Project-based learning in visual arts and design: What makes it work?

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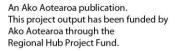**Dr Elly Govers – Govers Educational Consultancy and Research**

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Abstract

In August 2011 ideaschool Arts & Thinking at the Eastern Institute of Technology (EIT) embarked on a journey to redevelop the Bachelor of Visual Arts and Design (BVAD) into a project-based learning programme. This implied a significant paradigm shift from teacher-centred to learner-centred education for all involved. Many months of exploration, discussion, and hard work followed, resulting in the implementation of the programme from February 2013 onwards.

This report provides a comprehensive analysis of the redevelopment process in a search for the factors that 'make project-based learning work' in the context of arts and design education. It was found that this process could be meaningfully described as a system of projects at programme, course and student level, operating within the wider context of the institution and the world.

Indicators of success for the redevelopment have been identified, as well as preliminary evidence of meeting these indicators. An extensive range of factors at all project levels appear to have been important in contributing to the success of the redevelopment. These factors can be summarised into five key terms.

Holistic: it has been important to take a holistic approach to the redevelopment, including transformation of the programme, the school and the people within. Additionally, the redevelopment is to be seen as a holistic system of projects within projects that influence and are influenced by each other; if one project in the system changes the whole system will change. And finally, student projects are holistic in that they concern the entire process of making an artefact, including all the knowledge, skills, research, process, doing, being and becoming, from beginning to end.

Autonomy: It has been important for the Head of School, the tutors and the students to get a significant amount of 'free reign' to create the projects that they wanted to create. This has created ownership, fostered creativity, and people taking responsibility for making the most of their projects.

Ownership: Art and design work is extremely personal: art and design students own their work from its very inception. Ownership does not need to be created through autonomy; it already exists. Ownership can only be taken away by putting constraints on the process. The challenge in designing a project-based learning environment is to create optimum ownership while still steering students in the direction of the desired learning outcomes.

Collaboration: Collaboration between students, between tutors and management, and across the groups has been essential in making the projects at all levels successful.

Emergence: The outcomes of a complex process such as this redevelopment cannot be predicted and controlled. Just as students are taught to 'trust the process' in their art or design projects so must educators and education managers 'trust the process' of the redevelopment and allow the outcomes to emerge from the conditions and from people's engagement.

It is envisaged that embracing these terms can not only help sustain the success of the BVAD at EIT, but also assist other organisations with creating successful project-based learning environments.

You cannot plan for the new, since by definition it arrives out of the conditions that give rise to it.

(Lauterbach, 2009, p.87)

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Introduction

In August 2011 ideaschool Arts & Thinking (then School of Arts and Design; referred to as ideaschool in this document) at the Eastern Institute of Technology (EIT) embarked on a journey to redevelop the Bachelor of Visual Arts and Design (BVAD) into a project-based learning programme. This implied a significant paradigm shift from teacher-centred to learner-centred education for all involved. Many months of exploration, discussion, and hard work followed, resulting in a programme document being approved in the second half of 2012. The next step consisted of developing the actual projects and the implementation of the programme from February 2013 onwards.

Observations during 2013 were that the transformation in student engagement was phenomenal when compared with previous years and the previous curriculum. This encouraged the head of school, who was also project leader of the redevelopment, to gain a deeper understanding of this transformation and the processes that contribute to it, in order to support future developments in the school, within EIT, and in other education organisations who are considering developing project-based curriculum, particularly in the field of arts and design.

Research objectives

This research project was guided by the following questions:

1. What could project-based learning in visual arts and design education look like?

2. What is a successful project-based learning environment in visual arts and design education?

3. What are the crucial factors that contribute to a successful project-based learning environment in visual arts and design education?

4. What advice can be given to others who wish to embark on a similar journey?

5. How can the understandings developed in this project be used to guide the ideaschool team in further developing their teaching and other educational practices in the BVAD and other programmes within the school?

The scope of this project only includes the redevelopment and implementation of the BVAD up to the end of 2013. This implies that it only includes the actual teaching of the first year of the project-based BVAD; the second and third years are being taught for the first time in 2014 and 2015, respectively.

Acknowledgements

Methodology

The project is a case study of the redevelopment of the BVAD at the EIT, and includes the teaching of the first year of the redeveloped programme in 2013. Ethics approval for this project by the EIT Research Ethics and Approvals Committee was received on 30 July 2013.

The case study approach enables the development of a holistic understanding of the matter at hand (Yin, 2003), and acknowledges the importance of studying human activity in context (Gillham, 2000). To generate the data in this study individual interviews were held with three managers and one support person involved with the BVAD, exploring their role, experiences and decision-making processes throughout the development of the programme. Individual interviews were also held with all 12 tutors in the BVAD exploring their considerations, decisions and experiences in creating, leading and teaching a course. Additionally, focus interviews with two tutor groups sought their perspectives on the development of the entire programme, while focus interviews with two student groups revealed the students' perceptions of studying in a project-based environment. The multiple perspectives are expected to enhance the credibility and trustworthiness of the findings (Lincoln & Guba, 1985). All interviews were transcribed verbatim, and participants were given the opportunity to make changes to the transcripts as they deemed appropriate before the transcripts were used for analysis.

A literature review was conducted to identify a possible framework for analysing the data. Although the literature provided potential themes in some areas, it was unable to give structure to the complexity of the case that was reflected in the data. Therefore, some aspects of the research findings are connected with the literature, while for other aspects a grounded theory approach needed to be taken to make sense of the data (Cohen, Manion, & Morrison, 2000; Lincoln & Guba, 1985).

The interview transcripts formed the primary data source of the study, for the reason that interviews reflected the direct voices, experiences and understandings of the most important factor in the creation of the project-based environment – the people involved (Kvale & Brinkmann, 2009). The transcripts were read and re-read, and themes were identified by coding quotes from the data with help of NVivo®. After identification of the themes other data sources were used to refine the initial findings as reflected in the themes and as such to help further enhance the robustness and credibility of the findings (Lincoln & Guba, 1985). These other data sources included: notes from two classroom observations, notes from three tutor meeting observations, quantitative data retrieved from the institution's student management system, collated data from student course surveys, and formal programme and course documents.

It is important to explain the role of the researcher in this research project. Dr Elly Govers was involved in the early stages of the redevelopment of the BVAD as academic advisor, and played a part in the writing of the programme document that was submitted for approval in the second half of 2012. Through this involvement she was able to develop an understanding of and familiarity with the context in which the redevelopment occurred, and to build a good working relationship with the BVAD tutors and managers. This created the environment that enabled her to weave the data and the identified themes from the data into a coherent story as reflected in this document. The researcher was not involved with any of the further developments in the programme after the programme approval, implying that she had been distanced from the programme and its people for

a year before she commenced this research project. This allowed her to act as an independent observer (Buttny, 2003).

Generalisation of case study findings is inherently problematic. It needs to be left to the reader of the findings to decide whether the case has sufficient in common with their own context in order to use the findings for this other context. To support the reader in this decision-making, the findings have been reported comprehensively and within the context of the case (Lincoln & Guba, 1985).

To acknowledge that people in educational organisations may be interested in different aspects of the findings of this research project, depending on their roles, a website has been created to be read in distinct parts, and can be found on emergence.ideaschool.ac.nz. The website provides a reading guide targeted at particular audiences. As a consequence the website does not have one section reporting the literature review, but relevant literature is summarised in the appropriate sections. Where sections do not include such a summary the researcher has been unable to identify relevant literature. Sections that do contain a literature review component also include a reflection on the research findings in the light of the literature. This document contains the full text of the website, to accommodate readers who prefer to read or print the whole report.

Some themes were referred to more often in the data than others. While this may make the evidence for and understanding of the theme stronger, it must be noted that all data generated in the study are 'socially situated, context-related, context-dependent and context-rich' (Cohen et al., 2000). Hence there is no evidence that some data, and therefore some themes, are more important than other. For this reason all themes have been treated with equal importance in the reporting of the findings.

Quotes from the data have been used to illustrate or clarify the themes. They add to the richness and authenticity of the findings, as they provide the participants' genuine accounts. The source of each quote is shown in brackets at the end of the quote, using the following symbols: T = tutor; S = student; M = manager; SP = support person; Obs = classroom or meeting observation.

Defining projects and project-based learning

Defining projects

Project organisation theories indicate that projects within the context of organisations are complex. Grabher (2004) as well as Manning (2008) explain projects as temporary systems that are embedded within their organisational context, and as such influence and are influenced by this context. A project system is characterised by interdependent task specifications, time constraints and team relations (Manning, 2008). The task not only includes the overall project objective, but also the sub-tasks assigned to project-team members during the project. Time constraints influence the sequence of tasks and sub-tasks and the deadlines. The team includes the project team, and possibly also sub-teams, and brings not only the people, but also their roles, networks and relationships to the project (Grabher, 2004). This implies that people are inherent to a project: their relationships and networks, as well as their interaction with the tasks and the timeframes are essential to how the project will play out in practice. In a systems definition it is therefore not possible to speak of people undertaking or doing a project; instead, people should be referred to as involved or engaged in a project.

This document follows the system definition of projects, as it makes sense of the crucial influence that the people (students, tutors, managers and others) had on the redevelopment of the BVAD.

It is important to note that the system definition as presented by Manning (2008) is rooted in the world of work, and not in the world of education. Yet, it is a useful starting point for this document for two reasons:

1) This research project is not just about student projects. It also aims to understand more about the process of developing a project-based programme which could be conceptualised as a project within the world of work. More on this conceptualisation is found in the section *Conceptualising the project-based learning environment in the BVAD: Projects within projects.*

2) An important reason for creating project-based learning environments in education is to socialise students into the world of work, and to let students experience professional practice as an integral part of their studies; more details on this purpose of student projects are found in the section *Why project-based learning*. The section *Defining project-based learning* provides deeper insight in what distinguishes a student project from a project in the world of work.

Defining project-based learning

What the literature says

The research literature describes project-based learning as a form of experiential learning, which encourages students to engage in problem-solving processes through hands-on experience and through interaction with each other and with the content, which is often multidisciplinary in nature (Wurdinger, 2010). Experiential learning is called project-based learning if the learning task involves the following:

> *a time-bound activity which is directed by the project participants or team, who determine the course of the project and the final output in response to a brief of some description. The brief should ideally relate to a concrete or real world issue which the project participants are required to address. During the course of the project, participants might draw on widely differing disciplines and subject methods to achieve their goals. Student activity revolves around a complex series of interactions between the team members over time and draws on a range of key transferable skills such as communication, planning and team working. (Hanney & Savin-Baden 2013, p.8)*

This quote clearly identifies the project characteristics of task specification, time constraints and people or teams, as noted in the definition in the previous section. Implicitly it also notes the temporary nature of a project. But it particularly highlights key characteristics of learning projects which are confirmed further across the literature (e.g. Bell, 2010; Graham & Crawley, 2010; Helle, Tynjälä, & Olkinuora, 2006; Thomas, 2000; Thompson & Beak, 2007). In relation to task specification, learning projects are driven by a complex real life problem or a question, which takes a considerable length of time and amount of work to resolve. Ideally, students would be confronted with carefully scaffolded real life problems or questions of increasing complexity all through their education, in order to facilitate their development from novices to experts. A second feature of learning projects is the production of an artefact, which helps students learn the creation process, by working through this process from start to finish: project-based learning is learning by doing.

Project-based learning is grounded in theories of social constructivism and situated learning (Grant, 2002; Raucent, 2004), which explain learning as individuals constructing knowledge in interaction with others and with the environment; hence, the knowledge constructed by each individual is different. The project-based learning process is controlled by the student. This allows students to engage their previous knowledge and experience and work through the project in their own way, which supports their knowledge construction and expertise development processes. Learning through projects is also situated in authentic or simulated contexts, facilitating students' entry into a community of practitioners. In this way, by acknowledging that knowledge is constructed while participating in practice, project-based learning opens up possibilities to overcome the traditional theory-practice divide (Allan, 2007). Learning projects fuel students' intrinsic motivation through creating a 'need to know': they have sufficient complexity to raise more questions for students which lead to real inquiry, new ideas and innovation; they provide opportunities for feedback and revision; and they require public presentation of the artefact (Larmer & Mergendoller 2010).

Fridrich (2006) comments that the word 'project' is often used in education for learning tasks that are too closed and restricting to deserve this title. He emphasises three key criteria for learning tasks to be called projects: 1) the process and the results of a project cannot be exactly predicted by the teacher; 2) a project is what the project group does. This implies that projects cannot be repeated; they are unique; 3) and therefore, project-based learning is not just a different teaching method; it is autonomous, self-responsible problem solving.

Almost all identified literature on project-based learning was situated in technology, science or business education. This may explain Hanney and Savin-Baden's (2013) critique that the implementation of project-based learning often draws on the project management literature which reflects a techno-rationalist perspective. In those situations it may dampen the creativity which is essential in creative industries. Hanney and Savin-Baden (2013, p.9) argue that project-based learning needs to 'become an approach that opens up the possibility of a process-led activity where transcendence, intuition and creative play are celebrated – one in which new hypotheses are generated from learning and where innovation is possible.' This is where project-based learning in the BVAD may set an example.

What the research data revealed

Participants in this study characterise projects within a project-based learning environment in the context of the Bachelor of Visual Arts and Design as holistic: projects include the entire process from developing an idea to creating an outcome, together with all the research, media, technologies, lectures, working with others, and evaluation, which are necessary to make a quality outcome. Projects are driven by a question, a brief or an idea. They follow an exploratory and open-ended but rigorous process, and result in a tangible but unpredictable outcome. While students learn by doing projects, just doing projects is not enough: the projects have to be carefully designed to ensure that students learn what is intended. Hence, projects are to be seen as a vehicle for learning. This can be promoted by making projects authentic, that is, making them resemble situations, problems or contexts from outside the education system - often referred to as 'real-life'. Some participants referred to projects as another way of teaching the same content, and with more time than previously for students to create an artefact.

> *The idea that students follow content through, finding the thing that really engages them and*
> *allows them that time to actually truly understand something from beginning to end, rather than*

just giving them a fragment of it and trying to say to them, well that's it, they actually get involved from the beginning to the end of an idea. (T)

what we're doing now is: here are 2 or 3 technologies and you can use a couple of them, this is how you use them and we've been talking about the universe of pattern and go and create something, and it's more open-ended and you encourage them to research and they need to bring that research back and share it with the rest of the class. You're not giving them a straight lecture and expect them to take that all in and just go away in isolation, they need to bring something back as well that they've discovered or learnt or found that you may not know, so it's a learning curve on both parts (T)

project based learning is about learning by doing, it's about authentic learning so it's about as much as possible real situations, real world problems, real world context (M)

it's called project-based learning, the key word is learning there, not project. So I've identified the general areas that they were learning in the project that I delivered, and I think they are fairly general set of the things that we will be looking at for a project to have. (T)

Projects are initiated and managed by the students, which is what distinguishes them from briefs or assignments. The students interact with the project tasks, in the sense that projects provide an opportunity for students to explore, experiment, and push boundaries. Students should have the opportunity to try things their own way, and experience failure. This is considered essential in learning to learn.

I think there is less of a programme of autonomy in a brief, I think in the project the idea is generated by the student, it's initiated by the student, whereas the brief I think is an outside party coming to the student and setting parameters or increased parameters around what it is that the student is going to achieve, or make. (T)

with any project [it] is the structure of critical analysis, documentation, the process itself [...]. But if the end result of that is failure, as in that it did not work, there is more learning from that. To me that is what a project should be. It accommodates that, because of past experiences of projects, what is the success of a project based on what you have set up as a project, and it is not accounting where 'the figures don't add up and see you later'. We don't want the figures to add up (T)

Projects have constraints and project-based learning includes negotiating openness and creativity within these constraints. Particular constraints are time – in the first year of the BVAD five projects were four weeks long; one was five and one was eight weeks - and there may also be specific process and outcome requirements.

A project will provide students, within a set of constraints, the greatest opportunity to explore toward an individual solution, driven by an investigative question. (T)

Reflection

The project elements of task specification, time constraints and people relationships can all be recognised in the literature as well as the research data. To make it a learning project, the constraints put on these three elements have to be thought through carefully in order to stimulate learning. Strong features in the findings from the data are authenticity, exploration, unpredictability, and the possibility of failure. The research data show very little evidence of the importance of a 'project-management approach', and as such align more with the views of Fridrich (2006) and of Hanney and Savin-Baden (2013) on what a learning project should be. The likely reason for this is the

arts and design context of project-based learning in this study, in which openness, creativity and uniqueness are inherent. While rigorous process is still important in arts and design, it is different from processes in disciplines like technology, science and business to which most of the literature findings refer.

Why project-based learning

What the literature says

According to the scholarly literature on project-based learning, there are two main reasons why teachers and/or educational organisations introduce project-based learning. The first is that it enables students to learn knowledge and skills which they would not learn in what is often called a 'traditional' setting and tends to refer to a lecture-tutorial model of education. This relates particularly to helping students prepare for employment. Project-based learning aligns with professional practice where it includes expectations of project management, teamwork, professional behaviour, critical thinking, problem-solving, communication, collaboration, creativity and innovation (Musa, Mufti, Latiff, & Amin, 2012; Pearson, Barlow, & Price, 1999; Regassa, & Morrison-Shetlar, 2009; de los Ríos, Cazorla, Díaz-Puente, & Yagüe, 2010; Thompson & Beak, 2007). In addition, students learn to solve real problems and pay attention to ethics, sustainability and multidisciplinarity (Graham & Crawley, 2010). If projects are carried out in partnership with external stakeholders, they can benefit both students and stakeholders. Particularly in service learning, which involves student projects in collaboration with community organisations, project-based learning not only benefits the students and the community organisation; it can also raise the profile of the institution. Students may enhance their marketability and develop their interpersonal and ethical sensitivity and cultural understandings. They may also learn the impact of their decisions and actions on more than the bottom line, while teaching staff may increase their research outputs as well as give something back to society (Elmes & Loiacono, 2009; Metcalf, 2010). Secondly, project-based learning is introduced to help increase student engagement. Real projects to which students can relate enhance their curiosity and desire for discovery. Projects can then be used as a platform to learn theory and skills in a holistic way, thus integrating theory and practice (Allan, 2007). Holistic assessment of projects can encourage deep learning (Hargreaves, 1997). The purpose of increasing engagement may also include that of increasing enrolments and retention rates, particularly in a competitive student market (Graham & Crawley, 2010) or in specific courses within a programme (Movahedzadeh, Patwell, Rieker, & Gonzalez, 2012). Graham and Crawley (2010) comment however, that resource constraints such as the demands on staff time and the lack of staff expertise are often barriers to implementation of project-based learning.

Why project-based learning was introduced in the Bachelor of Visual Arts and Design

As happens with many programmes that have existed for many years, actual practices tend to evolve away from those that were once intended and described in the original programme documents. This kind of evolution tends to happen as individual courses are modified by lecturers, often for good reasons, however without transparency for others involved with the programme, and without a debate about the implications of the evolution for the programme as a whole. Consequently the coherence in the programme starts to fade.

In 2011 this was an important reason for the then relatively new head of school to initiate the redevelopment of the BVAD. There were two options: either to retain the existing programme and

to improve transparency and coherence while working through all aspects of the evolution as they had occurred in the programme, or to take the opportunity to start afresh. The second option was chosen, firstly as a result of a reflective process on what the school wanted to be and a subsequent rebranding of the school

> *I think a big part of it was a refocusing on the interface between the communities and the national identity of what we have. You could talk the branding thing because that's a big subject in many ways, but just the renaming of ideaschool and project-based within that, we had to construct this new identity, this new programme in order to make a different kind of identity (T)*

and secondly to what it means to be an artist or designer in the 21st century. A programme redeveloped from scratch was seen as the best option to reflect this new vision:

> *to take the opportunity to bring it into 21st century learning, which is why I started looking at project based learning, I had been aware of it prior to coming here, I am fairly up to speed with the latest developments in arts education, education in general and arts education specifically, I was aware of some of the stuff that was going on overseas at places like Stanford and so forth and I had read about the benefits of project based learning. (M)*

Some tutors, however, felt that the choice for project-based learning as the programme organisation model was never made deliberately by the team, but that it was chosen by the head of school.

> *the alternative to whatever situation we're in was put forward as not only project-based learning as the solution to those problems [...], but as being about education of the future, this is the way education was going. (T)*

Reasons for choosing project-based learning were its potential, according to the literature and from experiences in other institutions, for students to learn how to communicate and collaborate, to become self-directed learners, and for engaging students. It also endorsed the rebranding of the school and allowed ideaschool to stand out from other tertiary institutions who offered undergraduate arts and design programmes. Particularly, but not solely, for tutors who have a specialisation or background in design, project-based learning makes sense as it reflects their professional practice.

> *It comes from my industrial background, having worked on many industrial projects as a designer, I have always felt that when I went into teaching you need to bring that element into it. (T)*

As such, industry needs may be met better with a project-based programme. Project-based learning also allows tutors to embrace creativity in the design of their programmes and in their teaching, thus modelling being creative to their students.

> *...it kind of went hand and hand with rebranding [of the school]. If you're going to rebrand yourself and make yourself interesting and new, if creativity can't periodically reinvent itself it's a bloody poor show, because to sit back on our laurels is an oxymoron when we're talking about training to in some way invigorate creativity. (T)*

Reflection

There are notable differences between the reasons for introducing project-based learning in the BVAD and the reasons found in the literature. Firstly, the reason for improving student engagement was hardly found in the research data, and did not appear to be a driver for this change. Secondly,

the opportunity for students to learn things that they would not learn in a traditional context was not a driver for change in the sense that it would prepare students for employment; instead, this opportunity was seen as important for students becoming artists or designers in the 21st century. This went hand in hand with a reflection on and reconsideration of what the school should be in the 21st century. Hence, project-based learning in the context of the BVAD was introduced to serve the long term development of the people, the school and the profession, rather than any shorter term needs.

The differences can be understood considering that almost all identified literature relates to the contexts of engineering and technology, science, or business. Artists have been shown to be different from engineers (Gridley, 2007; Zare, 2011). For example, artists have been shown to be more interested in aesthetics than engineers, and they have a stronger tendency to personal introspection. Gridley (2007) also found that artists are more resistant than engineers to implement the plans of others and to accept input from others. Additionally, engineers tend to think more in hierarchies than engineers. Zare (2011) identified a significant difference in creativity between arts and engineering students. Artists as well as engineers are shaped by and help shape their discipline, implying that the discipline of arts and design most likely works from a different paradigm than that for, for example, engineers. This may well create different reasons for introducing project-based learning, and makes it interesting to identify what the implications are for the adoption of project-based learning in an arts and design context.

The above suggests that arts and design can be treated as the same discipline. However, O'Nolan (2009) states that "some designers consider themselves artists, but few artists consider themselves designers". He concurs with Brady (1998) in explaining that the purposes of the two are different and that artists and designers work differently. The difference was confirmed in the research data where tutors with a design background more than those with a visual arts background expressed familiarity with project-based learning as a reflection of professional practice.

Yet the choice was made in the programme redevelopment described in this document to retain an integrated Bachelor of Visual Arts and Design, for reasons that the two fields can complement each other, and that it provides students with opportunities for exploring the fields, and not having to specialise too early in their careers. This has contributed to the creation of a unique project-based learning environment. At the same time, however, the project-based BVAD is still rooted in the identified literature, although it comes from a different disciplinary context, for the simple reason that this literature was the only type of literature available to inform the development of project-based learning in the BVAD.

What could project-based learning in visual arts and design education look like?

What the literature says

Implementation models of project-based learning that are described in the literature tend to be situated in contexts other than arts and design. Yet, they have formed the basis of the project-based BVAD. The dominant implementation model appears to be a situation where one course or module in a programme is taught as a student project. Examples of this model were found in a variety of disciplines, including business (Metcalf, 2010; Thompson & Beak, 2007), engineering (Chu, Minasian,

& Xiaoke, 2012; Graham & Crawley, 2010; Gwynne, 2012; Raucent, 2004), science (Movahedzadeh et al., 2012), community services (Allan, 2007), and microbiology (Regassa & Morrison-Shetlar, 2009). Helle et al. (2006) refer to this model as the project-exercise model, that is, project-based learning as a large exercise encompassing one one-off course.

The project-exercise model is particularly found in capstone or service learning courses, which tend to be one of the final courses in an undergraduate programme. The purpose of these courses is often to apply the knowledge and skills that students have learned in the programme, as well as for students to develop the professional and/or service capabilities that were mentioned in the section *Why project-based learning*. Examples of this model were found in the fields of business (Elmes & Loiacono, 2009; Metcalf, 2010), law (Ver Ploeg & Hilbert, 2012), and rural development (de los Ríos et al., 2010). A potential issue regarding one-off project-based courses is described by Lattimer and Riordan (2011, para. 4):

> *PBL often fails when the emphasis falls too heavily on the "project" element of the title rather than on the "learning". When teachers focus on what students can make and do, instead of what they can investigate and uncover, projects are guilty of what Wiggins and McTighe (2005) term the "activity-oriented sin of design" (p. 16). Projects that come at the end of a unit of study, are peripheral to core concepts, or are intended to demonstrate what has been learned rather than actively engage students in new learning might all be characterized as "hands-on without being minds-on" (p. 16)*

A second model referred to by Helle et al. (2006) is the project-component model, in which students engage in projects alongside traditional courses, and was found in the literature to be applied particularly in the field of engineering (Heitmann, 1996; Heylen, Smet, Buelens, & Vander Sloten, 2007; Powell & Weenk, 2003). Examples of a third model, the project-orientation model (Helle et al. 2006), in which students only engage in projects, were not found in the literature. If students complete projects across the curriculum, there is an opportunity to scaffold the specific knowledge and skills that are associated with project-learning in order for students to continue to develop their expertise throughout the curriculum (Heylen et al., 2007).

What the structure of the BVAD looks like

The structure of the BVAD in shown in Appendix I on page 79. Each course within the programme consists of a student project. In Year 1, courses are taught sequentially. The first course has a slightly longer duration because of its orientation focus, while the final course of Year 1, World as a Stage, is eight weeks because its credit value is twice that of the other courses. This course is the capstone of the first year, enabling students to engage in an art or design project from beginning to end, including an exhibition. In the second year courses are scheduled concurrently, which assist students with learning to deal with multiple projects at any one time. Projects also become larger, and students from the second half of Year 2, students are expected to start specialising in either arts or design. In Year 2 students also begin to engage with business aspects of being an artist or designer and with the development of a professional network. The complexity of projects increases further in Year 3, culminating in the end-of-programme exhibition, where students can either choose to exhibit their work, or take charge of the organisation of the exhibition and the curation.

Four threads are woven through the programme, which are made explicit in each course as domains being assessed: Visual Arts and Design Work, Research, Creative Process, and Professional Skills. Each course has been required to assess against each of these domains. An example is found in Appendix 2 (page 80), in the form of the Ways of Seeing course descriptor. Under Assessment in this

descriptor each domain in the Assessment section the assessment weighting for each domain is shown as well as the learning objectives that are assessed in the particular domain. Although essential aspects are specified, the project description in the descriptor has been deliberately left as open as possible, to enable ongoing creativity in the development of the courses.

Reflection

The chosen structure for the BVAD is that of the project-orientation model, that is, the model for which no examples were found in the literature. The reason for choosing this model was simple: there was no good reason for any part of the programme not to be taught in a project-based environment.

This description does not tell the full story of what project-based learning in arts and design education could look like. It has only provided some technical details, in order to support the readers' understanding of the remainder of this document, which aims to create a more comprehensive picture of the project-based learning environment of the BVAD. However, to create this comprehensive picture, a conceptual framework is needed to help understand its complexity. This conceptual framework is described in the section *Conceptualising the project-based learning environment in the BVAD: Projects within projects.*

Conceptualising the project-based learning environment in the BVAD: Projects within projects

A project-based learning environment obviously contains projects. To describe the task specifications, the people and their relationships and the time constraints of the various projects, the project-based learning environment in this study has been conceptualised as a non-linear networked system, which is summarised in Figure 1. This figure shows three types of projects which are explained below.

Firstly, the environment contains student projects. In the BVAD each student is involved in a project as part of each course, either as an individual or as a team. The conditions for the student project are set out in the project outline, which includes the project objectives, the overall task, the deadlines, the assessment criteria and a timetable for the various activities within the project. Within the constraints defined in the project outline the student creates a specified artefact. Because each student is different and because a student is integral to his/her project (refer *Defining projects*), all student projects are different, and the outcomes, including the artefacts, of each project are also different.

Student projects operate within the context of a course project, as Figure 1 shows. The people in the course project are a team of tutors. In the BVAD each course has two course leaders who engage other specialist tutors where needed. The task of the course project is to create, teach and evaluate a course for students, which enables students to successfully engage with a learning project. Conditions for the course project are specified in the programme document. This project has deadlines in that the project outline needs to be created on time; a specific time frame (the timetable) has been set aside in which the course is to be taught and when assessments and evaluations have to be completed. While the course project sets out the conditions and provides the support for the student projects, its success depends on the success of the student projects; in other

words, the student and course projects are mutually dependent. Each course project is different, due to differences in tasks specifications and in the tutors involved; each course will therefore also have different outcomes.

Course projects operate within the context of the BVAD programme, which defines the third type of project in the creation of this project-based environment: the programme project. The task within this project is to create, teach and evaluate a project-based undergraduate programme in visual arts and design. The head of school, the tutors, and administrative and educational support staff are involved with the programme project as a team. Timeframes for this project include, for example, deadlines for programme approval, and teaching start dates. The following quote from a tutor, referring to the development process of the programme document, indicates how the people involved are inherent to the programme project and therefore to the programme's outcomes:

> *I think that the alchemy of [the tutor team] together worked extremely well and I think [...] as an experiment only, probably never be able to run it, but to do that same thing with another group who perhaps weren't getting on so well or weren't the same mixture of people, whether it would work? Because if you take the wrong content it could be a disaster in terms of how it is run, it could be boring, it might not be open enough for experimentation, like all of these things were thought about so that the courses can keep improving and be somehow open ended in the nature of them, all these things. If the wrong people being involved kind of made it all horrible and locked up and boring it would be a boring course to teach and the students would find it boring. (T)*

Course and programme projects are mutually dependent, because the programme project sets the conditions and provides support for the course projects, but its success depends on the collective success of the individual course projects.

Finally, the BVAD programme project does not operate in a vacuum either. It is embedded within a wider context of the educational institution, government agencies, the arts community, the arts and design industry, and the local communities. The programme project and the external context depend on each other, as the context provides conditions as well as support for the programme project, while a successful programme project contributes to the well-being of all these organisations and communities.

To complement Figure 1, Table 1 shows a summarised description of the task specifications, time constraints and people involved for each type of project, as they have been described above.

The system in Figure 1 has formed the framework to interpret the findings of this study. In the section *Which factors contribute to a successful project-based learning environment in visual arts and design education*, the context and each type of project in this system are described and discussed.

Figure 1: Conceptual framework of the BVAD project-based learning environment; an arrow indicates the influence a project level on another project level

Table 1: Summary of the characteristics of project types within the framework in Figure 1.

	Student project	**Course project**	**Programme project**
Task specification	Create one or more artefacts according to specifications in project outline	Create, teach and evaluate a course according to specifications in programme document	Create, teach and evaluate the BVAD programme
Time constraints	Defined in project outline – depends on course	Each stage is to be completed by a specific time	Constraint for approval process Programme to be taught over three consecutive years within institutional timetable
People involved	Student or student team	Lead tutors Specialist tutors	head of school All tutors Support people

What is a successful project-based learning environment in visual arts and design education?

What the literature says

Helle et al. (2006) found many positive stories about the potential of project-based learning but noted a lack of evidence of the 'proper' impact or of a cost-benefit analysis of project-based learning. Later literature, however, shows a range of outcomes from project-based learning.

Chu et al. (2012) found that students had had a good experience in project-based learning. Lattimer and Riordan (2011) saw that students showed pride in their own work. In a single project-based microbiology course Regassa and Morrison-Shetlar (2009) observed an improvement in the students' knowledge base and their analytical skills, and an increased confidence in critical thinking, all being attributes needed for independent scientific inquiry. From the results of a student survey in response to a project-based biotechnology course, Movahedzadeh et al. (2012) reports that the course promoted collaboration between students; it provided a challenging and encouraging learning environment that supported student learning; students felt inclined to take more biology courses, and their level of confidence in performing biotechnology techniques on their own had increased dramatically.

Gwynne (2012) mentions graduates' ability to work in teams and engage with ill-defined problems as an observed impact of project-based learning. He claims that making students feel like a professional in the first year, letting them 'imagine possibilities that haven't been imagined' (p. 8), throwing students in the deep end and letting them experience discomfort, but at the same time carefully

scaffolding the curriculum to give students ownership and responsibility, contribute to the outcomes.

Dinsmore, Alexander and Loughlin (2008) applied a pre- and post-test method to measure the (changes in the) connections between the where, the who, the when, and the what of learning in a project-based capstone course. They found the effect of what they call the new learning environment being particularly related to student interest. While they did not find much change in students' personal interest in the field over the duration of the course, students' role interests – that is, their interest in the specific roles they must adopt during the course - did change over this period. In measuring students' development of knowledge, Dinsmore et al. (2008) concluded that declarative knowledge increased, but not so procedural and principled knowledge, which are crucial in developing expertise.

These examples show a variety of possibilities for deciding which impact is supposed to be 'proper', to use Helle et al.'s (2006) term: it can be positive student experience or engagement, what students have learned, how much they have changed, whether their interest for the subject has been raised, how well they are prepared for employment, and there might be more.

What the research data revealed

Participants in this study expressed indicators to decide whether project-based learning had been or will be successful. The research data indicated three levels of indicators for success, which align with the three interrelated types of projects as conceptualised in Figure 1. It was found that indicators for student projects were different from those for course projects, which were different again to those for the programme project. A summary of these findings is found in Table 2, with a more comprehensive description below.

Table 2: Indicators of success identified in the data for each level of projects

Indicator of success	Programme project	Course project	Student project
Students learn	Holistic – becoming artist/designer	Something new Self/project management	New techniques, ways of working Challenging self
Students engage and have a good experience	Students are engaged in learning	Students have a good experience	Happy with the process Enjoyed the process
Students achieve	Students have high completion rates and high marks; Students create high quality work	Students pass and have high marks; Students create high quality work	Students pass the course, but only if they are happy with their own work
Students have a sense of personal fulfilment		The course enables students to demonstrate their potential	Students are pleased with the outcome they have created
The project runs smoothly		The course runs smoothly	
School culture	The internal school culture embraces innovation, collaboration and good educational practice	The course nurtures a collaborative culture	
External perception	The arts community, the industry and the wider community perceive the BVAD and ideaschool positively		

What is a successful programme project?

For programme projects, the following five distinct success indicators were identified. It was found that the programme is successful if:

1) students learn.

   It matters which knowledge, skills, dispositions, and/or attitudes students learn. Specific reference was made to learning:
   - To work in teams and collaborate with others

- Everything they need to be an artist and/or designer in the 21st century
- To present and communicate their work
- To think holistically
- To be self-directed
- To be a confident artist or designer

it will be so interesting to see them by the time they are graduating. At the moment I have seen students not being able to find their feet in expressing themselves and feel confident, sometimes until the last half of their graduating year. And in reverse I have seen some completely lose their confidence. So it will be really interesting to see how this affects that situation later on. (T)

2) it engages students in learning.

Signs of engagement are high attendance rates, a buzz in the classroom, students' explicit enthusiasm and enjoyment with what they are doing, a lack of issues regarding students not engaging, and students wanting to pursue post-graduate study after graduation.

They are happier, they are here for longer, their attendance is better because they are enjoying what they are doing. Just walking past their classrooms you see the buzz in the room, they seem excited and happy in what they are doing. (SP)

3) students achieve.

Achievement was mainly referred to as the programme having high completion rates and students obtaining high marks. It was noted, however, that completion rates are already high for the programme, and improvement of these compared to the non-project-based programme may be difficult to achieve. Achieving high completion rates can be supported by identifying students early on in the programme who are not suited for programme-level study. One participant noted this as a positive characteristic of the project-based programme. Another way in which achievement was specified is that students make good work at the end of the programme.

The standard of work is really impressive and I really look forward to their big end of show publication, the end of year exhibition when they graduate at Level 7, so in two years' time [...], that will be the one where you will really see I think a marked difference. (M)

4) the arts community, the industry and the wider community perceive the BVAD and ideaschool positively.

Indicators of this positive perception are positive feedback from the arts and design community about the quality of students' and graduates' work, other education institutions showing interest in the programme and how it operates, positive feedback from employers who have employed graduates, employers asking to employ graduates, the number of graduates who find work, and/or guest artists who want to come and practise at ideaschool. Another indicator is that students want to come and study specifically at ideaschool, not only from Hawke's Bay, but also from outside the region and abroad.

A potential issue was noted concerning community projects in which students are expected to engage during the programme; if they are not ready to do so there is a risk of a negative impact on public perception.

[...] the amount of uptake of our students in the industry, so especially those with more practically based or more industry based studies like design studies we could easily measure the

uptake of students in the industry compared to before but also, and this might take some time, the reputation of the school as time goes along, that might go up or down with time but it should go up. Again it's the acceptance of the outside industry of the people that are graduates from the programme. I find it harder to measure that with the pure visual art students where they become individual artists, I think that might be harder to measure. And again it can only be done to see how many successful artists you create out of it. (M)

5) the internal school culture embraces collaboration, innovation and good educational practice. This includes:
   - Tutors are willing to innovate and reflect on their practice and are enthusiastic about what they are doing;
   - Students and staff across the school and particularly within the programme working collaboratively and are supportive of each other; and,
   - The school supports a high level of academic rigour of the programme, including quality assessment, good teaching, good programme documentation, and transparency of practices.

Creating a good staff and student interaction and a positive vibe and feel around the school. (SP)

What is a successful course project?

For course projects, six indicators of success were derived from the data. It was found that the course is successful if:

1) it runs smoothly.
   This includes that the course goes to plan and there are no major hiccups; there is sufficient time in the course to achieve the intended depth; and tutors are able to motivate and inspire the students.

   It went according to plan. If you see x% of students grab the ideas and produce work, you know that you're on the right track and it is just a question of helping another group to get a little bit closer to that mark. (T)

2) students learn.
   For course projects, specific examples are that students:
   - learn something new
   - use what they have learned in previous courses
   - learn to manage projects
   - are self-directed, and take initiative and ownership.

   It's allowed students to explore a different part of creativity that they normally wouldn't do, most students have enjoyed getting into workshops and having a go, that's successful. (T)

3) students achieve.
   Achievement includes students creating quality work, passing the course with good marks, and not withdrawing.

   there is no definition of what an artist document is. Many of them of course went for what we would call a default mode and ended up with a book and they were beautifully, beautifully done, whereas some of the others went out on a limb and stretched the notions of what a document could be, so for me the project succeeded. (T)

4) students have a good experience with the course.

[...] based on daily positive comments from students, and that is when you know you're on the money. You know pretty quickly. If the project is not working, you'll hear it really quickly. (T)

5) it nurtures a collaborative culture.
   Particular reference was made to students supporting each other.

6) students are able to demonstrate their potential.
   This indicator was referred to as students being able to surprise themselves, and also in terms of a course not being successful if students are not given the opportunity to make a piece of work.

What is a successful student project for students?

The student responses showed that the student project is successful if:

1) the student has a sense of personal fulfilment.
   Students expressed success as being happy and pleased with the outcome they had created, irrespective of the views of other people. This included knowing that they had done their utmost and having achieved their own goals for the project.

   At the beginning of the year it was marks. I got over that pretty quickly and for me if I'm happy with what I have done, my outcome, and it's me just doing a really good product. (S)

2) the student has learned.
   Students found themselves successful if they had learned new techniques, media, or ways of approaching art. Particularly it was related to self: challenging themselves and pushing their own boundaries.

   Being able to challenge myself into something that I do not normally do (S)

3) the student has had a good experience.
   Having a good experience was reported in terms of being happy with the process, which included being happy with their own time management, understanding the expectations of the project, not being stressed, and having had sufficient support. A good experience also means having enjoyed the project.

   [if] I see results. Possibly taking notes, interactions in lectures and understanding it. If I'm able to understand it I can progress from there. If I don't understand it I'm just like a kid lost. (S)

4) the student passes the course.
   Passing the course was an indicator of success, but on the condition that the student was also happy with their own work; some students indicated that receiving a good grade might give them a good feeling.

   I look at marks because I want to know how I am doing because everything is scaled. I don't agree with that but that's how it is. Just as long as I'm passing and I'm happy with what I'm doing and learning then that's me; I'm happy. (S)

Reflection

With the main reason for redevelopment of the BVAD into a project-based programme being the making of a fresh start, it was left open what this would look like in terms of success, just as in an art or design project it is unclear beforehand what the final outcome will look like. Instead, the

indicators of success identified in this section appear to have been shaped as the projects progressed, with the people involved becoming increasingly aware of what 'good' meant to them as an integral part of their practices and reflections.

The identified diversity in views on success may be interpreted as a lack of clarity on what the project-based programme is aiming to achieve and as a sign that the intended outcomes of the change process have not been thought through. However, diversity also acknowledges the complexity of a programme (Govers, 2011), with many possible outcomes, where one is as good as the other. The focus in this regard could be on a strong process, trusting that good outcomes, whatever they are, will follow. In other words, there is not one meaning that can be attributed to 'proper' impact of project-based learning (Helle et al., 2006).

There are also two marked differences with the literature findings. First of all, the literature only discusses the impact on students, while the research findings clearly show the importance of impact on the school as well as students. Additionally, success indicators are more than just outcomes-based; they also concern the process. While the literature acknowledges student engagement and experience, the findings here also show a smoothly running course as an indicator of success; in a way this could be explained as part of a 'good tutor experience'.

The second difference with the literature is that no evidence was found in the latter of the distinct levels of programme, course and student projects; and therefore no distinction was made in the literature between indicators of success across these levels. The research findings show that the indicators vary considerably across the levels. Considering that the programme requires the success of courses in order to be successful itself, and that the courses require the success of student projects for their own success, the indicators at the different levels may reinforce each other, but they could also lead to tensions and negotiation of those tensions between the various levels. For example, the indicator 'Students engage and have a good experience' in **Error! Reference source not ound.** appears to align across the three levels, giving reassurance that the three levels indeed support each other towards a successful programme. On the other hand, for example, the indicator 'Students achieve', particularly in the sense of students achieving high marks, was raised as important for the programme and for courses, but not so much for students. For students, personal fulfilment was much more important, which aligns with the findings of Gridley (2007) of artists, more than for example engineers, relying on their own plans and their own input. Any artefact created by art and design students is extremely personal; the importance of the student's ownership over the artefact may therefore outweigh any good grade.

Which factors contribute to a successful project-based learning environment in visual arts and design education?

Using the framework, this section answers the above question for each level of projects within this case study.

The context

The context of the programme consists of many different environments. Below are the contextual environments that emerged from the data.

ideaschool

The programme project was grounded in a change process of the then School of Arts and Design, now ideaschool. The change of the school was instigated by the arrival of a new head of school, who identified a need for staff collaboration and a shared focus within and across programmes in the school. The relationship of the school with the wider community was also found to need a fresh start, as the positive perception of the school within the community seemed to have started to fade.

The school change involved a deliberate and managed process led by the head of school and consisting of many meetings with all staff to identify a common purpose, learn to know each other and each other's strengths, and to create a new global identity for the school. This process culminated, with the support from all involved, in rebranding the school into *ideaschool Arts & Thinking* on 9 November 2013.

The achievement of 'that sense of unity of who we are and where we are going and what we stand for and being incredibly proud of that' (M) formed the start of the redevelopment of the BVAD. At the same time, the BVAD team was already creating project-based learning opportunities for students in their second and third years, including, for example, the redesign of Marine Parade in Napier.

Looking back on the BVAD redevelopment process it was noted that the teambuilding had been essential in making a successful start with project-based learning in the degree. Yet, where the teambuilding started with the entire school, the redevelopment of the degree has mainly concentrated on the expertise and ideas of the existing visual arts and design team. The possibilities of collaborating and developing project with the fashion and screen production and music teams in the school have yet to be fully utilised.

The faculty and the institution

Within the organisation, ideaschool was part of the Faculty of Humanities, Arts and Trades until December 2013. This faculty has contributed to the redevelopment project of the BVAD primarily via the faculty dean through providing academic, moral and resource support at management level. This included constructive feedback by the Faculty Academic Committee (this is the quality assurance body at Faculty level) during the various stages of developing the programme document, assisting with ensuring sufficient staff resources for development, backing support to the head of school for the changes to be made, and showing interest in the changes to the teaching team.
Ideaschool is housed in probably the oldest buildings on campus, with the team spread over many different buildings. This does not support team building and collaboration. For financial reasons the institution has decided to defer the intended rebuild for the school, which has resulted in improvising with existing spaces to support the philosophy of project-based learning as much as possible.

The region

As a regional institute of technology, EIT and the BVAD mainly attract students from the region and are expected to build close connections with the communities in the region. Project-based learning offers multiple opportunities for such connections.

Additionally, EIT is a medium-sized institution and the BVAD is a relatively small-sized programme, particularly compared to arts and design degree programmes in the bigger cities. This raises opportunities in the sense that it may be easier for the BVAD team to make a substantial shift towards project-based learning compared to other larger visual arts and design programmes.

Arts education

Arts education as a field is currently pulled in multiple directions. One pulling force is the complexity of our 21st century society. As eloquently explained by renowned educator Sir Ken Robinson, creativity, divergent thinking and collaboration are now the key skills needed to survive and thrive in the 21st century (Robinson, 2010). These skills have not left the arts and design sector untouched. Digital technologies have changed the very ways in which artists and designers work, collaborate, communicate, exhibit and sell their work. Artists and designers also require business skills that are contextualised within the creative industries (NZQA, 2013).

A second force influencing arts education is the economy. Creativity and innovation, which lie at the core of arts education, are the 'skills' that are needed in the workforce to take the economy forward (Ministry of Education & Ministry of Business, Innovation and Employment, 2014). At the same time arts education is highly challenged and possibly threatened by this narrow focus on utilitarian expectations of present-day tertiary education (Millar, 2014). A wider focus will always be needed, as Wareham (2008) states: "Another perspective is that any civilised society needs creative, imaginative, reflective people to question its practices and values and that the creative disciplines in higher education help to develop and foster these attributes."

The different forces seem to have left arts education confused and uncertain. A recent book, ART School (Madoff, 2009) provides a wide range of propositions for arts education in the 21st century, acknowledging that a new era for arts education has arrived. The variety of options for arts education presented in ART School suggest that the process of recreating arts education has only just started, having only reached a state of idea formation and experimentation (Madoff, 2009).

In summary, the message from the arts education context is that something needs to change, but it is unclear what and how. The project-based BVAD responds to this message by providing an example of a change and is therefore in a privileged position of helping shape the future of arts education.

National

The national context influences the project-based degree project in three ways. First the programme had to be approved and accredited by the New Zealand Qualifications Authority (NZQA), as a condition for funding by the government (NZQA, 2010). A solid preparation process for this approval, plus the fact that the degree was already in existence, made this process rather smooth, much to the surprise of several of the tutors.

> *I was amazed at how quickly the document was ticked by NZQA. Because there was a lot of work getting it there but it seemed to be off there and came back. (T)*

Second, the Targeted Review of Qualifications process undertaken by NZQA (NZQA, n.d.) involved the Diploma in Visual Arts and Design which had always been partially embedded in the BVAD. With the BVAD being a qualification at level 7 on the New Zealand Qualifications Framework, it was not included in the Targeted Review, while as a level 6 qualification the Diploma was. The Targeted

Review is changing the Diploma, implying that Diploma courses can no longer be co-taught with BVAD courses in the. This has negative consequences for the viability of the degree.

Third, ideaschool is about ideas and helping develop thinking and innovation in New Zealand and the world. This is highly ambitious considering that an art school may fail if it is trying to do this on its own.

The programme project

What is the programme project?

The programme project was briefly introduced in the section *Conceptualising the project-based learning environment in the BVAD: Projects within projects*. This section provides a more in-depth description.

The task within the programme project consists of two phases. The first phase was the development of the programme document which was needed to gain approval and accreditation. The second phase of the project involves the further detailed development and implementation of the programme.

Programme project phase 1 – Developing the programme document

This phase was strongly influenced by the external context in terms of approval and accreditation requirements set by the EIT, NZQA and the Tertiary Education Commission. It was also influenced by the perspectives of the wider community, who were consulted during this process. The timeline for this first phase was constrained in the sense that it had to meet the deadlines for approval in order to start teaching the programme in the following year. There was however freedom in this timeline as it was up to ideaschool to decide in which year they chose to start teaching the programme. In fact, the original start date of February 2012 had to be deferred to 2013 as the team was unable to meet the external deadlines during 2011. The people involved in the first phase were the head of school as project leader, the visual arts and design tutor team, and support people including the programme secretary, an EIT education advisor, and all other tutors in ideaschool. The outcome of this phase was the formally approved programme document, including the course descriptors, which has formed the framework for the second phase of the programme project.

The task of developing the programme document involved regular time-tabled meetings with all the people involved. The very structured nature of this process helped the efficiency of developing the programme structure and subsequently a document.

> *The whole process of change and writing a new programme; there was an organised structure of meetings, got us all together, that was very efficient, because out of a very few meetings it seemed to me we had a structure. (T)*

Many team meetings involved brainstorming what students should learn in the programme, what the content would have to be, what the projects would look like. With all tutors having a full teaching load as well, these meetings often had to occur at the end of busy teaching days. However, the expertise, experience and engagement of the teaching staff appeared important not only for being able to be productive during these meetings, but also for the quality and usefulness of the outcomes of these brainstorming sessions. Ownership of the tutors over the ideas, the positive acceptance of the ideas raised during the meetings, and the collective prioritising what would be included and what not was important in making it the team's and not the manager's programme.

Once we worked that out it was then about, and we did this collectively, we did not do this individually, starting to mesh them into potential projects and going, 'well we could cover printmaking in that one and talk about the eco sustainable response to design and so forth and so perhaps we do some drawing techniques and so forth in there, where is this one visionary structures well we could use the 3D workshops so that they learn some metal work and some woodwork and we'll draw on postmodernism theory and we'll do some prospective drawing in it blah, blah, blah'. So we collectively worked out what was ultimately going to end up, it was like there was a collective brief rather than an individual brief (M)

To strengthen the importance of all ideas, written records of all meetings were made accessible to all team members, so good ideas would not be forgotten as the process progressed. While the recording of the meetings put a large pressure on the time of administrative staff, this time appeared well-spent, as the records were indeed referred to by team members, particularly in the specification of the individual courses.

A tension was found between the length of the decision process on the structure and content of the programme, and the need to get the document approved so that the programme could be offered. Several tutors felt the document that was submitted for approval was no more than a first draft, and they were surprised that it was approved at all. Could the design have been better if more time had been taken to write the document? Or was it the best decision to start offering the programme, where adjustments can be made as they are deemed necessary during the implementation process? A difficult question to answer:

you got some great ideas put on the table and then we acted on them and that's not saying that there mightn't have been 10 other really great ideas that might have happened if we had had time but actually ultimately the ones that were there were all very intelligent, sound projects to move with. I think what <name tutor> said is true that idea that we had to move, it had to happen to a programme quickly, and how else do you get teaching staff to contribute except after they have taught all day. (T)

During the meetings staff development needs were identified to assist the tutors with implementing project-based courses; simultaneously, the meetings themselves were also set up as staff development activities in the sense that tutors learned what project-based learning was, and explored what it would mean as the foundation of the BVAD. Financial resources were set aside for this professional development during the design process. Additionally, one of the appendices of the programme document is a plan with the identified professional development needs.

Overall, programme development time for staff is costly, but important. In this case every tutor has received some reduction in their teaching time per year for programme development. This may not pay for all their time, but is at least an acknowledgement of the time and effort they put in. However, this does not include the time spent by the project leader, the administrator and other support people involved for whom involvement in the programme project is seen as integral to their everyday job.

The staff have had to work very, very hard. While we have given some teaching relief to do the delivery design and some teaching relief, even earlier on, to do the curriculum design, it's not avoiding the fact that that was probably not enough, but we've got limited resources at EIT, so that has been a huge challenge. (M)

Programme project phase 2 – Further developing and implementing the programme

In the second phase the people involved are the same as those in Phase 1, excluding the education advisor and non-visual arts and design tutors. Time constraints for this phase are mainly defined by the programme structure and the dates of the academic year. To a large extent the second phase of the programme project is delegated to course projects, each involving two tutors as lead people. The collective outcomes of these course projects create the outcomes of this phase of the programme project. However, the course projects are not independent: to monitor and ensure the overall coherence and consistency of the programme across the courses, many considerations and decisions are still to be made at the programme project level with involvement from the entire team, which are then fed back to the course projects as task specifications, people involvement and/or time constraints.

Phase 2 is also influenced by phase 1 of the programme project, in that the programme document forms the framework for the further development and teaching of the programme. It has been important to acknowledge that the programme document is not static, and to allow it to be subject to ongoing reflection, articulation and negotiation by team members in order to give meaning to the document. For example, the following negotiation related to what students should learn in the programme:

> *Tutor 1: ... for some fine arts students the ability to communicate in a professional way, I question it because if they really have the drive and if they really want to they'll get in touch with someone or find a way of selling their work and of course the people they get in touch with, the galleries put no onus on artists being able to communicate well.*

> *Tutor 2: Not anymore, I remember [being told] the days of artists turning up with scrappy bits of paper are finished.*

> *Tutor 1: I don't mean in that sense, I mean being more able to orally communicate, being organised and showing yourself to your best advantage in a visual way.*

Other examples of considerations and discussions in phase 2 of the programme project that have occurred across the team and outside the scope of the individual course projects are the following.

- The overall coherence and consistency of the programme are discussed in many dimensions. There were clear indications that they are strong factors contributing to the success of the programme in terms of student learning (refer *What is a successful programme project?*). Examples are:
  - Monitoring the agreed implementation of deliberate threads throughout the programme, including, but not necessarily limited to:
    - A technologies thread, to teach students all technology and media skills that are deemed necessary
    - A theory thread, to teach students the theories and ideas that are deemed necessary
    - A professionalisation thread, to guide students towards becoming self-directed professionals
    - A digital portfolio thread, to ensure students develop their portfolio as they progress through the programme
    - A research thread, to help students deepen a particular area of their interest

- A contemporary practice thread, to strengthen the currency of the programme
- Scaffolding all of the above throughout the programme to ensure students grow to a high level in their capabilities; this is reflected in a prescribed sequence of courses, where students must complete all first year courses to continue with the second year, and a consistent approach to project-based learning, where each and every course includes a project
- Ensuring coherence across all courses in the programme and that students understand this
  - Finding an appropriate balance between theoretical depth and skills breadth in the programme
  - Developing an understanding across the tutor team of the relationship between being an artist and doing art and sharing this with students
  - Finding an appropriate balance between a visual arts and a design focus in the first year;
  - Modelling creativity to students through being creative in teaching
  - Finding an appropriate balance between engaging students and ensuring that all content is being covered
  - Negotiating the length of each course.

Tutor 1: But are you saying that before, when you were doing technology, you would have these specific groups and you would know they were coming to you?
Tutor 2: Yeah the structure is a lot harder to embed technology in actually, with project based learning.
Tutor 1: Because you're trying to cater for a bigger group and they're dealing with content and the subject of it but not necessarily the nuts and bolts of the technologies.
Tutor 2: Or certain aspects of it, absolutely, because it's not for everybody in a 42 group situation and so you've got to, we'll we're yet to find out how to do that. There's the answer.

Education to me is about content and it is very important if you want to grow the capacity to think critically in students that the content is very carefully considered and delivered at the appropriate time and pace. It is very easy to design a course that makes the student feel good and filled up with learning, but it is quite a different matter to craft an excellent course of learning where intellectual ability grows and builds alongside the acquiring of 'making' skills. (T)

Though I was surprised when they came to us [for the final project in the first year] that they were still so dependent, [...] I thought it would have had a huge change from the beginning of the year till when we got them.(T)

- Timetabling and staff allocation have appeared to be difficult, due to the 'fluidity' of the spaces used and of who is involved in each course. There is an ongoing tension between adjusting the projects to the timetable and adjusting the timetable to the projects, which is likely to become stronger as the second and third years of the project-based BVAD are being implemented.

  that's the absolute crux of the issue actually, because if project learning needs to fit inside timetabling expediency as we are finding that is happening, rather than the other way around, the timetable serving the best delivery of the project, what is happening is tutors not teaching to their strengths, and a prevailing idea that any tutor can deliver any part as if we are

interchangeable, so the students don't necessarily get the expertise in a particular field that they should get. (T)

- It is important that the spaces and facilities in a project-based programme are tailored to the nature of the programme. This includes flexibility for tutors to use spaces that support the course in which they are teaching, as well as flexibility for students to use the spaces that work for them. It also includes spaces where students and tutors can collaborate, as well as spaces that form an interface with the community. Unfortunately, due to financial constraints, the ideal spaces have not been created, but as much as possible of the above has been achieved with existing buildings on campus.

  we have had to deal with the buildings [...] which was just tweaking stuff. And we've opened up spaces, knocked down walls so there are much bigger open planned spaces. I got brand new furniture in there with all those new ergonomic seats which are quite colourful, quite playful looking, very consciously wanting to create a more colourful, vibrant type of environment so I put some resource into that (M)

- The following methods are currently in use to evaluate the programme:
  - Debrief meeting with the entire tutor team at the end of year 1 to reflect on the entire year and agree on changes
  - Debrief meetings of individual courses which include discussions about impact for the entire programme. These are, if possible, attended by the entire tutor team
  - Student evaluations on a course-by-course basis.

  Additional possibilities for evaluation were suggested by participants:

  - Finding a programme monitor who understands project-based learning
  - Potential debrief at end of programme
  - Creating space and time for reflection for tutors and for students
  - Working out a way to evaluate what students have learned.

  Time constraints may raise concerns that necessary changes identified through evaluation cannot be made:

  I have a concern though when we meet and discuss this year and think about how we might deliver next year is that for the sake of programming and timetabling which has already been done, that to what programme some of the things we might see as needing to change can actually be implemented. (T)

In its turn, intermediate and final outcomes of Phase 2 feed back into Phase 1 in terms of changes that may need to be made to the programme document and that may need re-approval. In the evaluation after the first year of teaching the programme, an example is changes in assessment weightings in several of the courses, and changes in the learning objectives of some courses where it became obvious that an essential topic to be learned in the first year had been overlooked in the original course descriptors.

The people

The project leader

As mentioned earlier, the project leader in the programme project was the head of school, who thus also had a role as the school's manager. It was found that the following characteristics of leadership have been important in the programme project.

- The project leader has the vision what the programme (and also the school in this case) should look like and is able to put a plan in place to work towards realising this vision. This includes, but is not limited to: keeping the big picture vision visible to tutors; holding on to it throughout the project; and allowing the process to be one of learning for all.

  I think vision is very important, that's the key thing. It's also being able to interpret that vision into practical meaning for each individual, [...] what it actually might mean for me as a painter or a printmaker or a ceramic artist or whatever, and what it might mean for the students as well, and <the project leader> has been outstanding in both developing the vision and making the vision meaningful for everyone. (M)

  Not being panicked about getting it absolutely right, nail on the head the first time around, having the freedom to go like 'we're going to give this the best shot that we possibly can but realise that we may need to tweak it a bit as we go because we're all learning a bit here' but never ever giving the students the sense that they are guinea pigs. We don't really discuss all that much with them. They all know it's a whole new programme but we don't go this is my first time doing this I think I'm doing it right, we don't ever do anything like that, it's always framed that it's extremely well planned, that it's very collaborative, that everyone knows what everyone is doing all the time. So I think being very careful of how you talk about it with students is really important, otherwise you'll freak people out if they think they don't know what they're doing yet. (M)

- The project leader creates and facilitates a process that assists with engaging the team members – this process was described under *Programme project phase 1 – Developing the programme document* and *Programme project phase 2 – Further developing and implementing the programme*. The project leader also ensures that the workload is distributed, allocates tasks to individuals, and ensures that people have the resources to do what they need to do.

  without [the project leader's] drive, she was very and genuinely ready to take it on. One thing I did notice, any contribution that we were making, she wasn't wanting to actually name the courses herself ever, was she? It always came from us, from my observations. (T)

- The project leader takes ownership of the process and the progress. This includes keeping an eye on the progress to ensure deadlines are going to be met, and taking responsibility for the process, the progress and the quality of the product. Near the completion of the programme document in phase 1 this required high time investment to ensure a high quality document would be sent to the approval committees.

  <the project leader> cracking the whip. I mean you need someone as a leader of sorts to go 'we're doing this and here's the...', sending us all the meeting requests and we answered for the next six months. (T)

  when we got to the really crunchy bit around programme document before we got it through to Academic Committee and on this journey, there was a lot of nights that I was here till midnight and I was absolutely running myself ragged, because ultimately all these thoughts and ideas

from the whole team and while they wrote all the course descriptors and stuff, [...] it needed to be turned into academic speak and it needed to be done in such a way that it was ready to go to an Academic Committee, and [...] I'm not prepared to hand in a document that's half-hearted [...] if you're going to do it you're going to do it properly (M)

it's continuing and just because we've got the programme document through now doesn't mean it stops, it absolutely continues and it's partly why a lot of the day to day management of the school I still do not do, I've handed it to [the assistant head of school] and he reports to me once a week about how things are going and that's all I want to know. The big picture stuff is what I have to keep focussing on. (M)

- The project leader has the educational knowledge to be the academic leader, as well as the discipline knowledge to understand what the discipline requires. This helps in gaining the trust and respect from tutors and higher management that is needed to successfully lead the project.

  a lot of institutions have wanted to pick up project based learning, it's a tough call to ask the head of school to also have that academic knowledge, but I think it helps hugely. (M)

- The project leader is cognisant of the differences between being a leader and being a manager. Management involves human resources, ensuring resources are available, keeping programmes going and resolving issues where necessary, whereas the leader is involved in the more ground-breaking aspects of the programme. In this case the project leader was also the head of school and as such had to wear multiple hats, but she had also delegated a significant part of her management role to the assistant head of school, in order to have more time for the leadership role. This allowed the assistant head of school to co-monitor the programme development and be a sounding board for the project leader.

  when I [the project leader; comment researcher] walk into [any of the other departments in the school] , they're under control, they're doing what they do, they'll call me in when they need me, which is fine. I occasionally go to their staff meetings, I just do the regular management stuff [...] in VAD; it's a different cup of tea. I'm at every staff meeting, I'm constantly pushing it, I'm constantly going what's next, what's next, now we need to look at the next level, now we need to start writing the next lot of course descriptors.(M)

  [As assistant head of school my role is] basically [...] a manager and supervisor, being there and seeing actually the classes working. Quite often walking in, especially near the ends of projects and having informal conversations with the students about it, which is really good because it's been a very good success up to now and so I'm quite pleased to be involved in it. (M)

The tutor team

It was noted before that the entire tutor team was involved in both phases of the programme project. The following explains what was important for the tutor team to successfully do this work.

- The team worked collaboratively, and all major decisions were made collectively. Individual courses were always co-designed and co-led by two people. Through working together and knowing each other the tutors were able to draw on each other's expertise during the courses, by bringing others in, for example as experts or assessors.
  At some stage the amount of work had to be distributed across the team. Two tutors per course were assigned as leaders of that course and were tasked with writing the course descriptor and leading the course project. The assignment was carefully considered by the project leader, taking into account the tension between the subject expertise required for each course and the nature

of the course in terms of non-subject-related student learning. Yet, there was concern from some tutors that subject expertise could have been taken into account more. The expertise of the team is vast, and, as has already been mentioned, contributed positively to the relatively quick decision-making on the contents and structure of the programme. Some team members also had expertise in developing courses from scratch, which others could draw on during the process. It was collectively decided that the course leaders should remain the same for each course until the entire programme has been implemented, for consistency and for workload reasons.

> we had a dynamic, maybe it was the perfect storm, I don't know. But the other thing is that as professionals we come to the table and put certain differences aside. Because we are individuals we have different ways of seeing things or whatever that may be, but I think we did make a commitment maybe in our own heart of hearts I suppose to get on with this thing and make it the best we possibly can. (T)

> I just remember how arbitrary some of the decisions seemed initially at a meeting, when we started to write course outlines it was like okay you two sitting at that table why don't you do that one, that was literally what it was like, no reflection on who we were or what our areas of expertise were or what we would've liked to get involved in, it was like you do that and you do that. (T)

- Engagement and ownership: The involvement of the team was characterised by full engagement in the meetings, which continued between meetings as well. This resulted in rich outcomes and ideas, and a continuation of discussions between meetings. One tutor reflected on this engagement as having had the feeling that s/he was being led. Others expressed being interested in at some stage experiencing other courses through a 'course swap'. The engagement in the process and the commitment to colleagues have helped tutors own the programme. Another factor that impacted on ownership is the opportunity that was given to be creative and experimental with the project-based programme, and being able to make things happen, within a context of trust. Tutors however expressed that the development was a lot of work, and it would have been difficult to put in this amount of work without the engagement and ownership.

> [The project leader] was guiding and kind of keeping us cajoled but it was the group and the people, the staff, that actually moved a lot of the ideas that you and her took and formulated and wrote in that document, and all of that amount of energy and information that came out was quite astounding. Sometimes I would just come out and go 'holy crap did we just talk about that much in an hour and a half', it was quite incredible. (T)

> it can go back to ownership but it's the fact that we have an opportunity to do things differently, better, experiment, without too much resistance, in other words, within trust and all of that sort of thing, there's a trust level here. (T)

- Developing the programme and the courses has been a learning experience for the tutors. The following are examples of what they have learned during the process to date: Tutors have learned to be flexible in their teaching, changing the way they teach depending on the situation. They have also learned that the subject matter they have taught in a certain way for many years can be taught in other ways. Tutors have found they can experiment with teaching, learn from what they do and change. Tutors have got to know their colleagues and learned to draw on their expertise. This was needed as some tutors had to learn new technologies and media in order to

teach their courses. Some tutors had reaffirmed how much they enjoy teaching, while another tutor had learned to work with a large group of students. It was noted that tutors have to give themselves to the work. And finally, developing a course from scratch was new for several tutors.

we're trying to teach creative stuff to people, there's got to be some kind of reaching towards those people because we're trying to get them to be creative, it's not like this kind of one process that they've got to adhere to because that's not what creativity is, it's a personal activation, with a kind of structure so that's what it taught me, the ability, the flexibility of teaching and learning. (T)

It gives you an opportunity to think about how arts education should be organised because normally you get a job and the programme's already a given and you do your bit and you fit right in there, you're not usually in this situation. (T)

I've enjoyed working with new staff that I haven't worked with before, I think that would be a good thing to focus on to have some sort of revolving inter-connection with various colleagues just to keep ourselves fresh with it. (T)

- Tutors' knowledge and skills: The idea of projects is not unfamiliar to arts and design practitioners, as projects reflect professional practice, particularly in the field of design. The knowledge and skills required to teach in a project-based environment are however slightly different from teaching in a more traditional content-based environment. Tutors need to have a diverse range of skills to support the variety of student projects within a course. This does create a tension around tutors being experts and specialists versus tutors being generalists – who can support student learning best? Nevertheless, the need for tutors to widen their knowledge and skills base requires professional development, which can be very personal and situational. An ongoing process of identifying and offering professional development opportunities has been put in place. One example of an opportunity is a community of practice.

One question I have around what we are attempting to do is that, as visual arts and design practitioners, some are stronger on the practice, the relationship and knowledge of technology, and some are far more geared into the ideas framework, and some can handle both. To assign a project to two people and assume that they can just deliver that conceptual basis of the project seamlessly is a little bit problematic. Traditionally in arts schools both those roles are separated; you have your theorists and they are quite separate from the practitioners. And while it is a very nice idea that we can all do both we either need to recognise that or we need to collectively work together to make sure that that is supported and talked about. (T)

one of the things that came out for example is a tutor said 'we want to have more time to actually talk about what we're teaching and for us to learn from each other, what each other are teaching' and so as a result a community of practice has been formed and I [the project leader] have very consciously stepped out of it, I do not want to be a part of it, I want them to lead this and take ownership. (M)

The students

Obviously project-based learning is focused on students and going to impact on students. In the framework used in this study, the programme project concerns itself with students in the sense that student projects are central to the project-based environment. Therefore, knowing the students and why they enrol in the programme are important elements of programme decision-making, which ultimately contribute to the success of the programme.

The other thing is of course that we don't have the luxury of at the front end sort of hand picking students, we simply don't, we have a different demographic, we've always had that demographic. (T)

Table 3 provides insight in the demographics of the first-year student cohorts between 2010 and 2013, with 2013 being the year in which project-based learning was introduced. The table shows a diversity of students in terms of gender, age, and preparatory education. Overall, the majority of students is female, although a higher percentage of male students enrolled in 2013 compared to previous years. It is noted that 2012 and 2013 have seen an increase in younger students enrolling in the programme, with more than half of the students now being under 20 when they start. Most of these students enrol in the BVAD immediately after completing secondary school. A significant percentage of students across the age groups completes a preparation year, which gives them experience in studying at ideaschool before they start the degree.

Table 3: Demographics of first-year students in the Bachelor of Visual Arts and Design 2010-2013. Project-based learning was introduced in 2013. Percentages are rounded to the nearest full percentage point.

Year	2013	2012	2011	2010
Total number of year 1 students	43	42	51	33
Percentage of female students	58%	69%	69%	64%
Percentage of male students	42%	31%	31%	36%
Percentage of students whose age at the start of the year was:				
under 20	51%	60%	41%	39%
between 20 and 34	35%	16%	31%	33%
above 34	14%	24%	27%	27%
Percentage of students who completed level 4 preparation year	49%	29%	41%	36%

The diversity of students is acknowledged by the tutors. One tutor noted that the changes in the way students are taught in secondary schools impacts on the way the programme is to be taught. Tutors noted a tension between pre-selecting students who already have the capabilities that are required to work in a project-based and self-directed way, and not pre-selecting students. They indicated that in a smaller institution they cannot select too stringently and therefore choose to teach the required capabilities as part of the programme.

Diversity is also found in the reasons students gave for enrolling in the project-based programme. Several were highly focused in that they were looking for a career in visual arts and/or design. Others were looking for a complete change in what they were doing, for example getting away from a boring job, or later in their lives exploring their creative side. Various other reasons were related to

the BVAD at EIT: to be able to stay in Hawke's Bay, because of the scholarship that was offered. And the final group of reasons had to do with the actual programme: the breadth of the arts and design field offered in the EIT programme, because it was project-based, because they had been told it is a good programme, and because of the quality of the tutors.

It was commented by tutors that a diverse group of students in the first year of teaching the project-based programme was beneficial for the teaching team.

> *It is quite good to have a wide-ranging group I think. If they were all very ambitious students everything would run beautifully and then as soon as you start getting the next group everything might turn to custard. (T)*

Support people
The final group of people involved with the programme project are administrative and educational support people. Support that has been invaluable in this programme is that of administration staff, who spent many hours recording the meetings, managing the records of the development process, and helping creating the programme document, as well as creating the administrative resources needed for tutors during the implementation, for example, spreadsheets to record student results. Academic support for the project leader and the tutors helped strengthen the educational rigour of what was developed. Tutors from other programmes in the school shared their knowledge and expertise about projects and teaching with the tutor team. And, finally, the administration team, as the pivot of the school, provided pastoral support to tutors, project leader and students.

> *it's a big jigsaw puzzle and [the administration team] are the glue that holds it together, you've got to have good support who know what they're doing, who have a good knowledge of what's going on and also being a bit personal at times, I mean finding the personal in someone, not just you're here to work and I know you at work, knowing about their family and showing that you do care, it's not just about work time, showing that you do think of them as a person, not just as a tutor, you're concerned about their whole other side as well to a point. (SP)*

The impact of the project-based BVAD on the context
As was mentioned before, the development of a project-based BVAD also includes spaces and facilities that align with this philosophy. The institutional context needs to provide the financial resources for buildings and spaces that allow project-based learning to flourish.

> *collaboration is an incredibly important part of project based learning for it to work and my staff are scattered, the whole school are scattered across seven buildings, [...], they don't even have staff from one programme in the same building so it's hard. I would not recommend doing what we had to do [; it is very hard] to try and do something innovative like what we are doing, within these very poor, poor facilities. (M)*

The renewed BVAD has also created new possibilities for the future, with thoughts about a Master's degree programme, and an environment for new graduates to practise and transition to industry and the wider world.

More widely, the re-development of the BVAD has started to influence arts educators in their thinking about their practices, now and for the future.

other people are coming to us to view what we are doing in terms of our new degree which is based on project based learning and very current and quite modern, so [I am] very proud to be associated with it. (M)

Summary

Table 4 summarises the factors that were identified in this section as having been important in the process of the programme project to enable the emergence of success, however without specifying the type of success.

Table 4: Factors identified in the programme project as important to enable success

Programme project phase 1 – Developing the programme document	A structured process
	Regular meetings that are inclusive of the entire project team
	Ownership of tutors over the ideas and decisions
	Recording and accessibility of all meeting notes
	Using meetings as staff development opportunities
	Making financial resources available to support the process
	Hard work by all in the team
Programme project phase 2 – Further developing and implementing the programme	Allowing and creating space for discussion, negotiation and change
	Creating tailored and flexible spaces for teaching and learning
	Evaluation with the entire team
	Acknowledging that timetabling and staff allocation are difficult
The project leader:	Has a vision and a plan
	Creates and facilitates a process that assists with getting buy-in from team members
	Takes ownership of the process and the progress
	Has the educational knowledge to be the academic leader, as well as the discipline knowledge to understand what the discipline requires
	Understands the differences between being a leader and being a manager
The tutor team	Works collaboratively
	Is engaged and takes ownership of the project
	Learn from their experiences
	Has the necessary knowledge and skills
Students	Are diverse – demographically as well as in the reasons for their enrolment
Support people include:	Administrative support
	Academic support
	Pastoral support for all involved

Course projects

What is the course project?

The course project was briefly introduced in the section *Conceptualising the project-based learning environment in the BVAD: Projects within projects*. This section provides a more in-depth description.

The task of the course project is to create, teach and evaluate a course for students, which enables students to successfully engage with a learning project. Conditions for the course project are specified in the programme document, particularly in the course descriptors. This project has deadlines in that the project outline needs to be created on time; a specific time frame (the timetable) has been set aside in which the course is to be taught and when assessments and evaluations have to be completed.

Each course is a sub-project of the programme project and connects to this programme project and to the other courses in the BVAD in one or more of the following ways. The connections are overseen through the programme project as described in *Programme project phase 2 – Further developing and implementing the programme*.

A course prepares for courses that are yet to come, either through letting students develop work that they will continue to work on in a future course (e.g. online blog), or through students learning skills (e.g. writing) that they will need in a future course, or through students learning concepts and theories that they will need in a future course. The future course can be in the same year or a future year;

> [We] took on the job of getting them to do a lit review, because we knew that in Documents [the tutors] wanted them to do an essay, and collectively as whole staff we wanted them to do a little practice of writing something before then. We also wanted them to practise going through Turnitin. So [we] kindly offered to put it in. That was not in the original plan. (T)

- A course extends what students have learned in a previous course. Examples are moving from looking inward to looking outward, from 2D to 3D, from exploration to deepening theory;

> In [Self-Portrait] we encouraged creating an ongoing e-portfolio and everything should feed into that. [Self-Portrait was] looking inwards and ours [Pattern Universe] was taking a wider view and looking out how things are created in relation to patterns in nature and mathematical pattern which are actually quite tied together. Visionary Structures worked on more physical things and was quite workshop based working with metal, wood etcetera. We tried to keep them flowing into each other (T)

- A course contributes to a thread throughout the programme, for example a skills thread, or a ways-of-seeing thread;

> They all connect to each other, but Ways of Seeing has a connection to Space and Place. Space and Place are ways of seeing; Self-Portrait is a way of seeing; the universe of patterns is a way of seeing; the imagination of Visionary Structures by its very name is a way of seeing, the activation of your imagination. Ways of Seeing is in that way connected to them all. (T)

- A course forms the beginning of a thread through the programme, for example the start of the e-portfolio thread;

- A course is part of the students' orientation to the profession, by letting them explore a range of options; and,

  We did not want to stream them [...]. We wanted a cross-over where they get a taster of everything so that by the time they get to the second year they have some idea of what sort of interest they have. (T)

- A course pulls previous courses together; in the case of the first year of the BVAD this is World as a Stage.

The course project process

Courses involve numerous decisions to be made in regard to which teaching and learning strategies and activities to choose and how to structure them, how to assess, facilities and resources needed, and how to evaluate, all within the parameters of the course descriptor, which also defines what students are expected to learn in a course. The findings concerning such decisions are presented below.

What the literature says

Lattimer and Riordan (2011) offer six terms starting with an A which abbreviate six key questions in designing courses as projects for students:

- *Academic rigor: How do the projects address key learning concepts or standards, or help students develop habits of mind and work associated with academic and professional disciplines?* (Lattimer & Riordan, 2011, para. 8)

This question focuses on what students are expected to learn by doing the project and how the project addresses this. Helle et al. (2006) note that often projects tend to have too many learning objectives that are not clearly spelt out and that lack a clear connection with the project activities. The breadth of a project could then be detrimental to the depth required. Particularly the use of theories and research evidence in their work beyond immediate experience requires careful consideration in the design of the project (Cook, Buck, & Rogers, 2012), for example through a requirement that all decisions made by students during the project be underpinned by reflection on theory and research (Allan, 2007). Multiple opportunities for formative assessment and revision may also assist with achieving the required depth of learning (Helle et al., 2006).

The complexity of the project may need to be broken down for students, particularly in the early stages of their studies, in order to help achieve the intended depth of thinking. It is easy for students to drown in the complexity, and subdividing the project may assist them with working their way through (Chu et al., 2012). Additionally, it is important to be very clear about outcome and process expectations, including expectations about collaboration to stimulate critical thinking. However, this needs to be balanced with sufficient openness to retain student motivation and ownership (Cook et al., 2012); involving students in the setting of learning objectives for the project is therefore important (Helle et al., 2006).

- *Authenticity: How do the projects use a real-world context and address issues that matter to the students?* (Lattimer & Riordan, 2011, para. 12)

- *Applied learning: How do the projects engage students in solving semi-structured problems calling for competencies expected in high-performance work organizations (e.g., teamwork, problem-solving, communication, etc.)?* (Lattimer & Riordan, 2011, para. 14)

Of the competencies mentioned in this question, teamwork seems to be the only one that receives attention in the literature, perhaps because it is an important way for students to learn communication, collaboration, leadership, and interpersonal skills (Lee & Lim, 2012). The main issues in regard to teamwork appear to be: 1) ensuring that every member contributes equally; and 2) managing conflicts in project teams.

The first issue particularly concerns identification of 'free riders' – students who don't put in a fair amount of effort, and preventing overachievers from doing all the work themselves, that is, enabling all team members to contribute (Nelson, 2012). This issue can be mediated in several ways:

- through the design of the project assignment: the project should not be able to be done by one person alone; the project must be such that students must rely on each other's participation; and the reason for doing the work in a group in terms of content and process must be very clear (Nelson, 2012).

- by teaching students how to collaborate, to set group goals, and to use their own and others' strengths (Lee & Lim, 2012; Nelson, 2012).

- through assessment: to assess the product as well as the process, the individual as well as the group, and to take the teacher's as well as the student's perspective into account (Nelson, 2012). Powell and Weenk (2004) describe an assessment process in which every student is individually questioned about the project in addition to a group presentation of the product; the combination of group and individual grade forms the student's final grade. Ver Ploeg and Hilbert (2012) explain a requirement for students to document the project process, as they would have to do in professional practice, and to report regularly, which helps expose individual contributions, but also creates an opportunity for students to receive feedback.
  Peer evaluation, in which students grade each other's contributions, is another approach used to distinguish between team members. Peer evaluation reduces teachers' workload – the question is whether the students' judgments are credible (Lee & Lim, 2012). In using and analysing peer evaluations, Dingel, Wei and Hug (2013) found that, in contrast to what people may think, free riders do not impact negatively on the overall product. It was also found that students tend to evaluate peers on effort, managerial, procedural and/or social contributions, rather than on knowledge and skill (Dingel et al., 2013; Lee & Lim, 2012). Assessment by the teacher is usually focused on the product while peer evaluation is focused on the process; hence the two assessment methods can be complementary.

The second issue in team work is that of managing conflicts which arise in project teams. Borg, Kembro, Pedersen Notander, Petersson and Ohlsson (2011) highlight the existence of different ambitions across the team members as a cause for conflict. While teachers mostly leave conflicts for the group to resolve, they may get out of hand which puts the teacher in a difficult position. Probably the best approach to reduce the chances of conflict occurring is to be very clear about the rules, expectations and consequences before the teamwork begins. And again, teaching students how to work in groups, and enabling the group to self-evaluate are helpful mechanisms in assisting student teams to work together more effectively (Borg et al., 2011).

- *Active exploration: How do the projects extend beyond the classroom and connect to work internships, field- based investigations, and community explorations?* (Lattimer & Riordan, 2011, para. 18)

- *Adult connections: How do the projects connect students with adult mentors and coaches from the wider community?* (Lattimer & Riordan, 2011, para. 22)

It must be noted that Lattimer and Riordan's work relates to a compulsory education context; for post-secondary education the word 'adult' may need to be omitted here. Depending on the purpose of project-based learning, it could be replaced by 'professional'.

- *Assessment practices: How do the projects involve students in regular exhibitions and assessments of their work in light of personal, school, and real-world standards of performance?* (Lattimer & Riordan, 2011, para. 26)

An important difference between project-based learning and the more traditional lecture—tutorial-based curriculum models is that the end product of a project by itself is often not able to demonstrate what students were expected to learn. As a consequence, assessing the process is equally if not more important than assessing the product, and probably therefore receives considerable attention in the literature. McGrath (2003) suggests multiple assessments throughout the project in order to assess students' understanding and how students' work has progressed over time. These assessments support learning by providing feedback and coaching to students. Requiring students to keep a logbook and doing in-process presentations is another way of assessing the process (Allan, 2007; Chu et al., 2012). Ultimately, the assessment result should not come as a surprise to students (McGrath, 2003).

There are tensions within project-based learning regarding who should assess. The person who has coached the students has considerable insight in the process, but may also have been too involved to make an independent judgment (Helle et al., 2006). Various authors suggest that students should be involved as well (Hammer, Ronen, & Kohen-Vacs, 2012; Helle et al. 2006; McGrath, 2003). To help students take responsibility they can be involved with setting the standards. Showing students the work of other or last year's students can raise the bar. Hammer et al. (2012) report a peer-assessment strategy where project groups assess each other. This assists with students' understanding of the assessment criteria and helps them improve their own work. They found that the peer assessments were trustworthy, and correlated with teachers' assessments. Students reported improved motivation and having created better products. It is necessary, however, to have a challenging project, resulting in an original artefact, and a good social climate for students to benefit. External people, e.g. another teacher or an external client, could also be called on as assessors. According to McGrath (2003), outside assessors may encourage students to put in more effort.

What the research data revealed
The research data showed various considerations that are also found in the literature, and many more, particularly around the importance of space, and sequencing and planning of project activities. The concerns around teamwork, which is a big theme in the literature, were not found in the data, as only in a few occasions students worked in groups in the BVAD, and on those occasions the matter of teamwork received very little emphasis.

Teaching and learning strategies and activities

A range of teaching and learning activities and strategies was used across the courses to support the students' projects. These activities and strategies were used deliberately and had their own specific purposes. The following list describes the activities and strategies that were identified in the data.

- To stimulate students to learn from each other a variety of peer learning activities and opportunities was created, including but not limited to group projects and group activities, peer feedback and sharing sessions. There were various reasons for this strategy. Firstly it was pragmatic from a tutor's perspective: it saved the tutor time and the amount of equipment needed was smaller:

    I did a drawing exercise to generate the stencil which was a group drawing exercise sitting around the table, drawing something and then passing it around. That was a different thing; it was pragmatic as well as a different way of drawing. That way we could get a stencil very quickly, to enable to get out of them what we needed to do in two days. They enjoyed it. (T)

    Secondly, it helped create a sense of belonging for students:

    we're dealing with 40 students between two tutors so I very much feel that the value of learning is that you've got to be comfortable and confident in the group. So that first course was about bringing them together as a group, making everybody feel comfortable. [...]. It was to mould them into a group really, get to know them, get them to know each other, so it was a group project, they were in groups working so there was a lot more interaction and sharing of ideas and communication, because it takes quite a job and if you get that going right then you've got a really great base, not only for the year but right through their three years of work. (T)

    Thirdly the industry requires students to work in teams:

    One of the things we did is we lined them all up here and we split all the couples and groups up, and then we paired them all up, so they had to work with someone they did not know before. There are times in the industry you are going to work with somebody new, so they had to experience that as well. (T)

    and fourthly, students get more ideas if they talk to other people:

    So we'd say, who's interested in sustainability, [...] let's talk about your project. So we encouraged the others to listen to what that person was discussing, and maybe encourage them to make comments, within limits, but when you listen to other people talking about their ideas, and you have something in mind, maybe with one word and that word could be a kindle for a project for another person sitting and listening (T)

- Lectures are limited and deliberate; they are used particularly at the beginning of a course to inspire students and help them develop ideas for their project. They are also used to raise awareness of bigger picture theories and ideas. Often they are interactive and interwoven with short activities.

    We delivered lectures, not full-on whole day things, just flick into this room and watch a short video and discuss, I think it changes from when you have a whole day of Visual Culture Studies,

where you would teach this sort of content, but because it's relevant to what you're working on they take it in a little better. (T)

they were thrown in the deep end, doing stuff that was going to inform what they're going to do without knowing why they were doing it. On the second Monday they found out why they had been doing it and how that would relate to the project, because I think there is nothing worse than engaging them in a lecture on the first day. (T)

- The complexity of the student projects and students' inexperience in dealing with this complexity required that activities be scaffolded or broken up into smaller steps, in order to help students progress towards the outcome of their project.

  That is why we did the half hour-40 minutes research projects for three days each week in the first two weeks. We know that there is only a small amount of students that have a natural affinity with the academic side of art and design, but if we could introduce it in small sharp interesting bursts we tried to keep it up and exciting and interesting. It makes it less intimidating in terms of finding it easier to comprehend and of finding it boring. (T)

- Creativity activities let students deliberately experiment with out-of-the box ideas, in order to stimulate creative and new thought.

  Their first project in their first week, a 3 day project was to rip up their workbook or pages from their workbook and make something else out of it, playing with this image and text, this inter-textuality thing and really creating something new, not to mean anything. Some of them found this very hard to come to grips with in the sense of intending to do something but realising that meanings are actually generated not described, and some of them came up with fantastic results. (T)

- Integration of all teaching and learning activities in the course in order to contribute meaningfully to the overall project was an important concern in designing the activities.

  that was the sort of thinking around it all. Getting some theory, thinking ideas, examples, historical, contemporary examples of work and then how you actually can do that, the making. [...] So good long thinking around how we could find terms and processes that linked to the project based exercises. (T)

- Workshops focused on teaching technical skills or particular techniques, for example, how to develop a project plan. Workshops in the form of break-out groups are less formal and can be used to focus in-depth on a specific aspect of the project for a short period of time.

  we explained to them, in a very simple way, how to set objectives, what are your interests, how to think about them, how to set objectives and how to write a brief in a very simple way, so we just explained to them in very simple terms, the brief structure, what would the brief look like. (T)

- Drawing activities were reported as serving a purpose of drawing thoughts and ideas out of students, in order to share these with others.

  Drawing their own portraits as a reflection of self was really important because I did an impromptu exhibition where they all got to see each other how they see themselves; they had to express themselves through different drawing techniques and then put that up and it was really telling of not only themselves but seeing everyone else was quite an amazing moment. (T)

- Giving students ownership of activities, letting students drive activities, where the teacher responds to what students come up with, was another strategy used to make the teaching and learning process student-centred.

  We had to be very fluid and changeable in moving from person to person because now I am not just talking to someone who is dealing with paint, now I am talking to someone who might working on photographs or film or paint, and they are not just looking at high and low, they may be doing film and feminism, they might be looking at surrealism with photography, so there was a lot of different directions taken in response to the project, as an outcome. It was a different kind of fluidity, but I liked it. (T)

- Excursions and noho marae were used to connect students with each other and with the local and national arts communities.

  we had a visit to the museum to look at the cultural side, so they went into the archives and looked at different aspects. We also had [name] who took us on a trip to Otatara and explained to us the history behind Otatara, which was great, so the students had a kind of a wide range of introduction to all these topics. (T)

- One course was entirely dedicated to the role of document in visual arts and design, but specific activities to teach the importance of taking notes and documenting were found in other courses as well.

  another very important objective, of Space and Place, was that they become familiar with the workbook and how to use it and familiar with the ideas of research and documentation. So the trip [to Wellington – note researcher] was a good opportunity to get them in their books, drawing, showing each other things, noting things down. (T)

- Information and communication technology was used as a teaching strategy for students to talk about themselves. It was also used as a communication strategy in the online blogs, for students to share their thinking with each other and potentially also with the world. This is different from using ICT as a technology, e.g., for film, photography or writing.
- Sometimes guest speakers were invited to help the students' idea development and to connect students with the professional community.
- It was important for tutors to use language that students can understand, without withholding the opportunity for them to develop their professional language.

Course structure
In deciding which activity is going to happen when, a range of factors was considered.

- Careful sequencing of activities as well as deciding on the length of each activity was important, especially because the courses were intense. This included ensuring that students had an opportunity to explore ideas and to learn the technologies and the theory concepts to help them focus on their project work. It also included ensuring a diversity of relatively short activities to keep students engaged. In some projects students were not informed beforehand when activities were scheduled, in order to keep an element of surprise to help engagement. However, they knew they had to be at ideaschool from 9am to 3pm on Mondays and on Wednesdays to Fridays. This was to provide structure and in some courses model the industry environment.

that is where project-based learning really works, so a mixture of lectures, demonstrations, individual tutorials, group tutorials, and also keeping them on their toes, so not have a lecture every Monday, where they can think 'I don't really want to go to this lecture', but if they don't know when the lecture is they have to go to it, and it keeps them on their toes. And a varied length of things; don't have a standard length. So we do a demonstration and then we do a little lecture, but they are not informed what that is, so it does not give them the option of saying yes or no. (T)

It is 8 weeks but we felt we'll give two weeks, which ends this week, for them to write a proposal to us which outlines what they need to do and what kind of skills they need and what kind of resources that they are going to need. So that'll take the first two weeks from their thinking, and then there will be about 4 weeks when they are going to execute the project, and that will leave the last 2 weeks to teach them about how to curate work, how to organise an exhibition, how to create a catalogue and an invite and all those other practices that go with the exhibition; how to professionally organise. (T)

In the first week, it was pretty much a round of meeting each other, in various kinds of discussions and icebreaker games, things like that. But I didn't want the thing to be too talky so we went straight in to some exercises where they got to learn some technologies while dealing with the theme, Space and Place, so they're actually getting into some work straight away in the first week. I felt that was very important. (T)

- The project was often broken down in stages or in mini-projects to help students oversee the project, have a sense of progress or let students experience completely different ways of looking at a concept.

  The first week [...] they were taught computer skills and then had to go and finish a little project and do an online component, so there's a lot of specific stuff that they needed to pick up. And then we had the trip away for a week so that was the two weeks covered. (T)

- Structuring the course in such a way that there was enough time to do everything that needed to be done was sometimes a challenge, particularly where the learning of new technologies was involved.

  3 weeks of workshop was needed because the students were broken up into three groups of 14, and they had three days in each workshop so it was actually quite a short time, even though its three weeks, it's essentially only nine days. (T)

- Some of the actual content selected was for some courses decided on the basis of the expertise of the lead-tutors in the course, and on other tutors who were available.

  We've built the choice of technologies on our strengths, [name] is a printer and I do graphics so it was always going to be based around those sort of things and you bring in whoever you need for the 3D component. We are both capable of doing that but time wise we're concentrating on doing these workshops so you need someone else. (T)

- The full engagement of tutors and students in a course over a number of weeks made it possible to spontaneously make changes to the planned activities in the course.

  The thing we had to change was that we had one lecturer who was sick to we had to care for back-up. We also changed some of the timing because we realised they were too long or too short, so there were a few jigglings that happened in the process. (T)

Course assessment

The assessment requirements are deliberately loosely described in the course descriptor, and more in-depth in the project outline, which includes a rubric with performance criteria and marking allocation. In addition, insight was gained during interviews regarding actual assessment practices.

- What is assessed: In several courses assessment was staged over the course, among other things to reward students for their progress. It was also noted that it assisted with encouraging students to do the work, particularly in relation to writing work. In assessment, tutors focus on the work in relation to the students' own intentions, on how well students have carried out the process, whether students' final outcome is sufficient for the time that was given, and/or whether students have made progress in their development as an artist or designer.

  we also staged their marks. So the marks are not given at the end of the project only. At the end of the second week they'll be about 10% of the marks and I'll make it clear to them that yes, you've spent two weeks, that's about 25% of the time given to them but we're going to give you only 10% of the mark at the end of these two weeks. So they know that there is a stage here, that is a point of arrival, and then they'll continue from that. (T)

  I've just marked an essay, I told the students [...] you have to do the essay to pass, and I'm glad I did, I'll keep that perception going, because a lot of them wouldn't have bothered, or wouldn't have put so much effort in. (T)

  I mark and assess on the intentions of the student and if they say 'this is how I'm going to handle this brief, this is my intention' then I mark against how well they've actually measured themselves against that. I don't like to mark like or dislike because that potentially sets them up to fail based on my prejudices. That's largely how I work. (T)

- Who assesses: Courses were assessed by the course leaders, plus additional tutors who helped share the workload, but also brought in an external perspective, of someone who had not been involved with the students' process. Having multiple views on the students' work was considered important to help with consistency. Tutors were aware of potential bias towards personal preferences in their judgments. In one case the marking was informed by students' self-assessment.

  There was an external assessor to have someone with fresh eyes, for us to have a sounding board. Once we came to the assessments on the final day we had already assessed the presentations previously, so it was really good to have someone who had not been with them the whole time and hasn't dealt with all the issues. It's good to have another opinion. It is easy for us as assessors to be set in our ways about what we think is good or bad. (T)

  They also were given the opportunity to self-evaluate, they were remarkably honest and even right at the end, someone very truly, very accurately assessed themselves at their overall performance as 4/10 and it was specifically 'how have you used creative use of time', not just using time but using it creatively because artists actually create time. [...] So that was a useful tool and we've largely based our marks for those on our perceptions (T)

- How to assess: It was noted to keep assessment simple for students, in terms of the criteria that are used, as well as efficient for tutors. This did not always work out, as one project required four full days of assessment for tutors. It was also noted that students should not be assessed on the basis of one product only.

Putting [the project outline] together [...] I think it should be simpler. The assessment criteria breakdown for the old programme is long-winded. You wonder if the students read it and if they do, if they understand it. [For our course we] have broken it down, like: this represents your critical analysis, this your presentation, this your communication, and this your creativity, and then they get it. [...] Really, the detailed marking schedule is more for us. Students can read it, but they are doing the work. If they do that at a high level they're ok. (T)

- Purpose of assessment: assessment was reported to occur in order to give grades, and/or to identify whether a student is ready for the second year. One example seemed to defy any purpose of assessment as it was important in this very first course in the programme that students did not fail.

  it was important that the students didn't fail this course, so I was aware while I was teaching, that I was going to have to make sure that those behind did the minimum that they needed to do to get through so that I wouldn't have to fail anyone (T)

- Group versus individual assessment: creating criteria for individuals within group work was found to be a good way to assess the individual.

Evaluation methodology

In order to identify whether the course had been successful and how it could be improved for next time various methods of evaluation were utilised. After each course a debriefing session was held, led by the course leaders and attended by the teaching team, to clarify how the course had gone, what had worked and what had not and what might need changing for the following year. Quick student surveys were held after completion of each course, although the first semester courses were surveyed as a whole. One tutor created her own questionnaire to be completed during students' final presentation of their project outcomes.

  We do have the debriefing sessions, I think that's a good step as well, in terms of these projects, that's a good thing to do.[...] It keeps staff up to speed, keeps them more aware of what needs to happen more, what they need to do, upskill, [...] (T)

Spaces and facilities

It was important to have multiple rooms or spaces available for students to make work, where students were encouraged to choose the space that worked best for them and/or provided the facilities that they wanted to use. It was also important to have the flexibility for tutors to choose a space that is most suited for the planned activity. Thirdly, flexibility of space was important for changing venue now and then, in order to stimulate students' creativity by changing their perspective. In some cases the set-up of the spaces could have been more flexible to better suit the activities.

  The whole first semester they were in the design room. [For the Ways of Seeing course we] decided to transplant them [...] we wanted a fresh environment from which they could see; a new perspective, working the idea of ways of seeing; a new perspective on the environment. The room we took them into is a lot smaller than the design room. We were kind of worried how the dynamic would happen with 42 students in there and it was amazing. Far from being a chore or hard or lacking in space they thrived in there. It was almost as if it energised them because we compacted them in a little bit more. It also started a relationship and pulled it out into more of the whole of the art department now. They used to be very one-area centric. Now you are seeing

the students, some of them are there, some are in another room and some are in another room. The outcome has been a real decentralisation. (T)

Spaces and equipment also need to be adequate: an audiovisual room, computer rooms, arts and design workspaces were all available, but sometimes the set-up of and equipment in these rooms could have been better to support the effectiveness of the learning activities.

We're very fortunate we've got studio spaces right next door to workshops. The workshop spaces are set up for about 10 or 12 students and in our groups we had 14; so we were a little pushed for space. We had 3 groups of 14 students, we could work it to have 4 groups of 10 students and bring in another workshop but that will also need to bring in some other staff, and that's part of the facility battle I suppose. (T)

With a large group of students using multiple spaces and students working on their own projects, sharing of spaces and equipment becomes a necessity for students and tutors.

we did not have very many cameras. We thought that would be a problem but we managed to juggle not many technological resources like tripods and cameras. We needed to share a photography room. There was a lot of sharing and organising and that was good because that is project management and time management, so it had some inherent learning to it. (T)

Despite the multiple spaces that were used, the group tended to have a home room where everyone came together in the morning to kick-start the day.

Differences from how it was

Participants in this research project often revealed characteristics of courses in the project-based programme in terms of identified differences in comparison with courses in the non-project-based programme or in the level 4 programme which precedes the BVAD.

Some tutors commented that there was not much difference at all and that they had always taught in his way; for them the project-based courses were 'normal' and non-project-based had always felt uncomfortable. Many Level 6 (Year 2) and Level 7 (Year 3) courses of the 'old' BVAD were noted as already being project-based, so the biggest change at this stage was felt to have to be made at Level 5 (Year 1). A difference was however the concentration of a course in a small number of weeks. Others noted that the project-based courses were essentially the same as the modules that used to be taught, with the two-week period having been extended to four weeks, which created more space to develop art works.

I consider that I have been doing PBL here since I have entered this space, and if you look at past projects: there is the Marine Parade Project for a whole semester, level 6, Guthrie-Smith Arboretum and the National Aquarium. We had the structure in a similar way. (T)

this programme is what I'm comfortable with. It is something that is logical as well, because I understand the process, I know what the outcome is, and I see how the students benefit from it. You can see immediately the light bulbs starting to flick on all over the place, and you think 'you've got it, you understand what we're talking about' (T)

in the module system at Level 5, they would go into print and do two weeks of print, they would go out and do two weeks of paint, and so on and so forth, so the idea here and that I thought was very good because one of the student criticisms about those modules was that they were too short, was that we would have way more time on our hands to really get something developed. (T)

Courses in the project-based BVAD are more student-driven rather than teacher-driven as in the non-project-based programme. This includes that students are working on their own projects and their own interests – within the boundaries of the project brief, requiring tutors to know and follow the students instead of the other way around. This implies that tutors require a wider knowledge and skills base than in the non-project-based BVAD.

The difference between that and how it was before is that everyone has a different approach, everyone had totally different ideas about how they were going to approach the brief, so it throws different problems up in terms of the technology and how they're going to use it and how they want to use it and that they have to learn a little bit on their own about how to do things as opposed to be 'we're going to do it this way, and this is what we want' it was 'what do you want to do?' You explain it to me and do a little mock-up drawing and we will discuss how you're going to achieve that. (T)

One of the demands of this new programme is that in teaching you need to have a wider range of knowledge. In the old programme you could say: this is my area this is what I teach. In the new one you need to be able to pull information from a wider palette of different directions. [...] I can see in the future that our abilities are widened. That I don't have to say: this is the expert on this area. There are always going to be people that have more knowledge in that area, but we don't need to have such and such over here because they are not the only ones that has knowledge. Say someone is an expert on semiotics. If you're pitching it to the right level, if you want to do a presentation on semiotics, it is not a great deal of research to do. So anyone can do that. I think it will pull people out a little bit in regards to their abilities. And that does not dilute the depth; what it does is it utilises the abilities of the tutors better. (T)

Courses in the project-based BVAD are more holistic in terms of creative skills, the big concepts, theory, process and practice all being united in one course around a particular theme. This makes the learning more relevant to students. It also creates more flexibility in emphasising the different aspects that make up the whole within courses and across the entire programme.

In the past [we kept] hammering to the students that you need to think of the Visual Culture Studies paper when you do your Studio study and we keep hammering this in, and one of the papers [...] didn't make sense at all, which was the Visual Communication paper. I think now when within one project we can emphasis the communication side and we have the flexibility of doing that within these papers, then I think we can get to the write proportions with time, we can settle on how much do we feed them of each [skill], with each project. And also adapt to change that may happen in the future, in terms of the new technologies, or the new ideas, or the new topics, so that gives us the flexibility to introduce all these ideas in a way that doesn't disturb the balance of how the programme is structured. (T)

In the non-project-based BVAD students as well as tutors tended to work on their own; for the project-based courses they work collaboratively, and some of the student projects are team projects.

One of the big differences would be that we're now coming at it from, in our case, three tutors' points of view so there's a bit more information 'cause we have to factor in more[...]. Whereas briefs done in the past have been of my own doing so it's been quite focused, very process orientated. Whereas in this one we've had to say include this and include this etc. so we've had that bigger discussion which still is good for us to have a broader view as well. (T)

Sometimes communication between tutors was not optimal, which led to the students receiving mixed messages and possible confusion, or guest tutors unintendedly digressing from a planned topic.

An finally, the project-based courses were found to take more planning and organisation than the non-project based ones, have a more efficient way of assessment, and enable breaking tutors' habits.

The people

The project team in each course consisted of two lead tutors who developed the course, and also taught and assessed in the course. They called in other tutors for elements of the course or for assisting with assessment as required. Students were also involved, but via the student projects; therefore their involvement will be discussed in the section *The students' projects*. This section describes the views on the tutors' roles and on the qualities tutors need to demonstrate. It also describes how tutors in the course projects experienced tensions in the interaction with programme and student projects.

The roles of tutors

The role of the teacher or tutor changes considerably when the learning environment changes from a more traditional one to project-based. It may be for this reason that a considerable body of literature can be found on this topic.

What the literature says

Examples are found in the literature of teachers in a project-based learning environment taking on roles as guides, monitors of the learning process, role models, experts and team workers.

A crucial change for teachers who are new to project-based learning is often to let go of making decisions for the students and hand the responsibilities for choosing when and how to learn and even what they want to learn to the students (Fridrich, 2006). Instead of focusing on results, in project-based learning teachers focus on learning; they don't give answers but they monitor that students learn what they are expected to learn (Raucent, 2004). They are also role models, and their intrinsic motivation for project-based learning has been shown to be associated positively with students' intrinsic motivation (Lam, Cheng, & Ma, 2009). It must be noted, however, that the teacher's role as guide during the learning process may be in tension with the role of monitor to ensure a high quality product is created, particularly where external clients are involved (Ver Ploeg & Hilbert, 2012).

Another important change is that in a project-based learning environment teachers are required to work in teams. Projects tend to be multidisciplinary and the expertise of multiple teachers is needed to create a meaningful student project. This is often a challenge for teachers, but it models teamwork to students (Raucent, 2004; Ver Ploeg & Hilbert, 2012). Team teaching may also be necessary to enable timely and quality feedback to the various student teams in the project (Ver Ploeg & Hilbert, 2012).

To assist teachers with the transition towards facilitating project-based learning, effective continuous professional development should provide them with autonomy, and can be found in teacher collaboration, support frameworks, and activities that are connected with real classroom work (Fallik, Eylon, & Rosenfeld, 2008). An example of the latter is the use of information in

students' logbooks as an opportunity for teachers to reflect on their teaching strategies (Allan, 2007). Weenk, Govers, and Vlas (2004) found that a professional development approach which modelled project-based learning with teachers taking the role of students was an effective way for teachers to understand what the change in their role involved.

What the research data revealed

In the research data, a variety of roles taken on by tutors were identified as well.

- Planning and organising the course was the role of the two lead tutors in each course. All tutors in the BVAD programme were involved with leading a course; one tutor led two courses. Using the course descriptor in the programme document as their brief, as a team they created the structure of the course, developed the project brief for the students, decided the assessment criteria, wrote the project outline, selected the content, developed the activities and the resources needed for those activities, identified the tutor expertise needed for the course and engaged the tutors, oversaw the course as it was being taught, conducted the assessments, and led the debrief session when the course had finished.

  Designing the course was the most considered piece of teaching that I have ever had to put my head around. The big difference for me was the amount of resources and planning that went into it, much more than previously. Because you have a large group of people, unless there is motivation, even if you have some students who are not really interested in what you are doing, if there is no good structure and no good set of resources then you run the risk of a large group of people getting bored and switching off and it is really contagious and that's a lot of people to deal with. (T)

  In the workshop that I ran, I spent a lot of trying to work out how to do it so that it was possibly within the timeframe and to combine some collaboration group type things as well and I also wanted it to be something that I've not really done before so I needed to have some kind of excitement with it too. (T)

  Well-organised, always more experimental; if you're organised it allows for that. Having all the bits you need, know what you are doing, and if that does not happen within the structure then so be it. Even to the stage where it might affect the assessment. Not that the students know, but you can tinker with it a little bit to get a better result. (T)

  The difference now is I am overseeing the whole thing delivered and I'm like in an aeroplane watching how everybody is going (T)

- Another role of tutors was that of a facilitator of learning, that is, a creator of an environment that is conducive to learning. It is creating the space, time and conditions that help students learn. The initiative here lies with the tutor: the tutor finds out where the student is at, what they might need, and creates opportunities to meet those needs, with an eye on the intended outcome of the course.

  My role as a tutor, it's always about that. I mean picking up on opportunities because you understand what you are doing so deeply that you can say: Wait a sec, I'm not going to do that today as I've planned; we are going to do this'. And I always shake it up at that level because you gain more. Even if you don't do the thing that you have set up, you gain more from either doing it differently or picking up on the opportunity that's there. On the project-based level that's how it works; it is open to that. The classic project-based paradigm is 'Oh, let's have a mini-lecture'. You

kind of know that it is going to happen and you present a mini-lecture or half-hour conversation or whatever (T)

It is to inform the students and help them grasp the information, and support them if they try to utilise that information and respond to it. Definitely presentation, as I am giving information, but yes, you are facilitating a project. (T)

Largely as a facilitator, I play different parts, there are parts where I'm delivering information to all of the students, parts where I'm working one on one with the students and there's a part where as a group we're working with all the students. (T)

- An important role of the tutor is that of being a guide to students. A guide is someone who has done similar things and has experience, and can therefore suggest and challenge students, but does not know where the students' journey leads and therefore is unable to direct them. The initiative and the direction are set by the student, which makes a guide different from a facilitator.

    I would not see myself as an expert, but as a baseline from which their learning can become more expert than mine, absolutely. It is giving people the basic ingredients and some things I know and other things they will come across and they will want to know more about it and I don't know. Particularly in technology, a lot of the students are very savvy with some of the programmes that we use. They know them and they are using more than some of us, there are one or two of that. (T)

    They're sort of like everyone else in the class that you just bounce ideas off, which is pretty good, because, they are your tutors but they don't treat you as it. They treat you as an equal. (S)

    They give examples. They try to open another avenue for you to turn to and go down. They just don't do your thinking for you. They are great especially when you just have a black box with nothing coming out. (S)

- Tutors are also experts in their field. As experts, they present students with concepts and theories, they teach them how to use technologies and media, they model and give examples of professional practice, they provide students with appropriate resources. Tutors who were also course leaders were to some extent experts in the field of the course, but other tutors who were asked to contribute to courses mainly did so, not only as assessors, as previously discussed, but also as experts. The contribution as expert often involved a specific task within the course, of short duration.

    What [the lead tutor] wanted me to do was bring a different point of view, a design point of view, because they are predominantly visual artists [...]. As a technical specialist as well, so I can help them with some of the technical aspects of what they are trying to do. But predominantly a fresh set of eyes. (T)

    I just take a cue from everyone who is coordinating that project. It is not my role to not do anything other than what I'm asked. They brought me in because I had experience with the machine. With that machine you can't be an expert. I showed [the students] doing a few things. You always have to test. It is a very good machine to keep everybody as a servant of it. If that is teaching them then that's what I did. (T)

    I had to do some drawing classes with the students in Self Portrait, so I had no relationship with them. I went in cold and out; I was like a visiting tutor, that is how I approached it: Hi, we are going to do this today… It was presenting an exercise and working through the exercise. I was

quite intimidated by the idea of having to teach portrait drawing to that many people. I was really concerned that I would not have any connection with that mass and I think it is really important, especially when someone is struggling with something, that they feel who they are talking to. [...] I was worried about that, how that would go, but it did not prove to be a problem. (T)

- Tutors further performed a role as a monitor of the students' progress. They checked whether students were making progress and kept an eye on the student being able to complete the project on time.

  I was there and they knew I was there and so they would need to come and make contact with me and I would mark on a roll which students were coming in each day and working and managing their time between everything. (T)

- All tutors were involved with assessing students, in the course that they had led, but also in at least one other course, as an 'external' assessor. This was a form of moderation of assessments. Assessment of project-based learning seems to bring interesting tensions. Various tutors welcomed the availability of the external assessor because this person had not been involved with the students' process and was therefore able to provide an independent judgement of the students' work. However, some tutors explained that assessment of the process was more important than the product, which raised an issue that it is difficult to assess this process if the assessor has not been involved with it. Also where marks were given during the process there did not seem to be an external assessor involved. Another tension experienced by some tutors is the requirement to grade students against predefined criteria, which they perceive as a box they need to try and fit in.

  The way I like to look at it is, is it not necessarily the outcome that has to be perfect, it is the process that they have gone through to get to that outcome. And whether that has failed or worked... if it has failed because they are lazy that's a fail. But if they have looked at something and it has not worked, and they are trying to explore it in a different way and it is still does not work, they have learned something. As long as they have learned something in the process and in the project that they were doing, as far as I am concerned they have succeeded. Part of my job as assessor is to evaluate that. (T)

  I find [the assessor] role always problematic. What you are putting on students is one set of criteria, one set of hoops or bars or level, and you are treating them at that moment as all the same; some are going to get A's, some are going to get B's. Really, what I'd like to assess, is how far they have stretched themselves as individuals in that project. When I talk to students about assessment I always say to them: it is about you and what you've learned, whether it has challenged you, but not whether you get an A or a B. So I try and downplay that. (T)

  I liked doing [the marking] as a team, I think there was maybe two or three, you get a good sense, it's interesting how people have quite different opinions around something, I think a group thing you find a grade that seems about right. (T)

- Some tutors found themselves to be learners. Because students were taking initiative and ownership, and were working on their own projects, they would often have questions to which the tutor did not have an answer. In collaboratively exploring the possible answers the tutor and the students were learning collaboratively.

Very much as someone learning too, very fluid, trying to be very fluid and very open about the possibilities and seeing it as an open-ended thing rather than something that is contained or defined or easily packaged. (T)

- And finally, tutors took on the role of being peers, using their knowledge and skills not only to help their colleagues, but also to share their learning as an arts or design practitioner with students.

    normally in a brief [...]I'd be doing everything, whereas the biggest is we can bounce around tutors' knowledge and that's useful so we have those broader conversations with the students or learning opportunities. We can bring in other people and bounce ideas around. (T)

Reflection

The findings from the research data on tutor roles confirm the roles mentioned in the literature, but also show a wider and more specific range of roles. The findings identify a distinction between guide and facilitator, and add planner/organiser and assessor to the list. The team worker role from the literature has been identified elsewhere in this document as important for tutors in a project-based environment and is partly found in the role of being peers. A striking difference with the literature is the identification in the data of tutors as people who learn with the students and take the role of the students' peers, hence creating a relationship of reciprocity between students and tutors. This could be seen as the ultimate effect of 'letting go' of making decisions for students.

Qualities of a good tutor in a project-based environment

A range of participants referred to the strengths of tutors while being involved in the courses. As these were highlighted by the participants as examples of good practice, they might be interpreted as qualities of a good tutor in a project-based environment. A good tutor:

- Communicates appropriately to the students, in a language that they can understand, and in a way that they can relate to

    I was able to take what could have been some quite unwieldy heavy kinds of concepts and make them relevant and personal for the students which was I guess the intention. (T)

- Is experienced and skilled as an artist and/or designer

    My strength is my experience of combining practical-creative understandings from long time creative practice, with applied theoretical-historical understanding informing approaches to work in a studio setting, and communicating this to students, both in groups, and especially individually (T)

- Hands the initiative to students

    [The tutors] are really good at not telling us what to do. We need to come up with our own ideas. (S)

- Is well-organised

    [the tutors] are being forced to [be] more prepared, they actually have clear plans of what they are doing for the day, they can't just let the students loose (M)

- Creates a trusting environment

For those last two weeks I was moving around carrying this book. I had a list of everyone that I was seeing every day. It was just ticking and keeping it updated. It worked. They got absolutely used to us coming and saying: show me your book; how are you going? And it started to invigorate a more natural and relaxed communication as opposed to: 'Ooh he is going to look at me this afternoon or tomorrow'. (T)

Other, less frequently mentioned, strengths were: the tutor enjoys what s/he does; is flexible; guides all students equally; supports the students' research and ideas; provides pastoral care; creates a relevant student project; and gets the students to teach each other.

Tensions between course project and programme project

The section *What is a successful project-based learning environment in visual arts and design education* highlighted the possibility of tensions between different levels of projects as the different levels were each aiming for their own success indicators. Several of these tensions were experienced by tutors involved in course projects in relation to constraints set or decisions made at the programme level:

- The duration of each course had been decided at programme level. Some tutors reported finding it difficult to align the ambitions for the course with the limited time available.

  It's just the pragmatics of x number of days with infinite number of possibilities, that's what I find hardest. (T)

- At the programme level it was decided which tutors would lead each course. This resulted in some not being able to use their specialised skills for the benefit of students' learning.

  Well that's one of the disappointments. My strength is around 3D and clay and we haven't done any clay [...] all year. [..] So my media strengths haven't been used. [...] So I've been put where I've been put, but it's not maybe where my strengths are. (T)

  It also meant that some tutors experienced their own or others' lack of knowledge or skills for the course they are teaching.

- While tutors had time allocated in their workload to assist in courses they were not leading, this time had mostly been spent by the time of the final course, where outside tutor support was paramount. It was felt by tutors that this may have let some students down. Perhaps different models of providing this support need to be sought, where students are expected to take initiative to find the support they need as part of becoming a self-directed learner.
- The embedding of cross-programme threads into individual courses was a challenge on some occasions. For example, embedding theory and students' engagement with research ideas to a sufficient depth in the courses appeared difficult, as was the implementation of students working in groups, particularly where tutors were not clear about the necessity of group work in the programme. Students were found to not learn sufficient skills in the first year, and concerns were raised about the impact this would have on the second and third years – however it was acknowledged that technical and media skills could still be integrated in the year 2 and 3 projects. At the same time it was decided that, some threads, such as research and drawing, needed more emphasis in courses across the first year.

- The notion of the workbook and the relationship between the project work and the outcome were found to be different for art and design and were therefore interpreted differently in different projects, which caused discussion on what the interpretations should be.
- The entry requirements for the programme are specified at programme level, and include the level of academic abilities required; sometimes tutors had higher expectations than the abilities they perceived some students demonstrated.

Summary

Table 5 summarises the factors that were identified in the course project activities and decision-making in this section as having been important for shaping the courses and simultaneously the success of the courses and the programme.

Table 5: Factors in course project activities and decision-making that have been identified as important in shaping the courses and their success

Course project activity	Factor
selection and planning of teaching and learning strategies and activities	Peer learning opportunities
	Deliberate lectures, workshops, excursions and noho marae
	Scaffolded activities to deal with the complexity of the project
	Deliberate creativity activities for creativity, drawing, note taking and documenting
	Integration of all teaching and learning activities into a coherent whole
	Giving students ownership
creating the structure of the activities	Careful sequencing of activities as well as deciding on the length of each activity
	Breaking the course down into stages or creating mini-projects
	Ensuring enough time to do everything that needs to be done
	Selecting content aligned with the expertise of the lead tutors
	Taking opportunities to change the planned activities if needed
designing the assessment method and conducting assessments	Deliberate decisions on the purpose of assessment in the course, what is assessed, who assesses, how the students will be assessed, and how to assess individual students within group work
evaluating the courses	Having debrief sessions and surveys
spaces and equipment	Having multiple, flexible and adequate spaces and equipment
	Encouraging the sharing of spaces and equipment
	Creating a home room for the student group

While several tutors did not experience many differences compared to the non-project-based BVAD, which highlights the familiarity some tutors already had with project-based learning, the following aspects of project-based courses were found to be different from before:

- Course work is student-driven rather than teacher-driven
- Courses are holistic in terms of creative skills, the big concepts, theory, process and practice; all being united in one course around a particular theme
- Tutors as well as students work collaboratively
- Project-based courses require more planning and organisation
- Project-based courses are more efficient to assess
- Project-based learning invites tutors to a consciously review their teaching practices.

The range of tutor roles and the qualities of a good tutor in a project-based course in arts and design, as identified in this section, are summarised in Table 6.

Table 6: Identified roles of a tutor and qualities of a good tutor in a project-based course

Roles of a tutor during their involvement in a project-based course	Planner and organiser
	Facilitator of learning
	Guide
	Expert
	Monitor of student progress
	Assessor
	Learner
	Students' and each other's peer
Qualities of a good tutor in a project-based environment in arts and design	Communicates appropriately to the students
	Is experienced and skilled as an artist and/or designer
	Hands the initiative to students
	Is well-organised
	Creates a trusting environment

Finally, the research findings showed tensions where programme level decisions had been made that impacted on the course projects. These include:

- Time limitations for courses
- Which tutors are to lead each course
- Embedding of programme threads into a course
- The entry requirements for the programme

- Integrating both visual arts and design into a single programme.

The students' projects

What is the student's project?

The student's project was briefly introduced in the section *Conceptualising the project-based learning environment in the BVAD: Projects within projects*. This section provides a more in-depth description.

Within each course, students are assigned a project task, which may consist of a number of sub-tasks. Two courses included one or more group sub-tasks, while in the other five courses all tasks and sub-tasks were individual. The person involved in the student project is the student, or, in the case of a group project, the student group. Other students as well as tutors may contribute to the student's project. With the task comes the timeframe in which the task and any sub-tasks are to be completed. The tasks are equivalent to the assessment tasks, hence assessment is nothing else but successful completion of the project – as judged by the assessor(s). The final page of the example project outline in this document shows the sub-tasks ('Assessment tasks') and the judgement criteria that are used for each sub-task. The first part of the project outline describes what is intended for students to learn during the project (the learning objectives), an overall description of the project, a suggested reading list, the timetable, and an explanation of the four areas of assessment in the programme (this part is the same in every project outline). Within each project the student creates one or more artefacts, which are often accompanied by written documentation or verbal presentations that underpin the artefact. The artefacts created in the first year of the BVAD are not made for an external client; in a way the lead tutors in the course could be called the clients, as they ultimately judge the acceptability of the work.

Planning the project work

Interviews with students indicated that the work plans students create their work plans according to the timetable in the project outline, which frames what they are expected to do, when, and how. Students are expected to be in class from 9am to 3pm on Mondays and on Wednesdays to Fridays. Tuesday is an independent study day. For some, the timetable is the structure for when they have to do things and when they do not; for others, the timetable is a, sometimes not-to-be-missed, opportunity to get support.

> *If I have something to do for school I will do it on the Tuesdays, but if I have nothing to do for school I treat it as a day off. (S)*

> *There's times that I think you need to be here, and then there's other times that you don't. There is a fine mix between being here and not being here. I get a lot of value out of talking in groups with other students and I don't know if you guys feel that way but I learn something from you guys all the time and that influences what I do and it gives me new ideas. So for me it is quite important to be here at times when we have our discussions as groups. Definitely there is times when you can go and do your own thing, and I do that too. (S)*

Beyond the timetable, students work on their projects in different ways. Some have a regular pattern, for example doing bookwork after 3pm and/or treating the Tuesdays like any other day of the week.

I treat it like work. I come here every Tuesday, no matter what happened the week before. I am here 8 o'clock every day; it never changes. (S)

I probably do about 3 hours extra after coming home. It depends how much work I have to do. In the weekend I do about 6 hours. (S)

Others work according to the short term demands for the project. Again others spend many hours outside the timetable if they enjoy their work and get fully engaged with it. Few students seem to plan ahead for the project. The opportunity to focus on one project only over a longer period of time was found conducive to concentrating on the work.

It depends on what time of the project it is. If it is a few days before it is due I do craploads of work but if not I don't. (S)

With the last one I had the painting and I worked here on some days until 4:30 or 5-ish. It is not normal for me. (S)

Doing the project work

The following two descriptions provide an idea of what is happening in class while students are working in their projects. The first is extracted from notes taken by the researcher while observing a class in the Ways of Seeing course. The observation occurred near the end of the course when all students were in the final stages of making their artefacts.

The room is a big painting studio. There are tables on the side, full of materials, and easels in the middle with students' work. All students' work and materials are in the room.

From 9:10am students are coming in – some have been to a school hui at 9am – and they immediately start their work. The students look at others' work briefly but very quickly get into their own project. There are three male and seven female students in the room; their ages range approximately from late teens to in their forties.

Two tutors enter at 9:20am. Tutor 1 checks who is present while tutor 2 starts talking to a student. Tutor 1 tells me that, as this is the final week of the project, several students are out doing project work elsewhere, e.g. filming, photographing or painting at home.

Students are working in their project, which is due by Wednesday (it is now Monday). Four students are painting at their easels, others are drawing or painting at a table. One student is painting while wearing headphones. Tutor 2 takes up the role of a guide. A student asks for feedback. A discussion starts between student and tutor on the student's research and what she is thinking of making.

Students regularly look at each other's work and have conversations about the work and what students have done. Tutor 2 is walking around, asking students how they are going, providing feedback. She has a conversation with every student. One student leaves to go and do something different.

There is full engagement of everyone in their work. At some stage tutor 2 asks a student: 'Do you want to talk, or do you want to get painting?' The student chooses the latter.

Tutor 1 tells one student that everything has to be finished by Wednesday night. The student is nervous because of the process; she is still not certain what the result is going to look like. The tutor asserts her that this is normal, and that the student has done everything she should have. (Obs)

The second extract is from notes taken during observation of the first afternoon in the Documenting Art and Design course. The setting is that of an introductory lecture to help students shape ideas for the project.

> *Students walk into the room and find a chair. They await what is going to happen.*
>
> *We were supposed to be in the design room, but tutor 1 could not get the technology to work so we moved to the AV room. It is a large room with loose chairs that have small rotatable tables attached. One side of the room has a screen plus computer. The chairs are more or less aligned to front the screen but there are no obvious rows. The room is quite dark because of the use of the data projector. Curtains on the back side are closed to avoid the sun blocking the views on the screen. The room is full and very warm.*
>
> *This is the first day of this project, focused on introducing students to the work they are expected to do. The morning session was facilitated by Tutor 2; the afternoon is facilitated by Tutor 1. Tutor 2 attends the class as well and takes notes.*
>
> *The tutors distribute a paper with the brief for the research essay, which is half of the project.*
>
> *Tutor 1 introduces the first activity. Students listen to a piece of music and write down words that come up which they associate with the music. All students write when the music is being played.*
>
> *After the music has stopped Tutor 1 invites students to share by reading aloud what they have written. One student volunteers to start and tells a story. Other students then share as well. When a student is speaking all others are listening. Tutor 1 comment on each students' words, affirms and fully acknowledges responses. As more is shared, the tutors starts identifying themes, tells students how good their responses are. All students are given and take the opportunity to share.*
>
> *Tutor 1 explains to the students that she could have put a painting on the screen, but students were able to find words from music, to enable them making a start with creative writing.*

While the number of group projects during the year was small, students supporting each other was a strong component of each project. Students talked about their work with each other, gave each other feedback, and shared ideas.

> *The students get on well together and they do form little groups where they rely on each other. They're not scared to ask each other for assistance or 'how do I do this?', and they are probably one of the more cohesive groups that I've had for a while. (T)*

Students being involved in group projects during their first year is new to the programme and seems to be in an exploratory stage, with some tutors not certain what to expect from these projects. In the student survey of the Space and Place course, in which working in a group is an explicit objective, 30% of students reported group work as one of the best aspects of the course. Yet, students also enjoy individual work, and sometimes even better. Besides group work, collaboration has sparked a friendly form of competition and a desire to excel.

> *You get the opportunity to work with other people but it quite good because it is your choice whether you do it or not. I don't really like working with other people. In the Visionary Structures brief you had to collaborate in groups of three for parts of it. And the first project, so there's definite group elements. (S)*

[competition] is not that anyone is trying beat anyone else, but you see the level that everyone pushes out and you try and beat that, so everyone is getting better and better. It's like challenging each other. (S)

During the project, students run into situations where they need support, either self-identified, or identified by the tutor. Examples are students who have a very fixed idea of what they want to do and do not ask for support in extending this to get the most out of it; students who dwell on ideas for too long and need support in order to finish on time; and often these students do not ask for support, so it is up to the tutor to initiate this. Other examples are support in using equipment or getting advice from the tutors; students can find it frustrating if the tutors are not available at the time that they need them; on the other hand, the student surveys indicated that if the support is offered it is highly appreciated.

there were [students] who had an idea straight off and that's all they did, they didn't push or progress it or develop it in any way shape or form. Those were the ones who were quite disappointed with their marks. 'I had a project, the tutor said it was ok but I got a bad mark'; they're the ones you have to watch 'cause they look like they're working quite happily and they don't ask any questions but they've stopped too fast and haven't pushed it. [...] they're not pushy enough to say 'excuse me, I'm thinking perhaps I've finished', and you could go, 'how about looking at this, or have you thought about doing this or changing this', they've already made their mind up they've finished, so we need to be really careful with how we approach it. (T)

[The tutors] take you through the first week and say: 'this is what is happening, we're going to do this and that'. And if there are any more questions they are always available for that time to have one on one talks with you to make sure that you're on track, what needs doing, what you're supposed to do. (S)

Students needed to take responsibility for their projects. There seem to be different perspectives on what this means. It may mean attending classes, or choosing whether to attend classes; it could also mean working on your project if the tutor is not around or not available, and to find other things to do if you have to wait for support; or it could mean doing what the teacher says, versus completely owning and engaging the project.

They have more of a personal responsibility and they were more motivated compared to the old way, and the peer assistance was a big change. We could leave people in the classroom or the computer pod and someone who knew something would help them. (T)

there are still students who don't come the first day, in fact the highest attendance was the second day which was after the independent study day, so it was the Wednesday, and the second highest was the last day when all the panic started, but we never had all the students there at any one time [...], I can't get my head around that. (T)

The opportunity to choose their own work space and being able to have a space during non-timetabled hours was seen as conducive to the work, as was the opportunity for 'psychological space' in terms of time and relaxation to work things through.

Student 1: In the weekend we can only use the library, but next year is free range, which is good. I can't wait.
Student 2: I can't wait either. It's going to be so exciting.

I am in here now for this project and I just got my own space and I just zone out and do my thing but I love going back to paintroom and talk to people about what they are doing. And the whole atmosphere. (S)

Factors contributing to a successful student project

In the student surveys, which were part of the regular course evaluation process, students were asked – without pre-prompting the possible answers - what they found best about the course. In the interviews one question asked what factors had helped them be successful. There was a remarkable agreement in the answers to both questions, suggesting that what students find 'good' is similar to what they identify as helping them be successful.

The following seven factors, in no particular order, stood out from the others:

- Assistance and support from tutors

It is actually the way we get taught. What you guys (other participants in focus group-comment researcher) are talking about is what you do yourselves and nobody tells you to do that. It's there and they keep pushing that and developing ideas and things but it is actually about the teaching and the way they do it. Really we get treated like adults and we take control of that and so we go and do as much or as little as we need or want to do. And that can vary because we do very different things. We are not all into graphics or paint or whatever, but it's something we still have to do and it is good to enter it with a positive mind. I've just put down teaching support, because of the clarity in their communication with us. If they don't communicate well we don't get the brief. (S)

- The freedom and autonomy to choose your own project

Ways of Seeing and Self Portrait were the ones where you could do anything, and it really showed when the presentations were up. You could see why everyone had such a high standard of work because they were doing what they wanted to do. Some of the other ones were more like: you have to do this; you have to do that; it was still free but… (S)

- Doing something new

Self Portrait was indeed as we were advised prior to, a very confronting module. I thoroughly enjoyed the challenge and became more confident in my own abilities and the way I relate to myself as a practitioner. The blog aspect was superb! Especially learning the skills and culture of it. (S)

- Learning with and from like-minded others in class

being in a class with 42 people who love what I love is a really helpful. You're in a place where everyone is here because they love art. That's what you're here for and you can show anyone an idea or a piece and they are enthusiastic about it and they tell you what you think. (S)

I get a lot of value out of talking in groups with other students and I don't know if you guys feel that way but I learn something from you guys all the time and that influences what I do and it gives me new ideas. (S)

- Opportunities to explore technologies and media

the whole process of creating a pattern and creating it in to a screen print was awesome and really just made my mind go crazy with all these different ideas and ways I could use this process to create more work! (S)

- The student's own actions, which include: working hard, managing time well, researching, communicating, self-discipline, pushing my own boundaries, my drive to complete, and attending class

The last two briefs I got my highest marks and that was because I actually did research and then thought of ideas and then really processed it all before making a final decision. Following the right steps. Research before anything else (sometimes I used to decide my ideas and then try and find research image afterwards). Time management. Note taking, being there every day. (S)

- Practical work using technologies and media.

Barriers to success for students were reported as relating to:

- The students' own abilities and comfort zone, including lack of time management, insufficiently documenting, lack of (language) ability to understand expectations, unfamiliarity with technologies, and difficulties in getting out of one's comfort zone

Differences with school and EIT, learning to be open minded and not be told what to do. I found that really hard because my brain does not work like that. I was so used to being told what to do and I would just do it. I found it at the start really hard to come up with my own ideas and think I can do whatever I want. (S)

- The expectations of the project, in particular the limited time to become sufficiently confident with equipment, but also requirements to do research and maintain a workbook, and equipment that does not work

The time in which we do the stuff [...]. That was only for a couple of briefs. Most of the briefs are very open and is enough time to do it successfully. If they give us something that is really challenging we have so little time to come up with an idea, and I like to think a while for an idea for a while rather than rush into it. (S)

- Insufficient time and communication with tutors.

some miscommunication with tutors. My thinking that I know what they are talking about and going off and doing it and then it's totally wrong, but I need to clarify now after I got hit with that big time. (S)

Tensions between the student project and the course project

Tutors have a stake in student projects being successful, in that the success of a tutor's course project depends on the success of the students' projects embedded in the course. This means that for tutors to make 'their' project a success, they are reliant on the students who exercise ownership over the student projects. In the variety of roles that tutors have they influence the students in their projects. Underpinning the various ways of influencing are expectations that tutors have of students as they are engaging in their projects:

- To commit to the work as deemed required to make their projects successful

My opinion has always been that if you want to study a course then you turn up. You can't study in isolation; otherwise you might as well do an Open University course and stay at home. (T)

Some students had a potential for good work, but needed a better work ethic (Obs)

- To be self-directed

I encourage students into self-reliance. To work toward something, but recognise when something other has happened, and to respond to that. (T)

- To have a minimum level of reading and writing skills
- To be enthusiastic about what they are doing
- To make the most of the opportunities that are presented to them
- To have the abilities needed for programme-level study
- To seek learning support if needed
- To have good manners
- To be digitally literate.

These expectations may be met or not, and the influence tutors have remains limited, which they may find difficult.

I like to see them engaged with the ideas and the technologies and work hard to get something happening. But you can lead horses to water but you can't make them drink so it is really up to each individual student to really engage, and you can just try and help that process. (T)

Tutors in this research project expressed the following challenges in regard to being able to influence the students:

- To give all students equal attention, particularly with a large group; often the students who needed a lot of assistance took up the majority of the time

  it's challenging in the context that there's three quarters of the class that are fine and good and motivated, but a lot of energy goes into the other 20-25% that either aren't here, miss things, aren't engaged as much, aren't putting the time and work in. The how to address them to get them going, it is a constant, and with such a big group you feel like the others aren't getting the amount of time that they probably should be getting; it's a bit of conflict really. (T)

- How to respond to students who are not doing the work that is expected

  I have found it difficult to communicate with students who want to be told exactly what to do, are not interested in ideas, or have little capability to absorb information, and who are not able to consistently work creatively. As my approach is to develop student understanding cumulatively, if students are absent or disengaged, or have low work rates, or poorly manage their time, as a worrying number demonstrated, they tend to perform poorly. (T)

- To find a balance between handing the initiative to students, with the risk of them getting lost, and giving them direction so they can make progress.

  it's actually really hard to stand back and just have them do the work, not be suggesting things. You need to sort of point them in a direction but for them to find their way. It is the hardest thing not to suggest what to do, they need to find their way and at the beginning they need a bit more help just to get going. (T)

  Protecting students from getting lost was a reason for creating themed platforms for students to work from in the World as a Stage course, which consisted of an eight-week project, twice as long as the other projects. However, some students complained about being restricted in their autonomy. To illustrate the tension, the following arguments for and against providing this type of direction raised during a tutor team discussion may be worth sharing. Arguments for were: it is alright doing this in the first year as this year should concentrate on skills; students may

otherwise get lost; and, the focus of this course needs to be on learning the steps required within a project. Arguments against were: students need this freedom; students should be able to work with the ideas they have developed during the year and not be pushed in a different direction; and, the themes should not be needed if students' research platforms had been developed better during the year.

Summary

The following factors in the student projects were identified in this section as important for shaping the student projects and simultaneously the success of the student projects and the courses of which they are a part.

In planning project work students appear to be largely guided by the timetable. In doing the project work the following stood out as important in the process:

- students supporting each other
- support from tutors, either self-identified, or identified by the tutor
- the need for students to take responsibility
- the opportunity for students to choose their own work space
- the availability of 'psychological space' for relaxation and working things out.

According to students, the following factors were found to help them be successful:

- Assistance and support from tutors
- The freedom and autonomy to choose their own project
- Doing something new
- Learning with and from like-minded others in class
- Opportunities to explore technologies and media
- Students' own effort
- Practical work using technologies and media.

Barriers to their success students reported as being:

- Students' own abilities and comfort zone
- Expectations of the project that seem difficult to meet
- Insufficient time and communication with tutors.

Tensions were found between the student and the course projects in that tutors were able to influence the student project but only to a limited extent, which sometimes led to disappointments and frustrations between what tutors were aiming to achieve and what students did or did not do, as perceived by the tutors.

Preliminary outcomes

In the section *What is a successful project-based learning environment in visual arts and design education* seven success indicators were identified for the redevelopment of the BVAD. Evidence and signals showing to what extent these indicators are met are emerging and preliminary at this stage. This section will describe what evidence has been found in the research data.

Success indicator 1: Students learn

According to tutors, students have learned:

- To broaden their ways of seeing and thinking
- The processes of arts and design
- A range of skills, including:
    - technical skills
    - to organise projects
    - present their work
    - health and safety practices
    - to manage time
    - to engage online
- To learn, including to:
    - self-reflect
    - work beyond habitual practices
    - assess their own performance
    - have a sense of quality
    - transfer knowledge from one project to the next
- To be part of a community of learners.

Their first project [...] project was to rip up their workbook or pages from their workbook and make something else out of it, playing with this image and text, [...] and really creating something new, not to mean anything. Some of them found this very hard to come to grips with in the sense of intending to do something but realising that meanings are actually generated not described, and some of them came up with fantastic results. (T)

They've learned something about themselves for the first time. They've actually had to study themselves, which is quite a scary thing to do. (T)

According to students, they have learned:

- The processes of arts and design, including:
    - to be open-minded, to explore, try new things, and trust the process
    - to appreciate the theory of arts
    - that work is never finished
    - To develop ideas
- A range of skills, including to:
    - use new techniques and media
    - manage time better
    - present their work
    - create an online blog
    - manage a project from start to finish
- To learn, including to:
    - grow as an artist
    - think for themselves
    - evaluate their own work and critique that of others
- To be part of a community of learners, including to work with others.

that I need to broaden my art abilities. When I came into the course I thought I would just do graphics but learning stuff in each brief has made me love photography, screen printing and a lot of arty stuff. It made me realise that I can do other things as well. (S)

Since the projects have gone along I have stressed less and I got my own timetable; that is probably the best thing I have learned this year. (S)

Success indicator 2: Students engage and have a good experience

According to tutors and managers, students are shown to be engaged, or not, in different ways:

- Students do, or don't do, what is expected of them. They complete their work on time and carry out the activities that the tutor expects them to do;

We only had two lots who chose to work as a pair, and one pair got quite different marks, because one had done comprehensive bookwork and the other hadn't. That was quite an eye-opener for them as well, I think. You don't expect them to have exactly the same bookwork because they're working on the same project. But one of them completely neglected it and the other one was quite meticulous about it. (T)

- Students are immersed in doing the project work;

I saw a different level of enthusiasm towards work. Normally you would say, in the first year and past years, by this time (November – comment researcher), they are all running out of energy, well in this class, the 40, there is a good percentage of students present and engaged in doing work. I think the reason for that they could make sense of it, they could see it is working and they get excited about it and they could see that what they are learning is relevant to the real world. (T)

- Students are engaged with their being as well as their doing;

They think, they act, they question, they conceptualise, they create, they evaluate; they go through that whole process and engage in it the whole time. Participate in the life of the school, contribute to that, all of that. They contribute to the community, they attend things, they go to stuff, they want to know. And not just the adults, there's a whole bunch that do that. Those people totally engage. (T)

- Students are having a good experience; and,

I was just reading [one of the course survey results] this morning cracking up laughing because [...] they just, it's ridiculous, it's like I feel like I'm learning so much, they just rave, they just rave. (M)

- Students are being entertained.

In terms of entertaining a bunch of young people by taking them to Wellington and going on a marae trip, high success. Everyone was happy, the place was really buzzing (T)

Success indicator 3: Students achieve

This indicator was interpreted in two ways, as explained in the section *What is a successful project-based learning environment in visual arts and design education:* Students have high completion rates and high marks; and students create high quality work.

Starting with the first interpretation, a quantitative analysis of student marks and retention and pass rates was conducted to compare these figures with previous years. Guiding questions for the analysis are shown in italics below.

Student retention: Did the withdrawal rate change with the change to project-based learning?

All students who enrolled in one or more level 5 (first year) courses in 2010-2013 were considered. Table 7 shows the percentages of students who were enrolled full-time and completed all courses, who were enrolled part-time and completed all courses in which they were enrolled, and who withdrew from the programme. While full-time completion of year 1 is higher in 2013 than in the previous three years, this may have been influenced by the non-availability of part-time enrolment in 2013. No trend can be observed yet from the data.

Table 7: Overview of retention rates for the total of level 5 (first year) courses in the BVAD from 2010 to 2013

year	2013	2012	2011	2010
Total number of students enrolled in one or more year 1 (level 5) courses	43	42	51	33
Percentage of students who were enrolled full-time and completed all courses	93%	78.5%	82%	70%
Percentage of students who were enrolled part-time and completed all courses in which they were enrolled	N/A	9.5%	14%	21%
Percentage of students who withdrew from the programme	7%	12%	4%	9%

Students' successful completion: Did the successful completion rate change with the change to project-based learning?

All students who enrolled in one or more level 5 (first year) courses in 2010-2013 were considered. Table 8 shows the percentage of students who failed (that is, achieved a final course mark below 50%) at least one of the courses in which they were enrolled.

The data show a trend of higher successful completion rates over the last four years. A particularly strong increase in successful completions was found in 2013 compared to 2012, but without doing a statistical analysis it would be fair to say that project-based learning at this stage cannot be said to have had a significant impact on pass rates, despite the successful completions being the highest since 2010.

Table 8: Overview of successful completion (pass) rates for the total of level 5 (first year) courses in the BVAD from 2010 to 2013

year	2013	2012	2011	2010
Total number of students enrolled in one or more year 1 (level 5) courses	43	42	51	33
Percentage of students who successfully completed all courses in which they were enrolled	88%	86%	76%	73%
Percentage of students who failed at least one of the courses in which they were enrolled	12%	14%	24%	27%

Students' marks: Is the average mark obtained by 2013 students over all first year courses different from that obtained by 2010-2012 students?

Only those students were considered who had obtained marks for all first year courses. This reduced the number of 2013 students considered to 40 and the number of 2010-2012 students to 99. The average mark for 2013 students was 72.00, while for 2010-2012 students it was 71.70. With a significance level of 5% the average mark for 2013 was not found to be statistically significantly higher than that for 2010-2012.

Additional tests were carried out to identify whether the average marks of specific subgroups in each cohort had been affected in comparison with the average marks for other subgroups. The results are summarised in Table 9. This document is not the place to discuss the significant differences identified in the 2010-2012 groups, but it is notable that these differences have disappeared in 2013. Does this mean that project-based learning is particularly effective for male students? Does it mean that the Level 4 preparation programme aligns better with project-based learning than with the traditional pedagogical approach? At this stage it is too early to draw firm conclusions from these findings, as only the one-off results for 2013 are available. It would be worthwhile, however to continue monitoring these statistics and find out if the reduced difference of marks between subgroups is a continuing trend.

Table 9: Comparison of average marks for subgroups within each of the 2013 and 2010-2012 cohorts (significance level is 5%).

Is the average mark obtained over all first year courses different for:	2013	2010-2012
students under 20 compared to those aged 20 or above?	No statistically significant difference	No statistically significant difference
female students compared to male students?	No statistically significant difference	The average mark obtained by female students is statistically significantly higher than that obtained by male students.

students who have completed the Level 4 preparation year compared to those who have not?	No statistically significant difference	The average mark obtained by students who have not completed the Level 4 year is statistically significantly higher than that obtained by those who have.

Various qualitative comments about student marks were found in the data as well. These related to students passing the courses as well as students achieving high marks.

> *From memory, it was pretty much in the bell curve there. I remember being a little underwhelmed, and I take responsibility for that. I feel like the project can still do with some tinkering to make it better. (T)*

> *On the whole I would say they performed extremely well. There was no failure and there weren't many C's. On the whole there were A's and B's. Then again I think they saw the relevance of it. If they see the relevance they'll do it. (T)*

Another aspect of student achievement is that of students 'growing' over the duration of the course. This was not found in the success criteria, but it was identified as an outcome.

> *there were one or two low, only just squeaked through. One is still squeaking, the other is achieving really high and he is a young guy who people thought at the beginning he shouldn't be here but he has grown and developed. He was just a shy, fish out of water at the beginning, but the other is still plugging along at the bottom. (T)*

With respect to the second interpretation of 'students achieve', a range of references was found in the data referring to students having made high quality work and other students having disappointed the tutors.

> *The products were a Keynote presentation with something about themselves, nothing to do with here. We assessed that and then they did a final presentation of their blog which we assessed as well. They had an idea book only because the workbook was the online space. Because they understood that, it lifted the engagement online as well. That was what they had to achieve. It was amazing; incredible stuff. I am just thinking back to that full day of presentations; you are always quite blown away by what those guys can achieve and have achieved, from drawings. (T)*

> *Some performed exceptionally well, researching extensively and producing very good outcomes and workbook work that is up to a remarkable standard, even conceptionally. There are a few who took an idea and pushed it quite hard. Others, some, took it very literally and stepped back on their heels and worked to 'this is all need to do and all I'm going to do'. Vast differences. (T)*

At the end of, and as part of, the World as a Stage course, students created and led the entire exhibition showcasing their work; this had never happened before. The World as a Stage course also showed the impact of students driving their projects, as the work presented at the exhibition was highly individual and very different.

Success indicator 4: Students have a sense of personal fulfilment

The signals of this indicator being met were entwined with students expressing that fulfilment was important to them, and therefore it has been difficult to separate the outcome from the indicator in this case.

Success indicator 5: The project runs smoothly

This indicator was identified for course projects only, and only a few signals were found of this indicator being met.

> *when we submitted the review of Self Portrait there was nothing on it. It worked quite well. The feedback from the students was that it worked well. It needs little tweaks, but nothing major. (T)*

Success indicator 6: The school culture is positive

Evidence for this indicator being met was found in tutors expressing how the project had impacted on them: on their teaching; on extending their knowledge and skills base; on themselves; and on working as a team.

> *I found the debrief sessions from the previous projects really important; learning what has worked and what was not working, using it as an opportunity to fill some gap. (T)*

> *Project-based has been more of a collective, working together as tutors, that's definitely the desire, so 'let's get together as a group and work this out' so it's maybe part of dismantling some of the hierarchies that may have been there before with the other type of degree programme, where even though we still have hierarchies within project-based learning, distinctions amongst staff and whatever. There's been the thinking around how could you be a bit more egalitarian; that's how I see a big part of it. It doesn't always work that way, politics in the workplace. (T)*

Success indicator 7: The external perception is positive

With the redevelopment being in its early stages the evidence of a changed perception is still limited. However, the development has raised interest from the community, which is one of the reasons for developing this document.

> *I had [the former] Director of the Hastings City Art Gallery [here] and she has known the students here and the work here very well for many years and that was the gallery that our graduating students exhibited in last year for the end of year exhibition show. She was in here it was at the end of A semester and she was looking at some of the work that happened to be out at the time and she said to me, 'I am so looking forward to the final end of year exhibition of these students'. I said, 'I know I'm exactly the same'. She said 'you can see it now some of this work is almost Level 7 some of this stuff that they are coming out with'. I said, 'I know'. (M)*

Conclusion

This document has described what project-based learning in visual arts and design education could look like through a comprehensive explanation of the redevelopment process of the BVAD at the EIT. This process could be meaningfully described as a system of student projects within course projects within a programme project that operates within the wider context of the institution and the world. Each project was explained to consist of specific task specifications, time constraints, and – first and foremost – people.

The title of this project is Project-based learning in visual arts and design: What makes it work? To define what it means for project-based learning to 'work', the research project has identified seven indicators of success for the project-based BVAD described in this study:

1. Students learn
2. Students engage and have a good experience

3. Students achieve
4. Students have a sense of personal fulfilment
5. The project runs smoothly
6. The school culture is positive
7. The external perception is positive

It was found, however, that variations and tensions exist between acknowledgement, importance and interpretation of these indicators across the three levels of student, course and programme projects. Preliminary evidence of meeting these indicators was also found. However, it is important to acknowledge that the project-based BVAD has started, but it still in full motion. Just like with the development of art or design work, the end is open.

An extensive range of factors at all project levels appears to have been important in contributing to the success of the project-based BVAD. They have been described in detail in this document. If these factors are to be summarised they could be condensed into five key terms. Each of these terms have had a crucial role to play at each level of the development and implementation process of the BVAD.

Holistic

Firstly, it has been important to take a holistic approach to the redevelopment. Adopting project-based learning has not simply involved 'a change in teaching practice', or changing a few courses to make them project-based. Rather it included making a new start with the entire programme, embedded in a rebranding of the school and transformation of the people within: how they work and how they work together.

Secondly, the redevelopment has been identified as a holistic system of projects within projects that influence and are influenced by each other. Student projects operate within the context of course projects. This implies that course projects define the conditions within student projects operate. Simultaneously, the success of a course project depends on the success of the individual student projects within it. Similarly, course projects operate within the context of the programme project, implying that the programme project defines the conditions for the course projects. Again, the success of the programme project depends on the success of the individual course projects. Through this interdependence a change to one project in the system will impact on the entire system.

A third identification of 'holistic' as a key factor that has contributed to the success of the redevelopment is found in student projects. These projects are holistic in the sense that creative skills, the big concepts, theory, process and practice are all united in one project, leading towards the creation of an artefact. What used to be taught in separate theory, media skills or visual communication courses is now all fully integrated to serve the completion of projects. This makes learning more relevant to students.

Collaboration

Collaboration between students, between tutors and management, and across these groups has been essential in making the projects successful at all levels. At all levels the people involved worked together in a spirit of learning from each other. Students collaborated as a community, providing peer support and encouragement; tutors created deliberate activities for students to help create this community spirit. Tutors collaborated as lead people in the course projects, drawing on additional

expertise in the team where required. Reversely, tutors offered their expertise to courses when requested. Collective decision-making in all development at programme level and in course and programme de-briefs also nurtured collaboration.

Autonomy

A project is essentially entirely open in terms of task, time and people, creating an infinite number of possibilities for the project to emerge. By setting constraints the number of possibilities is reduced and the project becomes more closed. It has been important for the people involved in the BVAD to receive a significant amount of autonomy in shaping their respective projects. The head of school was given the space and the trust by the institution to lead and organise the development of the programme that she envisaged. It has also been important that the tutors were given a significant of free reign for their course projects. Tutors were trusted to be creative and experimental in their decision-making, within an assurance that there would always be an opportunity to change if their decisions did not work out. The students also received a significant amount of freedom to drive their own activities, explore and experiment, choose their own work spaces, and create the artefacts that they wanted to create. Autonomy has created ownership and fostered creativity.

Ownership

Two dimensions of ownership are found here. One is ownership that is created through providing autonomy, as discussed above. The autonomy given to the collective of tutors to make the decisions about the programme created engagement and commitment, which led to ownership and to willingness to put significant amounts of time into the developments. The autonomy given to students has created ownership which have led students to take responsibility for making the most of their projects.

A second dimension of ownership is probably particularly characteristic for the field of arts and design, but may be found in other fields as well. Artists and designers tend to have a high personal attachment to their work: they own their work almost by definition from its very inception. This second dimension of ownership does not need to be created through autonomy; it already exists. This type of ownership can easily be taken away by having put constraints on the process. Various signs were found where such constraints restricted ownership. For example, students being restricted in their choices for the World as a Stage project limited their opportunities of showing what they are capable of; tutors being assigned a course to lead, rather than being able to choose themselves, limited their opportunities to showing the best course they could possibly create; and the head of school not being given the go-ahead for new buildings limited the full realisation of her vision.

The challenge for those who set the project constraints is to find a balance between limiting the number of constraints to enable maximum ownership at one level of projects, and controlling the process to maximise attainability of the desired outcomes for the projects one level up.

Emergence

The BVAD is open ended and has no pre-defined outcomes. It is unknown what quality of work students will be able to create or who they will have become by the end of the programme. When the redevelopment process of the BVAD started none of the team members knew what the

programme was going to look like. When students start a project they do not know what they are going to create. As the projects at each level evolve, the outcomes start to emerge from the process.

Not having predefined outcomes does not mean to say that the BVAD does not require direction. When discussing complex systems, Davis, Sumara and Luce-Kapler (2008) explain the importance of direction in what they refer to as 'enabling constraints', which allow a system to "maintain a delicate balance between sufficient structure, to limit a pool of virtually limitless possibilities, and sufficient openness, to allow for flexible and varied responses" (p. 193). It was found that the BVAD project-based learning environment is guided by desired outcomes which emerged from the development process in the form of seven success indicators. These desired outcomes have informed decision-making for the projects at each level. They are reflected in constraints set for programme, course and student projects, while retaining the fine balance between constraints on the one hand, and autonomy and ownership on the other.

As a result of the necessary openness, the actual outcomes of the BVAD cannot be fully controlled. It is important to acknowledge that, just as students in the BVAD are taught to 'trust the process', educators and education managers must 'trust the process' of the redevelopment and allow the actual outcomes to emerge from the conditions and from people's engagement.

Where to from here?

For others who embark on a similar journey, the description of the redevelopment process in this document may help in providing ideas and inspiration for approaching the process. We strongly recommend to embrace the five key factors of holistic, autonomy, ownership, collaborative and emergence. Nurturing the contributions and engagement of the people involved is of essence to make this happen. For each participant in the redevelopment process, we have provided a list of factors they may wish to consider in their programme, course or student projects.

It is important to note however, that embracing the factor of emergence implies acknowledgement that any other organisation will work with different people, a different context, and different constraints, and therefore that process and outcomes will unavoidably be different.

For ideaschool the redevelopment continues, and so will the discussions. Looking back, during the debrief meetings of the teaching team during year 1, several issues came to the fore, which in hindsight might have been done differently from the start. More time could have been taken to think how the themes were to be woven as threads through the programme. For example, half way through the year the team realised that students were expected to write an essay as part of a project, based on a literature review, but that nothing had been planned to teach how to do a literature review. Another example was the realisation that no attention was paid in the first year to the ethics of arts and design. As a collective, tutors worked out how this could be resolved, and they were very flexible in adjusting their projects to accommodate the issues. A more permanent solution has been found for the next round of year 1 projects. Another issue that arose was the reduction in time for students' media skills development compared to the 'old' BVAD. Tutors were very concerned about this as they felt students were unprepared for the bigger projects in the second and third years. It was however agreed during the debrief meeting at the end of the year that students had learned other valuable skills during year 1 and that further media skills development could still occur in years 2 and 3, where they were relevant to the projects.

Matters as the above could potentially have been resolved by making more time for careful analysis of the threads during the development of the programme document. This would have delayed the start of the project-based BVAD for another year, which was not considered beneficial at the time. Leaving sufficient space within the development of the course projects have allowed the making of changes as the BVAD developed.

Looking forward, it is important for the BVAD team to continue to reflect on the past and let this inform future decisions. The regular debriefs of individual courses and the entire year have been crucial for this process. Notions of success are likely to crystallise and become more transparent for those involved. They will however remain diverse, due to the diversity in motivations, interests, understandings, and responsibilities of the people who are directly and indirectly involved. The voices of all these people are important, and therefore no success indicator can be said to be more important than another. The entire set of success indicators must continue to be considered collectively as a holistic indicator of success. In doing so, balancing the setting of project constraints while retaining sufficient autonomy and ownership for the people involved is expected to be an area of ongoing debate and reflection.

From 2014 the first year course projects have become 'business as usual' and are subject to 'continuous improvement'. With different students, as this project has shown, and potentially also with different tutors in the future, courses will keep changing; each year they will be a new project with uncertain outcomes. While the groundwork may have been done in the first year, each year courses will need some newness, in order to keep the five key factors alive.

Appendix 1: Structure of the BVAD

Structure of the Progamme
BACHELOR OF VISUAL ARTS AND DESIGN

ideaschool
ARTS & THINKING

Semester One

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Year Three (Level 7)

Plan Your Life 2 (1 week)

BVAD7.10 Studio Project
45 credits/12 weeks

or

BVAD7.20 Dragon's Den
45 credits/12 weeks

or

BVAD7.30 Internship
45 credits/12 weeks

BVAD7.40 Ideas of the Year
15 credits/4 weeks

Individual e-portfolio

Year Two (Level 6)

Plan Your Life 1 (1 week)

BVAD6.10 From Local to Global
30 credits/all semester

BVAD6.20 Competition Project (Visual Arts or Design)
30 credits/all semester

or

BVAD6.30 Community Project (Visual Arts or Design)
30 credits/all semester

Individual e-portfolio

Year One (Level 5)

BVAD5.10 Space and Place
15 credits/5 weeks

BVAD5.20 Self-Portrait
15 credits/4 weeks

BVAD5.30 Pattern Universe
15 credits/4 weeks

BVAD5.40 Visionary Structures
15 credits/4 weeks

Individual e-portfolio

Semester Break

Semester Two

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Year Three (Level 7)

BVAD7.50 Exhibition Proposal
15 credits/4 weeks

BVAD7.60 Exhibition Project:
Visual Arts
or
Design
or
Project Management
45 credits/12 weeks

Off-Site Exhibition (1 week)

Year Two (Level 6)

BVAD6.40 The Business of Being a Visual Artist and Designer
15 credits/4 weeks

BVAD6.50 Ideas of the Year
30 credits/8 weeks

or

BVAD6.60 Ideas of the Year
30 credits/8 weeks

BVAD6.70 Studio Methodology
15 credits/4 weeks

In-House Exhibition (1 week)

Year One (Level 5)

BVAD5.50 Ways of Seeing
15 credits/4 weeks

BVAD5.60 Documenting Visual Arts and Design
15 credits/4 weeks

BVAD5.70 The World as a Stage
30 credits/8 weeks

In-House Exhibition (1 week)

Appendix 2: Example of a course descriptor

BVAD5.50   Ways of Seeing

Level: **5**
Credits: **15 credits**
Duration: **4 weeks**
Pre-requisite: **BVAD5.10 Space and Place**

Purpose

To allow students to critically engage with different ways of seeing and of representing ideas. To create paint, photography and moving image work that challenges the conventional ways of seeing.

Learning Objectives

Upon completion of this project, students will be able to:

1. Research critical texts and images to gain theoretical understandings of the following, and apply these understandings to support their work:
   a. Critical theories of representation;
   b. Semiotics.
   c. The use of imagery in propaganda and advertising;
   d. Feminist critique;
   e. Empire of signs and competing sign systems; and,
   f. Street art and interventionist art.
2. Plan, document, and execute interventionary practices across a range of media, which may include photography, drawing, painting, collage, performance and/or audiovisual media.
3. Orally and visually present work.
4. Maintain a workbook to apply and document drawing and design techniques that inform creative output.
5. Apply project management techniques, including: negotiating resources relevant to the project brief; managing a collaborative project; critically evaluating project outcomes; and critically reflecting on their interpersonal relationships and teamwork skills in a studio.

Project description

In this project students engage with interventionary practices across a variety of media, which are underpinned by critical theories as relevant to visual arts and design. The visual arts or design work they create in this project forms a visual and oral presentation of their engagement with these practices.

The project consists of individual and collaborative work. Activities include, but are not limited to, skills workshops, theory classes, research, studio work, oral presentations, project management and portfolio development.

The project includes both collaborative and individual work.

Breakdown of hours

150 hours made up of project work and contact time.

Assessment

Completion of the project to the desired specifications. This includes:

- Visual arts and design work (40% of final mark) – LO 1,2,4
- Research (30% of final mark) – LO 1
- Creative process (15% of final mark) – LO 2,4
- Professional skills (15% of final mark) – LO 3,5

An overall mark of 50% or more is required to pass this course.

Literature informing project development

Aland, J., & Darby, M. (1998). *Art connections* (2nd Ed.). Melbourne, Australia: Heinemann.

Barthes, R. (1981). *Camera lucida. Reflections on photography.* New York, NY: Hill and Wang.

Berger, J. (1972). *Ways of seeing*. London, England: Penguin Books.

Duro, P. (Ed). (1996). *The Rhetoric of the frame. Essays on the boundaries of the artwork.* Cambridge, England: Cambridge University press.

Elkins, J. (1999). *Pictures of the body: Pain and metamorphosis.* Stanford, CA: Stanford University Press.

Lacey, N. (1998). *Image and representation: Key concepts in media studies.* London, England: McMillan Press Ltd.

Pound, F. (2009). *The invention of New Zealand. Art and national identity 1930-1970*. Auckland, New Zealand: Auckland University Press.

Rose, G. (2005). *Visual Methodologies. An introduction to the interpretation of visual materials.* London, England: Sage.

Appendix 3: Example of a project outline: Ways of Seeing

ideaschool
ARTS & **T**HINKING

BVAD 5.50   Ways of Seeing   2014

Level: 5
Credits: 15 credits
Duration: 4 weeks
Prerequisites: BVAD5.10 Space and Place

Purpose
To allow students to critically engage with different ways of seeing and representing ideas.
To create paint, photography and moving image work that challenges the conventional ways of seeing.

Learning Objectives
Upon completion of this project, students will be able to:
1. Research critical texts and images to gain theoretical understandings of the following, and apply these understandings to support their work:
    - critical theories of representation
    - semiotics
    - the use of imagery in propaganda and advertising
    - feminist critique
    - empire of signs and competing sign systems
    - street art and interventionist art
2. Plan, document, and execute interventionary practices across a range of media, which may include photography, drawing, painting, collage, performance and/or audiovisual media.
3. Orally and visually present work.
4. Maintain a workbook to apply and document drawing and design techniques that inform creative output.
5. Apply project management techniques, including: negotiating resources relevant to the project brief: managing a group project: critically evaluating project outcomes: critically reflecting on interpersonal relationships and team work skills in studio.

Project Description
In this project students engage with interventionary practices across a variety of media, which are underpinned by critical theories as relevant to visual arts and design. The visual arts or design work they create in this project forms a visual or oral presentation of their engagement with these practices.

The project consists of individual and group work. Activities include, but are not limited to skills workshops, theory classes, research, studio work, oral presentations, project management and portfolio development.

Breakdown of hours
150 hours made up of project work and contact time

Assessment
Completion of the project to the desired specifications. This includes:
- Visual Arts and design work (40% of final mark) –LO 1, 2, 3
- Research (30% of final mark)- LO 2
- Creative Process (15% of final mark) – LO 3
- Professional Skills (15% of final mark)- LO 4, 5

An overall mark of 50% or more is required to pass this course.

Reading
Aland, J., & Darby, M. (1998). *Art Connections* (2nd ed.) . Melbourne, Australia: Heinemann.
Barthes, J. (1981). *Camera Lucida. Reflections on Photography.* New York, NY: Hill and Wang.
Berger, J. (1972). *Ways of Seeing.* London, England: Penguin Books.
Duro, P. (Ed). (1996). *The Rhetoric of the Frame. Essays on the boundaries of the artwork.* Cambridge, England: Cambridge University Press.
Lacy, N (1998). *Image and representation: Key concepts in media studies.* London, England: McMillan Press Ltd.
Pound, F. (2009). *The invention of New Zealand. Art and national identity 1930-1970.* Auckland
Rose, G. (2005). *Visual Methodologies. An introduction to the interpretation of visual materials.*

BVAD 5.50 Ways of Seeing

Tutors: Nigel Roberts, Paula Taaffe, Jerry Gull, Bridget Sutherland, Diane Wilkie, Jonathan Rodgers, Anthony Chiappin, Wellesley Binding, Michael Hawksworth

Rooms: A-pod, D110; Paint room, F114; Drawing room, F109; Photo studio, F108

Date	Monday		Tuesday	Wednesday	
Week 30 22 July 13	**AM:** **Groups 1 & 2** Human Composition photography exercise [Paint room] Staff: NR, PT	**PM:** **Project Presentation** Discuss following 6 days Staff: NR, PT 43 students	Independent Study Day	**AM:** **All students (9.00-10.00)** Research exercise: Review readings [Paint room] Staff: NR, PT **(10.30- 12.00)** **Group 1** Video workshop Working with Footage [A-Pod] Staff: NR **Group 2** Introduction to Storyboarding workshop [Drawing room] Staff: PT, MH	**PM:** **Group 1&2** Swap workshops **Group 1** Storyboarding [Drawing Room] **Group 2** Video Workshop [A-Pod]
Week 31 29 July 13	**AM:** **All Students** Presentation: ' Genre in Advertising [Design room] Staff: JG	**PM:** **All Students** Presentation: Surrealism [Paint room] Staff: BS, PT		**AM:** **All students (9.00-10.00)** Research exercise –material [Paint room] Staff: NR, PT **(10.30-12.00)** **Group 1** Painting-Oil media workshop [Paint room] Staff: PT **Group2** Photography: Scale [A-Pod] Staff: DW	**PM:** **Group 1** Photography: Scale [A-Pod] Staff: DW **Group 2** Painting-Oil media workshop [Paint room] Staff: PT
Week 32 20 July 13	**AM:** **All Students** Project Planning. [Paint room] Staff: NR, PT	**PM:** **All Students** Project Planning. Presentation, plan, sketch, research. [Paint room] Staff: NR, PT		**AM: & PM:** **All Students** Work on own project outcome. [Paint room, Drawing room, A-Pod] Staff: NR, PT, AC	
Week 33 12 Aug 13	**AM: & PM:** **All Students** Work on own project outcome. [Paint room, Drawing room, A-pod] Staff: NR, PT, AC			**AM: & PM:** **All Students** Work on own project outcome. [Paint room, Drawing room, A-pod] Staff: NR, PT, AC	

Thursday		Friday		Assessment domains

Thursday

AM:
All students (9.00-10.00)
Research exercise:
Visualisation [Paint room]
Staff: NR, PT

(10.30-12.00) Group 2
Video workshop Working
with Sound
[A-Pod] Staff: NR

(10.00-12.00) Group 1
Paint workshop
Monochromatic World in
Acrylic [Paint Room] Staff: PT

PM:
Group 1 & 2 Swap workshops
Group 2 Paint workshop
[Paint room]
Group 1 Video workshop
working with Sound.
[A-Pod]

AM:
All students (9.00-10.00)
Research exercise
Methodology
[Paint room] Staff: NR, PT

(10.30-12.00)
Group 1 Photography: Tone
[A-Pod] Staff: DW

Group 2 Painting:
Colour Theory project
[Paint Room] Staff: PT

PM:
Group 1 Painting:
Colour Theory project
[Paint Room] Staff: PT

Group 2 Photography: Tone
[A-Pod] Staff: DW

AM: & PM:
All Students
Work on own project outcome
[Paint room, Drawing room, A-Pod]
Staff: NR, PT, AC

AM: & PM:
MARKING & ASSESSMENT
All Students
Project recap
Student oral presentation of Finished Work.
(One image or video clip)
[AV room] Staff: NR, PT

Visual Arts & Design Work 40%
Professional Skills 15%

Friday

AM:
All students (9.00-10.00)
Research exercise: Material
[Paint room] Staff: NR, PT

All students (10.30-12.00)
Camera Obscura Lecture
[AV room] Staff: JR

PM:
All Students:
Camera Obscura workshop
[Drawing & Paint rooms]
Staff: JR, PT, NR

AM:
All students (9.00-10.00)
Research exercise Symbol
[Paint room] Staff: NR, PT

All students (10.30-12.00)
Presentation:
Signs & Semiotics.
[AV Room] Staff: WB

PM:
Semiotics exercise
[Design Room]
Staff: NR, PT

AM: & PM:
All Students
Work on own project outcome.
[Paint room, Drawing room, A-Pod]
Staff: NR, PT, JG

AM & PM
MARKING & ASSESSMENT
[Paint room, Drawing room]
Staff: Nigel Roberts, Paula Taaffe, Michael Hawksworth

Research 30%
Creative practice 15%

Assessment domains

Art and Design Work
● Work to a given brief
● Develop and apply technical skills
across a range of disciplines including
paint, print, sculpture, photography
& movinwg image,
3D design, spatial design, and graphic
design
● Effectively communicate and
present creative ideas and work

Research
● Describe historical art movements,
contemporary studio thinking and
philosophical positions relative to
visual arts and design practice
● Demonstrate an awareness of
appropriate visual arts and design
language
● Demonstrate foundational
knowledge of materiality and
methodology relative to studio
practice

Creative Process
● Demonstrate the foundational
principles of design including
proportion, scale, balance, harmony,
unity and variety, rhythm and
emphasis
● Demonstrate the foundational
principles of drawing including line,
shape, volume and perspective
● Document the creative process
from conception to the making of
practice-based works using drawing
and design journals

Professional Skills
● Apply project management
skills under supervision including
managing the scope, time and
resources in order to successfully
complete a project, and evaluate the
project outcomes and process
● Demonstrate an awareness of
management techniques relative to
visual arts and design careers
● Undertake personal development
as a visual artist and designer
including identifying their place in
the local arts & design community
● Work both independently and
in a team
● Meet workshop occupational
health and safety requirements
as demonstrated in their work

Marking Schedule
BVAD5.50 WAYS OF SEEING (15 credits)

iS AT

Name: _____

Date _____

Moderator _____

Assessor _____

Domain	Assessment Tasks	Weight	Excellent 100 - 90	Very Good 89 - 73	Competent 72 - 56	Minimum Pass 55 - 40	Fail 39 - 0	Raw /100 Mark	Domain Total
ART & DESIGN WORK 40% (LO 1,2,3)	Create project work using one of the following media: Paint, Video or Photography. The project is documented in student's individual project workbook	30%	Work made with high levels of technical and conceptual proficiency using paint, video or photography and is documented in individual workbook	Work made with well considered levels of technical and conceptual proficiency using paint, video or photography and is documented in individual workbook	Work made with variable levels of technical and conceptual proficiency using paint, video or photography and is documented in individual workbook	Work made with low levels of technical and conceptual proficiency using paint, video or photography and is documented in individual workbook	Inadequate work made with low levels of technical and conceptual proficiency using paint, video or photography and is documented in individual workbook	0	
	Project work effectively communicates and presents creative ideas	10%	High level creative ideas are compellingly communicated and inventively presented	Well considered creative ideas are effectively communicated and presented	Some creative ideas are communicated and presented	Low level creative ideas are poorly communicated and inadequately presented	Lack of creative ideas are communicated and are not presented	0	
RESEARCH 30% (LO 2)	Undertake individual research to develop ideas for work that shows links to theory presentations	15%	Comprehensive individual research, develops ideas for work and shows well defined links to theory presentations	Relevant individual research, develops ideas for work and shows clear links to theory presentations	Mostly relevant individual research, minimally develops ideas for work and shows weak links to theory presentations	Low level individual research minimally develops ideas for work and shows no link theory presentations	Inadequate individual research fails to develop ideas for work and shows no link theory presentations	0	
	Research is applied to practical requirements of project outcome	15%	Research is clearly applied to practical requirements of project outcome	Relevant research is clearly applied to practical requirements of project outcome	Mostly relevant research is applied to practical requirements of project outcome	Low level research is minimally applied to practical requirements of project outcome	Inadequate research is poorly applied to practical requirements of project outcome	0	
CREATIVE PROCESS 15% (LO 3)	The project planning and drawing is documented in student's individual project workbook	10%	Comprehensive and consistent planning and drawing is documented in project workbook	Consistent planning and drawing is documented in project workbook	Some planning and drawing is documented in project workbook	Minimal planning and drawing is documented in project workbook	No planning and drawing is documented in project workbook	0	
	Evaluation of own processes of planning and drawing is documented in student's individual project workbook	5%	Comprehensive and consistent evaluation of processes of planning and drawing is documented in project workbook	Consistent evaluation of processes of planning and drawing is documented in project workbook	Some evaluation of processes of planning and drawing is documented in project workbook	Minimal evaluation of processes of planning and drawing is documented in project workbook	No evaluation of processes of planning and drawing is documented in project workbook	0	
PROFESSIONAL SKILLS 15% (LO 4,5)	Project work is presented to class as oral and visual presentation	15%	Project work is well organised and presented with professional clarity in delivery	Project work is well organised and presented with clarity in delivery	Project work is organised and presented with developing clarity in delivery	Project work is organised and presented with developing clarity in delivery	Project work is not presented	0	

COMMENTS

PROJECT TOTAL MARK

Appendix 4: Developing and teaching the Ways of Seeing course

Appendix 3 presents the project outline for the Ways of Seeing course. This project outline served as a guide for the students while they were working in their projects. The lead tutors of this course were Nigel Roberts and Paula Taaffe. To illustrate tutors' actual decision-making in designing and teaching a project-based course, Nigel and Paula share some thoughts.

Paula, what were key factors in your decision-making for the Ways of Seeing course?

We had to deliver 3 things: theory, technology workshops and act as a facilitator for the students to make their own creation. So we decided that the best way to do that was, instead of having whole days of theory or whole days of one thing or another, we knitted up those three things, so each morning there was a short research project, followed by a presentation. It was really important that no-one was listening a whole day to information; that there would be a balanced mix of practical, listening and group interaction.

The other thing was that we were really careful that what we designed in reaction to the project was relevant. So we could not have some random idea that might be just fun to do, everything had to knit together. It was very important to acknowledge that students had just come back from the holidays; some wouldn't have thought about anything creative for weeks, so it was really important that the first day was fun, interactive.

This was new for me: there had to be a mix of group and individual work. That was very exciting. Now that I can look back at the old programme: we were missing out on the learning that occurs in a group and also the opportunity for students to peer-assist each other. That did not happen very much before this project-based learning. That's why we decided on the group work as that had not been exploited. When students are isolated and we as teachers act as the voice at the front of the classroom it's really boring for them, because they are not learning together at their level solving a problem. Their ways of solving a problem are going to be much more creative than what I can come up with. And they share that with the group as a whole, so there is that tiered learning that happened.

Nigel, what were the key factors for you?

Key decisions were to give students a broad overview presentation to start with. We looked at the earlier projects in the year and how they had operated, and adopted some principles that these projects had used. For instance, starting off with a period of concept presentations, interspersed with technology presentations, so introductions to different elements of technology that were going to be used. This was to focus the students' thinking. We decided the first two weeks were going to be a structured delivery of concepts and technology and also small research exercises, and then the second two weeks was asking the students to use everything that we had supplied to come up with a response.

We prepared the structure of the project carefully. We tried to invigorate the students' minds by not sticking to one idea for a great length of time, so moving around a lot; so keeping on energising them by doing short bits, short intense sessions on something and then moving on to something else, instead of settling in for a day on something. There was never a day where they actually settled in on

one thing, which was a characteristic of the old degree. Usually there were 2-3 different elements each day. This was to keep them focused and interested. That is an acknowledgement of how we actually take information in. Previously it was centred on what was convenient for the teacher. You walked in there as a student and this is what you are offered. There is a bit more of a step in trying to acknowledge the time that students are actually able to take information in. If you keep changing what they are learning there is that invigoration of 'oh this is something new'. As soon as you put something new in front of people they pay more attention for a short period of time and then it degrades. By putting something new to them you get more of their neurons firing and they are paying more attention for a certain period of time, and then it degrades off, move them to something else and lift it back up again.

A big thing which I love and which has really worked is getting them to drive parts of the project. It was not blind; it was: this is what you are going to do for the next hour; here are the tools; this is the structure; ok, go, and see what happens. Some were more successful than others. It was to do with group work, with research, but it was creating those instances in the first two weeks where we didn't prescribe the whole process. We gave them a structure and let them do the work. This is important because people want to have some kind of control in their learning and in what they doing. I think it is exceedingly important that they don't feel like they are just being led all the time. In this way there is more buy-in and participation.

Paula, how was designing Ways of Seeing different from designing degree courses in previous years?

Designing the course was the most considered piece of teaching that I have ever had to put my head around. The big difference for me was the amount of resources and planning that went into it, much more than previously. Because you have a large group of people, unless there is motivation, even if you have some students who are not really interested in what you are doing, if there is no good structure and no good set of resources then you run the risk of a large group of people getting bored and switching off and it is really contagious and that's a lot of people to deal with.

In a previous class I could wing it. I could be really creative in my teaching, because I had more dynamic to work with. We might not cover the thing that I said in the programme outline the day before and then I might address it later. So it was more fluid in that way, in that old way, but I found that some of that fluidity has still happened in this. We had to be very fluid and changeable in moving from person to person because now I am not just talking to someone who is dealing with paint, now I am talking to someone who might working on photographs or film or paint, and they are not just looking at high and low, they may be doing film and feminism, they might be looking at surrealism with photography, so there was a lot of different directions taken in response to the project, as an outcome. It was a different kind of fluidity, but I liked it.

Nigel, how does this project relate to the other projects in the degree?

They all connect to each other. Space and Place are ways of seeing; Self-Portrait is a way of seeing; the universe of patterns is a way of seeing; the imagination of Visionary Structures by its very name is a way of seeing, the activation of your imagination. Ways of Seeing is in that way connected to them all. It is so huge, that when we planned what we were going to do we had to pick. There are so many things in the art and design world that we had to say: we only have this amount of time; what is really necessary; what could have a connection to where they are and where they are going.

Ways of Seeing was also a prelude to Documenting. Given that Documenting is about documenting different ways of seeing it was another step in that direction. That is why we did the half hour to 40 minutes research projects for three days each week in the first two weeks. We know that there is only a small number of students that have a natural affinity with the academic side of art and design, but if we would introduce it in small sharp interesting bursts we could keep it up and exciting and interesting. It makes it less intimidating in terms of finding it easier to comprehend and of finding it boring. We kept saying each time we were doing it: You've got to focus on these things; these things are going to come into play in the next project. So there is that connectivity that we are constantly trying to bring in.

Paula, how have you approached your role as a tutor in Ways of Seeing?

I am always feeling that I work as a facilitator in my teaching role and that is my philosophy. In the old way of teaching Painting, if we had a theme, let's say high and low in art, then the students got to choose how they responded to that. Teaching in projects, in a way, is still the same because students pick something and they choose how to respond to it. So I still think of it as a facilitator, but the kinds of responses we deal with are much more varied. One of the exciting things for me was this idea of collaboration being a part of the learning as opposed to the passive presentation of knowledge.

I would not see myself as an expert, but as a baseline from which their learning can become more expert than mine. It is giving people the basic ingredients and some things I know and other things they will come across and they will want to know more about it and I don't know. Particularly in technology, a lot of the students are very savvy with some of the programmes that we use. They know them and they are using them more than some of us, which is great.

How did assessment work, Paula?

It was important that how it was assessed, so not just on one presentation, that who assessed was more than the people who had been teaching it, and that what we assessed. With art you can have a very ugly outcome but a really great mark because your process was really strong. It is therefore important in the marking schedule that what we are assessing is fair. At level 5, the marking schedule reflects assessment of the process very much.

There was an external assessor to have someone with fresh eyes, for us to have a sounding board. Once we came to the assessments on the final day we had already assessed the presentations previously, so it was really good to have someone who had not been with them the whole time and hasn't dealt with all the issues. It's good to have another opinion. It is easy for us as assessors to be set in our ways about what we think is good or bad.

Nigel, what was the importance of spaces and facilities in this course?

The whole first semester they were in the design room. Therefore Paula and I decided to move them to another space. Primarily we wanted a fresh environment from which they could see; working the idea of ways of seeing; a new perspective on the environment. The room we took them into is a lot smaller than the design room. We were worried how the dynamic would happen with 42 students in there and it was amazing. Far from being a chore or hard or lacking in space they thrived in there. It was almost as if it energised them because we compacted them a little bit more. It also started a relationship and pulled it out into more of the whole of the art department now. The students used to be very one-area centric. Now you are seeing the students – some of them are there, some are in

another room and some are in another room. The outcome has been a real decentralisation. I am looking at that kind of idea of eventually, within the art department, seeing a better dispersion of use of spaces by students.

I am looking at a better habitation of place. There was this kind of feeling that certain areas in the old degree were not used for a few months in a row; why aren't students using it – well, they are not used to that kind of format. I was always saying to students, 'If a room is not being used, then go and use it'. That is happening far more now. They are all happy to move into any of the spaces. They are also more familiar with the spaces, they are inhabiting *their* art school.

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