

FACILITATING EARLY RESEARCH EXPERIENCE IN ART AND DESIGN USING A RESEARCH-ORIENTED APPROACH TO TEACHING AND LEARNING

Tara Winters
Elam School of Fine Arts
National Institute of Creative Arts and Industries
The University of Auckland, Aotearoa, New Zealand

Abstract

Artists and designers find themselves in an unsteady position in relation to the world of research. Visual art and design practice is relatively new to the domain of academic research, and a level of critical engagement with the theory and practice of art-as-research is required at all levels, from undergraduate student to senior academic. This involves determining an intellectual position with regard to the nature and purpose of artistic research, as well as finding or developing a methodological approach appropriate to visual practice. With the complexity of this situation in mind, this paper advocates for the integration of appropriate research experience from the very beginning of higher learning. Research-oriented teaching is a framework developed to describe a particular category of the teaching-research nexus (Griffiths, 2004). With an emphasis on understanding *how* knowledge is developed (similar to ideas of constructivism) research-oriented approaches sit well alongside the widely shared view that the area of expertise of the artist-researcher is in the *processes* that lead to finished objects.

In this position paper, I draw on BFA teaching experience in order to illustrate how, at early programme levels, research-oriented teaching can support student learning and the development of graduate attributes related to understanding and appreciating the philosophical basis and characteristics of artistic practice as research. I propose that the evolution of practice-based research over the last two decades has had an impact on our pedagogical content knowledge and that we are developing a distinctive, subject specific 'research-oriented' approach that holds the potential to be of wider pedagogical interest and value.

Introduction

Artistic research is an emerging field of practice-based investigation, and the question of whether art practitioner activity can be described as academic research remains an open one. When research is said to be carried out *through* artistic practice, things become particularly interesting and debate flourishes. Is it possible to differentiate art practice in itself from art practice as research? Is this work knowledge directed? Does it contribute new knowledge? Are its methods transparent? Henk Borgdorff (2006) usefully points to the nature and scope of the kinds of questions being asked with regard to research in the creative arts:

“... the issue is whether this type of research [art research] distinguishes itself from other research in terms of the nature of its research object (an ontological question), in terms of the knowledge it holds (an epistemological question) and in terms of the working methods that are appropriate to it (a methodological question)” (p. 1).

Hito Steyerl discusses the disciplining process of the phenomenon 'artistic research' from an artist's point of view, highlighting the role of an 'aesthetics of resistance'. Steyerl notes that practices of artistic research have a long and extensive history, and suggests we know more about artistic research than we think, he says:

“... if we look at artistic research from the perspective of conflict or more precisely of social struggles, a map of practices emerges, that spans most of the 20th century and also most of the globe. It becomes obvious that the current debates do not fully acknowledge the legacy of the long, varied and truly international history of artistic research which has been understood in terms of aesthetics of resistance (Steyerl, 2010, p. 32).

While I do not propose to comment on or address these questions specifically, this situation informs my discussion of a developing pedagogical content knowledge in art and design teaching, providing important contextual information.

Part of the definition of academic research is that it is conducted within the conventions and standards of the class of research to which its procedures belong. Applied to artistic research, this would refer to the conventions and standards of the art and design world, which would also serve as a context for the validation of the research. The aims and goals of artistic research serve multiple agendas. As Hannula et al. (2005) notes: “At the same time as providing the researcher with intellectual challenges and learning experiences, artistic research also participates in the development of the theoretical basis of the field” (p. 19). Hannula explains that because a paradigm governing the nature of this field does not yet exist, everyone active in art research is obliged to “provide contextual, practice-driven definitions for the practice, and especially for the concepts used when doing and describing the research” (Hannula, 2009, p. 2).

Practice-based, creative arts research has been developing its response to the institutional context it is a part of, pursuing a framework that allows its distinctive qualities (with respect to the three broad questions captured by Borgdorff above) to impact perspectives on a definition of its practice as research. Education in the subject reflects these debates and propositions. Pedagogical research has indicated students believe that more exposure to research methods at younger undergraduate years places them in a better position to cope with the demands of further study (Zamorksi, 2002; Krause, 2008). In the context of the complexity the practice-based researcher faces, early experience seems especially critical. In what follows, I outline the problematic nature of art as research, and provide discussion and a practical example of how a research-oriented pedagogy can be used to appropriately introduce students to artistic research early in undergraduate degree study.

Challenges and issues for art-as-research

Context

The context of artistic research attempts to bring together two distinct domains: the creative arts domain (the art and design world), and the academic domain (higher education and research). It is the very unique situation that artistic research seeks to contribute simultaneously to both these domains. Not losing sight of its primary concern of functioning successfully in the art/design world, artistic research also aims to contribute to what we know and understand more generally through the aesthetic experience of art and design work. Its systems for ‘quality assurance’ with regard to quantifiable academic research outputs reflects this. Examples of quality-assurance processes include: exhibitions in or acquisitions by national or international institutions; inclusion in national or international festivals; and broadcasts on national or international television (2012, Tertiary Education Commission of New Zealand, p. 4)

Academic research is clear about its requirements, whatever the subject or context. These are:

1. To make a contribution to knowledge in the discipline in which it operates
2. That the activity employs reliable methods relevant to the context that guarantee valid results
3. That working methods and results are documented and made widely available.

These are the kinds of conditions in place for higher degrees (MFA, DocFA, PHD) and for research

undertaken by academic staff within the university setting. Students who will go onto further study can benefit greatly from being familiar with the terrain that is being established through the ongoing debate around art as research. So too, do students moving directly into the workforce benefit from a research-based education.

A notable aspect with respect to research in the Fine Arts is the rather unusual situation that artists and designers are required to develop satisfactory descriptions of exactly how their individual practice meets the requirements of academic research. That is, they must offer detail about how their artistic process represents a methodology (the principles from which methods are derived) and what its research methods are (how will the research be conducted, and why this is appropriate/reliable/valid as procedure). This is due to the special case that artistic research takes place in and through artistic *practice*. 'Practice' is the logic of all activity in the Fine Arts (including research activity). The term refers simultaneously to the subject of the research, the method, and the outcomes of the research.

Knowledge

The term 'research' is synonymous with the idea of the generation of new knowledge. At once, art and design, with its quest for meaning over formal knowledge seems to sit at odds with academic research. However, it is possible to distinguish two ways that artistic research may be said to be making a contribution to collective knowledge. The first is in reference to advancing knowledge about artistic practice itself through research. This idea is similar to Frayling's well cited 1993 description of research *into* art and design¹, but it also departs from this in that it can refer more specifically to theoretical knowledge from a practitioner perspective, from within the process itself rather than the more traditional model of historical and aesthetic studies of art and design from an external perspective that Frayling refers to (Laurel, 2003, p. 11). In this context, practice informs theory building to gain new insights, knowledge and understanding about creative practices and processes - how artists and designers think, and how they work. Documentation of process allows practitioner thinking to be communicable to others, sometimes through a research report or other written component which sits alongside practical outcomes. This is perhaps less controversial in its relationship to traditional academic research in that it is usually communicated through written or spoken language.

The second kind is the knowledge artistic activity seeks to convey through aesthetic experience – the kind that is activated by audiences during the experience of artworks. This is closest to Frayling's third and most problematic research distinction – research *for* art and design, described as "Research where the end product is an artefact – where the thinking is, so to speak, embodied in the artefact, where the goal is not primarily communicable knowledge in the sense of verbal communication, but in the sense of visual or iconic or imaginistic communication" (Frayling 1993, p. 5). In the opening to his chapter 'The Production of Knowledge in Artistic Research', Henk Borgdorff (2011) says:

"It [this chapter] will conclude by saying that artistic research seeks not so much to make explicit the knowledge that art is said to produce, but rather to provide a specific articulation of the pre-reflective, non-conceptual content of art. It thereby invites 'unfinished thinking'. Hence, it is not formal knowledge that is the subject matter of artistic research, but thinking in, through and with art" (p. 44).

The idea of thinking, meaning and novel apprehension as the goal of artistic research, rather than formal, validated knowledge is a popular one (see Wesseling, 2012; Scrivener, 2002). Artistic research has little interest in claims to knowledge in the most formal, academic sense where reliability and certainty are important. Appropriately, the features high on the list for artistic research are the features

¹ In his paper 'Research in art & design' Christopher Frayling makes a distinction, which is adapted from Herbert Read's ideas on art education, between research into art and design, research through art and design and research for art and design.

central to art and design as artistic practices in the art and design world: notions of value, significance, meaningfulness, and aesthetic effect, for example. These resonate much more with the quality of research with a little 'r' than research with a capital 'R'. Research with a little 'r', as described by Christopher Frayling, describes an affinity with the much broader values of inquiry, questioning and investigating as distinct from 'work directed towards the innovation, introduction and improvement of products and processes' (1993: 1).

The point to be made here, as part of a research-oriented teaching practice, is that as academic research, artistic research has a different relationship to the concept of knowledge than other subject areas. It operates first and foremost in the terms of the larger field in which its creative outcomes must operate. This position is critical to understanding and acknowledging why methodologies and methods alternative to those of traditional research are appropriate and acceptable, and reflects why methods from other subject research traditions cannot be, and should not be, expected to apply to artistic research.

Teaching and learning in a research-led University

Research-based programmes of study are said to differ from other kind of study programmes, offering a 'distinctive student learning environment' (Commentary, The University of Auckland). They propose to highlight aspects of higher-level learning and utilise pedagogies that take advantage of the fact they are staffed, in the main, by research active academics. In my own national academic context, research-led universities are said to be a defining characteristic of New Zealand Universities, with a description laid out in government legislation. Benefits of learning within a research-based teaching environment are described as:

1. A deeper understanding of the knowledge bases in a subject/profession, including research methods, and the research challenges and issues these subjects currently face
2. Expansion of the capacity for lifelong learning
3. Experience of independent research and inquiry that support more advanced levels of learning
4. Enhanced engagement in study and development of the capacity for independent learning (based on material from 'Commentary, The University of Auckland').

Research based learning sets students up for potential postgraduate study and for entering the workplace. "For employers, this can mean prospective new employees who not only demonstrate subject area knowledge, but are also well-versed in research methodologies, have real experience of being part of a team, are capable of critical thinking, and show potential for leadership" ("Teaching and Learning in a Research University", 2010, p. 3). Each subject/discipline area will have its own interpretation of what it means to learn in a research-based way, related to its particular traditions and practices. Features of a research-oriented learning experience at an undergraduate level in the Fine Arts include:

- Establishing context for the studio practice
- Developing a of philosophy/position for the studio practice
- Development of a personal methodology
- Development of an independent, self-directed studio practice

A key focus of learning in early parts of a Bachelor of Fine Arts (years 1 and 2), is the development of a deep understanding of ideas, issues and concepts in contemporary art and design followed in later parts (years 3 and 4) by students' self-identifying and responding to contextual issues relevant to their own developing practice. Working in a practical way on studio projects constitutes the primary learning mode, and these are regularly framed as 'research projects' focused on artistic outcomes where students are encouraged to discover their own creative and critical voice. At BFA Honours level (year 4), the course I teach on is described fully in research terms as an 'individualised research-based programme of study'.

Research-oriented teaching

Various opinions exist among academics about if and how teaching and staff research is linked. Factors that impact these varying perspectives include the conceptions held by staff of what teaching is, and the nature of research practices within a discipline. Griffiths (2004) outlined several relationships that are said to exist within the research-teaching nexus: research-led; research oriented; research-based; and research informed. He makes a distinction between research-teaching relationships that are specific in form, and those that seem to be more dispersed and indirect in character, using the term 'research-oriented' teaching to refer to this latter category. Of this category Griffiths says that:

“What academics are bringing to the teaching situation is not so much the specific methods, findings and experiences associated with particular research activities, as a more general orientation to the subject, and to the process of knowledge creation, that first-hand participation in knowledge production provides” (Griffiths, 2004, p. 721).

Attention is given to acquiring a 'research ethos' and the research experiences of teaching staff are brought to bear in a more diffuse way (Griffiths, 2004; Healey, 2005).

There seems to be a good fit here with the ways that art and design staff bring their practitioner-researcher experience into the classroom. There is an emphasis on facilitating students to 'think like artists' - to develop certain dispositions that bring them closer to the community of professional practice. They also bring their experience of establishing individual approaches to framing their art/design practices as research within an academic context. The research-oriented model also places an emphasis on *how* knowledge is created, and this represents another moment of its value as a construct for art and design pedagogy. Griffiths explains how, under a research-oriented model, “the curriculum places emphasis as much on understanding the processes by which knowledge is produced in the field as on learning the codified knowledge that has been achieved” (2004, p. 722). I have commented elsewhere on the alignment of this characteristic with art and design teaching and learning noting that:

“The concept of a research-oriented model focuses extra attention on *process*, in contrast to say a research-led approach, which concentrates on sharing research findings after the fact. Given that a central role of studio education is to help students find out about their own ways of working and to support the development of their individual practices, a research-teaching model whose focus is on process seems a productive and appropriate model for the subject” (Winters, 2015).

The current work builds on these ideas, considering the specific case of early undergraduate learning. In the example that follows, a 'general orientation to the subject and process of knowledge' is achieved via personal discovery. Observation and description through experiential means is proposed as central to establishing a sophisticated understanding of art practice as research. This sits in opposition to illustrating specific methods and procedures, and the simple reporting of results, leaving things more open for experimentation and deliberation, consistent with the very nature and purpose of art and design.

Advancing pedagogical content knowledge

The establishment of a specific research-oriented pedagogy for incorporating a research perspective within artistic practice may also represent an advance in subject-teaching, pedagogical knowledge. Incorporating a set of values important to art into the practice of art-as-research by students requires, I believe, a reflective and dynamic pedagogical response. Shulman (1968) introduced the term 'pedagogical content knowledge' to address a perceived dichotomy between subject knowledge and pedagogy in thinking about teacher knowledge. Pedagogical content knowledge (PCK) exists at the intersection of subject knowledge and what teachers know about teaching. PCK is concerned with the representation and formulation of concepts, and with pedagogical techniques. While some aspects of the teaching and learning practices outlined in this paper are not new, the framing of these in relation to the coming together of the domains of 'art' and 'academic research' is. Bringing attention first and

foremost to the idea of art practice as a logic to be utilised for establishing concepts of artistic research can be highly motivating for students, and provides an important working contextualisation for future artistic researchers.

Using a research-oriented pedagogy to introduce students to artistic research

Content

Students will need to establish their own interpretation and perspective on how their artistic process constitutes research by responding to the essential concepts of question, methodology, method and outcome. This is something that can begin at undergraduate level through introducing students to the kinds of questions and challenges they will be expected to respond to simply by being involved in a research category that remains contested territory in the academic world. A review of contemporary literature on the debate over art as research reveals characteristics associated with studio-based research, and provides several more points of content to be utilised in research-oriented teaching. These are:

- that contemporary art and design (the art and design world) constitutes the appropriate context for the research, alongside the academic forum (Borgdorff, 2011).
- that the construction of theories that attempt to explain things (central to research) is rooted in experience and encounter in studio-based research, as separate from theories that are based on how knowledge is applied to solve particular problems (Sullivan, 2010).
- that artistic research has an interest in questions over answers. Research ‘outcomes’ are generally seen as a stepping-stone along the way to something else, they routinely raise more questions than they answer. In artistic research, an answer can be a question; question and answer are often reciprocally related, and methodology may also provide us with a research question (Andersson, 2011). This also relates to the celebrated concept in art of ‘unfinished thinking’, reinforcing the “contingent perspectives and world disclosures which art imparts” (Borgdorff, 2011, p. 61).
- that the artist’s subjectivity and knowledge is foregrounded, with the intention of offering an individual, situated, value-laden interpretation (Hannula, 2009). The artistic work (the research) is a test of the artists ideas about the world set against the logic of what is presumed to be seen and known about things (aesthetic reflexivity). Productive doubt is seen as a tool in art practice (Wesseling, 2012), and there is a primary concern with a ‘knowledge of significance’; of ‘the meaningfulness of things’ (Sorensen, quoted in Elkins, 2012, p. 40).
- that methods emerge as part of the process of making, thinking, and reflecting, and are not usually pre-determined. Instead, procedures are “shaped in response to the characteristics and structure of the practice” (Gray & Malins, 1993, p. 7). There is not a single, dominant mode of inquiry, and multiple, sometimes contradictory methods are in use, and may change at any time, for any reason.
- that the activity is premised within modes of thinking and action that give us access to phenomenon we might not be fully be able to communicate using verbal or written language. The communication of artistic research results does not rely only on the linear structure of text-based languages alone. The idea that art itself is the discourse that confers meaning (and that writing fails to capture aesthetic communication) is a fundamental epistemological issue for artistic research within academia, where written/oral discourse must to be entered into (Schwab & Borgdorff, 2014, p. 11).²

These concepts and ideas represent important perspectives shared by artists that can be productively built into research-oriented approaches to teaching and learning. As such, they appear in the discussion

² In recent work (2014) Schwab and Borgdorff talk about art as a form of writing, offering the model of the ‘exposition’ in the context of art and design research as ‘operating between art and writing, where artistic practice is able to install a reflective distance within itself that allows it to be simultaneously the subject and the object of an enquiry’ (p. 15).

that follows.

Mode of learning

In practice-based research a unique path and individual creative project is initiated by the practitioner. This is the outcome of a complex amalgamation of conceptual and contextual frameworks of individual concern, media and material interests, and specific methods and techniques that are deemed appropriate by the artist, potentially involving a range of strategies from within the field as well as outside of it. This will very likely be different in the case of each project. Playing with materials and ideas, chance, randomness and intuition all characterise this unpredictable process which is full of stops and starts, dead-ends and unexpected turns. This is reflective of the research culture in creative subjects where research is discovery-led rather than hypothesis led.

As students move through project work, questions may arise through making and through thinking and these experiences form the basis of dialogue (group critique, one to one interactions). The studio critique, an enduring pedagogic practice in the Fine Arts, is “a way of teaching students fundamental disciplinary points of view” (Klebesadel & Kornetsky, 2009, p. 106). As such, this is a major forum for the proposition and analysis of subject values and perspectives on art-as-research from within the subject.

In fact, most of what is done at this level is to help students find out about their own working process - how they work, what working situations seem to be productive, and the like. This is reflected in studio teaching. Ideas about ‘research methodology’ and creative practice ‘methods’ are introduced to students through the great diversity of ways in which practitioners go about their work. It is very typical for artists’ talks to be part of the learning programme – an opportunity for established artists/designers to show and talk with students about their personal creative process. This teaching practice demonstrates an important concept about methodology in artistic research: that it is characterised by the enormous plurality of approaches and outcomes that exist in the field today.

Teaching example

At early studio levels, it is often the case that students will be presented with a project brief which they are expected to respond to. It is common in the BFA degree (a four year degree at Auckland University) that students move from guided learning situations where staff set projects in years 1 and 2, to an increasingly self-directed situation where work is self-initiated by students in years 3 and 4. Project briefs used at early studio levels are usually the unique creations of studio teaching staff, intended as a platform from which students can develop an individualised body of work. As such, they imply methodology, and methods, appropriate to creative art practice, setting students up to engage with ways of thinking and making representative of art-as-research. They often specify materials, processes, key concepts, artistic/theoretical issues and the form of the investigation and frame these in research terms. By way of example, the following text is an extract from a studio level II project brief:

“The concept of system as medium in art and design can serve a diverse range of purposes, including being utilised as an artistic research methodology. Artists and designers have placed limiting structures on the image-making process that engender a number of possible visual sequences and outcome. For example, understanding design as a process or action, rather than an object, contemporary design practice as research has moved its focus from the aesthetic configuration that typically happens near the end of a project to the beginning where what is developed is unknown. ‘Conditional design’ represents a working method in which conditions and rules are drawn up that produce outcomes within a regulated process toward an unpredictable result. The method invites chance, indeterminacy and unconscious acts.

In this project we will experiment with the artistic concept of ‘system as medium’ as a working research methodology. We will look at a range of art and design practices that utilise organizational schemes and systems in the production of artwork. Students

will establish of a strict set of material/conceptual/technical conditions to work with and will present the artistic results of their research as a series of prints (digital or screen-prints)” (BFA studio project, June 2015, Tara Winters).

This example shows how studio projects can be built from a philosophical/theoretical/conceptual base, facilitating student learning in relation to existing artistic strategies and methods, framing these as research. The students own response, interpretation, and/or critical position in relation to the material presented forms the basis of this studio research. As the work develops, ongoing conversations about methods and processes that arise *through the needs of practice* are discussed at length between students and staff, reflecting an emphasis on the process by which art/design ideas are developed and work is produced, linking back to Griffiths’ descriptions of the research-oriented model of teaching and learning.

Building an understanding of art as research with students from within the terms of the art practice differs from other more common approaches. Much of the time, classic or generic models of academic research are held up to artists, and art practice is asked to fit itself around the rationale and procedures of these long-standing models. In the approach described here, conceptualisations of research ‘questions’, ‘methodologies’, ‘methods’ and ‘results’ are built around activities occurring in practice. Artistic practice (actions, theories, positions, attitudes) lead this process rather than being driven by already established systems for how academic research proceeds, usually derived from an outside subject logic. In the longer term this could help new art-researchers from falling into the trap of looking for structures outside of their art practice in order to confirm their activity as research. On this point, Schwab and Borgdorff offer a warning:

“The danger is that as the art academy enters academia, art may be subjected to epistemic regimes that are not suitable to, and thus might compromise, the kinds of practices and knowledges in which artists engage” (2014, p. 10).

This approach allows students to build more appropriate and useful appreciations of research. Related to the points above, the context for the research can be readily located as the art and design world (which is at once more appropriate to its function as art and design) rather than some new category within academia. The generation of theories to explain things can be easily linked to unique experience and encounter, rather than applying accepted knowledge to solve pre-defined problems.

Conclusion

The shift from a teacher-focused, knowledge transition model of teaching and learning to a student-centred, dispositional/conceptual change one is now well established. While art and design is already an excellent example of the dispositional/conceptual change model of teaching and learning, engaging a research-oriented approach to the teaching-research nexus has introduced a new ‘research ethos’ to this culture of learning, furthering pedagogical content knowledge. The relatively recent phenomenon of conceptualising art and design practice as research in an academic context seems to mark a developing moment in pedagogical knowledge for the subject. My own observations and experience, along with an analysis of pedagogic models and characteristics of art/design practice, suggest that art and design has adopted a diffuse, research-oriented approach to the practitioner-researcher nexus that is informing a developing notion of artistic research rich in practitioner values.

Framing their work as research involves students in reflective observations about the guiding philosophies and artistic principals that motivate their work, and the artistic actions involved in creative practice. There is great room to manoeuvre here, and, with experience, students come to recognise how their own strategies, impulses and approaches can form a response to the question of artistic methodology and method - a requirement of every artistic researcher.

References

- Andersson, M. (2011). *What is an Artistic Research Question?* Paper presented at The Art of Artistic Research, Norwegian Academy of Music, Oslo, Norway, 4-6 May. Retrieved from http://www.magnusandersson.no/musik-forskning/what_is_artistic_research/.
- Borgdorff, H. (2011). The Production of Knowledge in Artistic Research. In M. Biggs & H. Karlsson (Eds.), *The Routledge companion to research in the arts* (pp. 44-63). New York: Routledge.
- Borgdorff, H. (2006). *The Debate on Research in the Arts*. Sensuous Knowledge 2. Bergen: Bergen National Academy of the Arts.
- Elkins, J. (2012). *What do artists know?* (Stone art theory institutes (Series) ; v. 3).
- Frayling, C. (1993). Research in Art and Design. *Royal College of Art Research Papers*, 1(1), 1-5.
- Gray, C., & Malins, J. (1993). Research procedures/methodology for artists & designers. Retrieved from: <http://carolegray.net/Papers%20PDFs/epgad.pdf>.
- Griffiths, R. (2004). Knowledge Production and the Research-Teaching Nexus: The Case of the Built Environment Disciplines. *Studies in Higher Education*, 29(6), 709-726.
- Hannula, M., Suoranta, J., & Vadén, T. (2005). *Artistic research: theories, methods and practices*. Gothenberg, Sweden: Academy of Fine Arts & University of Gothenburg/Art Monitor, Helsinki.
- Hannula, M. (2009). Catch Me If You Can: Chances and Challenges of Artistic Research. *Art and Research*, 2(2), 1-20. Retrieved from: <http://www.artandresearch.org.uk/v2n2/hannula1.html>
- Healey, M. (2005). Linking Research and Teaching to Benefit Student Learning. *Journal of Geography in Higher Education*, 29(2), 183-201.
- Steyerl, H. (2010). Aesthetics of Resistance? Artistic Research as Discipline and Conflict. *mahkuzine*, 8, 31-37. Retrieved from: http://www.mahku.nl/download/mahKUzine08_web.pdf
- Klebesadel, H. & Kornetsky, L. (2009) Critique as Signature Pedagogy in the Arts. In Gurung, R., Chick, Nancy L., & Haynie, Aeron (Eds), *Exploring signature pedagogies: Approaches to teaching disciplinary habits of mind* (pp. 99-117). Sterling, Va.: Stylus.
- Krause, K., Arkoudis, S., James, R., McCulloch, R., Jennings, C., & Green, A. (2008). *The academic's and policy-maker's guides to the teaching-research nexus: A suite of resources for enhancing reflective practice*. Strawberry Hills, NSW: Australian Learning and Teaching Council.
- Laurel, B. (2003). *Design research : Methods and perspectives*. Cambridge, Mass.: MIT Press.
- Macleod, K. & Holdridge, L. (2006). Thinking Though Art: Reflections on art as research (I need to include this, as its an important reference, and add in a quote to it somewere!)
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4- 31.
- Schwab, M., & Borgdorff, H. Eds. (2014). *The exposition of artistic research : Publishing art in academia*. Leiden : Leiden University Press.
- Scrivener, S. (2002). 'The art object does not embody a form of knowledge': *Working Papers in Art and Design* 2, viewed 10 June 2015, <https://www.herts.ac.uk/_data/assets/pdf_file/0008/12311/WPIAAD_vol2_scrivener.pdf>.

Sullivan, G. (2010). *Art practice as research : Inquiry in visual arts* (2nd ed.). Thousand Oaks [Calif.]: Sage Publications.

Quality Assurance Agency (2008). Subject Benchmark Standards: Art & Design. Mansfield: Linney Direct / QAA

Teaching and Learning in a Research-led University (2010, March, Issue 5) *Commentary, The University of Auckland*, p. 2.

Tertiary Education Commission of New Zealand (2012) Creative and Performing Arts panel - specific guidelines – PBRF 2012 Quality Evaluation, p. 1-12.

Wesseling, J. (2012). 'How do artists think'. In J. Elkins (Ed.), *What do Artists Know* (pp. 193-195). Pennsylvania: Pennsylvania State University Press.

Winters, T. (in press). A developing research-oriented pedagogy for undergraduate teaching in art and design. *International Journal Of Education Through Art*.

Zamorski, B. (2002). Research-led teaching and learning in higher education: A case. *Teaching in Higher Education*, 7(4), 411-427.