

Patterns of Instruction: Using Screencasts in the Teaching of Textile Design

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Rapid developments in technology over the last decade have enabled new processes for the printing of textiles. This has brought accompanying changes in textile design processes, and new challenges to the teaching of textile print design. Processes that traditionally involved hands-on physical interaction (e.g. screen-printing) have been transformed to become computer-mediated processes. Enabling students to acquire necessary software skills has proved a challenge in a time-constrained teaching environment. This poster illustrates the iterative development of screencasts that have allowed students to work independently on the acquisition of these software skills. Having students work at their own pace, with the ability to revisit material as required, has resulted in more advanced outputs than were obtained using a more traditional teacher-led approach.

Keywords: textile design, screencasts, self-paced learning

Context

In 2006 the Textile Design Lab was established at AUT University, providing access to digital inkjet printing for Art and Design students. In 2008 Digital Textile Design was established as a subject in the new Bachelor of Design Textiles for Fashion, and is now taught across several Design programmes as well as through short courses for industry training.

The “transition from fabric printing to digital textile design has required a significant leap from hand crafted, hands-on printmaking, to working entirely through digital design and print processes” (Fraser, Joseph & Cie, 2010). Adobe Photoshop has become a primary software tool, even though it is not specifically purposed for textile design. It has a number of functions and tools which can be adapted for creating repeating patterns, and for visualising prints, and has the advantage of ready availability both inside and outside class; a recent informal survey of students in a Fashion Elective indicates that a significant proportion of students (50%) had Photoshop available at home, and it is also available in AUT open access computer labs. The survey also showed that while 50% had prior learning with Adobe Photoshop, the remaining students had limited or no prior experience.

Teaching the use of software techniques can be problematic, particularly to groups of design students with varying levels of experience; as Houston and Lin (2012) note, there is the potential in a teacher-led classroom session that “advanced students zone out from boredom while struggling students get lost and often give up”; one-on-one teaching of technical skills had proven to absorb a large proportion of class time. Other research in textile design teaching suggests that student learning should be “active and hands-on, yet requiring time for contemplation and reflection”, and that aural transmission is not a preferred delivery modality (Sayer & Studd, 2006).

Screencasts

The development of screencasts was seen as a way of responding to the varying needs of students; screencasts provide a way to present “digitally recorded playback of computer screen output which often contains audio narration” and to visually demonstrate procedural information to students (Sugar, Brown, & Luterbach, 2010). Screencasts (or animated demonstrations) provide “an easy and affordable way of producing multimedia instructional material that is authentic, situated, and motivating and can be exploited in various educational settings (in the classroom, self-paced, collaboratively, etc.) unlike other kinds of multimedia resources” (Palaigeorgiou and Despotakis 2010).

Adobe Captivate software has been used over the last three years to produce a series of screencasts. The initial pilot videos have been revised and refined each semester to improve the content and to encompass new software

releases. Additional videos have been developed to cover more advanced topics. The collection is currently being modified and reformatted for delivery as an interactive resource via the iPad.

Outcomes

Digital printing technology has expanded the possibilities for design, allowing use of unlimited colours and fully photographic imagery. The acquisition of more advanced software skills has enabled students to explore visualisation of designs applied to garments or interiors; this allows decisions to be made about scale and print placement, alternative design solutions and colourings.

The shift to using screencasts to develop procedural skills has allowed the lecturer to focus class time on higher level concepts of design development, and on mentoring individual creative processes. This “inverted” classroom approach (Houston & Lin, 2012) has resulted in more advanced outputs than were obtained using a more traditional teacher-led approach. Examples of these outputs are displayed in the Poster.

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