

Presenting an On-Line Future for Tertiary [Design] Education

Om'nium [vds]: virtual design studio '99

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Om'nium [vds]'99 is now established as the world's first fully international, interactive and collaborative on-line global classroom. It is a research project involving 50 students from geographically distanced university design faculties working collaboratively through a 'process' to produce developed, multi-disciplinary design solutions using the internet as their communication tool.

The aim of Om'nium [vds] '99 was to explore future possibilities of 'design studio' education made available by technological advances of internet communication. The project encouraged and emphasised; collaboration, innovation, redefinition, communication and interaction and strove to recognise alternative approaches and mechanisms for the future of teaching and learning [design]. Om'nium [vds] aimed to be radical, alternative and innovative and in turn promote a revised understanding of the 'design studio' as an educational setting.

Om'nium projects have been conceived to offer alternatives to current university [design] education practice: ones which embrace the advancement of digital technology with the individual needs and context of the contemporary student.

The word '*om'nium*' is defined in the Concise Oxford Dictionary as meaning 'all' and goes on to describe 'a strange assemblage of persons or things; a party to which everyone is invited. This seemed highly appropriate as a name at the outset of a project which set out to be collaborative: an entity in which all who worked or visited would become a small part of.

The Om'nium [vds] '99 project can be located at: www.omnium.unsw.edu.au

Om'nium [vds] '99 was basically concerned with two things:

- 'design process and dialogue': an exploration into the generation of ideas and concepts collaboratively and digitally across distance which potentially could also be applied to professional applications.
- the possible future of applying such process within a 'revolutionary educational framework' which uses virtual space for its classrooms or studios, a framework that strives to identify the role design should play in education and how this can be best offered to the contemporary design student.

The Om'nium project adopted the internet as a communication tool to facilitate both these focuses, the qualities which the internet now offer us and which it was felt would enhance the project included the anonymous nature of its use, being progressively faster technically than even one or two years ago and the excitement of being able to explore new media and break down existing boundaries both technically, socially, culturally and physically.

On-Line 'Collaborative' Design Education – a background

I conceived Om'nium [vds] in July 1998 whilst completing an earlier research project in which I investigated institutional and individual problems faced by contemporary students studying design at university level, especially those within first year programs. After initial research, it soon became apparent that today's [design] students are a 'new breed'; a collective in dire need of alternative options away from the traditional setting of the design studio or classroom. The 'new breed' of students are sophisticated, highly creative, technically competent and in most cases well capable of making sensible and astute choices regarding their futures.

A key area I wanted to address with the first Om'nium project was the apparent widening gap between the exciting world of contemporary Australian and international design and the often traditional, economical and lack lustre design programs that students sometimes face. I believe that the two areas of practice and education are becoming 'dislocated' and contemporary students now need an alternative option to traditional university [design] education.

Om'nium [vds] identified a need for collaboration between student, teacher, computer technician, educational institution and most importantly professional design practice. A relationship with 'real world' practice that is not purely concerned with internship programs and work experience placements but with helping students identify and possess a crucial awareness of contemporary design practice both in Australia and overseas.

Design education still constantly submits its students to Bauhaus principles and Bauhaus methodologies yet are we not seventy years on and about to enter the digital age of the new millennium? This comment in no way detracts from the notion of the Bauhaus being the excellent forum for teaching design that it was, but that surely it is time to move on and push the boundaries of design education to meet those established and being challenged in the professional environment. Perhaps the reasons for much of the success of Bauhaus workshops depended upon collaboration between master craftsperson and teacher – has this become overlooked? The Om'nium project has avidly noted this success and adopted similar roles between academic, computer technician/programmer, professional designer and student in which all four become vital players and there exists no hierarchy between them.

Om'nium [vds]'99 therefore tried to identify the kind of learning environment that best suits today's students and at the same time draw together the elements that will best equip a design student for future practice. The project has always considered itself only a first step towards such an initiative within design education. It was only ever envisaged as a 'pilot study' to test the effectiveness of the technology used in creating a virtual classroom environment and to analyse the protocols and methods that groups of students adopted once in such an unusual design space.

There is a tendency within academia to jump on the IT bandwagon and package existing subjects and courses into 'neat internet bundles' which simply become high tech distance learning packages. Om'nium [vds] is adamant that this area of teaching and learning research needs to be properly explored and analysed before such on-line programs can take the place of existing educational methodologies. Before teaching and learning can be facilitated on-line, the whole notion of how students interact within an internet environment needs to be examined and documented. Education should not be seduced by 'in vogue' technology merely as a response to keeping up to date but research the potential of using the internet as an educative tool and provide data from such initiatives which can then be used to guide future on-line curriculum designers.

Om'nium [vds] takes the view that a higher education design course should adopt the role as a

place of research, investigation and experimentation. In the same way that medicine is quite clearly and freely split between research and practice then so should the training and practice of designers

Om'nium [vds]: '99 – The Project Realised

In 1999 the Om'nium team (of two) set about interesting students, designers, their institutions and professional designers in a collaborative project. The project was marketed world wide through a promotional CD-Rom and graphic 'bookmark' and these attracted interest from countries all around the globe. This gave the project a rich cultural variety, which was something that potential participants constantly referred to as a motivation to join together. The marketing stage was difficult in regard to responses from institutions and academics yet easy when the details filtered through to students. The major hindrance for the project was that the time of year that it was set to run conflicted with many term or session dates in the Northern hemisphere.

Om'nium [vds] '99 subsequently linked 50 design students from 11 countries (15 universities), situated across 5 continents by placing them in working groups where each member of a group was geographically distanced. Ten groups challenged the same conceptual brief for a seven week period on-line and in collaboration via a specifically designed and constructed website which included as a unique feature the provision of a virtual classroom/studio environment from where students work.

Om'nium [vds]: the user 'interface'

The concept of a virtual design studio as a learning environment has existed since 1993.

Om'nium [vds] was fortunate to have the opportunity to learn and develop from past examples of virtual design studios by analysing their structures and outcomes and in turn making key philosophical decisions about the nature and structure of a revised example.

The major difference between Om'nium [vds] and its predecessors is the offering to student participants of a virtual environment in which they exist together and work. Om'nium [vds] supplied as its backbone and strength a 'user interface' for its activities to take place. The 'user interface' is the virtual environment which replaces the physical studio/classroom. This provision compliments one of the original and lasting aims of the project: to reduce the focus on technical issues to a minimum, thus allowing students and facilitators to concentrate on the creative potential of designing collaboratively via the internet.

The Om'nium [vds] 'interface' was designed and built specifically to allow students to work and interact within groups. a student could interact and work privately within their own group as well as participate in discussions and critique with students from other groups working within the project. The interface allowed this to occur through a series of:

'easels' – for individually working on concepts and visuals/sound

'walls' – for 'pinning up' work for critique by peers, tutors and public

'chat rooms' – for synchronised conversations with peers and tutors

'message boards' – for asynchronous conversations with peers, tutors and public

'exhibition areas' – for display of final resolved concepts accessible to anyone via the world wide web

Each of the working groups has all these facilities offered to them via a series of virtual studio rooms (vsr's) which ranged from totally private working areas (vsr 1), tutor consultation areas (vsr 2), peer review forums (vsr 3) through to general world wide web access locations (vsr's 4 & 5).

An interesting anecdote to the project was that within the project a 'technical help forum' (thf) was provided which consisted of chat rooms, message boards and faq's (frequently asked questions). the technical structure of the 'thf' area allowed a maximum of 24 questions to be 'posted' each day. For the first two weeks. This allocation was completely utilised but as the project progressed the 'thf' was used less and less. From week three of the project to its conclusion, no technical assistance was required within the 'thf'. The students had initiated an elaborate peer assistance mechanism to solve each others technical problems. It should be noted that this project included some students who had never worked using computers before.

A Virtually Collaborative Design Process

The ability to generate ideas and strong concepts within design work is vitally important. in the same way that a piece of sculpture or an installation are only really able to be truly critiqued when their content is exhibited and allowed to be challenged, likewise design work, no matter which discipline it derives, should also be able to stand inspection and analysis. the skill, talent and passion of the designer are surely apparent within the process and it is the structure and development of a 'design process' which Om'nium [vds] strongly concerned itself with.

The entire Om'nium [vds] project was a process, a dialogue, and as an investigation into developing such design process, some relevant considerations needed to be recognised.

The work within the project:

- was totally un-prescribed and un-predetermined (yet not confusingly ambiguous)
- involved a strong dialogue and interactive component
- contained a cross disciplinary approach to designing
- encouraged collaboration rather than competition
- and was internationally and culturally diverse

A conceptual approach to working was emphasised with less preoccupation at early stages on finished, commercially viable resolutions.

The Project Structure

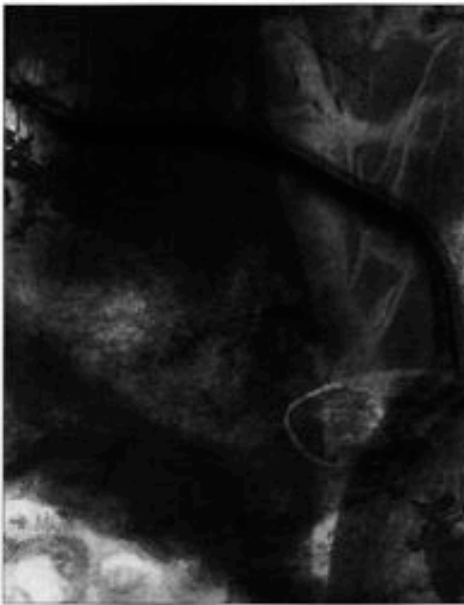
The 50 students selected from the applications were formed into groups of ten, with each groups membership including five students from different settings: country, culture, discipline study area, gender, study year, computer experience, etc.. The groups were purposely named to recognise the fact that these differences were coming together in a new setting which was perhaps not grounded comfortably on this world as we are used to, but instead taking place in another space...cyberspace.

The groups were named: **alya**, **cursa**, **electra**, **jabbah**, **kraz**, **merak**, **naos**, **sadr**, **wezen**, **zaurak** (these are names of star constellations: a number of fixed stars grouped within an imaginary outline)

Project brief – 'the small red car': a process dialogue

Om'nium [vds] developed a brief for its project which would encourage emphasis on 'process'. it designed and constructed an 'unraveling' brief which was the result of many months canvassing and listening to opinions and theories of both designers and student designers regarding the validity and effectiveness of a variety of briefs.

The eventual project brief which 'unraveled' weekly was enhanced and supported by a series of



1) stage 1 'red'

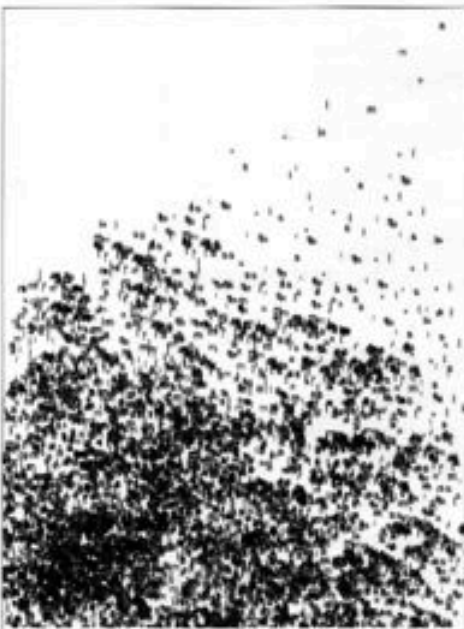
'assisting lectures' written from a variety of locations both in Australia and overseas. The issues within each lecture accompanied the stage at which the brief had reached. The assisting lectures were written by a combination of design practitioners, recent graduates and academics.

The Om'nium [vds]'99 brief asked each group to make proposals for their interpretation for designs of 'the small red car'. This was in essence to be simply a title for their entire working process from day 1 to day 49: a process which was intended to explore each groups dialogue whether verbal, textual, visual or experiential. As is explained below, the project began by exploring conceptually three words: red, small and car. These words were selected as representing three areas of design practice.

red – two and four dimensional graphic/ textual and new media domains of design

small – three dimensional environmental and spatial/architectural areas

car – industrial, object and product design based disciplines



2) stage 2 'small'

Hence the 'small red car' brief was a collaboration and abstraction of ideas and notations from these studies and not the physical representation of any particular object or thing. 'the small red car' was the documented 'process' of taking part in Om'nium [vds] '99.

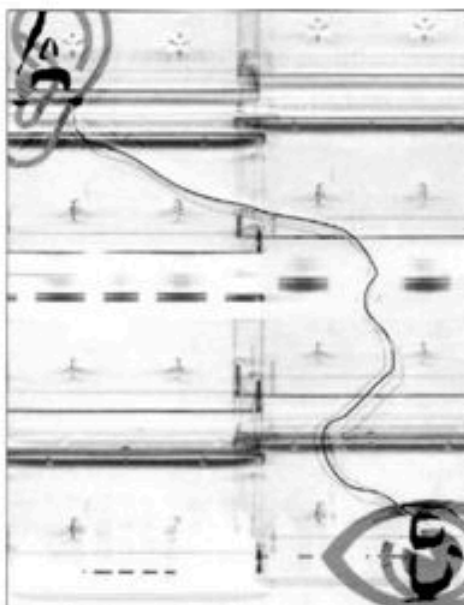
The unraveling nature of the Om'nium [vds] brief encouraged the 'process dialogue' by identifying five stages over a seven week period:

Gathering (two weeks)

Initial conceptual investigations of three words (red, small, a car)

This section of the brief was designed to allow several things to take place simultaneously.

- introduce the members of each group to each other
- allow the students to become familiar with the technical interface and structure of the project
- encourage initial individual involvement from all 50 members of the project and at the same time develop work which would ultimately add a rich mixture of cultural and personal backgrounds to the project. The project would be hindered if group work started immediately as stronger students may intimidate weaker students.
- begin collecting resource material from which the project would later depend



3) stage 3 'car'

At the end of this stage each group would have 15 pieces of work from which to begin the next stage

Identifying (one week)

Deciding as a group a specific interpretation of the main brief

The second stage began the process of unifying the individual members of each group. this stage collected all the 'gathering works' together and rearranged the works from group to group. Students were able to select to retain (5 images) or discard (10 images) work previously submitted in their

own group. This stage was important as it:

- brought individuals into a working unit that allowed social and physical collaboration
- began an initial working process and passing of ideas by asking each group to reinterpret their own understanding of the brief
- broadened the project to become 10 aligned projects held together by the concept of 'the small red car'
- clarified to group members and project facilitators and tutors what each project was aiming to communicate

At the end of this stage each group would still have 15 pieces (although different now) of work from which to begin the next stage



4) stage 4 Identify/proposal

Distilling (one week)

Breaking down ideas from the works produced in the gathering stage

This was a valuable stage as it:

- requested students critically assess their process to date
- asked that they discard some of their own works
- examined the works they now had and break them into physical and conceptual elements
- re-used the elements they identified to progress new works
- began narrowing down their 'palettes' of work whilst still considering their own groups intention regarding the main brief
- was the first time where work was physically required to be passed through all five group members and additions and proposals suggested as a dialogue both within the work and in group chat rooms

At the end of this stage each group would now have 5 pieces of work from which to begin the next stage



5) stage 5 Distill

Abstracting (two weeks)

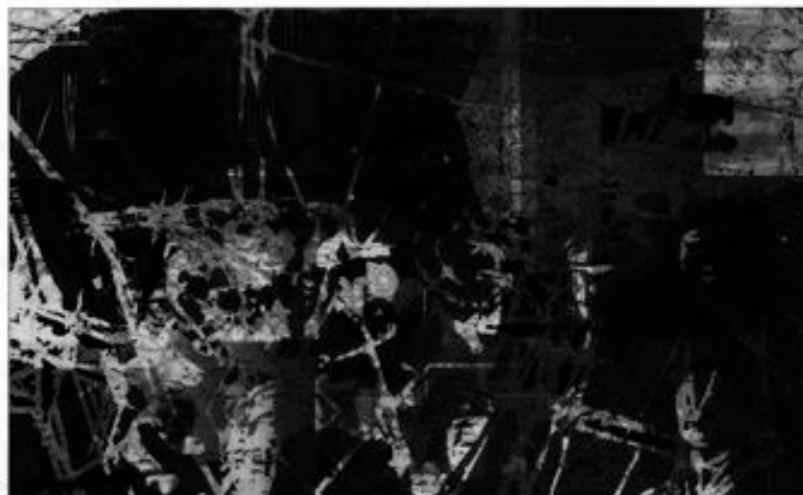
Further selecting and rejecting elements from the distilling stage

This penultimate stage in the process required students/groups to extend the distilling stage to simplify images to attain an essence and a clearer communication of their own brief. Again the students would pass the work through the virtual environment of their new learning space and finally submit work that all members of the group had an opportunity to contribute to.

Considerations at this stage for the collective membership of each group were:

- to begin identifying the likely nature of their resolved process
- engage in further self critique encouraged by the necessity to submit three works by five people
- develop critical time management skills to allow each work to journey through five countries at least once and sometimes twice
- adapt their work according to the critique of both the project facilitator and the guest tutors

At the end of this stage each group would now have 3 pieces of work from which to begin the next stage



6) stage 6 Abstract

Resolving (one week)

Further abstraction and refinement to a point of final presentation.

Beginning with the three works in each group the last stage was to resolve these into one final submission. This final piece would be titled 'the small red car' and be merely the end of the process. By resolving their works into one final piece they would complete a journey which had lasted seven weeks and the work would no doubt contain and communicate much of this experience.

Finally to end the process the students were asked to submit over three weeks an 'exhibition' documentation of their groups process dialogue. This could then appear as an archive on the projects website as well as being able to be shown in a physical exhibition context.



7) stage 7 Resolve: smallredcar

These are all works by Jamie Fox and group ~~sadr~~ in the later stages from stage 4. Jamie is currently just about to enter her the fourth year of her honours degree at The College of Fine Arts. She has worked with Rick Bennett on Om'nium for the last 15 months and become the project's visual art director.

Guest Tutors

Another important feature of the project was the tutoring and feedback within the project. Om'nium [vds] was greatly aided by enthusiastic support from four internationally recognised design practitioners who generously acted as guest tutors for the 50 participating students and gave feedback at weekly intervals throughout the project to the work the students were presenting at each stage. The designers represented a variety of design disciplines and each working student group would receive feedback from all four designers at least once throughout the seven week process. The designers were:

Susan Cohn	Workshop 3000	Australia
Tom Kovac	Kovac Malone Architecture	Australia
Andy Polaine	Antiom	UK
John Warwicker	Tomato	UK

The tutors who joined me in giving regular feedback, also existed within an on-line group from where we could also interact and view works and offer critique. The tutor group (5 members) was also provided with exactly the same 'vsr' facilities as each student group

Conclusion

The project, from my point of view, was something that has now produced significant results and is stirring great interest from those who see it. It is the effect upon the students which has been most rewarding and most gratifying in respect that what we did seems to have been really worthwhile. It seems to have had a lasting effect on the participants and certainly produced long lasting friendships. I have proved to myself that with a lot of effort the most adventurous things are possible and that now we must not waste the hard work but find serious support for extending the project and look to start introducing this as a way of delivering visually based courses.

I am also extremely cautious about what I have produced and am very careful that I do not just accept the first offer of future help. What I have developed is only the first pilot study and more research in this area needs to take place before we can seriously offer courses on-line as a credited part of a degree course.

Most importantly we need to identify how young students use the internet and encourage the internet to be far more content driven rather than image driven. At present I still consider the internet to be our old world crammed into a small screen but slowly the design of both information and navigation is becoming more sophisticated and far more in tune with the contemporary student. This is probably because the designers are recent graduates and it is they that will really develop this medium into the exciting place it should be.

I believe on-line, collaborative education is a definite future and we should take it seriously and embrace it as so many people are starting to do...but we should not take what we currently have and 'paste' it on the web. We should totally revise what we are doing and custom build it for use in this new environment; that is what Om'nium has just set off on the journey of doing.

Check out Om'nium [vds]: the worlds first global interactive classroom
www.omnium.unsw.edu.au

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