

VuuA.Org: The Virtual Upperrhine University of Architecture

Volker Koch and Peter Russell

In 1998, architecture schools in the three nation region of the upper Rhine came together to undertake a joint design studio. With the support of the Center for Entrepreneurship in Colmar, France, the schools worked on the reuse of the Kuenzer Mill situated near Herbolzheim, Germany. The students met jointly three times during the semester and then worked on the project at their home universities using conventional methods. This project was essential to generating closer ties between the participating students, tutors and institutions and as such, the results were quite positive. So much so, that the organisers decided to repeat the exercise one year later. However, it became clear that although the students had met three times in large groups, the real success of a co-operative design studio would require mechanisms which allow far more intimate interaction among the participants, be they students, teachers or outside experts. The experiences from the *Netzentwurf* at the Institut für Industrielle Bauproduktion (ifib) showed the potential in a web based studio and the addition of ifib to the three nation group led to the development of the VuuA platform.

The first project served to illuminate the differences in teaching concepts among the partner institutions and their teaching staff as well as problems related to the integration of students from three countries with two languages and four different faculties: landscape architecture, interior design, architecture and urban planning. The project for the Fall of 1999 was the reuse of Fort Kléber in Wolfisheim by Strasbourg, France. The students again met on site to kick off the Semester but were also instructed to continue their cooperation and criticism using the VuuA platform.

The VuuA Platform

The VuuA students are instructed to place their designs while they work onto the internet using the VuuA web platform as a portal to their design solution presentation. The Platform serves as a front end to a database by using active server pages to dynamically create the HTML code on the fly. This helps to significantly reduce the administrative overhead in running a design studio with over 140 students as well as to implement additional features that are too unwieldy to implement using raw HTML or JavaScript. The Platform serves as a focal point for the project and as a source of information about the project. Primary information about the project is stored on the platform as well as where to find further information. Identification of the project partners is also an integral part of the platform including the classification of their competencies. A calendar of upcoming events is coupled with a diary function which informs the user of recent changes to the platform, either from the tutors of the individual students.

The student's work is, as in the *Netzentwurf* studios undertaken at ifib, based on HTML and left up to the student to decide what to present and how. This has definite advantages and disadvantages. As other work at ifib has shown, [Elger, Russell] the combination of learning a new medium and attempting to solve a difficult design problem is often beyond the organisational, planning or design skills of the students involved. To be sure, the assignments are not insurmountable, but the increase in work load and the steep learning curve [Forgber, Russell] require additional support from the professors and tutors. In spite of the increased work load for both Student and Tutor, the results from an unstructured mandate to present their work as they best see fit has resulted in some stunning, if not innovative architectural graphics and designs [Russell et al].

Work at ifib with variations of the Virtual Design Studio concept was convincing to the members of VuuA in accepting the methodology. However, the outlay on behalf of the schools was not entirely understood by the partners, nor was the concept of continual actualization. To be fair, some of the partner institutions had structural or infrastructural problems which prevented a larger intergration. Nonetheless, the extra work needed to map existing pedagogical methods onto existing educational structures cannot be easily negated. That said, the work performed by the students was on par with other Virtual Design Studio work and exceeded most of the participant's expectations.

The largest hurdle to the co-operative efforts had to do with the semester schedules of each institution and the attendant flexibility allowed to each institution. In combining these schedules together, the VuuA had then a common schedule of overlapping student activity with distinctive knots of potential work together. During the planning phase of the semester, it became clear that schedule conflicts were unavoidable and that the potential

for collaboration that existed should be used to their full extent. To that end, most every partner acted as host to the other participants when the weight of the work carried out during a specific phase shifted to that institution. Indeed, the geographic proximity of the schools allowed informal meetings among the students. The work carried out at that institution then became a focal point for a period of time during the whole project. The type of work varied with the field of study be it architecture, interior design, urban design or landscape architecture. This helped to reinforce the concept of competence pools within the platform.

As was stated earlier, each participant in the VuuA project, be they students, tutors or professors, has the possibility to declare their competencies. These are then catalogued in a database according to preset, but extensible, categories. Students who then encounter difficulties in a certain area, can then consult the competency database to see where they might receive advice, criticism or simply help. Further, the tutors were also able to offer consultation timeslots which the student could then respond to.

As the students' work progressed, the most useful feature of the platform became the noticeboard of diary entries. Using the connected database, visitors to the site, be they participants or spectators, were able to see a generated list of recent changes to the student web sites. Instead of merely reporting the unreflected change in status of the students' work, the list declared only those pages deemed ready by the authors. That is so say, each student had an editorial control about which things were made known and when. There lay the possibility that some students would simply post nothing until the end of the semester and thus, negate the potential of an internet based sketchbook. This problem was mostly averted due to a strict syllabus stating weekly assignments and expectations of the tutors. Further, this allowed the students a modicum of privacy with their presentations, which, owing to the neophyte character of the group, helped to alleviate some of the apprehension in working this way.

Still, the impetus of the students was to work as in the Netzentwurf studios with an eye to putting all their work on the web once the design was finished. This is contrary to the standard studio situation and a concept integral to the virtual design studio. Instead of privately working out design solutions and then making them public, in the Netzentwurf the students essentially design in the open. To a student accustomed to working quietly towards a impressive final presentation, a working environment such as the VuuA platform requires more than a modicum of extroversion on their part. As with many aspects of the virtualization of the design studio, this needed and needs constant tutor support.

The results from the second VuuA project are overwhelmingly positive. A third project is without question and the preparations are underway for a project in Augst, Switzerland. The basic result from the VuuA platform is that it has helped to further bond the project partners. On a more complex level, the VuuA platform has helped to introduce a completely new working method to a heterogeneous mixture of participants. The authors are convinced that collaborative design studios that span countries, fields, languages and cultures reflect the current volatility of the professional world and the experiences gained through projects such as VuuA will, in the long run, benefit the participants in as yet unforeseen ways.

The authors

Volker Koch, Dipl.-Ing. Architekt volker.koch@ifib.uni-karlsruhe.de
Peter Russell, Dipl.-Ing. Architekt peter.russell@ifib.uni-karlsruhe.de

Institut für Industrielle Bauproduktion
Universität Karlsruhe

Links

VuuA: <http://www.vuua.org>

References

Elger D., Russell P. (2000) **Using the World Wide Web as a Communication and Presentation forum for Students of Architecture** In: Proceedings of the 18th Annual eCAADe Conference, Weimar, Germany

Forgber, U., Russell P. (2000) **The E-Talier: Inter-university Networked Design Studios** in: Proceedings of the 18th annual eCAADe Conference, Weimar Germany.

Russell P., Kohler N., Koch V., Forgber U., Rügemer J. (1999) **Interactive Representation of Architectural Design: The Virtual Design Studio as an architectural graphics laboratory** In: Proceedings of the 17th Annual eCAADe Conference, Liverpool UK pp. 459-465