The design proposal in situated learning

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Abstract
The design proposal is a standardized writing structure used in design business practice to rationalize, describe and persuade a client that a particular design outcome is the best solution to their brief, as such it is clearly a competitive document and instrumental to best design practice. In this paper I am proposing that with an augmented structure, it can also serve academic outcomes with equal alacrity. Since moving to Swinburne University Faculty of Design five years ago, I have been heavily involved in honours and postgraduate teaching and instrumental in establishing research methodologies in Honours and Postgraduate Coursework studies. This opportunity has allowed me to inherit and modify the design proposal and develop it into a versatile vehicle for both academic and/or business oriented applications by selectively modifying its components according to the outcomes and requirements of the client. From the students point of view the design proposal gives continuity of experience with previous studio learning, while providing a structure for the incorporation of more rigorous and research driven components required for academic assessment. This article provides a modified structure for the design proposal as a hybrid form of writing that can serve as a powerful bridge to postgraduate study. At Swinburne it has also proven to be a versatile, subdividable structure that suits group work and collaborative learning.

Design in academia
Relative to fine art and the social sciences, design has a remarkably short history in academia. In Australia it was only really in the 1990’s that design joined the rest of the academy in design initiated research and publishing. Prior to the 90’s, design was applied in much the same way as the crafts – a practical profession serving primarily industrial needs. In Australia, design qualifications were awarded as certificates and diplomas, but by 1990 diplomas were converted to degrees and slowly design academics started raising their qualifications to match the institutional standards they now found themselves in. Design teaching had occurred almost exclusively based on the master-apprentice model and design was judged primarily by the masters or your peers according to criteria that existed as aesthetic ideals set mostly by either avant-garde and/or industry practice. By coincidence, the other phenomena so important to the recent development of design that also accelerated in the early 90’s was computers and digital technology.

Computers have been important both in terms of transforming the generation and production processes of design itself, but also in providing new and increasingly dominant medias of delivery best exemplified by the internet and the constant transformations of mobile telephony. The first great flowering of design related research has occurred in relation to the Human Computer Interface, but now design itself seems to be fragmenting and diversifying into addressing less material oriented problem solving to more conceptual, organizational and even social outcomes. These days design is even touted as a problem solving paradigm that might rival the inductive methods of science. (Friedman, K. 2003)

These changes have occurred over twenty years and in that time change has been at best, uneven. The generation of design graduates now running the major studios and professional organizations tend to express little need for research and even tend to be a little wary of a curriculum outside their experience. So research is getting little drive from industry. If writing on design occurred in the 90’s academy it tended to be industry related and in industry magazines. Even though these were popular and influential among design academics and students they were not refereed, nor did they adhere to academic requirements in relation to writing style, citation etc. Also, the sorts of problems addressed by 90’s design writing tended to derive from opinion and theory rather than research. In design, it was those user centred problems that have needed and used research in their resolution.

The one form of writing that was commonly produced in the 90’s design academy was the proposal. The proposal was produced because it served an essential industry function related to the pitch – when design firms competitively seek to win over clients to their ideas and solutions in relation to a design problem. The proposal may have had another manifestation in relation to government tendering or as submissions to competitions through which particular outcomes are articulated, justified and illustrated.

Writing for the academy
Fast forward to 2009. The design academy has changed considerably in orientation. Internationally, in the United Kingdom, Europe, Australia, New Zealand and parts of...
Asia, over the last decade there has developed a common emphasis on research output as the major determining criteria for university funding. (Wilson & O'Brien: 2007: 393-4) Defining these criteria is proving difficult, but suffice to say in relation to design in particular it is handicapped on a number of fronts.

- Availability of design staff with higher qualifications and research experience is still limited (in the Australian context at least). This results in design faculties having some of the lowest percentages of PhD's in the university.

- Design courses do not have a research tradition as either a formal or integrated part of their undergraduate curriculum – not in any long-term context anyway.

- General and special interest refereed design journals are currently proliferating (though this field of publications is still slight compared to the well established academic disciplines).

- Courses that train designers are still primarily practical and by other academic comparisons would involve relatively little reading and formal writing as a designated outcome.

- In order to boost research output, many design faculties/courses import non-designers to conduct research and write for them but this rarely touches undergraduate design practice.

There is another type of proposal that is commonly used in most faculties (though of course not yet met by undergraduates) and that is the Research Proposal, a document produced before commencement of further study. (Herrington et al.: 2007) The Research Proposal would normally contain a literature review leading to a research gap, proposed methods to be used in researching the problem and maybe some speculation on its resolution.

**The Swinburne Design Proposal**

Honours and Coursework Masters courses (in their 2009 – 2010 manifestations) each have two core ‘research’ subjects where a theory and research subject is married to a studio subject and through both, students produce a practical design outcome derived from (usually) a group exploration of a broad research area (with titles like Social Patterns, New Technology, User Centred Design, Sustainability and Design as a Service). The driving force of these subjects is research and the main written output is in the form of a proposal. (see Figure 1 – Appendix A) The reader will notice that the table is presented in black and grey tones, the black representing the original industry/product oriented proposal in common use at Swinburne in 2005; the grey represents those extra headings I have introduced to accommodate research to the outcomes and design resolution.

As a structure of headings, students have found this a relevant and useful set of parameters around which they can build an argument and develop a solution to a problem. The insertion of methods and findings into the sequence, tends to reinforce the quality of the justification made for particular decision making and leads to stronger and more reasoned outcomes. Usually I would expect students to triangulate research methods because this is a wise research tradition and demonstrates a variety of methods in practice to students with very little prior experience of formal research or even articulating those parts of design practice that are research related. This hybrid design proposal brief, incorporating research into the design development strengthens the design proposition in such a natural way that it has the affect of increasing credibility and persuasive power of the argument supporting the outcome. Add to this the fact that in design there is often an aspect of the method that becomes part of the outcome’s structure or delivery. The idea of research driven design can reinvigorate the whole design process and the proposal format tends to re-enforce the connection between stronger and clearer decision making, rational and imaginative outcomes.
The situated proposal

There is an even stronger argument in support of the proposal in relation to design and research. As I stated earlier, the proposal is already THE accepted format in the design industry for the delivery of ideas and innovations. As a presentation form it can seamlessly be applied across what might otherwise be a gulf between industrial practice and research. While the lack of a formal research phase has been seen as an impediment to design quickly developing a research culture, design is in fact fortunate to have an established applied area of practice through which research can be situated. As an academic from both a design and sociological background, I can recognize the benefit and usefulness of applied research in relation to design, whereas sociology mainly uses research to develop theory.

Situated learning was named and described by Lave and Wenger (1991) as the sort of learning that occurs when students are immersed in a community of practice – in their case initiated by their study of apprenticeship learning of trades. This has developed into a movement in education that recognizes this deep and intuitive learning as one of the strongest forms of educational development – appropriate at all levels of learning. As a beneficial educational philosophy, situated learning has the potential to be active at two levels in relation to design:

1. In terms of design practice. Undergraduate design teaching currently trains for operation at many levels of industry practice. This might be reinforced by industrial placement if students have the good fortune to have this on offer by their faculty (as my Honours students do).

2. In terms of research learning and development. The location of research problems in an industrial context through vehicles of expression such as the proposal which are understood and useful at both an industrial AND academic levels means that the proposal as a form can work as a natural facilitator.

Education is always at its most exciting when it is transcending barriers and facilitating better practice. The proposal can have an instrumental role in this process and should not be neglected as an expressive form that belong to other areas of practice or lesser levels of learning.

References

Friedman, K. (2003) Theory construction in design research: criteria, approaches, and methods Design Studies Vol 24 No. 6 November


Figure 1

The hybrid proposal brief:

1. Top sheet
   Design Research Proposal Brief
   Subject number and name
   Project number and name
   Faculty of Design
   Student Name and Student Number
   Lecturers:
   Submission date: / / 2009

2. Abstract (new page) 300 words
   Abstract – a 300 word description of your project proposal.
   Abstracts should be in plain English and to the point. Don’t be overblown. Abstracts are generally constructed in the following order:
   • Motivation Why do we care about the problem and its results – maybe a summary of the major issue and its context. (1 or 2 sentences)
   • Problem Statement What problem are you trying to solve? What is its scope?
   • Methods How did you go about researching the problem / finding out more?
   • Results What is the answer?
   • Conclusion What are the implications of your answer?
3. **The proposal in detail**

**Background/Introduction/Literature Review**
A few paragraphs placing the work/study in context. Students are encouraged to insert a summary version of their literature review (their previous research task) in this section.

**Objectives**
These concern your design outcome – a few sentences presenting the purpose of the proposal.

**Design Considerations** (choose relevant headings only)
Description of issues relating to function/purpose, aesthetics/design elements, context/environment, performance, materials, production/manufacture, human factors/ergonomics/semantics, demographic, competitors, design registration, marketing/packaging/distribution (choose most relevant categories)

**Research Methodologies**
Choose at least three methods to successfully triangulate your research insights into the development of your design project. Choose from methods you are familiar with such as

Methods (chosen as appropriate to problems and needed information)
- **Triangulation** List the 3 chosen methods, briefly describing why you have chosen each.
- **Describe each method** Briefly describe the questions asked, participant response, its strengths and weaknesses and key outcomes.
- **Key outcomes** Describe which outcomes were most pertinent to the development of your project.

**Positioning**
Product audience/Design restraints/Product competition/Brand vision/Personality Marketing advantages/Points of differentiation and distinction

**Proposed outcomes**
Try and make these as concrete as you can. If you are finding it hard to pinpoint an outcome at least try and identify the ballpark in which you will be working. You may be able to name a related product or use a metaphor to describe the relationship of your product to a field of interest.
- Without actually drawing up specifications for your designed object try and show the look and feel by comparison and illustration if possible with similar or related products.
- Illustrate how your research findings might effect the shape and form of your final product.

4. **Costing**
Include a budget of the production process.

5. **Timeline**
Research and production schedule
Fit your research and production into a schedule within the semester time frame – there is a schedule that might help as part of the unit brief.

6. **References**
Include all references in the Harvard style.