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Comparative Measures: Learning through Action, Reflection and Planning

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ABSTRACT
The multidisciplinary programme in Art, Space and Nature (ASN) is a two year MFA programme offering a framework of advanced study for individuals to develop practical and academic interest in the visual arts, architectural and environmental practice. This paper will reflect on a central concern of the programme to structure a balanced approach between multidisciplinary activity and the individual practitioner, where both can be valued and structured as an educational dynamic. In particular the paper will relate to ideas that promote action and reflection as the basis for learning and a means to guide a dialogic approach which enable the student to rationalize and locate the specificity of their own practice.

The paper will proceed from a general outline of programme objectives related to the values that underlie these, before outlining the learning context, and finally how the learning process assesses an individual’s performance.

INTRODUCTION
Art Space & Nature (est. 2003) is a post graduate platform for research led teaching, responding to a contemporary demand for an integrated and interactive mix of disciplinary perspectives, from art, science and design practice, to equip students with the necessary expertise to operate in a multidisciplinary field, with effective modes of self critical practice. In ASN this is articulated through opportunities for collaboration and interdisciplinary work, both speculative and practical, promoting a multidisciplinary approach to problem solving by drawing appropriately from multiple disciplines to redefine problems outside of normal boundaries. The major objectives of the programme can be summarized as an endeavor to:

Expand student’s personal development by introducing new modes of practice as a result of interdisciplinary collaboration
Promote contextually informed exploration and project development, addressing opportunities in local, national and international contexts

Provide students with valuable intelligence on new strategic developments in international multidisciplinary practice

The programme’s principal goal is the development of the individual, through exploration into visual and spatial constructs, where students are encouraged to be creative practitioners who combine these skills in an interdisciplinary form.

I. ASN’S VALUES

Comparative measures:

The term measure emphasizes a more active stance of creative judgment, relating to the agency of creative practice to engage environment as the context of relational structures, systems and processes, of social and natural phenomenon. In this sense a measure forms the language of creative practice, which becomes comparative across disciplines such as art, architecture, and the sciences and the basis for comparative exploration. By defining a measure as the language by which a discipline generates and presents its ideas, we can reflect on Eagleton’s assertion that it is also the context in which we operate (Eagleton 1983). This informs the objectives of ASN, to expand the students understanding and knowledge of

Fig. 1. Newspaper report of residency project at Queens Medical Research Institution, Edinburgh
Action, reflection and planning:
To engage these comparative modes of creative measuring ASN operates to promote applied thinking, in many ways related to Argyris and Schön’s theories on experiential learning and reflective practice. This in particular emphasizes a process involving experimentation and the testing of ideas, creating praxis between theory to action and production, which Schön described as a process that unified thinking and doing, where experimentation is a kind of action, and implementation is built into inquiry (Schön 1983). The value of action as a basis for student research has been identified as oriented toward the enhancement of direct practice, as a form of self-reflective enquiry which improves the rationality of practice, directly related to the situations, or contexts, in which practices are carried out (Carr and Kemmis 1986). This value informs how ASN promotes contextual and practice based projects (action), with student led learning (reflection and planning) as a unified process of learning through practice.

Immersion – contextual exploration:
The basis of exploration involves immersing students into the context in which they operate, as both the environments within which projects exist, as well as the context of practice. Exploration relates to a concern for action, but action that puts into operation the various methods, techniques, tools and theoretical frameworks that students engage. This questions how we articulate context, as a process of measuring through media effects as the articulated capture and presentation of context in its broadest terms. Immersion then relates to a process of investigation, testing, reflection and refinement of approach, where students seek a developmental connection between action and context as the formalization of their individual practice. On this basis, the idea of contextual exploration also relates to an endeavor to negotiate an extensive theoretical field, as a process to locate a position within the open ended discourse that surrounds multidisciplinary practice.

Intersection – intersubjective connections:
The aspect of connecting informs ASN’s objective to question student’s ability to locate the significance of their work within the socio-political domain, beyond the confines of the academic institution. This can be seen as a value to create connectable experimentations with the real (Corner 1999), as an extension of a contextual engagement to evaluate projects that actively work in the public domain. The idea of connection relates to a philosophical position, with particular reference to eco-philosophy, which promotes the potentials for creative practices to explore and present an intersection between environment, society and mind, promoting the value of creative measures that connect across these three interacting and interdependent ecologies, while exploring the role of creative practitioners to bring insight to socio-ecological contexts (Bateson 1972, Guattari 2008).

While we now have an overview of the values that inform the ASN programme, the significant aspect is how we deliver these as a learning context and process.

II. THE LEARNING CONTEXT

The student cohort:
The value of intersubjective working is firstly evident in ASN’s student cohort, where students are carefully selected to contain a variety of disciplinary and cultural backgrounds to provide a mix that acts as a great catalyst and stimulation to the development of all the students on course, establishing a multidisciplinary context within the social group and immediate context that students operate within. Each year brings different individuals that contribute their own dynamic and basis of interaction, while the two year structure provides an overlap offering a sense of continuity and shared experience between students at differing levels of development. In this way, the programme emphasizes the value of intersubjective connections, but equally promotes the role of subjective positions within it, providing a basis for a non-determined process that emphasizes the social group and context of working (Guattari 2008).

Collaborators – network opportunities:
The structure of social context is further emphasized within the collaborative approach to teaching, where ASN forms a platform and forum where students can interact and work with a range of experts from varied disciplinary fields involved in international projects which offer live project opportunities and global perspectives. Schön outlines that reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline (Schön 1983). This has been described as an unstructured approach, directing understanding and learning as a continuous process where the learner considers their experiences in relation to a professional field, where it can be argued that “real” reflective practice needs another person as mentor or professional supervisor, who can ask appropriate questions to ensure that the reflection goes somewhere (ATHERTON 2009). To provide this learning process ASN operates as a forum for multidisciplinary projects, where students can participate in...
research led projects, and tutors can involve students in ways that support their work, providing a basis where teaching, learning and research are integrated and mutually informing. This encourages students to see the value of professionally integrating research, creative practice and contemporary cultural theory as a pathway for individual development.

This provides a professional context for students to learn from, often involving aspects of project delivery, such as grant applications, client consultation, public engagement and media dissemination, which are less common to conventional taught courses. Professional input supports a broad range of approaches to digital media, structural expression, practice documentation and publication, field and visual theory, offering students a balance between practical skills, interrelated with theoretical reflection. In effect ASN offers a connective structure of individuals, projects and networks that reflect the realities of professional practice, while providing a focus of interrelated action for a number of research centers’ within the institution.

Fig. 3. A research led field project in Greenland.

Projects:
To benefit multidisciplinary exploration projects are carefully considered to provide necessary diversity and balance, with a mix between large scale semester length projects that are continual from year to year, interpolated with smaller workshops and events with specific focus. Overall, the project base provides a rich variety of contexts, scales and collaborative potentials for students to negotiate and test their work. A common aspect is that all outputs of presentation are within established venues or institutions, providing a set of opportunities for students to develop a portfolio of professionally executed works, while negotiating the realities of professional settings, of curators, public agencies and commercial clients, which equip students with the confidence and working knowledge of the public sector. In general these works can be categorized into 4 areas:

- Field works - explore comparative approaches to measure context, interrelated with reflection on the various methods and tools that underpin working in-field.
- Gallery works - challenge students ability to negotiate exhibition spaces, involving refined spatial explorations, while providing insight into comparative practices of assemblage.
- Public works - involve projects that seek to enter the culturally charged space of public domain, as the exploration of spatial infrastructures around us.
- Publication works - inform students of the process of synthesizing, structuring and disseminating theoretical perspectives, facilitated through ASN’s Mutual Press (est. 2009).

The international dimension of the programme explores global concerns, such as climate change, food production, social inclusion and multicultural values, expanding student’s worldview. Our extensive network, comprising partners in the US, Japan, Australia and Europe, provides great evidence that the concern for multidisciplinary work is an international one, where ASN operates to seek new connections that bring insight to this global endeavor. This provides students with opportunities to develop portfolios that demonstrate a global awareness and competency to implement effective practice through a range of opportunities in local, national and international contexts.

Studio base:
For effective reflection in action Schön argues that the micro-culture, or specific design venue is important to provide a setting to understand a problem better (Schön 1983: 69). For the often dispersed activity of ASN we greatly value the presence of our studio base as the specific venue for our activity. While the programmes vitality stems from a complexity of contexts and projects, this is counterbalanced through the consistency of a stable working space and regular meeting point for students, providing a continuity of structure where all students can meet and discuss ideas. The studio has become the hub for activity; with meetings, lectures, seminars, exhibitions and events contributing to a sense of a space that is collectively owned and controlled by the students, but structured to engage varying public activities. A great asset for the programme is that the studio has a gallery with public street interface, offering students an immediate context to test ideas, while promoting the public engagement of work even within the studio.

Fig. 4. The Art, Space & Nature studio.

Integrated technology:
ASN has endeavored to utilize technology as a means to create and foster a communicative basis of activity and discourse, while more significantly, as the testing of innovative means to interface and develop projects through our international network. This has involved on-line projects,
including performances and installations, while our gallery has audio-visual set up directly linked to the web, allowing for projects to be structured across international locales. Further to these ongoing activities, ASN has developed projects that engage the appropriation of media to explore and test the capacities and perceptions of new media, such as sensors, data, modeling and visualization, and their application and value across disciplinary fields.

### III. CONCLUSIONS - THE LEARNING PROCESS

What we have learnt is that multidisciplinary education is of great value and range, but its basis must stem from identifying with the individual student, who participates and contributes meaningfully, while benefitting through specified developmental attributes. Certain tensions may be attributed to the ambitions of any innovative programme, such as; the intensive nature of organization, the ability and maturity of students to negotiate a self directed programme, the resources required to facilitate an international dimension, and the internal politics and personalities of strong individuals involved. In a sense these are all aspects that make up the vitality of a multidisciplinary field, where ASN’s particular success relates to an emphasis of balance, where the multiple is cultivated with regard to the position of the individual and their development through a dynamic educational structure. The conclusion of this paper will set out how we achieve this aspect, with particular regard to learning through action, reflection, and planning.

![Diagram of the 2 year MFA programme.](http://www.learningandteaching.info/learning/reflecti.htm)

Structure & assessment:
The context in which the students work promotes a fine balance between the time for reflection and experimentation and the opportunity to critically examine work and contemporary issues. While the cultivation of the capacity to reflect in action (while doing something) and on action (after you have done it) has become an important feature of professional training programmes in many disciplines (ATHERTON 2009), ASN’s programme also seeks to assess the students ability to plan future action as a logical reiterative progression. This informs the basis for assessment, where module learning outcomes prompt the student on these 3 aspects, of action, reflection and future application, structured as an iterative appraisal that traces a pathway for individual development. Each module synthesizes multiple projects, which allows assessment to focus on the student’s ability to critically trace the continuity and formalization of their practice across varying project contexts.

Building repertoire:
The programme consists of two transversal lines of assessment, one vertical that interrelates action with reflection, the other horizontal that traces the developmental progress of the student between a present point and prompting them to think about how future activity can progress their work. This encourages a process of development that makes students increasingly self critical and independent, where the programme is structured around a deliberate shift from directed, where projects are provided, to self-directed, where students develop their own projects, to provide a pathway for individual development into professional practice.

The act of reflection is seen as a way of promoting the development of autonomous, qualified and self-directed professionals (Jasper, 2003), where each project module has an underlying reflective module that assesses their ability to locate the contextual basis of their work. Moon defines reflective practice as "a set of abilities and skills, to indicate the taking of a critical stance, an orientation to problem solving or state of mind" (Moon 1999: 63). For the contextual focus of ASN this centers’ on the logic that an autonomous practitioner must formulate the basis of their own practice, as the formulation of an internal system that is then capable of negotiating the external challenges of contextual engagement (Kwinter 2003). These reflective modules are a means to assess the broader continuity of a student’s work, as a concern to develop a means to correlate and document activity while building a sense of formalism to an individual approach. In this sense the programme acts as a reflective measure, as the students measure of their own creative activity.

### REFERENCES


4
