

Introduction: Statement Of Problem

This paper summarises the SCA Face project: the design and development of a website school profile. SCA Face sought to develop web-based communities of practice within Edith Cowan University's (ECU's) School of Communications and Arts (SCA). The school's existing webpage provided no mechanism for individual discipline areas to identify their strengths and showcase their activities. This is particularly problematic in a school such as SCA, which is highly diverse—there are 22 individual majors across the school—and which generates large quantities of visual content. SCA represents the amalgamation of the School of Communications with the School of Multimedia and Learning Technologies (1999), the School of Contemporary Arts (2006) and the School of International, Cultural and Community Studies. This has created a school that has benefited from diversity but suffered from a lack of focus on particular disciplines or any means to highlight these. This has impacted on the students' sense of belonging to a discipline. Students can struggle to quickly find out about what has been happening in their area of study and to celebrate their own successes. A web community portal such as SCA Face, should enable students to connect to staff and for each discipline within SCA to connect to the broader community. It should also allow community participation in programs, and provide opportunities for students to develop closer links to industry. Students should be acculturated in the research, professional, and creative activities conducted by academic staff. SCA Face's purpose is to provide all of the above and a virtual home for the individual majors available to students within SCA.

Undergraduate and postgraduate students at SCA number over 2000. A significant proportion of these students rely on folio-based output for future employment. Students need an avenue to put into practice the sharing and display of these outputs and disciplinary expertise. They need a way to communicate between themselves, industry and the wider community, in particular, via current technologies and dissemination methods such as the Web 2.0 environments. In other words, to be able to communicate via practices already used in industry. The SCA staff body consists of more than a hundred academics and technicians. All are professionals in their field of expertise as well as dedicated teachers and advisers who wish to participate in the school community, share knowledge, and encourage students by example. These issues have been addressed by developing communities of practice

through a web portal that manifests the activities conducted through individual courses within the school. 'Communities of practice' can be defined as groups of people who share a concern or a passion, and learn how to do it better as they interact regularly (Wenger, 2008). The characteristics required for Communities of Practice are:

- A joint enterprise, as understood and continually renegotiated by its members.
- Mutual engagement that binds members into a social entity.
- A shared repertoire of communal resources that have developed over time.

Communities of practice come about through the collaborative activity of their members rather than at an institutional level. The goal is to give course coordinators, staff and students a sense of ownership of their areas and to share those with the broader community. The flat, static 'Web 1.0' approach of most university's websites was not suitable for a school of this nature. SCA Face is a platform for collaboration, sharing, innovation, and user-created content (Lai & Turban, 2008). One of the most significant differences between Web 2.0 and the traditional Web is that content is user-generated and there is a greater collaboration between users.

Identity, Logistics & Ownership

SoADs that belong in universities can suffer keenly from the one-size-fits-all approach to corporate identity. On the one hand the university itself is a brand. People recognize it because of its reputation, communicated values, and visual identity. The advantages of this are a consistency in terms of setting expectations and delivery of the university brand, however, it is an inevitable truism that students go to university, not to be a part of the university but to get the education that they need within a discipline to enter a profession or work more effectively in it.

The role of the larger ECU website is not only to attract students, but to maintain the profile of courses within schools, and promoting activities is an issue that is coming under the attention of the central Web team at ECU. Consistency is promoted by a corporate style that not only dictates the use of logos and colour, but goes so far as to define the structure and content of individual web pages in the school. Thus every school within the university has a

consistent but somewhat homogeneous feel. Course information is provided at the degree level rather than the discipline level. This is problematic for a school such as Communications and Arts that embraces multiple disciplines within three main undergraduate awards of Communications, Arts and Creative Industries. When a student seeks information about Graphic Design, for example, they are doing so with this discipline in mind rather than its parent degree.

The ECU website's sharp focus on providing official course information ensures accuracy of information but misses much of the quality of activities that take place within a school, such as the professional work and engagement of existing students and staff in specific disciplines. The SCA Face portal seeks to address this issue; taking the view that content created by staff and students forms a necessary and compelling augmentation to course information. A further goal was to allow visitors to identify with the school rather than purely the university. Therefore, the design of SCA Face needed to provide an identity of its own. Achieving this involved analyzing the identity of SCA itself and building SCA Face to encapsulate this large, multidisciplinary school. The design of the site was carried out on a collaborative basis, with a team member dedicated to needs analysis, and design meetings with the heads of each discipline area within the school. The project used school resources and skills, including front-end design and back-end development by SCA students. In this way, the final product highlights the school's innovation through its design and engineering and further embeds the project as a SCA asset. The graphic design for the website was not just about creating an intuitive navigation system, but also about developing a visual identity unique to the School. The needs analysis and discussions with heads of each SCA discipline identified that SCA audiences (students, prospective students, staff, prospective staff and other community and industry members) were not the same as the communities that access other ECU schools' web pages or the ECU site in general.

In its reduction of complexity and integration of media, SCA Face consciously runs counter to the university's corporate style. The portal was designed to represent the work of students and staff in a professional and contemporary manner. Attention was given to perceptual and gestalt understandings of design (Bosshard, 2000) to establish clear hierarchies and ease of use within the interface. Ironically, in this case, the clearest

approach to information design proved to be a predominantly non-hierarchical one. Figure 1 demonstrates the visual design of SCA Face. As is immediately apparent the, focus is on exploration, with the front screen displaying a range of thematically linked articles. These themes are organized around a series of categories. Articles can be accessed via the discipline area (e.g. Journalism, Game Design) or by the nature of the article (event, student profile etc) or users could simply click and browse. The articles themselves are not tied to a single parent. For example, a multidisciplinary project could be attached to more than one discipline area.

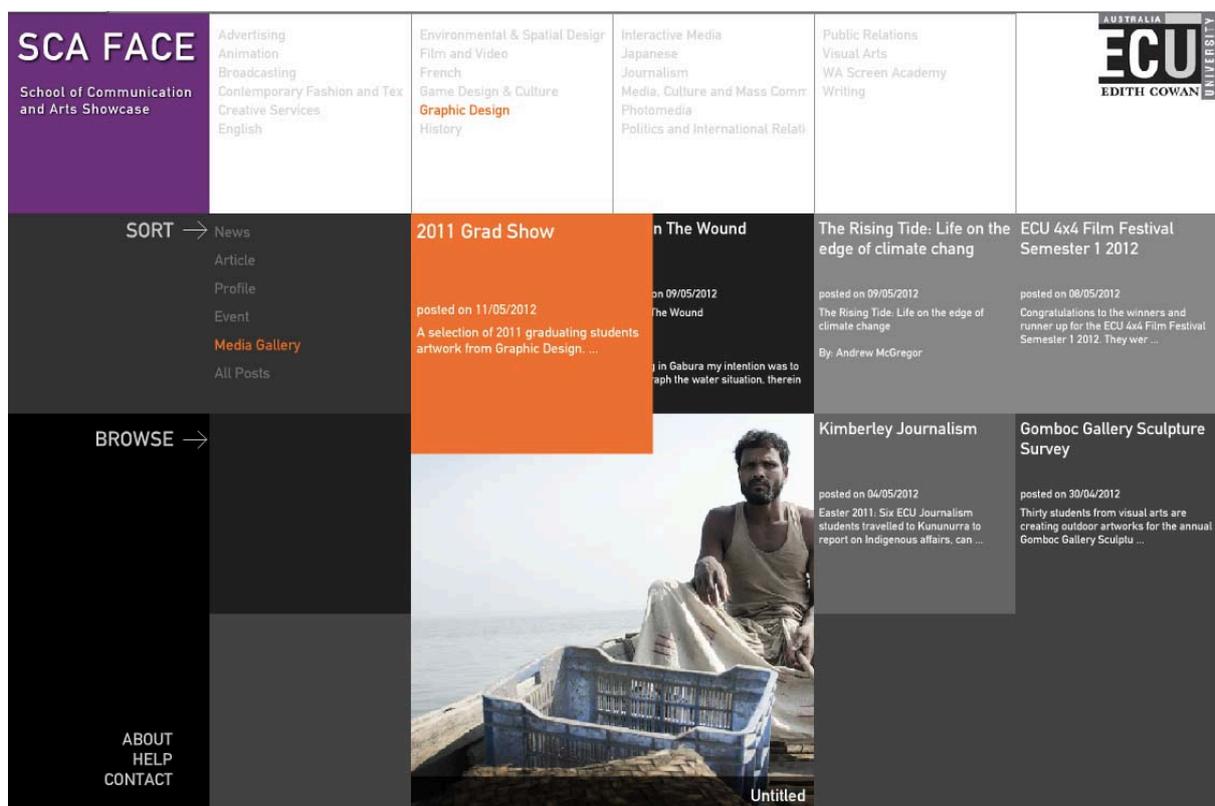


Figure 1

In terms of content, SCA Face aims to reflect the content requirements requested by the program areas. Accordingly, it is designed to accommodate the ongoing changes and updates necessary for the evolving nature of the School of Communications and Arts. Consultation with project stakeholders expressed the need for the following issues to be addressed by the portal:

- Description of SCA in its ECU, Australian and international context.
- Current SCA events and news.

- Examples of student work and innovations within the courses, as well as exhibitions, awards and ongoing projects.
- RSS feed for those who wish to subscribe.
- Accommodation for 'easy' updates by the program areas.
- Default set of information for each program.
- Integration with existing ECU website.

SCA Face was therefore developed with the capacity to display rich media and supported by an easy-to-use content management system to enable discipline experts to manage their own content. This process is facilitated via the PHP/MySQL Content Management System underpinning the portal. A marketing officer is available to assist any coordinators who require guidance as to how to undertake such modifications and the development of content material. A time-out feature, which defaults to a set of information for each program area, activates after a certain period of inactivity to ensure that no out-of-date information remains on the portal.

Discussions have taken place with SCA's Web Manager and ECU's Web Business Manager centred on SCA Face providing an innovative test bed for the development of such discipline-based communities. Depending on the success of SCA Face, other school-specific sites may be deployed at ECU.

Managing The Project

The project team were successful in receiving an AU\$5,500 Faculty Teaching and Learning Grant which enabled the design and development. Table 1 shows the original project timeline with the key stages outlined and points at which formative (A, B & C), Summative (D) and Impact (E) evaluation were to be carried out. The ADDIE management model was applied across the major phases of the project's research and development (Clark, 2004). The project development was intended to span January to December 2009. However, a number of factors prevented this. While some delays were due to project aspects, such as the consultation process, the vast majority of issues resulted from external constraints that affected the timeliness of delivery.

Phases	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Analysis (1)												
Design (2)												
Development (3)												
Implementation (4)												
Evaluation (5)			A,B				C	D			E	
Reports						Prog (1p)		Final (2p)			Imp. (1p)	

Table 1: SCA Face Project Timeline

The final delivery of the prototype site took place in March 2012. In reality, the product had been built by early 2010, however, the existence of the site proved problematic to the university. In many ways, the design and development of SCA Face was the easiest aspect of the process. Once built, deploying the site proved to be much more challenging. The following section outlines some of the issues experienced and findings developed throughout the SCA Face project.

Issues And Recommendations

Findings from the SCA Face experience can be grouped into three main categories. The first of these relates to the need to consult widely to ensure key stakeholder involvement, the second relates to managing external stakeholders and broader institutional issues, while the final focuses on the application of appropriate development technologies.

- **Consulting widely, consulting often**

The first issue was what caused the initial development delays. The School of Communications and Arts consists of over 20 individual disciplines. These disciplines predominantly form majors within three large awards, but are staffed by teachers, researchers and practitioners with a strong discipline focus and an existing perception that the university's web presence was one that did not adequately represent their area of expertise. The first goal, therefore, was to use the SCA Face project as a first step of reconciling this perception by celebrating the disciplines within the school. This meant that the product needed to address what was 'missing' in the university representation of the School of Communications and Arts.

This proved to be a time-consuming but extremely valuable process. A lengthy requirements gathering stage provided a strong foundation for the above issues to be addressed. There is never going to be a complete consensus about all aspects of a product such as this, however an initial requirements mapping ensured that academics were able to take control over the forms of content that were displayed within SCA Face and manage their own areas.

- **Having patience, persistence and humour**

SCA Face sat in implementation limbo for two years following its initial development. While it would be disingenuous to say that such delays were totally unexpected, it demonstrates how organizational systems can stifle innovation in the quest to ensure consistency. A number of issues were raised regarding the design of SCA Face:

- By the time of prototype completion it represented an approach to development that did not align with the university's model for small applications development being managed centrally. Added to this was the problem that the newer development model created a two-year backlog in applications development.
- Ceding control of web content to course coordinators ran counter to the university's web policy. One of the most vociferous complaints about SCA Face was that it enabled unmoderated content to appear online, even though the environment had an authenticated content management system. This was only resolved by giving special permissions to individuals closest to the project to moderate the SCA Face content.
- SCA Face did not match the university's corporate style. The deliberately non-corporate look and feel of SCA Face did not initially sit well with ECU's brand managers. A compromise solution ensured that no competitive logo was

implemented, that SCA Face did not replicate any information on the existing ECU site, and so on.

The above issues proved to be the most time consuming by far. They were also complicated by a range of logistical problems. Recent moves towards a centralized network infrastructure meant that there was much discussion about whether there was server room for the product and how it would be hosted. At one point it was mooted that SCA Face may require a third party host, or have a non-ECU URL. SCA Face's final approval only resulted from persistence and the ultimate acknowledgement that it provided a service that was deemed important to school business and was one that could not be provided centrally.

- **Maintaining design and technological currency**

Over the time that SCA Face was developed, the school had undergone change management and a major curricular renewal. This impacted significantly on the profile of the school and its disciplines, though the design of SCA Face was able to accommodate these changes. Since disciplines were not hard coded into the system, existing instead as categories that could be redefined and removed or attached to individual articles, the system was able to respond nimbly to structural changes and portray accurate and current information.

PHP, as the main data management technology also had currency throughout the development cycle due to its wide adoption and acceptance within the Web development community. Less resilient was the use of Flash as the underpinning display technology. During the initial design phase, Adobe Flash was the dominant interactive media platform for the Web. HTML 5 was an immature technology that was being implemented in different ways in different browsers and lacked backwards compatibility. At the time of writing, almost the reverse is true. Much of the featureset of plug-in technologies such as Flash can now be rendered directly by the browser and the widespread adoption of mobile technologies is impacting on its saturation across the breadth of devices.

Conclusion

Universities are understandably protective of their brand, but it must be acknowledged that as complex organisations, that brand may not adequately represent the breadth of activity that is undertaken in individual schools. Schools of Art and Design in particular, suffer from

the homogenous corporate approach to marketing that many universities adopt. Environments such as SCA Face can do much to promote the individuality of a school and the achievements of its community – the students and staff that comprise it. Providing an online avenue such as SCA Face for both staff and students will contribute to each program's sense of identity and showcase the activities being conducted. SCA Face grows through grass-roots ownership so that each area in the school is responsible for and manages its own content. As has been shown here, innovative approaches to providing discipline-based information can do much to promote the cohesive vision of a school, though embarking on such projects has its risks. Key stakeholders need to be involved in the process and the treacherous waters of corporate policy need to be navigated diplomatically but with clear goals and persistence. It may be that a product is out of date by the time it gets approved. Nevertheless, effective design can do much to ameliorate the negative impacts of rapid technological evolution.

Bibliography

BOSSHARD, H.R. (2000) *Der Typographische Raster*, Zürich: Niggli.

CLARK, D.R. (2004) *ADDIE – 1975*, http://www.nwlink.com/~donclark/history_isd/addie.html
[accessed November 6, 2008]

LAI, L. & TURBAN, E. (2008) Groups Formation and Operations in the Web 2.0 Environment and Social Networks, *Group Decision and Negotiation*, 17(5): 387-402.

WENGER, E. (2008) *Communities of practice*, <http://www.ewenger.com/theory/index.htm>
[accessed August 9, 2008]