



The Online Exhibitions Project: Final Report

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Executive Summary

This report describes the research carried out as part of the Online Exhibitions Project, a two-year collaboration between the CETLD partner archives and students and tutors from the University of Brighton and the Royal College of Art. The results of an extensive literature survey and exploration of best practice are included, along with a selective bibliography of recent scholarship.

The Online Exhibitions Project examined how design students might learn from and about archives through the medium of a virtual exhibition. Using collections at the Royal Institute of British Architects and the University of Brighton Design Archives, a prototype exhibition was developed about the house at 2 Willow Road, London, designed by modernist architect Ernö Goldfinger. Students visited the house, viewed its archive at the V&A and then took part in an online experience, using the virtual exhibition and a blog to contribute their ideas and images. A secondary project involved creating a small exhibition on Flickr and assessing student reaction to it.

The outcome of this research was the decision to focus on Web 2.0 applications, such as Elgg Community@Brighton and Flickr, as the most participative means of involving design students in learning from archives. A recommendation to the partner archives to consider disseminating their collections through various online channels, rather than following traditional exclusive image licensing practices, concludes the report.



Figure 1 University of Brighton 3D design students at 2 Willow Road, October 2008 (Photo: J. Devine Mejia)

Acknowledgments

I would like to thank Catherine Moriarty, Paul Snell and Anne Asha for their work in launching the Online Exhibition Project, phase I (2007-8) and in supporting the project throughout the past two years.

At the RIBA, Robert Elwall, Susan Pugh, Jane Oldfield and Irena Murray have all given their time and expertise to the development of the 2 Willow Road online exhibition and Catherine Duncumb (RIBA/V&A education officer) did an outstanding job of encouraging design students to look at archives as a living record of the design process.

3D design tutors Patrick Letschka and Jacqui Chanarin graciously offered to make the Willow Road experience one of the “adventures” for their visual research students. Without their enthusiasm and the visual research students’ voluntary involvement, there would be no findings to report.

The RCA’s Neil Parkinson provided thoughtful advice throughout the project, while Jeremy Aynsley, Harriet McKay and the MA in History of Design students volunteered time and creative ideas in the OLE testing and assessment process.

CETLD ICT specialist Sina Krause did an outstanding job of creating the prototype exhibition and testing other options along the way, while Roland Mathews provided valuable help with our blog and the complexities of user access. Learning technology experts Stan Stanier and Adam Bailey advised on Elgg and Community@Brighton at critical points in the project and let us play in their technology sandbox.

At 2 Willow Road, National Trust curator Rebecca Milner tailored the house tour to the needs of two distinct student groups and also contributed her time to evaluating the experience. Her work created an inspiring context for the students’ archival experience.

The V&A Museum’s senior archivist Christopher Marsden and curator of design drawings Abraham Thomas both showed a keen interest in the project, offering their advice and knowledge along the way.

Special thanks to these CETLD staff: Debbie Hickmott administrator extraordinaire, Rebecca Reynolds for including our Flickr experiment in her creative writing class, Catherine Speight for editorial work on several papers, Philippa Lyon for advice and editorial skills, Jos Boys for support and guidance throughout the project and Sol Snelvedt for her patience in the final months, and lastly my appreciation to CETLD director Anne Boddington and advisors David Gosling and Allan Davies for helping me to stay on course and to ask the right questions.

Jane Devine Mejia

1. Introduction and background

The Online Exhibitions Project (hereafter OLE) took place from October 2007 to December 2009 and involved collaboration between the four CETLD partner archives (the Royal Institute of British Architects (RIBA), University of Brighton Design Archives, Royal College of Art (RCA) and V&A Museum), along with students and tutors from Brighton and the RCA and CETLD ICT staff.

The OLE Project was first proposed in May 2007 by archivists and education specialists from the RIBA and the University of Brighton, with support from the CETLD manager. After some changes in scope and the hiring of a part-time research fellow to lead the project, ten specific goals were articulated by February 2008. These were:

1. To promote the knowledge and use of the CETLD partner archives across the HE sector through the medium of an online exhibition (hereafter OLE)
2. To develop a prototype OLE drawn from existing digitised archival materials in the CETLD partners' collections
3. To work with the partner archivists, curators and ICT staff to select, document and replicate the digitised material for the purposes of the prototype OLE
4. To investigate how to incorporate metadata from the partners' digitised archival materials into the OLE
5. To find effective ways of engaging students and tutors with this archival material, both for historical/theoretical research and for practice-based inquiry
6. To explore the potential of 'students as curators', both in presenting their own work within the OLE and in selecting and writing about archival material for the OLE
7. To undertake a review of the best and most innovative OLE websites, particularly those in the museum, library, archives and HE sectors (including where possible information on 'front end' content and design, and 'back end' elements such as costs, technical infrastructures, etc.)
8. To undertake a literature review of art and design online teaching and learning environments and OLEs, with an emphasis on HE rather than primary/secondary and further education
9. To report on the research completed and issues raised during development of the prototype OLE and to make recommendations for the further design and development of an OLE educational resource within the context of the CETLD partnership
10. To disseminate knowledge acquired from the project to a wider audience across HE design education and the museum/gallery sectors through the CETLD website and newsletter, conferences, seminars and other venues.

These goals provided the framework on which to build the project and also defined the project leader's principal responsibilities. Staffing for the project consisted of the half-time project leader, a summer placement student (12 days), part-time assistance from the CETLD ICT staff and voluntary involvement by the partner archivists, tutors and students. A complete list of participants and people consulted during the project is provided in Appendix I.

In addition to the project goals, a set of CETLD guiding themes defined the focus of the research. These were:

- Learning spaces (physical/virtual)
- Practice-based learning and object scholarship (through the interpretation of artefacts and drawings in archives and museum collections)
- The student voice: student-centred, personalised learning
- Use and application of collections

This report describes the project methodology, including preliminary research, and outlines the main findings and research outcomes. It concludes with a discussion of key issues and some recommendations for the CETLD partners to consider in light of the project findings.

2. Preliminary research

a. Literature review

The literature review was based on an extensive exploration of art, design, education and museum scholarship about online exhibitions. An initial bibliography was compiled with the help of CETLD placement student Heloisa Candello, drawing on these online indexes and extensive searches of relevant conference proceedings:

- Art Full-Text
- Artbibliographies modern
- Australian Education Index
- Avery Index to Architectural Periodicals
- Bibliography of the History of Art
- British Education Index
- Design and Applied Arts Index
- Educational Research Abstracts
- Educational Resources Information Center (ERIC)
- Expanded Academic Index
- Library and Information Science Abstracts (LISA)
- RIBA Catalogue & Index
- Zetoc (British Library)

The search focussed on literature published from 2000 onwards as earlier publications often dealt with outmoded technology and were thus less relevant to current practice in OLE design. Many of the key papers that informed our research were drawn from online conference proceedings and electronic journals, rather than print sources. From an initial list of over 70 citations, we focussed on 35 books, papers and articles that dealt with OLE design from an archives/libraries/museums and education perspective, rather than a technical standpoint.

Our literature survey findings suggested that no one was developing OLEs explicitly for a higher education (HE) design audience; while none of the case studies that we reviewed tackled the question of how HE students learn from OLEs based on archival collections. This confirmed that our research agenda was original and that it offered the potential to contribute new findings to the study of collection-based virtual learning in art and design.

Appendix 3 presents the bibliography of the key literature that guided our research.

b. Survey of best practice

This review was based on an assessment of OLE sites that had won awards at the annual Museums and the Web conference (1997-2009). This peer award, voted by members of the association, has been a mark of excellence since the early days of virtual exhibitions. A summary table of findings is provided in Appendix 4. A review of the past thirteen years of winners shows a progressive trend from fairly simple self-developed HTML pages to complex professionally designed websites created with custom software applications. By 2001, firms such as Terra Incognita Productions (Austin, Texas) and later Second Story Interactive Studios (Portland, Oregon) were creating unique virtual exhibition sites to meet their clients' needs and take OLE design and conceptualisation to new levels. More recently, software such as WordPress for blog-making and the Flickr image sharing site are supporting a more user-centred approach to OLE development. The Brooklyn Museum's "Click! A Crowd-Curated Exhibition" (2008-9) is one good example of current practice in participative OLE design.

Both the literature survey and the review of best practice led to the conclusion that we would concentrate on developing an exhibition framework that would allow as much viewer participation as possible and would thus encourage student and tutor engagement in the curatorial process of selecting and documenting archival material for the OLE. Participatory sites that informed our thinking included the Art Gallery of New South Wales myVirtualGallery (see Cooper 2006), the Art Museums of San Francisco My Gallery and Exeter University's EVE Everyone's Virtual Exhibition site (see Gardner 2005) as well as Flickr and several V&A projects described by Durbin (2003-2009).

Based on the range of best practice cases that we studied however, it was clear that we had neither the funding nor the staff to emulate the more ambitious sites created by large teams of curators, researchers, web designers, photographers and other technical experts, but would instead need to think about the opportunities presented by social media such as CETLD's Elgg Web 2.0, Flickr, Community@Brighton (also an Elgg site) and other comparable applications.

3. Developing the online exhibition: technology

Technology proved to be one of the biggest challenges of the project. The initial assumption had been that CETLD's implementation of Elgg Web 2.0 would underpin the OLE; however it soon became clear that Elgg's "Photo Gallery" feature was not sufficiently developed at that stage to meet the exhibition's requirements. Without funding to purchase commercial software or to pay developers to build a custom application, we looked at a range of open-source [free] options, including Panraven, MyGallery, Slideshow Pro, Smooth Gallery and Flickr before choosing Jalbum's Fotoplayer, an open-source exhibition framework designed by Dhinakaran Annamalai.

Fotoplayer offered a number of advantages. We could create the OLE and run it from within the CETLD Web 2.0 site, with passwording to ensure the necessary level of security. There was ample space to display image metadata as well as zooming and panning tools to allow detailed image viewing. Fotoplayer's "guestbook" tool also allowed the potential for users to comment on the images they were viewing and to share their comments with others. This software was used to present two versions of the prototype OLE, one for the University of Brighton second year visual research students and the second for the Royal College of Art MA in the History of Design first-year students. Each version of the OLE included an Elgg Web 2.0 blog for comments and image uploading and the Fotoplayer exhibition based on archival material from the RIBA and the Brighton Design Archives.



Figure 2 Fotoplayer prototype, showing images from the RIBA and University of Brighton Design Archives. Image metadata is displayed in the lefthand column.

4. Online exhibition content

The theme for the prototype exhibition was chosen after careful reflection on how practice-based students and tutors are most likely to be attracted to an OLE and on how we could design effective learning experiences based on the exhibition content. It became clear from meetings with the archivists and from online research in the collections that the common strength of the partner archives was twentieth-century British design.

A critical deciding factor was that we had no funding to digitise archival material and so had to depend on digital images that the partner archives had already created. The RIBA archive of Ernö Goldfinger's 2 Willow Road house in London was the most complete set of design drawings and documentary photographs available in digital form, with the major advantage that RIBA held full copyright to the archive. A further benefit was that this material had already been collected into a resource box as part of the RIBA/V&A education programme and most of its contents were available in the RIBApix digital image bank. As a National Trust property, the house was open to visitors and the National Trust curator was eager to be involved in our project. The first online exhibition of 32 images drew on Goldfinger material from the RIBA and related items in the University of Brighton Design Archives.

5. Student and tutor engagement

Finding a way to involve students and tutors in the project was one of the greatest challenges. Not only did we need them to volunteer their time, but they also had to fit the project work around their coursework. Two groups joined the project to test the prototype OLE: the University of Brighton 3D design undergraduate visual research class and the Royal College of Art MA in History of Design first-year class, along with their tutors. A further group of extension class students was recruited to test the Design Archives Flickr group. In each case, it was hard to sustain the students'

involvement beyond the initial activities, though many expressed an interest in the research and regretted not having more time to contribute. Nonetheless, the evaluation questionnaires provided valuable comments and data that advanced our work and led to a better understanding of student learning in both online and physical environments.

6. Learning from students and tutors

a. Undergraduate visual research students: an archives immersion

We structured the first student experience in the following way. The Brighton group (12 students with tutors Patrick Letschka and Jacqui Chanarin) visited the house at 2 Willow Road with National Trust curator Rebecca Milner and then explored the related RIBA archival material at the V&A study room with RIBA/V&A education officer Catherine Duncumb. After the physical tours, they had the opportunity to visit the virtual exhibition and to upload their own Willow Road photographs, questions and comments to the OLE blog. Using a series of three questionnaires, they assessed their own learning and reactions to the virtual, vs. the physical, archives immersion over a 10-week period in autumn 2008. At the same time, they worked on their individual visual research projects which focused on an object with personal meaning and required them to explore it using various media. A fuller discussion of this phase is provided in two conference papers listed in Appendix 2.

None of the undergraduate students had had any prior exposure to archives and they were generally very positive about this introductory experience. Some of the students noted:

“There is a lot of information to find in the Archives and I would definitely try and revisit to research into future projects.”

“the drawings are certainly going to be useful for my work. It made me think differently about ideas and approach...”

Another commented that the online archival exhibition gave the *“opportunity to see the building when it was first built and differences in interiors as well as the intentions of the architect in the plans”*

At the same time, there was a desire for more user control over the sequencing and presentation of images. For instance, in contrasting the real with the virtual experience, one student said:

“Being in the house lets me choose to see what I want to see whereas the OLE is someone else’s perception.”

Similarly, a suggested improvement to the OLE structure was *“possibly ordering the images to mirror the beginnings – plans and sketches to the end – photographs of the house.”* The exhibition had been presented to show the house from exterior to interior, divided by room type rather than type of drawing or photograph, but clearly some students would have preferred to arrange the images according to their own preferences. Due to the limitation of the software, we could not offer them this option, but it was significant that some students wanted more involvement in sequencing and presenting the archival images.

The visual research tutors had a strong interest in exploring how an OLE could influence learning. Students showed the influence of their Willow Road experience in their attention to materials and their approach to space as they worked on their individual projects. While the students were not

always aware of this connection, their tutors observed it when reviewing the work. The tutors also felt it was very useful for students to participate in the project as an example of design-related research. The tutors felt it was important for the students to see the difference between an academic interface (like the Willow Road OLE) and a commercial one, and also between social networking sites like Facebook and academic sites such as our Web 2.0 environment. They noted that design students often go online to learn how to make or do something, rather than in search of content. The tutors felt that a possible theme to explore in future research would be how to present student work in an online environment, for instance by sharing work shown at crits through an online medium or in an e-portfolio.

b. MA History of Design students: virtual curatorship

Working with Prof. Jeremy Aynsley and PhD candidate Harriet McKay at the RCA, we structured the second student project over a two-week period in March 2009. The 10 first-year MA students had a guided tour of the 2 Willow Road house with National Trust curator Rebecca Milner and participated in an afternoon panel at the V&A focusing on online curatorship, archives and education. The panel was unfortunately curtailed by a fire evacuation, but each student received a reading package and participated in an informal discussion about the project's aims. The project brief encouraged them to propose alternative exhibition layouts, narratives and perspectives using the archival images and related readings as the basis for an exercise in virtual curatorship. Four students presented PowerPoint mock-ups of their ideas, using archival images, their own Willow Road photographs and other material related to the topic.

Lack of time and the demands of their coursework prevented them from doing a complete assessment of the OLE experience, but the students did present some creative ideas about how the OLE could incorporate contrasting contemporary and archival images and how the Willow Road design narrative might unfold in an online environment. They also found examples of other sites that could be models for future development of the OLE. However, it was apparent that these MA students were already proficient in archival research and did not need the online exhibition experience and Willow Road tours as an introduction to archives. This finding confirmed that we should focus our attention on undergraduate and postgraduate practice-based students, rather than those on design history courses.

c. Extension class students: experimenting with Flickr

In thinking about the OLE, we had considered Flickr as a possible platform, but rejected it on the basis that copyrighted RIBA collections could not be posted on a commercial third-party (ie. Non-CETLD) site and there was concern about asking students to set up separate Flickr accounts instead of using the CETLD Web 2.0 site. However the "Creative Writing in Practice" extension class taught by Rebecca Reynolds offered us the opportunity to run a very small scale Flickr test project using the Brighton Design Archives collections.

In March 2009, archivist Catherine Moriarty presented a selection of archival material to 11 students enrolled in the class and then 28 images and associated metadata were uploaded to the private Design Archives Flickr pool. The group was defined as private so that students would have the security of working in a closed environment and so that the Design Archives and CETLD staff could measure image use without Flickr members from the general public joining. A week later, the

students presented their work based on the archives session and Flickr use and they were asked to complete a short questionnaire assessing their experience with Flickr.

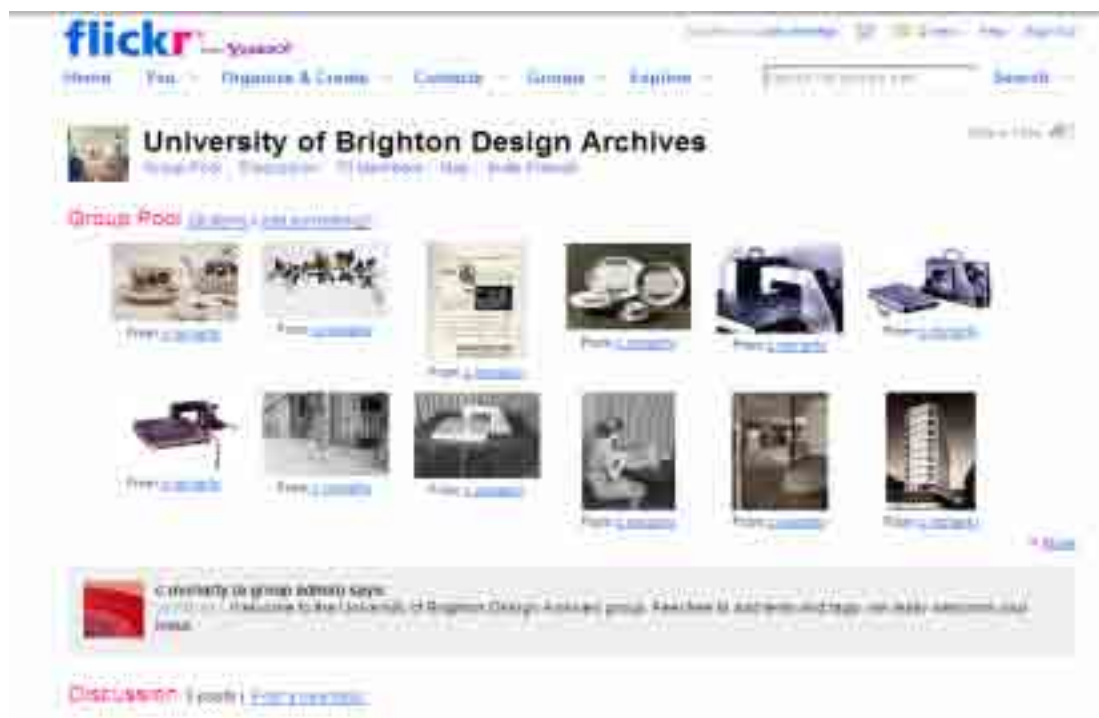


Figure 3 The Design Archives Flickr Group, showing images from the collection.

Like the previous Brighton group, these practice-based undergraduates were largely unfamiliar with archives. At least four of them were Facebook users and two already had Flickr accounts. When asked how they felt about the informal online exhibition of images in contrast to the archivist's classroom presentation, one commented: "I'd still prefer to physically be in contact with the objects but if not, it's an acceptable alternative." This response echoes previous findings and articulates the appreciation many students felt for contact with real archival objects as opposed to their virtual surrogates. Nonetheless, the online experience was considered useful as a means of exploring the archival collections and producing the creative writing work required for their class.

7. Research findings

The most important research finding was the discovery that a collaborative art and design archives-based virtual exhibition project like ours has not been attempted elsewhere. The review of award-winning OLE sites confirmed that few, if any, of them address an HE audience explicitly. Although many museums and archives produce online exhibitions for virtual learners, the emphasis tends to be on lifelong learners and primary/secondary education. University archives produce scholarly virtual exhibitions that may have a teaching and learning benefit, though this is not always a stated goal. Although certain projects had similar elements to our prototype OLE, such as Kingston University's "Trading Faces: Recollecting Slavery" site (<http://www.tradingfacesonline.com/index.asp>) which used archival collections and invited user contributions, none was focused on archives, higher education and creative practice. Janis Jefferies' research on Goldsmith College alumni and the role

of textile archives in the production of new work¹ is similarly a related field of research, but it does not deal with how online exhibitions can make the bridge between archives and practice-based learning.

Our research has revealed the high degree of interest in the application of Web 2.0 technologies in an academic context, an interest that is reflected across the CETLD partnership from Community@Brighton to the RCA's Moodle environment. Museums, libraries and archives, such as the V&A and the Library of Congress, are increasingly involved in interacting with their audiences through social media like Flickr, built around communities of interest. They are also exploring how to disseminate their collections within these social networks. Our project was therefore at the crossroads between the trend towards participative environments in art and design education and the desire of museums and archives to reach wider audiences through social networking technologies.



Figure 4 National Trust curator with University of Brighton students at 2 Willow Road (Photo: J. Devine Mejia)

¹ Jefferies, Janet and May Cornet. "Crafting geometry: work in progress". Talk presented at Archive Fever 2: Building Material and Virtual Archives, Collections in the Making conference. Goldsmiths College, University of London, 12 September 2008.

8. Key issues

a. Project management and staffing

Successful OLEs require specialist project teams, with archivists, curators, ICT staff, Web designers, imaging experts and others.

Our research into best practice showed that outstanding OLEs were typically designed by professional Web design firms in collaboration with curators, archivists and education staff from the lead institution. In some cases, they were also designed by dedicated in-house teams of programmers, designers and imaging specialists. An array of expertise is needed to produce an exhibition that presents archival content in an engaging and user-friendly way, with the added value of teaching and learning components and opportunities for user participation.

In our case, the archivists and curators have the collection knowledge, digital imaging and image cataloguing expertise, but very little free time to participate in curating an online exhibition in addition to their very full workloads. The project leader therefore became the *de facto* curator, a role not originally envisaged in the proposal, and acted as a coordinator between the partners.

We relied on the RIBA/V&A education specialists to lead student sessions and provide expertise on interpreting the Willow Road material to student groups. The CETLD ICT staff devoted part-time hours to testing software, developing the prototype OLE and providing technical support, in addition to their other duties. This kind of collaboration is very rewarding, but it does create difficulties in scheduling an additional project on top of existing work plans.

b. Collection content, copyright and digitisation

Copyright restrictions determined the potential content of the prototype online exhibition to a large extent. A key issue in developing the OLE was the tension between the archives' desire to protect digital images from unauthorised use, versus our need to use them for teaching and learning purposes. Copyright policies varied across the CETLD partnership and did not always take digital rights into account., particularly rights to disseminate their digital holdings through third-party websites.

c. Metadata

Most partner archives do not have established protocols for exporting images and associated metadata from their online catalogues.

There was a lack of metadata and image exporting protocols across the partnership, because very few of them have disseminated selections from their image collections through third-party websites. Each partner uses different cataloguing software for its collections: RIBA uses iBase, Brighton uses FilemakerPro, while the RCA uses Extensis Portfolio and the V&A has two in-house systems (CIS and a separate archives catalogue). While they share common metadata standards to some extent and the collections databases are managed by highly qualified staff, it has been hard to determine how to get images and their associated data out of each system. Cutting and pasting data from RIBA's and the University of Brighton Design Archives system proved the only practical short-term solution, but this is far from ideal, particularly if the archives wish to produce OLEs with other institutions in the future.

This is an area that will need special attention if the partners wish to collaborate with each other or with other institutions in sharing metadata for online exhibitions and other ventures.

d. Access to students and tutors

Research involving students and tutors where the lead researcher depends on voluntary participation is particularly challenging. It was difficult to find space on the academic calendar to carry out the project and to give students enough time to do their own work while participating in the research.

e. Designing for dyslexia

Given that up to 35% of practice-based students may have some degree of dyslexia, it is very important to consider how this affects the design and structure of OLEs. We had hoped to incorporate audio narration and metadata description into the prototype, but software limitations prevented this enhancement. Likewise, the system of double passwords to prevent unauthorised access to images was a deterrent to some students. In future, there should be a better balance between security needs and accessibility, perhaps through another means of user validation.

Future OLEs need to allow for sound files, variable font sizes, user-defined colours schemes, dividing of text into shorter segments to enhance readability and use of graphic elements and colour to denote types of content. The British Dyslexia Association provides style guides to help Web designers make their sites more accessible to all users

(<http://www.bdadyslexia.org.uk/files/Dyslexia%20Style%20Guide.pdf>).

9. Technology for the OLE: moving forward

At the start of the project, there was no technology budget, on the assumption that the CETLD Elgg Web 2.0 site would host the OLE. Once it was evident that the blog feature could be used, but that the Photo Gallery was inadequate, we had to seek open source solutions. This resulted in the choice of Jalbum Fotoplayer for the prototype exhibition as it met most of our specifications and was fairly easy for the ICT staff to learn.

With the 2009 release of Elgg however, there were significant improvements to the image management and display features. A small test using RIBA images and some student photographs (see figure 5) led to the conclusion that we could again use Elgg to present small-scale OLEs which incorporate the blogging, tagging and commenting tools that users value in other sites like Flickr. As a result, the University of Brighton Design Archives has created an archives group on Elgg's Community@Brighton and will be using it to share archival material for teaching and learning, as well as to present online exhibitions.



Figure 5 Albums of 2 Willow Road archival material and student images on Community@Brighton

10. Conclusion & recommendations

Throughout the project's two-year life, dissemination activities offered a means of presenting work in progress and soliciting advice from others working in related areas. A full list of papers, presentations and publications is provided in Appendix 2. Besides confirming the unique nature of our research, these events provided an opportunity to learn what others were doing. Almost without exception, whether the focus was archives, museums or education, attention focused on how users could engage more fully with collections in an online environment. The 2008 seminar "Widening Access to the V&A+RIBA Architecture Partnership Collections", hosted at the V&A, confirmed that HE users were confused about accessing online archival resources and felt the need for guidance and support. The range of different online catalogues and image databases is not always easy to navigate, even for subject specialists. At the same time, users are eager to do more than passively view collections on display. Initiatives such as the Library of Congress photography collections on Flickr Commons are inviting the public to contribute their memories and knowledge to enhance the understanding of archival objects (Springer 2008).

As our project was evolving towards a participatory model that encourages student involvement with and learning from archives, several larger scale projects went online that validate our focus. These include the National Museums Learning Online Learning Project (NMOLP) Creative Spaces site (<http://iwm.nmolp.org/creativespaces/>) that links nine UK museums in a Flickr-like environment and the Australian Powerhouse Museum's Object of the Week blog (<http://www.powerhousemuseum.com/collection/blog/>). What these models suggest is that user participation is the key to designing successful online exhibitions. In fact, we are in the midst of a profound change as museums, libraries and archives become more than repositories that relate to their audiences hierarchically, but instead evolve into "memory palaces with porous walls" (Schnapp

2008), ready to disseminate artifacts of the past and to invite viewers to join them in virtual collaborations.

At the beginning of the OLE project in 2007, the expectation had been that we would find ideas of best practice and seek to implement them in the creation of the prototype. What in fact happened is that the literature review and survey of best practice led us away from the notion of a complex, professionally designed site like those that had won awards and towards a simpler but more participative concept based on sites like Flickr Commons.

In terms of recommendations to the four CETLD partner archives, the main point that should be made is that conventional image licensing needs to be re-examined. The V&A is already offering users non-commercial image access for personal use and the University of Brighton Design Archives is disseminating its holdings on the Visual Arts Data Service (VADS) and Archives Hub. The assumption that institutions will lose both revenues and curatorial control if they disseminate their collections on sites such as Flickr has proved untrue (Bray 2009, Springer 2008). Instead broader access has benefited both the institutions and the local and global research communities.

This report recommends that the CETLD partner archives take advantage of the array of Web 2.0 channels for raising awareness of their collections and for inviting users to be partners in learning, whether through their internal Web communities (e.g. Community@Brighton) or through public sites such as Creative Spaces. Archives can easily be overshadowed by museum collections and Web 2.0 media offer the opportunity to highlight material previously known only to archivists and skilled researchers.

Online exhibitions no longer need to be about creating a perfectly conceived and curator-controlled product, but instead about offering arrays of archival objects that invite the user into a dialogue around the artefact. There is a place for the virtual equivalent of a physical exhibition, but that is no longer the only model for online exhibitions. Increasingly users want to enter the archive or museum and make their own choices about what to exhibit (Cooper 2006). The design students who participated in the OLE project were eager to learn about archives and to incorporate this learning into their own creative practice. This is the project's most important achievement: to show students that archives do have relevance to contemporary practice and that an online exhibition can be a way into these rich and diverse research collections.

Appendix I: Project participants and people consulted

University of Brighton

Design Archives

Catherine Moriarty

Leslie Whitworth

Sirpa Kutilainen

Barbara Taylor

Screen Archives South East

Frank Gray

3D Design

Patrick Letschka

Jacqui Chanarin

Second-year visual research students

Postgraduate Studies & School of Architecture

Christopher Pierce

Learning Technology

Stan Stanier

Adam Bailey

Royal College of Art

Library & Special Collections

Neil Parkinson

Learning & Teaching

Chris Mitchell

History of Design

Jeremy Aynsley

Harriet McKay

First-year MA students

Royal Institute of British Architects

Library & Archives

Irena Murray

Jane Oldfield

Robert Elwall (RIBApix)

RIBA Archives at V&A

Eleanor Gawne

Susan Pugh

Education

Paul Snell

Catherine Duncumb (joint RIBA/V&A)

V&A Museum

Archives

Christopher Marsden

Design Drawings

Abraham Thomas

Web Team

Mark Hook

Online Exhibition Advisory Group

Catherine Moriarty, *University of Brighton*

Neil Parkinson, *Royal College of Art*

Paul Snell, *Royal Institute of British Architects*

Christopher Marsden, *V&A Museum*

National Trust, 2 Willow Road

Rebecca Milner

Appendix 2: Dissemination activities, papers and presentations

Jane Devine Mejia is the author, unless otherwise noted.

“The DesignCETL Online Exhibition Project.” Design Scholarship Seminar, CETLD, 14 May 2008

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Appendix 4:

Models of best practice: Museums & the Web award winners

Museums and the Web Best Online Exhibition Award Winners 1997-2009

WEBSITE & URL	INSTITUTION	FUNDING SOURCE	DEVELOPER	SOFTWARE	AWARDS
Mongolia, The Legacy of Ghinggis Khan http://www.asianart.com/mongolia/index.html	The Asian Art Museum of San Francisco in association with the Ministry of Culture, National Museums, and National Library of Mongolia	National Endowment for the Humanities and National Endowment for the Arts, USA		HTML	Museums & the Web Best Virtual Exhibit 1997
Virtual Museum of Arts El Pais http://muva.elpais.com.uy/	Diario El Pais [newspaper], Montevideo, Uruguay,		In-house production team (20 people)	Web2mil	M&W 1998
Cyberatlas [no longer on the Web]	Guggenheim Museum		Designer: Laura Trippi		M&W 1999
Virtual Leonardo http://www.museoscienza.org/leonardo/leonardovirtuale/default.asp	Museo della Scienza e della Tecnologia "Leonardo da Vinci" and Politecnico di Milano		Politecnico di Milano, Hypermedia Open Center (HOC) Director: Prof. Paolo Paolini	Webtalk	M&W 2000: Best online exhibition. Honourable mention (no winner chosen)
Tempus Fugit: time flies http://www.nelson-atkins.org/art/PastExhibitions/tempusfugit/ax/common/startup.html	Nelson-Atkins Museum	National Endowment for the Arts and others	Terra Incognita Productions, Austin, Texas	custom	M&W 2001, American Association of Museums, MUSE Award - <i>Silver</i> , 2001

2009 Museums and the Web Criteria for Award Winners

Best Exhibition: These sites excel in presenting and interpreting museum collections and themes, providing a rich and meaningful virtual experience. They may be a section of a larger museum Web or be a collaborative project between institutions and/or individuals and communities associated with museums. Entirely virtual museums are eligible to participate in this category as are exhibitions of Web art and other "born digital" collections. Quality characteristics include:

- Effective use of multiple media formats
- Innovative ways of complementing physical exhibitions or providing surrogates for physical experiences in on-line only exhibitions
- New ways of representing museum processes and structures
- Imaginative audience participation and engagement of different categories of 'visitors'

Museums and the Web Best Online Exhibition Award Winners 1997-2009

WEBSITE & URL	INSTITUTION	FUNDING	DEVELOPER	SOFTWARE	AWARDS
Jasenovac: Holocaust Era in Croatia 1941-1945 http://www.ushmm.org/museum/exhibit/online/jasenovac/	U.S.Holocaust Memorial Museum		Second Story Interactive Studios, Portland, Oregon	custom	M&W 2002
Corridos Sin Fronteras http://www.corridos.org	The Smithsonian Institution Traveling Exhibition Service (SITES), The Chicano Studies Research Center, University of California, Los Angeles (CSRC) , <u>Smithsonian Center for Latino Initiatives (SCLI)</u>	Smithsonian	Interactive Knowledge Inc., Charlotte, North Carolina	custom	M&W 2003
Yin Yu Tang : A Chinese Home http://www.pem.org/yinyutang	Peabody Essex Museum		Second Story Interactive Studios and 40-person team	custom	M&W 2003, American Association of Museums, MUSE Awards, Bronze, History and Culture, 2003 + 6 others
Lewis & Clark: The National Bicentennial Exhibition http://www.lewisandclarkexhibit.org	Missouri Historical Society	Various sources, including the NEH	Terra Incognita Productions	custom	M&W 2004

Museums and the Web Best Online Exhibition Award Winners 1997-2009

WEBSITE & URL	INSTITUTION	FUNDING	DEVELOPER	SOFTWARE	AWARDS
Cycles: African Life Through Art http://www.ima-art.org/cycles/	Indianapolis Museum of Art	SBC Communications	Terra Incognita Productions	custom	M&W 2005
Curating the City - Wilshire Boulevard Los Angeles Conservancy http://www.curatingthecity.org	Los Angeles Conservancy	The Getty Foundation, Ralph M. Parsons Foundation	Hello Design (Los Angeles) and Future Studio with LAC 9-person content team	custom	M&W 2006
Rembrandt-Caravaggio Webspecial Rijksmuseum, The Netherlands http://www.rembrandt-caravaggio.nl?index_en.htm	Rijksmuseum, Amsterdam	Rabobank (sponsor)			M&W 2007
The American Image: the Photographs of John Collier Jr. http://americanimage.unm.edu/	Maxwell Museum of Anthropology, New Mexico	National Endowment for the Humanities	Ideum (Corrales, New Mexico), with the College of Education's Technology & Education Center TEC), University of New Mexico	Flash, Flickr mashups and custom programming	M&W 2008
Click! A Crowd-Curated Exhibition http://www.brooklynmuseum.org/exhibitions/click	Brooklyn Museum		organized by Shelley Bernstein, Manager of Info Systems, Brooklyn Museum	Blog – WordPress;	M&W 2009