

European School for Urbanism and Architecture Curriculum Hypothesis

1. The ESUA project

Introduction - Where do we want to go?

Since WWII the art of town planning and architecture has moved from apprenticeship to the university and has focussed on the object of the building rather than the subject of the street. Since 1950 man has also consumed more natural resources than in all of history prior to that time and the urban population has exploded with an additional 2.8 billion people expected to move into cities by 2050. This phenomenon combined with a need to drastically reduce our carbon emission to reverse global warming has suddenly placed the spotlight firmly on traditional town planning and architecture which is base on more durable, flexible and ultimately sustainable models of practice.

The ESUA project

The ESUA project aims to establish a new European model for European schools of architecture based on networks between existing educational institutions, practitioners and NGOs. The project has received funding from the European Union Leonardo da Vinci programme for a two year project to develop its curriculum and teaching methodology.

Students of future schools based on the resulting curriculum and methods will be able to compose an education in architecture and urbanism including modules taken at different existing institutions in different countries. The current Leonardo funded ESUA project will not establish its own campus or hire faculty. The school will focus on New Urbanist principles and architecture based on tradition and local identity.

The current Leonardo funded ESUA project is limited to development of a first version of the curriculum and structure. To establish educational programs and recruit students will be a separate project hopefully starting in 2008, after the EU-funded project ends. An aim of the project will be the nomination of Centres of Excellence in the five specialties corresponding to deficiencies identified in existing programmes. The Centres of Excellence resulting from this work will have the role of running the curriculum modules and, in due course, training others to run them in universities across Europe.

The main result of the current Leonardo funded ESUA project will be a five year curriculum for architectural education in accordance with European certification requirements. The starting point will be the existing curricula of the educational partner institutions.

The development of the new curriculum will focus around five test modules in key areas:

- 1. The heritage, sustainability and future of design and construction with stone (Italy)
- 2. Building restoration and related craft skills (Romania)
- 3. User participation in the "charrette" design process (UK)
- 4. The heritage, sustainability and future of design and construction in timber (Norway)
- 5. Sustainable urban design (Germany)

The five individual test courses will be used to develop one each of the key modules, and relate it to a specific theme of that year's curriculum. The test modules will be both a laboratory for discussion amongst the parters and a platform for feedback from students on the proposals.

2. Curriculum Hypothesis

As stated in the Declaration of Viseu on Architectural Education un the 21st Century (Viseu, Portugal, 8 May 2004 – http://ceunet.org/viseu.htm):

Preamble

<u>We believe</u> that it is the primary task of architects and urbanists to improve quality of life by creating an enduring legacy of beautiful, functional, equitable and healthy environments. To that end, we must prepare students to engage the complex challenges of the 21st century, and to:

- Consolidate and regenerate existing cultural and natural resources;
- Identify the knowledge and skills that constitute the diverse heritage of humanity;
- Build enduring and sustainable cities, towns, villages and countryside, contributing to continuity and coherence of place;
- Facilitate civic engagement, social diversity and economic vitality while protecting local identity and ecosystems;
- Assess and learn from past successes, failures and unintended consequences.

<u>We reject</u> the fragmentation of specialised education in architecture and urbanism, and we support a more integrated approach that includes:

- The need for leadership by educated generalists as well as trained specialists, in recognition of the inseparable link between architecture and urbanism;
- An ecological understanding of the built and natural environments, with attention to the full range from small- to large-scale patterns;
- An explicit incorporation of processes, including collaborations with other disciplines and with citizens;
- An open discourse between theory and practice;
- The cultivation of practices and habits of life-long learning.

- - - - -

Section I: Goals

We agree that our architectural education will:

- Engage the larger context of human aspirations and needs, and the rich knowledge of other disciplines;
- Teach and learn from history and experience;
- Learn to engage and harness the means of production, from craft to mass production;
- Build and share a body of professional knowledge and data:
- Recognise the unique role of urbanists and architects as form-givers not as individual artists acting in isolation, but as professionals engaged with citizens in creating forms that satisfy human aspirations and needs.

Section II: Methods

We therefore agree that architectural education should:

- Create regular opportunities for engagement with other professions, disciplines, organisations and individuals; and gather knowledge and educational resources through conferences, charrettes, publications, and collaborative research;
- Include case studies, apprenticeship and practical work, and the study of historical precedent;
- Facilitate scholarly exchange, research, demonstration projects and experimental investigations;
- Gather and distribute a coherent body of curricular materials, definitive texts, protocols, model codes and on-line resources:
- Encourage the generation of form in rigorous design processes that include research, analysis, drawing, modelling and computer simulations.

Section III: Curriculum

We agree to develop architectural education in a supportive environment with a rich studio culture, and grounded in these subject areas:

- Arts and Sciences: humanities, natural and social sciences;
- *History and Theory*: world architectural and urban history, precedents, principles, processes, travel and field studies:
- *Technology*: engineering, construction, materials and building crafts;
- *Skills*: analysis, research, feasibility, construction management, drawing and sketching, writing and rhetoric, collaboration, digital and physical modelling;
- *Design*: composition, proportion, scale, buildings, interiors, details, urban form.

Section IV: Implementation

We will establish a global network to implement these educational objectives by:

- Gathering existing curricular models, practices and materials;
- Identifying new models, practices and materials;
- Developing means of distribution, through journals, the Internet and conferences, both within architecture and with other disciplines;
- Fostering collaboration within architecture and with other disciplines, through joint research, student and faculty exchange, lectures and symposia, and travel programmes;
- Promoting interdisciplinary understanding, conviviality and international goodwill.

Possible further development of the ESUA project

The network of assembled institutions during the current Leonardo project has an extremely useful knowledge base in this area and there is an urgent need to disseminate applied theory to a broad network of practitioners operating in the field. The luxury of universities today is that they have resource in the form of people and time. This resource can be used to germinate, collate, refine and ultimately teach, but this resource is only really useful to the larger agenda if it is packaged in a form where it can be directly disseminated and applied to practice to effect an immediate change of culture in planning and building.

The proposal is therefore to further develop the initial curriculum and expanding the series of 'applied theory' modules based on specific areas of expertise and with defined target audiences and methods of funding. New modules can be germinated and underpinned by a Centre of Excellence with associated networks in a particular field. The modules from different Centres of Excellence should aim to cover the broad spectrum of subject areas pertinent to sustainable building practice and be targeted to fill gaps in existing knowledge, rather than replicating that which is already well understood and practiced in a particular field. This might therefore be described as 'cutting edge'. The result of this continued development will be the issue of regularly improved and updated versions of the ESUA Curriculum.

Future development will establish a collaborative network amongst partner organisations that will act as a core networking and information exchange organisation responsible for actively marketing and creating opportunities for dissemination of the training modules in practice. In the first instance a pyramid structure for dissemination should be developed for teacher training so that the modules can be more widely distributed by other partners. It will run workshop-based educational programmes for practitioners and students alike at the Centres of Excellence, to fill in the gaps in today's training and education within the field of urbanism, crafts and architecture. It will also be responsible for monitoring quality control amongst the Centres of Excellence and attracting new partners to the network. The partnership created by the current leonardo project could also help to advise and tailor modules to suit a student's desired career path whilst they are in practice.

The curriculum resulting from the ESUA project will include the five key applied theory modules developed by the Centres of Excellence. They will be further developed for validation both as Continuing Professional Development (CPD) by the country's professional institution and also as part of the practical component for a student's professional practice.¹ At present the professional practice year in architecture (for example) is poorly structured and there is not much tailored material to boost the competitive edge for students during these years. The key modules will enable students to experience specialisations in their practical years and to gain a competitive edge in a field which is growing rapidly.

It is the case that architectural education in Europe is likely to become more modular and that more time will be spent in practice working towards a professional degree. The dilemma facing practice is that it is not geared up to educate students in a structured way, and so modules that can be taken or assembled to tailor learning towards a student's skills may well fill this gap. For this reason this proposal will be developed alongside professional institutions and a strong overlap with continued professional development, lifelong and adult learning will be sought.

The resulting curriculum will therefore be virtual (not related to one spesific physical school) and constantly evolved to keep ahead of the market, and developing skills that are needed at a particular time. The attraction of keeping a network of Centres of Excellence collaborating with each other, is that the curriculum can be evolved relatively quickly to be responsive to a changing market. The modules will essentially

¹ Note: not all countries require professional practice. Norway for instance requires only 12 weeks which have to be either at an architect's office or on a construction site.

become a means of outreach for the Centres of Excellence, focussing on applied theory, and responsible for meeting a demand in the market of the particular specialism.

In practice (and beyond the scope of this project) the modules will constantly be monitored and tested by the Centre of Excellence, in collaboration with the other partner institutions of the Leonardo project. The Centres of Excellence will become key components in a feedback process which informs and if necessary retrains other networked institutions teaching their particular module.