Agile Curriculum Design for the Creative Industries

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Abstract

The creative industries thrive on novelty and technology, demanding professionals who can innovate, deliver to demanding briefs and constantly reinvent processes to match new problems. Traditional educational approaches can deliver some of these to a high level, but the demand for graduates who can thrive in these conditions is increasing. Escape Studios has reputation for rapidly upskilling graduates and making them 'studio ready' and is now moving to offer degree programmes including team working skills and commercial awareness impossible to include in its existing short intensive courses. This paper outlines the design process involved in creating these new programmes and provides case studies of some experiments in studio-based learning using industry briefs, peer and self-assessment and iterative working.

Categories and Subject Descriptors: Applied computing ~ Media arts, Applied computing ~ Education

1. Introduction

Escape Studios is a London-based school providing classroom-based training for VFX, computer animation and video games professionals. Founded in 2002, it quickly built a strong reputation in the industry for taking beginners to professional entry level over 12-18 weeks of intensive instruction. It further developed strong links with the industry by providing recruitment services, production facilities and the sale, support and deployment of leading digital media technologies through the (now independent) Escape Technology arm.

Until recently it existed to bridge the gap between higher education and the creative industries. Most of the students arrive with undergraduate degrees in a related subject but lack the required in-depth technical knowledge and skills to get their first job. These industries are at the intersection between art and science: they need a creative spark to innovate and produce novel solutions as well as a deep understanding of the technology involved in delivering them. Escape Studios has a long track record of delivering 'studio ready' talent [Esc16], but clearly the length of the courses rely on some of these elements already being present in the students.

In 2013 Escape Studios became part pf UK-based international education company Pearson PLC, becoming part of Pearson College London. As a result, it has moved into delivering Undergraduate and Masters programmes alongside its professional short courses. There is a clear need in UK higher education, and especially in the creative industries, for programmes that more effectively prepare graduates for the workplace [DCM14]. With rising fees and an increasing demand for highly talented professionals, it is the responsibility of education providers to design relevant and effective learning experiences that are highly aligned with the creative industry.

The design and delivery of the new programmes was approached with the same level of technical rigor as the existing short courses but with an increased emphasis on art and design, teamwork and business understanding [Rog83, Ill09, Whe14]. After a nine month development process, in partnership with the University of Kent, we now have validated Integrated MArt degrees in Visual Effects, Computer Animation, and Video Game Art, all commencing September 2016 [Esc15].

2. Curriculum Design Process

We use an extensive curriculum design process to ensure that our programmes are fit for purpose. We will save a detail description of this for another paper, but the outline stages are:

1. Define the goals using an established method called *backcasting* [Got12]
2. Build a suitable core design team with multiple and overlapping skills [Fri13]
3. Research existing leaders and innovators in the sector [Hyp15, Kao15, Gob15, dSc15].
4. Engage with industry professionals, academics and current students through Degree Concept Team (DCT) workshops
5. Test and refine the delivery and assessment methods
6. Document the programmes with reference to sector benchmarks

As part of the design process for these new programmes we are updating and refining our learning, teaching and assessment (LTA) methodologies. We are doing this for three key reasons:

1. Formalise and codify our already established practice.
2. Draw on best practice in the creative industries to inform and enhance our pedagogy.
3. Establish an LTA strategy that is both authentic in the context of professional practice and academically rigorous.

As many of the delivery and assessment methods we are using in these programmes have been drawn from industry practice and other education establishments, we need time and space to test them and integrate them into our daily practice.

The two most significant innovations we have made in this design process are: establishing pedagogy centred on professional practice; and allocating a large proportion of the assessment and feedback from the tutor to industry, peers and the students themselves.

We define our approach through four key principles:

CREATE BEAUTIFUL EXPERIENCES (ART & DESIGN)
- Applying art and design skills to digital projects
- Developing a voice as the new generation of visual artists
- Shake up the industry by prizing curiosity, and innovation.
- Absorbing influences from outside the classroom.

LEARN A CRAFT (CRAFT)
- Honing a specific craft through hard work and a good eye.
- Operating as a hybrid of an art and design school, an apprenticeship and a start-up.
- Learning from masters whilst developing a signature style
- Developing the cognitive skills that are required to work at a high level in the creative industries.

WORK IN TEAMS (PROCESS)
- Building strong communities of practice: supportive, professional, challenging, honest.
- Work in groups with their own culture and community feel.
- Learning from each other, giving and receiving feedback, sharing skills
- Collaborating on projects as leaders and followers.

MAKE IT VIABLE (BUSINESS)
- Working with state-of the-art technology on realistic projects to produce work that would make studios money.
- Following a realistic production/development pipelines.
- Understanding the business case for projects.
- Having an in-depth knowledge and application of professional techniques.

These provide a strong platform for the design and delivery of the programmes which are built around a logical series of intensive learning experiences, each of which are structured as specific modules. These are either **Craft**-focused or **Project**-focused. Students are expected to be engaged in their study for at least 35 hours a week, just like in a professional studio.

Tutors lead the **Craft** modules, where students acquire the knowledge and skills they will need to know to create high-quality visual and interactive experiences. The environment and close contact with the tutors fosters an apprentice-like experience, learning from and working with master craftsmen. The focus here is on the individual and their skills, with feedback coming from tutors (50%), peers (25%), and self-reflection (25%).

Tutors and industry professionals lead the **Project** modules, giving students the chance to work in teams on a client brief, put their skills to practice and collaborating through a production or development pipeline. These modules are the primary way that the intellectual and transferable skills are developed. The focus here is on the group and the individual's role in that group. Feedback comes from tutors (25%), peers (25%), self-reflection (25%) and the industry (25%). These Projects are divided into three phases: concept, making and retrospective. The fundamentals of our approach in place, we then needed to demonstrate the efficacy and rigour of our programme.

We could go into more detail about the delivery modes, student outputs and assessment types, but our space is limited. Therefore the remainder of this short paper will focus on step 5 in the overall Curriculum Design Process: test and refine the delivery and assessment methods.

3. Agile Testing the Pedagogy

We drew on our extensive experience and research in education for the creative industries to develop and enhance our existing LTA strategy and design the curriculum. Whilst we are confident that the theory and approach are sound, we feel it is essential to test delivery modes and assessment methods with real students in environments that are close to that to be used for the programmes.

'Agile methods' have emerged from the software development industry to gain widespread adoption across the digital segments of the creative industries. In contrast to more traditional, long-term, or 'waterfall', development methods, Agile promotes an ethos of iterative development cycles. Through a process of adaptive planning, evolutionary development, early delivery and continuous improvement, agile teams are able to respond rapidly to changes and are flexible in the face of problems.

Instead of one long development process with a single point of success/failure at the end, we work in short *sprints*, each ending with a tangible, testable output. Working this way allows us to adapt to the changing industry and needs of the learners. In the rapidly changing landscape of the creative industries, traditionally lengthy university development cycles are simply not fit for purpose. Our programmes have been designed with this in mind. We are constantly designing, developing, testing and redesigning. This process of continuous improvement is what keeps our programmes relevant and fresh [Mau12].

The clearest example of our approach to agile testing is in our Studio Projects initiative. These provide space and time for exploration and experimentation, away from day-to-day classroom delivery and commercial pressures.

4. Studio Projects

Studio Projects are short, practical, focused activities with specific sets of learning outcomes that are designed to test multiple elements of learning, teaching and assessment. Their design is usually framed by one or more key questions.

Our new programmes have allowed us to bring more industry-appropriate delivery methods into our pedagogy. To that end we defined the four crucial elements that need to be incorporated into everything that we do: Art & Design, Craft, Team Work and Business. For the first two – learning how to make beautiful experiences and developing specific technical expertise – we have well-established approach. But the second two, working in teams as part of a professional community and being aware of the business and commercial context have not been the focus of our previous work due to the short nature of the courses offered. The Studio Projects allow us to develop studio-based learning (SBL) with effective, challenging projects and run in-depth crit sessions incorporating peer and self-assessment.

Studio-based learning has a long history in the art & design fields, and has more recently been adopted by some in computer science [Ber08; Cenn11; Est10; Gre03; Lac99; Hen10]. According to Myneni, et al, an effective studio project has five key features [Myn10]:

1. Briefs provide problems which students develop solutions
2. Briefs can have multiple solutions which students must choose from and justify their design decisions

3. Students present their solutions to the tutors and peers
4. Tutors and peers provide feedback.
5. Students incorporate the feedback in the next iteration of their solution

This provided a useful framework for the design and delivery of our projects. Below we explore two completed Studio Projects and one in-development as case studies. We will present a short summary of the project, then in the final section of the paper outline the lessons we learned, in the hope that others may wish to adopt this approach.

4.1 Studio Project #1 - Client Briefs

Studio Project #1 aimed to test group work in a studio environment, with students working on a client brief. For two weeks, twelve Escape alumni worked in two teams on a brief for The Wild Network [Wil15], under the creative direction of Charlie Bayliss from Framestore [Fra15].

They worked to a loosely defined brief which challenged group dynamics and presented scheduling issues to mirror a 'live' working environment. We made several interventions, supporting them to reflect on their process and practice to work more effectively together and we provided mentoring throughout the project from tutors to help with technical and artistic aspects.

Midway through the project we provided a feedback session from the creative director. He gave an authentic assessment of the projects developed so far, without mitigating this in the light of them still being developing professionals. To many of the students this came as a shock: they were unprepared for the honesty provided that would be the norm for them once they were practicing professionals themselves.

After team meetings with the tutors, work progressed in light of this feedback. The final projects were delivered a week later to the satisfaction of the creative director and client. Important lessons were learned, both by the students and the tutors, in terms of ensuring that students are prepared for the rigor of a professional production process and the 'no holds barred' assessment of student work provided by professionals at the top of their field.

4.2 Studio Project #2 - Assessment Methods

Project #1 successfully tested a client-based project, but did not provide an opportunity to test the assessment methods we had devised. Studio Project #2 was structured quite differently, with ten different tasks spread over two weeks, each testing different combinations of learning approaches, assessment methods and feedback processes. The fast turn around and iterative nature of the projects gave the students opportunities to rapidly develop their approaches and quickly take on different team roles.

The aim was to be exploratory and rigorous; playful and serious, ensuring that we tested the methods and captured the data required whilst building the creative culture that we know is essential for success. The tutors and industry professionals who led the tasks were encouraged to approach the design of their sessions with a creative mind-set, as this was an experiential learning process for us as much as the students.

Peer and self-assessment used two main mechanisms: anonymous online questionnaires and face-to-face group sessions,

all based on pre-defined sets of criteria that created marking 'bands' based around traditional academic benchmarks. The questionnaires were used to gather comments and create initial 'grades' for the work, whilst the face-to-face sessions were in the form of a group crit where everyone contributed to the assessment and feedback and a discussion spiralled into a consensus of the final grade. Tutors acted as mediators or 'referees' for disputes (which were few).

The move from a didactic approach to an inclusive, organic one, both in terms of the learning process and more interestingly the assessment and feedback process was well received by both staff and students. An initial reticence to assess their own work and that of others gave way to an open, authentic environment where comments were taken as opportunities to improve rather than personal criticism and the 'one true answer' sometime sought by students was no longer seen as part of the agenda.

This was particularly noticeable when one of the tutors who acted as one of the team members for a while due to the unplanned absence of a student found themselves defending their work in the light of criticism of the rest of the team – giving both parties a true insight into the feedback process!

4.3 Studio Project #3 – Inexperienced learners

Currently in the planning and preparation phase, this project will support our tutors and staff to work more effectively with less experienced learners. Escape students are usually graduates and aged 21 and upwards. We now need to explore how effectively our enhanced pedagogy works with groups of young people who have very little training, who aren't used to working in a professional environment and who aren't bound by the conventions of higher education.

We have 12 college students from across London taking part in a 1-week project. There will be instruction and inspiration from a wide range of tutors and industry experts, supporting them to develop a solution to a brief from a real client. We will be using the approaches developed in Projects #1 and #2, albeit with 'front-loaded' exercises that will allow them to experience the methods before launching into the project for real.

5. Conclusions

We will continue testing and refining our methodology, even whilst the degree programmes are underway, using iterative development just as we would for a creative product. We must constantly strive to deliver better, more relevant projects with deeper and more transformative learning. Our conclusions from the work so far are grouped under three main areas.

1. **Industry input into studio-based learning is invaluable if used with care**. When our role as educators is to prepare students for work in the creative industries building a programme that mirrors projects in those industries is most appropriate. The projects are structured, and facilitated to ensure that required learning takes place but they are also open, exploratory and unpredictable to mirror the professional world. Briefs set and assessed by professionals creates high levels of expectations in terms of creative output and technical competence. Handled sensitively this is motivating and prepares students well for the rigors of a fast moving industry.

2. **Innovative learning, teaching, and assessment methods can fit into a rigorous academic programme.** Our assessment framework has far more peer, self, and industry input than is normal in similar programmes with tutors providing oversight and moderation instead of being the sole arbiters of grades. Industry told us that a deep contextualised appreciation of a professional's own work and that of others is essential for success. Resilience to set-backs, negative feedback and failure is needed to grow successful graduates, but these are often watered down in the 'safe' word of education. The programmes have these as intrinsic elements of the pedagogy, explicitly trying to move away from tradition and making the assessment and feedback conversations rather than a one-way transfer of information, whilst delivering this in a rigorous academic framework.

3. **Iterative approaches work in education.** It is clear that practice can make (almost) perfect, and in many creative disciplines this the core of the approach. Education also uses this approach, but the timescales can be glacial due to internal processes and requirements. Our approach has allowed experimentation that has engaged tutors, industry and students to test and refine our approach. Short projects allow us to provide intense learning experiences that are rewarding to all involved and yield valuable data and lessons, and so are now an integral part of our design process. By building flexibility into the LTA and working with a partner open to innovation we have developed a suite of programmes that can adapt according to the needs of the industry and the learners.

6. Further Work

We will continue to test our learning, teaching, and assessment methods using agile development principles. This will be even more essential after the new programmes begin in September 2016. The creative industries are changing ever more rapidly, and we need to ensure our programmes are always relevant.

Our portfolio of short-term professional-level programmes is also expanding. Our aim is to use the same design and development principles outlined here, to build the best accredited and non-accredited courses possible.

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