printmaking	3	43	5 676	4
19	MFA	2016	RISD	Jewellery	2	80	5 030	5
20	MFA	2018	RISD	Graphic design	3	100	17 499	4
				Means for master's degrees		59	9838	
				Means for PhDs		160	43170	

Note: The acronyms in the applicable table are as follows: RCA = Royal College of Art; RMIT = Royal Melbourne Institute of Technology University; HKPU = Hong Kong Polytechnic University; UNN = the University of Northumbria at Newcastle; RISD = Rhode Island School of Design.
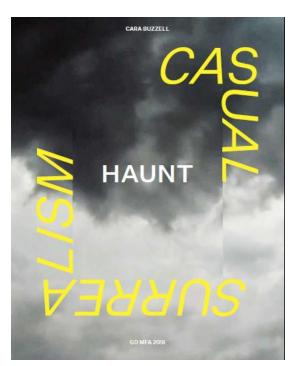
Table 2. The scope of the references and the type of work

Student no.	Types of references	Type of work	No. of references	No. of journal article count in the references
1	Books, anthologies, video, websites, theses, journals and exhibition catalogues	Practice-based	384	20
2	Books, publications, artworks and websites	Language-based artwork including a practical component	185	1
3	Books, journals, interviews, filmographies, moving image works and DVDs	Practice-based	224	10
4	Filmographies, interviews, television programmes, DVDs, websites, personal archives, books and newspapers	Practice-based	78	0
5	Websites, books and journals	Practice-based	133	13
6	Books, journals, films and television programmes, exhibition text, catalogues and databases, unpublished conference papers and websites	Practice-based	470	120
7	Books, journals and websites	Practice-based	156	8
8	Books, journals, websites, television programmes, conference papers, exhibitions and video art archives	Practice-based	420	15
9	Books and websites	Practice-based	32	0
10	Books, journals, CDs and DVDs	Practice-based	25	1
11	Books and journals	Practice-based	74	2
12	Books, filmographies, websites and videos	Practice-based	420	0
13	Books, journals, conference proceedings and websites	Experimental or Practical	72	17
14	Books, journals, conference proceedings and websites	Practice-based	158	30
15	Books, journals, websites and photographs	Practice-based	405	156
16	Books, journals and websites	Practice-based	301	32
17	Books, journals and websites	Design-led approach	140	28
18	Books and websites	Practice-based	7	0
19	Books, journals, websites and photographs	Practice-based	34	3
20	Books, magazine articles and websites	Practice-based	31	14
		Means for master's degrees	25.8	3.6
		Means for PhDs	241.33	30.13

Items that stood out are as follows:

- Only one student had one supervisor. Students are generally supervised by two or three supervisors.
- Master's degree dissertations ranged from 34 to 100 pages, with a mean of about 9 000 words. Doctoral degrees consisted of substantially more, and ranged from 48 to 408 pages, with a mean of about 43 000 words.
- The mean number of reference and scholarly journals for master's degrees were 25.8 and 3.6. For the doctoral degrees, these were 241.3 and 30.1.
- One thesis, the work by Palmer (2011), was a theory-based project that included a practical component. The others appeared to be dissertations or theses based on practical work.
- The students write in the first-person singular. They use a narrative and what appears to be a non-academic style of writing to explain and describe the stages of their creative processes.
- The structure and format of the theses and dissertations differ widely from one university to the next.
- One dissertation lists only seven references.
- Students use footnotes liberally.
- One student had only one word (Jockel 2016), while another had only three words (Buzzell 2018) in the titles of their work.
- One student appeared to have gained entry to a doctoral programme with only a BA(Hons) degree (Dagnall 2017).
- The dissertations and theses from the Royal College of Art and the Rhode Island School of Design represent work in graceful layouts and the texts are richly illustrated with images and include expressive words and quotations. These colourful dissertations are visually refreshing and present the antithesis of the customary black and white, double line spaced scripts that we have become accustomed to in South Africa (Figure 1).
- Work from RMIT and the Hong Kong Polytechnic University reflects an approach similar to what we see in our fine art-based postgraduate studies.
- Work from the Hong Kong Polytechnic University is applied and follows an IMRAD-style approach.
- Not all the works are illustrated with visual examples. The work by Wilczek (2007) on music composition in surround sound contains no images.
- The impression that we gained from this brief review is that some of our peers focus on applied and practice-based work, and the verbalisation of the thoughts, philosophies and processes underlying their practices. Even though the sampling employed a convenience process, we did not purposefully select practice-based dissertations and did not purposefully exclude IMRAD-type dissertations.
- We are not aware that the students relied on or even felt compelled to include lengthy definitions of terms, to undertake extensive literature reviews or to include long-winded discussions on a chosen methodology or on theoretical frameworks. What stood out is the in-depth and detailed description, discussion and illustration of their practical work and the outcome of their empirical work.
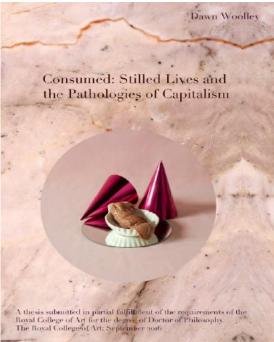
Figure 1: The front covers of Buzzell (Rhode Island School of Design, 2018) and Woolley (Royal College of Art, 2017)

Discussion of the results and concluding questions

This paper aims to question the typical scope and content produced by our master's and doctoral students in design and related fields. The benchmark study has shown that the international trend at some institutions is towards practice-based work. Dissertations and theses produced by our overseas peers are richly illustrated. However, there are some that follow a similar format to the IMRAD approach that we currently employ in South Africa. The numerical information in the two data tables allows us to assess and determine if the content and scope of our postgraduate work would pass the muster of our international peers. South African dissertations and theses compare favourably with research undertaken and work produced at some of our overseas peer universities that follow an IMRAD-type approach. Where the design disciplines can develop, however, is with practice-based work and applied research.

If the trend is indeed towards practice-based studies, is there still a need to direct our students towards IMRAD-type work and the writing of a traditional dissertation or thesis? The National Qualifications Act (South Africa 2014), the Policy on the Evaluation of Creative Outputs and Innovations produced by Public Higher Education Institutions (South Africa 2017) and The Higher Education Qualifications Sub-Framework (CHE 2013), with requirements, support practice-led research. Should we move towards practice-led design with an accompanying dissertation or thesis, and, in Mäkelä's words (2007), to de-mute the artefact and give it a voice to speak? Changing our direction from the traditional IMRAD-type dissertation and thesis towards a practice-based approach would require both supervising staff and examiners with academic and practical expertise and experience. This may present itself as a simplistic and easily achievable solution but may nonetheless be difficult to attain. We know that a full-time academic staff member who supervises postgraduate students has the added pressure to produce research papers. Will such a supervisor neglect their research activities and devote valuable time to work as a designer – parallel to the standard and typical academic and administrative duties? An alternative route would be to appoint staff members who function

solely as practitioners, as opposed to and in conjunction with those who are charged with a department's research processes.

We can also counter-argue that practice-led research and international trends are not necessarily appropriate and a good model for South Africa. If we argue and then accept that the production of a design artefact is appropriate for the awarding of a postgraduate research degree, should we then not consider awarding such degrees to all innovative design practitioners? All that is required is the additional production of an accompanying set of text that verbalises the process and text to clothe the artefact in an academic aura. We know that this is illogical reasoning, and we cannot entertain such a process. Master's and doctoral degrees in South Africa require research (CHE 2013). Research advances knowledge and uses scientific thinking and processes such as empiricism, rationalism and scepticism. The scientific method embraces observation; formulating a question, a hypothesis or objectives; collecting data; a research process; and reflecting on the results (elements which are achieved by IMRAD-type research outputs). Objectivity, reproducibility, testability and the elimination of personal and cultural bias are some key tenets of a scientific process. South African academics who supervise students are bound by the CHE's requirement for research for master's and doctoral degrees. By supervising research, we are constrained to 'obey' the prudence of science and the scientific process. If we, as argued above, 'de-mute' and provide a voice to an artefact, would this violate the principle of objectivity and the elimination of bias? Is it possible to separate oneself from one's creative process and report objectively considering rationality and scepticism?

Should we move from the traditional dissertation and thesis towards a practice-based approach, and do we have the required supervisors and examiners with academic and practical expertise to do so? We would need to develop 'precise and defensible standards' (Kroll & Webb 2012, p. 172) to supervise and examine dissertations and theses in a changing academic environment. We move to conclude that these otherwise defensible standards will nonetheless have to consider, and, ultimately, include the CHE's requirements (or possibly similar future requirements) for a doctoral degree, namely 'high-level research capability', and "a significant and original academic contribution at the frontiers of a discipline or field" (CHE 2013, p. 40).

List of student theses and dissertations

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Buzzell, C, 2018, *Haunt: casual surrealism*, Rhode Island School of Design.

Chun Ting, C 2017, *3D pattern for knitted objects,* The Hong Kong Polytechnic University.

Costa, J 2012, *Cinema forges the event filmmaking and the case of Thomas Harlan's Torre Bela*, The Royal College of Art.

Costello, C 2015*, The continuous view: practices of attraction in the moving image,* The Royal College of Art.

Dagnall, R 2017, *Landscape photography and the imaginary of an Australian gothic*, Doctor of Philosophy (PhD), Art, RMIT University.

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