

Some Thoughts on the Education and Training of Landscape Architects

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Abstract: As the education/training of landscape architects consists of both academic learning and professional practice, this paper focuses on the overall education and professional development of landscape architects. The paper focuses on the history and on-going development of landscape architecture education and training in Europe and internationally, and explores the diversity of curricula and the varied delivery of courses. An exploration of the various academic routes and professional development forms an important aspect of this paper. This paper also outlines the author's views on the design process and the fostering of creativity and imagination as part of the education of landscape architects. Such 'soft' skills are considered key aspects of the skills required of landscape architects. The use of creativity and imagination are skills which must be used in tandem with the more tangible skills of science, engineering and the arts, as a discipline, may ensure an aesthetic focus in the design and construction of public and private spaces. Transferring the ideas on paper into drawings and plans to allow the construction of our projects is a key aspect of our work.

Keywords: IFLA, EFLA, Education, Accreditation.

1. Introduction

1.1 History of IFLA and IFLA Europe

The International Federation of Landscape Architects was formed in 1948. Our sister organisation, the International Union of Architects (UIA), was formed in the same year. Prior to that there had been much discussion among professionals for the formation of an association at international level. In fact, this period immediately after World War II saw the formation of many international institutions such as UNESCO no doubt in response to a need to ensure co-operation of nations and their institutions at an international level.. It is not intended to present a full history of IFLA but merely to highlight the important events which led to the current organisation as it relates to education and training of landscape architects. The European Foundation for Landscape Architecture (EFLA) was formed on the 1st of April 1989 in response to a perceived need to provide an umbrella group specific to the European context and may of course have also been stimulated by the development of the common market' within some countries of Europe. The original formation of EFLA involved 12 member states of the European Economic Community.

However, the existence of IFLA Central meant that some organisations had membership of both and thus the representation of the profession may have appeared somewhat fractured. IFLA and EFLA negotiated a merger of IFLA Central and EFLA, which continued to use its title EFLA. The acronym was maintained until 2012 and was changed to IFLA Europe at the general assembly in St. Petersburg in June 2012.

The work of IFLA is carried out for the most part by the voluntary efforts of its member organisations and individual national delegates and ordinary members. The executive roles, which include education, are also carried out on a voluntary basis. This paper thus relies on the results and the combined efforts of many past members of the executive of IFLA and of its countless volunteers who gave their time in order to develop the structures and projects of IFLA.

As the current incumbent Vice President of Education, I am thus carrying on the work of my predecessors and hopefully preparing the way for my successors. Indeed much of the current work (and that of the past and I expect in the future) is done by the members

of the Education Committee and by the IFLA delegates and members of the national associations. This work is done in tandem with our colleagues in the academic world.

To use the old adage, I only see so far as I 'stand on the shoulders of giants'.¹

2. IFLA, IFLA Europe and Education and Training of Landscape Architects.

2.1 History of Education in IFLA / EFLA (IFLA Europe)

IFLA:

In 1959 a contemporary report commented on the intense attention given by the council to promoting better education in landscape architecture. The education committee was set up in the following year under the Chairmanship of Prof. Hubert Owens. In 1960, the committee recommended the adoption by IFLA of the educational standards applied by the American Society of Landscape Architects, and that data concerning all schools should be collected.

In 1962 it was reported that the Education committee had received inadequate information concerning schools. By 1966, however, it was possible to submit a draft report to the Stuttgart Congress. This listed the establishments teaching landscape architecture to a professional level throughout the world. The final version of the document was published by IFLA in Portugal in 1968.

The 1970s was a period of rapid change in the status and development of landscape architecture education everywhere. In the UK, almost all of the programmes now available developed at that time. Reports on the status of education were published by the education committee during this time.

The support of education in landscape architecture in places where it had not previously existed formed a focus in the 1980's. For instance, a graduate masters programme was set up in 1984 at King Faisal University in Saudi Arabia including the development of the syllabus. In 1986 a conference of the Western region in Jamaica had been devoted to landscape architecture education in Latin America,

while the Central region held a symposium in Malawi on 'Landscape Architecture Education and Training in Africa' in 1991. A further meeting was held in 1994 in Nairobi and in both cases careful recommendations for a two year graduate programme in landscape architecture were formulated and proposed.

IFLA Europe / EFLA:

In the original EFLA draft agreement of 1989 between the members, the role of landscape architects was defined along with the 'basic teaching subjects' and the qualifications necessary to work as a professional landscape architect within the common market. In the original formation of EFLA, the foundation was organised into two committees; 'the education committee and the practice committee. The objectives of the former are the collection of information on University structures and academic curricula for the training of landscape architects (with a view to recognition of their professional training), while the latter is primarily concerned with the rules and methods regulating professional practice within the EC countries'.

IFLA Europe (EFLA) has expanded to include members from the wider Council of Europe states and its work now requires an additional communications committee.

The archives of IFLA are currently being digitised so it is not possible to present a detailed account of the history of the Education Committee and its work. However, the following brief history is extracted from both IFLA and ECLAS publications:

1. 1919–1948: This period saw the development of courses in landscape architecture in a small number of countries, with one university in the country beginning to offer landscape architecture education. The pioneering phase ended in about 1948/9. In this period the first university courses were set up in a number of European countries.

2. 1949–1973: This period produced several new landscape architecture programmes in many countries in Europe. A period of significant growth in new degree programmes took place from 1949/50 until the early 1970s. This growth period was driven by the social needs of post-war reconstruction, together with a growing environmental concern. Again, a gradient is visible in the establishment of landscape architecture programmes between North-West Europe, where the discipline developed strongly, and the east and south of Europe, where fewer landscape architecture programmes were established.

3. 1974–1991: During this period, few new programmes were established, but existing programmes increased their numbers of staff members and students. During this time the interest of young people in choosing landscape architecture as their field increased significantly, and numbers of enrolled students increased, as did the scope and scale of landscape issues.

4. 1991–2003: During this time, new landscape architecture programmes were established, after the fall of the Iron Curtain. The fall of the Iron Curtain, in 1989, resulted in the (re)establishment of several new countries and beginning in 1991, several new university degree programmes were established. While most of these are

located in East and South-East Europe, including the Baltic, former Yugoslavia, and Poland, some new programmes were also set up, for the first time, in former Western European countries, including in the Republic of Ireland, Austria, Italy, Spain and Iceland.

5. Current period, 2008 to 2012: The Bologna Process is taking effect. Currently, a second phase of consolidation may be observed, as schools are implementing policies of the Bologna Agreement and, since 2008, of the European Qualification Framework (EQF), of the Council of Europe and the European Union. Adding further momentum, and a special social quality, schools and departments of landscape architecture are encouraged to also implement policies of the European Landscape Convention.

For more detail of the history of landscape architecture education, please refer to "Rare Knowledge" report² and IFLA publications listed in the references.

2.2. The Role of IFLA

On the fortieth anniversary of IFLA's foundation in 1987, Sir Geoffrey Jellicoe asked 'What has IFLA done for me?' and answered his own question with a robust 'A good deal more than you realise, my friend'. Elaborating on this he said that 'above all IFLA has a vital part to play in the world wide, science-dominated civilisation that has come upon us so suddenly'.

2.4. The Role of Landscape Architects

The role of Landscape Architects in this 'science-dominated civilisation' is key to the development of solutions to the challenges facing our planet and our civilisation. Our role requires that we are 'well rounded' in our education and that we are both generalists and specialists. The role of a landscape architect requires many skills in the Sciences, Engineering, Architecture, Sociology and the humanities. We must be aware of the physical solutions to the problems of our landscape, our planet and must be able to find creative and imaginative ways to achieve a positive outcome. This requires us to be aware of the scientific facts, the engineering possibilities and to be able to creatively and imaginatively combine them. It requires us to have the social skills to discuss and convince both our clients and society to accept our solutions and to have the management skills to physically manifest our projects.

2.5. Definition of Landscape Architect.

There are currently a number of definitions of 'landscape architect' and the role we serve.

The original definition of EFLA was updated in 1992. It reads as follows:

"The Landscape Architect plans and designs urban and rural landscapes in space and time, based on natural features and historic and cultural values. This employs aesthetic and functional management and scientific principles with appropriate use of techniques and natural and man made materials".

This definition has been developed in recent years and the following definition of the role of landscape architects is being developed as part of the joint IFLA Europe / ECLAS working group.

Landscape architects research, analyse and realise the potential of the landscape at all stages, scales and contexts of the development process including:

- landscape planning and policy development;
- feasibility studies;
- strategic vision, planning and review;
- master-planning and spatial design;
- detailed design;
- implementation;
- long-term maintenance and management.

The role of landscape architects is also referred to in the LE NOTRE Tuning Document as follows.

“Landscape architecture as a field of professional activity, and an academic discipline, is concerned with the shaping of landscapes at various scales. Core competences of landscape architecture centre on the process of intervention in landscapes to create new or revitalised places, by means of landscape planning, design and management, as well as by project implementation. Aims are to create, enhance, maintain and protect places so as to be functional, aesthetically pleasing, meaningful and sustainable and appropriate to diverse human needs and goals. Landscape architects must have a holistic knowledge and understanding of landscape in time and space, and the pressures and driving forces to which landscapes are subjected; they involve not only specialist knowledge from a wide range of disciplines, but also the interests of the public.” (ECLAS - LE: NOTRE: Tuning Landscape Architecture Education in Europe, draft 27, 2010:7).

The International Labour Organisation (ILO) also has a definition of and explanation of the role of landscape architects. This was developed with input from IFLA.

‘Landscape architects plan and design landscapes and open spaces for projects such as parks, schools, institutions, roads and external areas for commercial, industrial and residential sites, and plan and monitor their construction, maintenance and rehabilitation’³

The ILO lists the tasks required of landscape architects as follows. Tasks include:

- developing new or improved theories and methods and providing advice on policy related to landscape architecture;
- inspecting sites and consulting clients, management and other stakeholders to determine type, style and size of proposed buildings, parks, roads and other open spaces;
- compiling and analysing site and community data about geographical and ecological features, landforms, soils, vegetation, site hydrology, visual characteristics and human-made structures, to formulate land use and development recommendations, feasibility studies and environmental impact statements;
- preparing reports, strategic plans, site plans, working drawings, specifications and cost estimates for land development, showing location and details of proposals, including ground modelling, structures, vegetation and access;
- writing specifications and contract documents for use by builders and civil engineering contractors and calling tenders on behalf of clients;
- making necessary contacts to ensure feasibility of projects regarding style, cost, timing, and compliance with regulations;
- identifying and finding best solutions for problems regarding function and quality of exterior environments and making necessary designs, drawings and plans;

- monitoring construction or rehabilitation work to ensure compliance with specifications and quality standards;
- maintaining technical liaison and consultancy with other relevant specialists.

It is currently a key task of IFLA Europe to continue to develop these definitions and to combine them into one clear set of definitions and guidelines of the function and role of landscape architects. The ILO definition has been redrafted but requires to be formally adopted by the ILO.

There have been a number of different but related projects which have both defined the role (or roles) of landscape architects and the education and training required to fulfil these roles.

2.5. Education and Training

In discussing the education and training of landscape architects, we look at the overall education which includes both

- academic learning
- period of training and professional practice.

A distinction must be made between the academic learning at university or institute of higher education and the training leading to professional practice.

In ensuring that we fulfil our professional role, we require a wide ranging skill set. As with many professions, we achieve these skills by a combination of academic study and by learning through our actions and by working with our colleagues.

In recent years we have been compiling a comprehensive list of the range of courses of study leading to a professional degree in landscape architecture and an analysis of the current research shows both the diversity and the similarities in the curriculum and the delivery of courses.

2.5.1. The development of education guidelines

In the EFLA Declaration of 1989, Appendix B outlines the landscape architectural education required to prepare professionals for their role in society.

“The objective of landscape architecture education is to prepare professionals for this role in society.

Landscape architects must have the ability to:

1. create and sustain landscapes that satisfy human and natural requirements;
2. identify and meet the needs of society in general and individual clients within the constraints imposed by economic, ecological and cultural factors, and technical feasibility.

Their work is the synthesis of their knowledge of:

1. the history and theories of landscapes and the related arts technologies and human and natural sciences, with their interrelationships;
2. the fine arts as an influence of the quality and aesthetics of landscape design;
3. ecology and the use of natural elements as a basis for landscape conservation, planning, design and management;
4. the architectural and engineering needs associated with landscapes;
5. the physical problems and technologies affecting the external environment;
6. the relationships between man and environment;

- 7. the preservation, conservation and restoration of historic landscapes;
- 8. the role of landscape architecture as part of the international, national, regional, local design and planning processes;
- 9. the methods of investigation, preparation of a brief for a landscape project and environmental assessments;
- 10. the communication skills and presentation techniques;

- 11. the industries, organisations, regulations and procedures involved in translating planning, design and management into landscape;
- 12. legislation relating to the environment and the practice of landscape architecture. 'The list of 12 points is still valid and the basis for the further development of the education guidelines by IFLA Europe / EFLA.'

First Cycle		conversion course for different disciplines ????			
	Core Competencies of the courses	Landscape studies oriented on landscape theory	Landscape planning	Landscape Design	Landscape management
		1st Cycle			
A	Analysis of people and space in the landscape				
B	Analysis of ecology of landscape (soil science, hydrology, Ecology)				
C	Land Use Planning (landscape policies) and Env. Ass.				
D	Landscape Planning (regional scale design)				
E	Site Planning and Design				
F	Making Landscape Construction Plans and Realisation				
G	Landscape management				
H	Planting Design, Vegetation Establishment				

50% design and planning activities - projects etc
studio work as optimal mode of learning
interdisciplinary by nature
6 month placement

Key for the above table

	Advanced Level: Innovation and reflection of methods, with research components. Graduate can choose between different methods, make a selection of optimal tools.
	Basic level ; acquiring skills and knowledge essential to make a site plan, a ls policy. Graduate can apply a method, work with essential tools (computer skills, sketching)

Table 1. First Cycle.

second cycle		conversion course for different disciplines ????			
	Core Competencies of the courses	Landscape studies oriented on landscape theory	Landscape planning	Landscape Design	Landscape management
		1st Cycle			
A	Analysis of people and space in the landscape				
B	Analysis of ecology of landscape (soil science, hydrology, Ecology)				
C	Land Use Planning (landscape policies) and Env. Ass.				
D	Landscape Planning (regional scale design)				
E	Site Planning and Design				
F	Making Landscape Construction Plans and Realisation				
G	Landscape management				
H	Planting Design, Vegetation Establishment				

50% design and planning activities - projects etc
studio work as optimal mode of learning
more specialised than first cycle
focus on research skills and professional dev
interdisciplinary by nature
6 month placement

Key for the above table

	Advanced Level: Innovation and reflection of methods, with research components. Graduate can choose between different methods, make a selection of optimal tools.
	Basic level ; acquiring skills and knowledge essential to make a site plan, a ls policy. Graduate can apply a method, work with essential tools (computer skills, sketching)

Table 2. Second Cycle.

2.5.2. *The further development of Education Guidelines*

We have also worked closely with our colleagues in ECLAS and both jointly and separately produced guidance on the course content and delivery. We continue to work with our colleagues in ECLAS to ensure the professional associations and the academic institutions work closely together to ensure that the quality of the academic courses in tandem with the further development of graduates leads to landscape architects who are both highly and appropriately qualified but also capable of developing and managing projects at all scales.

A central theme of research into landscape architectural education has been on the definition of core disciplines and advanced disciplines. The research undertaken by and publications of the 'Le NOTRE' project and other ECLAS publications have been a key component of this

The following tables are developed from the Le Notre I. Advice note on Bachelors and Masters in Europe. Basic level shown in green is the acquiring of knowledge and skills to make plans. This basic level may be termed 'Technician level'.

Advanced level is shown in red. The advanced level requires the ability of innovation and reflection. The graduate should be able to differentiate between different methods and make selections of the optimal 'tools' based on the body of knowledge. The advanced level is that required of the full professional. Table 1 and 2 are currently being updated with latest Le Notre and EFLA research and publications and will be published later in 2013.

2.6. *EFLA/ECLAS Working Group*

At a meeting in Birmingham, England in February 2011, The EFLA/ECLAS working group discussed and drafted an outline of the contents of curricula which should be provided as part of landscape architectural courses. This is termed the Birmingham document.

2.6.1. *Requirements for Landscape Architecture as discussed by the EFLA/ECLAS working group.*

The activities of a landscape architect require that students have knowledge, understanding and abilities in:

1. Landscape Architectural Practice

- Considering the landscape as a cultural and natural concept, a physical and abstract entity, with economic and social value;
- Creating designs that satisfy aesthetic, policy and technical requirements in landscape architecture;
- Understanding of the relationships between people and their landscapes, and of the relationships between natural and cultural environments;
- Knowledge of urban and rural design, and the protection, planning and management of the landscape.

2. Theory and precedent:

- Generating and applying landscape architecture concepts, ideas and theory;
- Understanding history related to landscape and landscape architecture;
- Relation with/to the arts, humanities, technologies, sciences, others;

3. Technology:

- Knowledge of materials, physical properties and technologies;
- Knowledge of standards and legal procedures necessary to realise proposals.

4. Physical, ecological social, and cultural processes:

- An ability to engage with society and enhance perception of, awareness of and identification with landscape;
- Knowledge and understanding of the structure and development of spatial design and of abiotic, biotic and anthropogenic processes.

5. Sustainability:

- The necessary design skills to meet society's response to environmental change and the need for sustainable development.

6. Professional values and ethics:

- Understanding, developing and communicating the methods of research, investigation in the preparation of a brief for a landscape proposal;
- An understanding of the profession of landscape architecture and the role of the landscape architect in society;
- Ability to lead, coordinate and work in a multidisciplinary environment with related professions while respecting professional distinctions;
- Knowledge and understanding of the process of planning and design and its main phases of research and analysis, defining goals and programmes, project management;
- Ability to engage and lead processes of participation.

2.6.2. *ECLAS Tuning Document*

The 'Tuning Document' published by ECLAS/LE NOTRE is now being analysed by IFLA Europe in order to incorporate and assist the curriculum design of courses. This document is a key component of the further development of coherent guidance for the development of course curricula.

2.6.3. *EU-Teach-I*

We have also worked with colleagues in the EU-Teach I project which analysed the curriculum and delivery of courses and suggested ways of further developing the range and diversity of courses.

The EU Teach project was invaluable as it allowed a full and comprehensive review of the education requirements and a focused review of the curriculum required.

This document therefore updates the EFLA/ECLAS requirements.

The following *List of Relevant European Teaching Contents in the Studies of Landscape Architecture* has been worked out in the research project "Implementation of Relevant European Teaching Contents in the Studies of Landscape Architecture (EU-teach)", funded with the ERASMUS-Life Long Learning programme of the European Union and supervised by the Education, Audiovisual and Culture Executive Agency.

The partners of the consortium were the Corvinus University of Budapest (Budapesti Corvinus Egyetem), the University of Kassel, the University of Sheffield, the University of Applied Sciences Weihenstephan-Triesdorf, the European Council of Landscape Architecture Schools (ECLAS) and the European Federation of Landscape Architecture (EFLA).

Each of the partners has contributed special expertise to develop the list. EFLA and ECLAS have consulted their members. The "List of Relevant European Teaching Contents" has been agreed with the relevant partners but must be incorporated into the overall education guidance.

- 1 European basics (the legislative framework)
- 2 Theory and methodology in landscape architecture
- 3 Different fields of landscape architecture
 - 3.1 Strategic landscape planning, design and management (including landscape impacts of infrastructural projects, management of cultural landscapes, protection and development of nature, species and visual landscape quality)
 - 3.2 Open space planning and design
 - 3.3 Conservation, development and management of historical parks and gardens
 - 3.4 Landscape construction and materials
- 4 Participatory planning
- 5 Information technologies in landscape architecture
- 6 Professional practice of landscape architecture in Europe

A further analysis of the course content requires that the level of teaching for the bachelor and masters is refined to ensure core and advanced competencies are ensured. Core competencies are learned during the bachelor phase with advanced competencies being learned during the masters stage and/or during the professional practice period.

The concept of core and advanced competencies was introduced by the first LE NOTRE publications. The advisory note on bachelors and masters still remains a key document with the principles being robust.

The EU Teach developed lists designed to inform course curricula. The lists are not meant to be binding but to be used as a practical framework and a recommendation for teachers and students of landscape architecture. Its aim is to improve the dissemination of knowledge about landscape architecture in and for Europe. However, the project also lauded the diversity of course curricula.

The "List of Relevant European Teaching Contents" considers the work of landscape architects in individual fields. Concerning the individual fields and their definitions, "EU-teach" has oriented towards "The Tuning Project ECLAS - LE: NOTRE" (see "Tuning Landscape Architecture Education in Europe", draft document, 27 December 2010). The Tuning document has been an excellent basis, has been discussed in detail and is - concerning its contents - accepted by a large number of experts. Due to the focus on "relevant European", the Tuning Document has been further developed and specified in the project "EU-teach".

Therefore the fields of work should not be considered as specific "subjects" within a curriculum. The contents of each field could be taught in other connections or combined, e.g. in project studies. Also the sequence of the fields of work is subordinated.

According to the project's orientation, only subject-specific, not generic competences are listed.

The list is extendible and can be enriched by further contents or can be used in excerpts.

The names of the fields of work and the allocation of contents to the fields differ between the universities within Europe, e.g. some contents of "landscape construction" (preparation and implementation of technical planning documents, see point 3.4) are included in "landscape contracts within professional practice" as the University of Sheffield pointed out. The question of the allocation of contents will also affect other European universities and should be specified subsequently, perhaps in a following project involving more European universities.

Landscapes are the result of natural and/or human factors. Land-

scape architecture is concerned with all types of landscapes: rural, peri-urban and urban as well as cultural landscapes and their aesthetic, environmental, social, functional and economical aspects. Landscape architects develop solutions for all scales: national, regional, local and site scales.

The EU Teach project provided some guidance on the core competencies and thus further developed the concepts of the Le Notre project.

Planning, design and management of landscapes are the core competences of landscape architects. They can be further differentiated into the following working fields:

- Strategic landscape planning, design and management are processes to find solutions for the conservation, development and management of landscapes, e.g. concepts/alternatives for landscapes, contributions for local and regional plans. Impacts of infrastructural projects and the management of cultural landscapes are also included (see point 3.1).

- Open space planning and design deal, for instance, with the planning and design of open space systems and nature development of parks, public areas and gardens. Close relations exist with town and spatial planning (see point 3.2).

- Conservation, development and management of historical parks and gardens includes the treatment of gardens and parks in the context of the historical and cultural circumstances that shaped them (see point 3.3)

- Landscape construction prepares and implements technical planning documents that are needed in order to realize designed projects (see point 3.4). Materials and construction techniques are included.

Competences in information technologies and participatory planning support the work in planning, design and management of landscapes.

2.7. Duration of studies:

There is much discussion among the IFLA members both globally and within Europe regarding the duration of studies. Rather than a time period, the concept of the European Credit Transfer System (ECTS) is used within the EU. This framework would be useful if adopted by the wider IFLA members but would require much discussion to ensure its adoption in a coherent manner.

The student workload for one ECTS (European Credit Transfer System) is equivalent to 30 contact hours and independent studies. In general it is considered that 60 ECTS is equivalent to a study period of one year or two semesters.

The first cycle programmes must be a minimum of 180 ECTS and up to 240 ECTS. Masters and postgraduate degrees must be 120 ECTS or in some cases 60 ECTS.

Conversion masters must be tailored to suit the particular competencies of the students being enrolled and this topic is one which requires further consideration and guidance both within Europe and within the IFLA membership internationally

In the discussions between IFLA Europe (EFLA) and ECLAS, the minimum duration of studies taking in the above areas in landscape architecture needs to be a sum of 240 credits given or a recognized equivalent by an academic university program in landscape architecture in order for the academic requirement for a later National or State Professional Recognition.

However, the situation in other jurisdictions must be dealt with by IFLA (international) and much discussion has taken place.

In the recent World Council of IFLA at Cape Town the following was passed as part of the IFLA/UNESCO Education Guidance. "The balanced acquisition of knowledge and skills outlined above requires a long period of maturation. First professional degrees in landscape architecture may be offered at the undergraduate or the graduate levels. An undergraduate degree should not be less than four years of full-time studies in a university or an equivalent institution unless otherwise specified by accreditation organizations recognized by the profession. A graduate degree will normally require a minimum of two years of full time study or the equivalent on a part time basis. Entrance into graduate programmes will require an undergraduate university degree in landscape architecture, or other fields accepted by the institution. This diversity serves to accommodate local practice needs, research and/or specialization. Research degrees may also be offered at the PhD level"

3. IFLA and Education

IFLA and IFLA Europe are primarily concerned with ensuring the organisation of national professional associations of landscape architects and the role of the Education Committees is to ensure that the education of landscape architects provides the graduate with the necessary skills to fulfil their role.

For that reason, the accreditation of courses is primarily focused on the course content and delivery.

Our accreditation procedure is based on the assessment of the course content and delivery by both

- the National Association of the jurisdiction in which the institution exists;
- the assessment by the Schools Recognition Panel (SRP) of IFLA Europe.

The SRP is composed of professional landscape architects. It includes those practising and those tutoring/teaching at universities and of course those doing both. We have been increasing the number of members of the SRP and endeavour to reflect the variety of members within the IFLA Europe region. We have been adding to the number of members of the SRP, ensuring they are representative of the regional variations and are thus able to have a varied cohort from which to ensure a coherent and fair assessment.

We have been further developing our accreditation procedures and are affiliate members of ENQA. We hope through this continued analysis and revision of our accreditation procedures to ensure that we ensure the curriculum and delivery of a course that is suitable for the development of skilled graduates who can fulfil challenging professional roles.

3.1. Analysis of the Curriculum

We are currently reviewing the results of EU Teach I along with the discussions of EFLA/ECLAS and the Tuning Document as published in October 2012. The EFLA/ECLAS working group must now ensure that all relevant documents are analysed and further developed to provide a coherent document outlining the course curriculum (core and advanced competencies), the learning environment and the delivery of the curriculum.

3.1.2. Delivery of the Curriculum

Along with the teaching and tutoring in the core disciplines, there

is a need to provide students with the tools to advance their studies and to equip them with the means to investigate and develop projects at all scales and in various situations.

The setting or learning environment, both physical and academic, of the landscape architecture school is a key element in the overall delivery of the curriculum.

For this reason, there is an emphasis on ensuring that the delivery of the curriculum is not solely based on learning by lectures but by participation in studio work, projects and field work. There is an expectation that design and planning must be learned through an active learning environment and a 'hands on' approach.

3.1.3. The Body of Knowledge

Our role as designers requires us to use this learned knowledge and skills to provide the means to develop, construct and maintain such landscapes. This requires that we are proficient in both verbal and non verbal communication. I would suggest the most valuable non verbal communication is provided by the ability to sketch and draw our concepts and further develop such concept sketches into the means by which they are constructed.

Our sketches may be used as part of our dialogue with clients and/or with those we need to convince (including ourselves). Translating our sketches into construction stage drawings, specifications and managing contracts is a necessary element of our required skill set.

To draw a line on paper and be able to transfer this to a landscape, to build that which we can imagine, to describe and draw that which we design and to organise works to ensure a coherent project is delivered. In short the skills to design and build environments for humans at a human scale.

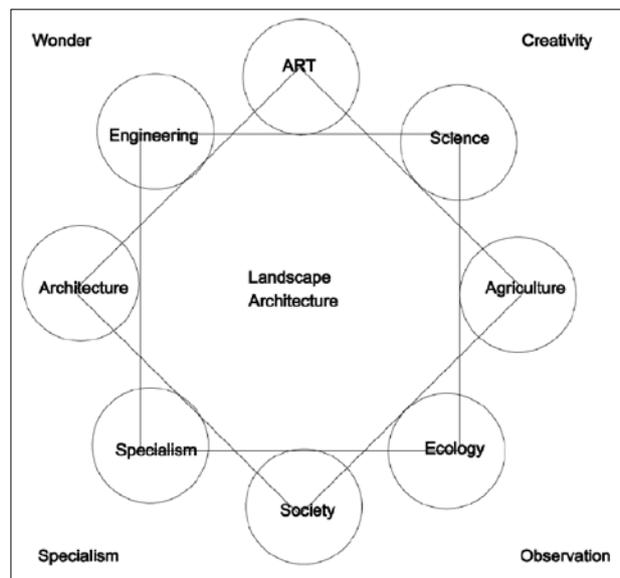


Figure 1. Landscape Architecture..At the centre of interdisciplinary learning

In Figure 1 I have tried to develop a 'map' of the relationship between the various disciplines and bodies of knowledge to explain how the variety of landscape architectural courses draw on a wide

range of knowledge from different disciplines. The diversity of courses is due to the distinct cultural or academic preference of the particular jurisdiction or individual school or group of schools. The spatial arrangement of the components is arbitrary and all relate to the study of Landscape Architecture. The diagram allocates equal weighting to subjects whereas the curricula and delivery of courses will draw in differing measures from the broad range of knowledge.

The particular mix represents specialism or generality.

I might also explain that in devising this diagrammatic representation of the range of skills and bodies of knowledge that an early version using a Venn diagram, the overlapping circles showing interrelationships was not appropriate as some subjects may be omitted.

The omission of a particular body of knowledge is not a fault of any landscape architectural courses but a result of the particular focus of each landscape architectural 'school'.

There may be many components within a particular course of study or there may be a narrow focus. However, the narrow focus is carried out within the framework of the general core skills.

'The School of Architecture and Landscape upholds the notion that the profession of Landscape Architecture is many things and requires many skills, some of which will be developed to a higher level than others according to the individual interests and abilities of our graduates. It is therefore our intention that our students and our graduates will be offered and will offer a great diversity of experience, knowledge and ability.' (Thames. 1989 in EFLA Blue Book).

3.1.4. Achieving Professional Status

The requirements to become a professional landscape architect are currently being analysed within the IFLA Europe member associations. Currently the requirements include membership of a national association of landscape architects and such membership is generally dependant on successful graduation from a recognised course in landscape architecture and completion of a period of professional practice. Though not all national associations require a period of professional practice to be a full member, it is common for a period of professional practice to be required before a graduate may be considered a full professional. In countries which do not require this, the period of study is a minimum of five years with part of the study being spent in a practice environment.

We are also discussing these requirements with our colleagues within the wider IFLA membership and it is our expectation that this will lead to the development of a common education framework or common training framework. Within European Union (EU) countries and European Economic Area (EEA), this will assist with the recognition of the profession and enable increased mobility of professionals within the member states of the EU.

4. Conclusion

The education of landscape architects requires a coherent input

from both academics and practising professionals. There is no single curriculum of landscape architecture but a broad spectrum of knowledge and skills which must be accessed and learned. The specific mix of knowledge and skills are a function of both the cultural environment and the emphasis of the school.

Mozart created beautiful music using the rigid rules of music with the tools of harmony, counterpoint being recorded as music notation. The creation of such beauty may occur without such tools but its recording and performance depend on it. For this reason we may still listen to and perform his wonderful creations.

'The true specialisation of the landscape architect is that he works, basically, with living elements, soil, water, trees and the effects of time. Like a scientist, he must respect life and natural processes. Like an artist he should be capable of visualising, developing, communicating and reviewing, with each project always in harmony with its environment. Like an engineer, seeing it through to completion on the ground.' (ESAJ, 1989).

References:

- Anagnostopoulos H, Dorn L, Downing M.F., Rodel. H., 2000. IFLA Past, Present, Future. International Federation of Landscape Architects. Versailles.
- IFLA/ILC working group: Towards an International Landscape Convention, February, 2011.
- ECLAS: Tuning Landscape Architecture Education in Europe, Version 27, January 2011.
- EFLA/IFLA: Guidance Document for Recognition or Accreditation 2009.
- IFLA: Draft Definition of the profession for discussion with the International Labour Organisation (ILO), April 2008.
- EFLA/IFLA: Charter for Landscape Architecture Education 2008.
- Dutch Law on Architecture, 2010, Additional Regulations for Landscape Architects.
- ECLAS - LE: NOTRE, 2010, Tuning Landscape Architecture Education in Europe, draft 27.
- Maniglio-Calcagno, A. et al, 1992, EFLA Education Committee Report. (EFLA Blue Book), IFLA Europe (EFLA) Archives, Brussels.
- Advice for Bachelor and Masters Education in Europe. 2006. DeVries. J and Bruns. D. LE NOTRE Publication.

Notes:

¹ The origin of this adage is 12th century theologian and author John of Salisbury, who used a version of the phrase in a treatise on logic called *Metalogicon*, written in Latin in 1159.

² See: "Rare Knowledge" - from the Modernist Period of Landscape Architecture Education; summary of the Final Report to LE:NOTRE 2 Tuning Landscape Architecture Education in Europe, version 26, 9.

³ <http://www.ilo.org/public/english/bureau/stat/isco/docs/d3b.pdf>