



PATHWAY TO NURTURE PRACTICAL SKILLS OF LANDSCAPE ARCHITECTS IN THE BALTICS BY CONTINUOUS PROFESSIONAL GROWTH

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Landscape architect's activities are facing complex socio-economic and environmental challenges such as suburban sprawl, depopulating city centres, vast urban landscapes and others. In search for the best solutions, the similarities and differences of solutions in different places allows analysing the particular cases in more regional and even international perspective. Still experiences differ from city to city and from place to place on how to mitigate the impact of these factors on sustainable urban development. In this context, sharing and transfer of knowledge and skills has become a mainstream of continuous professional development in different regions where professionals cooperate across the borders and across the professions.

The paper analyses impact of continuous professional development framework developed by Lithuanian, Latvian and German landscape architects on development of instrumental, communicative and systemic competences of landscape architecture professionals. Training need analysis revealed the most favoured themes of training leading to both compensation of academic gaps and upgrade for current innovations in planning, design and maintenance of urban landscapes. While compile the contents of training Landscape architect's associations used the instruments of transfer and blending the knowledge and experience from partner's countries.

Introduction and Background

Landscape architects develop their practices in the situation of constant social changes and development of civil society. Geopolitical constraints of the 20th c. and the following break with former soviet regime in 1990 has fragmented community life in Latvia, Lithuania and the other countries of the region, also grown negligence to community life including activities in urban neighbourhoods. As a strong instruments to shape quality of public and residential environment to the way that facilitates social interaction landscape architecture could be used more to accelerate understanding of benefits of social capital growing in community life.

Numerous cases pop out when public has expressed dissatisfaction with the results of professional activities in urban development, housing and other projects. Critics on the results of development often appear after missing the opportunities to discuss the forthcoming projects in their own neighbourhoods. For this and many other reasons, public involvement into discussing landscape architecture projects in Lithuania and Latvia is still vague, episodic and fragmented. This is one of the reasons why public debate on many strategic issues of urban development including future of public spaces of our cities has to be brought to the domain of competence for landscape architects in their daily professional work on residential, public and even industrial environments.

Landscape architects are developing their practices in the context of present maturity in civil societies in our countries therefore universal and specific issues arise to the professionals in different countries. Refurbishment and upgrading of public space, development of mobility and other infrastructural solutions, specific issues of reusing the deindustrialised areas and finding the proper destination for the vast ones are the major professional challenges that landscape professionals in Lithuania and in Latvia are facing in recent years. The need for specific knowledge and working skills in sustainable site planning, water management, mobility, application of green materials is just coming onto the agenda of landscape architecture professionals, and resolving these issues needs updated professional competences. Quality of professional services provided by public administration also faces issues of weak interdisciplinary cooperation and needs upgrading. As all that is the result of proper knowledge and skills of landscape architects, which also depends upon their ability to apply traditional and innovative solutions, modern working methods, implement research results and the other benefits of professional growth, the process of continuous professional development (CPD) is taken as a way to upgrade the needed professional competences.

Innovative training methods and tools as virtual urban simulation facilitate efficient participatory planning used for creating liveable public spaces in sustainable urban landscape and demonstrate how public participation acts a communicative and advanced design instrument. Analysis of typical cases by study trips and interactive workshops allow identifying the space where modern analysis and design methods could bring the best value. Self-assessment and user's feedback is a part of the process allowing monitoring and permanently improving the contents and organisation.

Continuous professional development framework in the Baltic Sea Region promotes cross-cultural exchange of knowledge and skills by hands-on approach in analysing and changing different landscape sites, merging lecturers and moderators in training process, also putting the professional's teams from several regions together.

Partnership and Cooperation

In order to develop a more coherent approach to CPD experience of Federation of German Landscape Architects BDLA in this field is analysed. Several specific professional challenges arise to German landscape architects and they are constantly addressed in their professional events. In the context of globalising economy, that provides immense amounts of materials and services for the market further development of national regulation and the need of standardisation in professional work is an acute topic in German landscape architecture practice. The need for new skills of teamwork and professional networking are commonly needed in the light of sustainability challenges that usually require multidisciplinary approaches. Green infrastructure topic has been recently set up as a social strategy and planning opportunity for German Landscape Architects (Green 2014). Transforming and refurbishing the formerly used industrial facilities into modern use public spaces is an actual topic for landscape architecture professionals (Fig. 1, Blast 2007). The same or similar topics are on the agenda of landscape professionals in Latvia and Lithuania, even more pointing out on the direction where to professional training and skills should evolve in the next years.

The recent activities of Lithuanian and Latvian landscape architect's associations give a perfect opportunity to review and estimate the whole scope and quality of numerous actions and events that were done in past, are done now and are planned for the next future. Annual and biannual professional events like scientific review "Landscape Forum" and municipal study trip "Space and Landscape" are complimentary to several exhibitions and informative seminars that are organised as the need arises and opportunity appears.

Still more consistency and professionalism is needed if one analyses the contents of these events more carefully, how evocative, innovative and applicable they are. More, the aspects of public involvement, innovative analysis and design methods, and ICT are often missing or blurred.



Figure 1. Phoenix West Blast furnace facility transformed into a modern landscape park (Green 2015).

Based on the joint inventory of the present activities the main goal for continuous professional development activities is to build on top of the existing experiences and to develop a coherent and flexible platform for exchange and transfer of up-to-date knowledge, skills and experiences in landscape architecture. It should also fill the gaps of the missing knowledge and skills for landscape architecture planning, development and maintenance that would be continuous in time, professional in its contents and promote development and growth of the competence of the of Lithuanian and Latvian landscape architects associations. For this reason, the opinion of association's members in the need of training was analysed.

Training Need Analysis

As present problems and challenges are similar, the joint questionnaire to identify the needs for specific competence areas was developed to survey opinions of Lithuanian and Latvian landscape architects. Specific competence topics were outlined in more detail making in total the list of 22 themes. More than 100 association members - landscape architects - have responded, and based on that the list of most required competence areas was developed. In each of these thematic areas, a more detailed list of subjects was identified. Majority of respondents have professional experience of 6 to 15 years. 92% of them are occupied in design practice and absolute majority looks positively on the CPD idea. At the same time, some other guidelines were assessed. European Parliament directive on LLL education and ECLAS guidance on Tuning of LA education programmes gave us some basic ideas for distributing the time between professional, social and legal issues as the proportion of 60% for professional themes, 20% for social and legal themes.

Self-assessment done by the Latvian and the Lithuanian landscape architects associations figured out the needs and preferences of the members and allowed drawing up the plan for turning the set fragmented events into the coherent, flexible and lasting framework for continuous professional growth. In a conceptual way, recent professional activities of landscape architects as of the other specialists that are involved into planning, construction and maintenance of the built environment has moved away from the linear "Fordist" concept of programme: project – construction – use – maintenance. The need for advanced sustainability solutions has led to a cross-professional type of involvement and integrated flow of activity (Fig. 2) that puts programming, design, construction and maintenance professionals into one cooperative platform for the best benefit of the user. Therefore, modern CPD framework is built on this integrated approach of developing complex interdisciplinary skills.



Figure 2. Conventional “Fordist” design process: from programme to the user, from initial idea to the completed result.

Analysing responses to the questionnaire allowed us to see many practical aspects of training as the probable number of people involved, possible partners and potential supporters, we identified possible coordinators and lecturers for different themes also some practical aspects as the needed infrastructure and resource. As a whole, the variety of training subjects, methods and location make one coherent training framework where different subjects find appropriate methods, scale, audience and the other features (Tab. 1). Exact lecturers and locations are adjusted as to the time and preference choice of the participants.

Table 1. Themes of continuous professional training (development) in Germany, Latvia and Lithuania

Latvia	Lithuania	Germany
Cultural landscapes and heritage	Landscape planning methodology for urban space	Teamwork and networking
Site management	Creative methods for landscape planning and design	Public Participation
Landscape in housing areas	Creating a public space	Planning and design standards
Roof gardens, green walls	ICT in landscape planning and design	Green infrastructure
Project organisation and management	Technical regulation in landscape architecture	Economic aspects in landscape planning and design

Focus of “professional” topics is built according to the preferences of the potential trainees and is based on analysis of academic training programmes as well as on the recent challenges in professional practice (Fig. 3). They cover the range of activities from planning methods and their applications, transiting to the issues of modern place making and especially focusing on applications of refined artistic methods, where the specifics and innovation are in the centre of attention. Based on the piloting experience, the set of professional topics offers a three consecutive days of training to blend and multiply theoretical and practical experiences tested on the sites offered by the hosting municipality.

The essential feature of the designed continuing professional development programme is a broad professional and real-life experience of participants that inspire to simulate the forms of learning and teaching, which in their turn facilitate the exchange of information and involve all to participate actively in the process. The innovative aspects of the programme are personal experience as the basis for training, the examination of the tasks through the work experience, use of advanced training methods as ICT, simulation and e-learning.

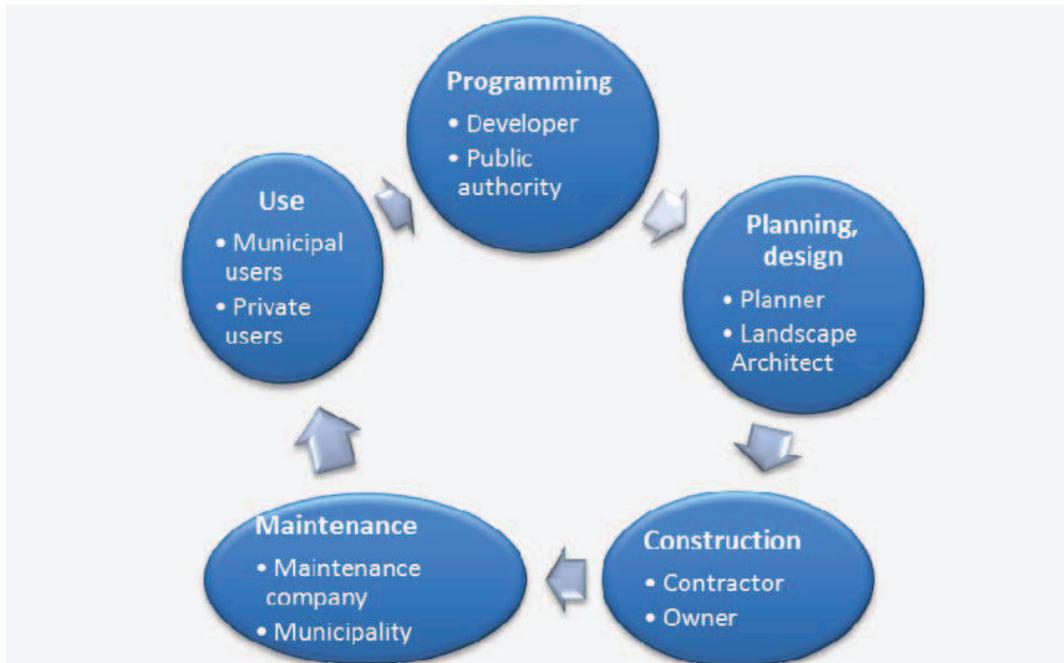


Figure 3. Concept of integrated competences for creating advanced landscape architecture

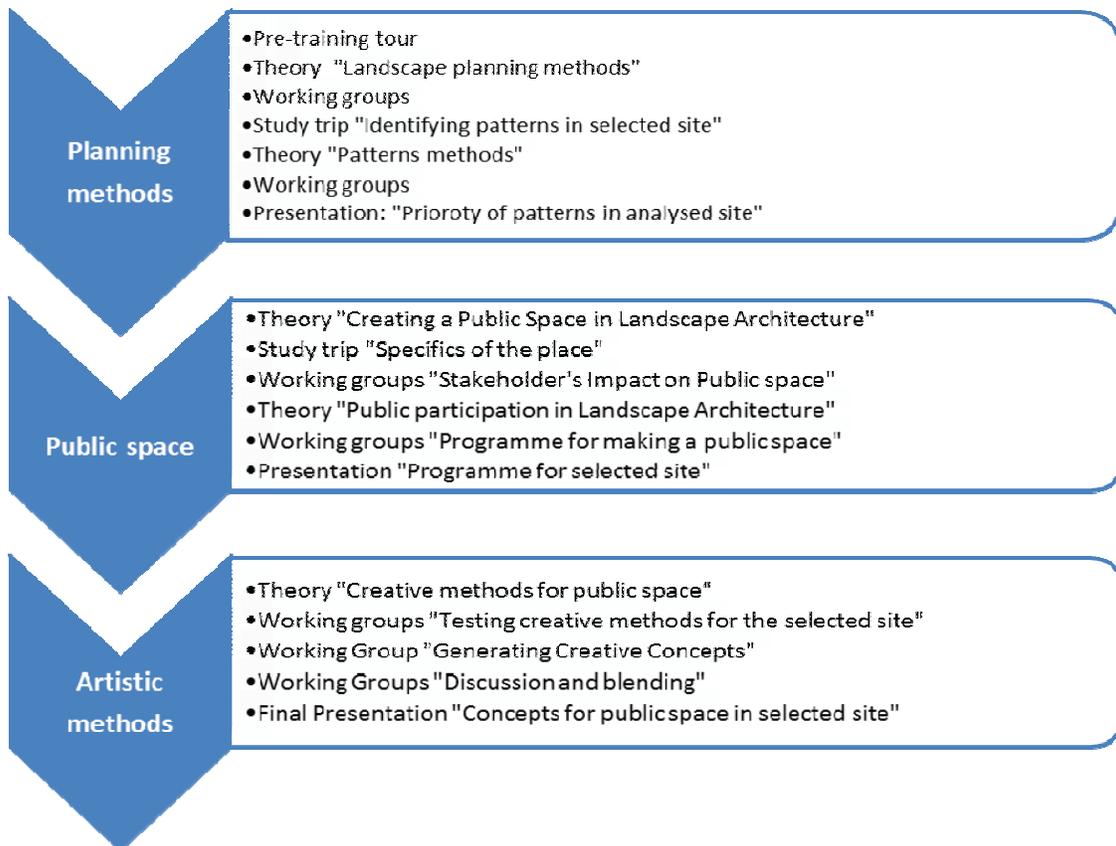


Figure 4. Layout of training topics "Landscape planning", "Public space" and "Creative methods".

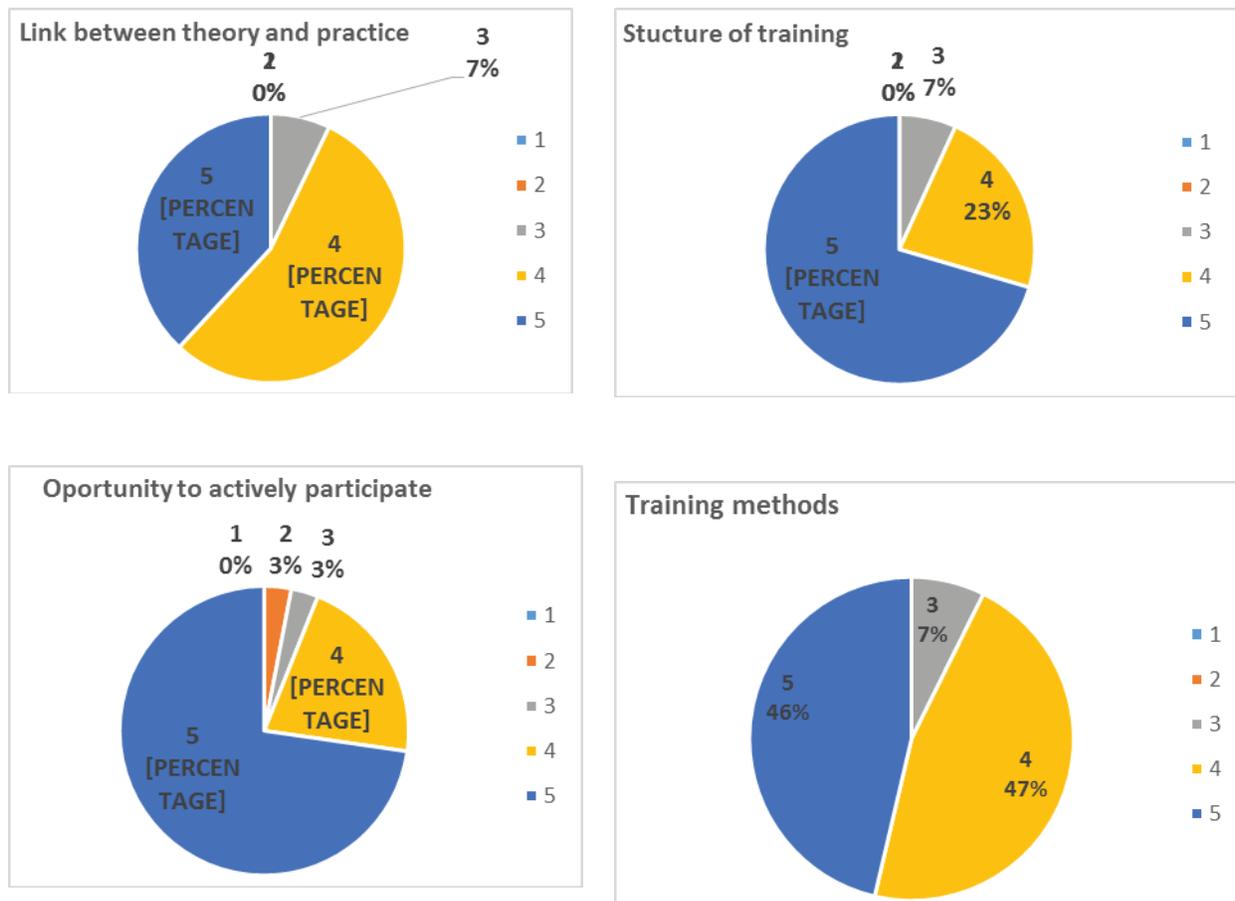


Figure 5. Feedback on pilot training session “Legal aspects in Landscape architecture”, February 2015. Evaluation (5 high - 1 low).

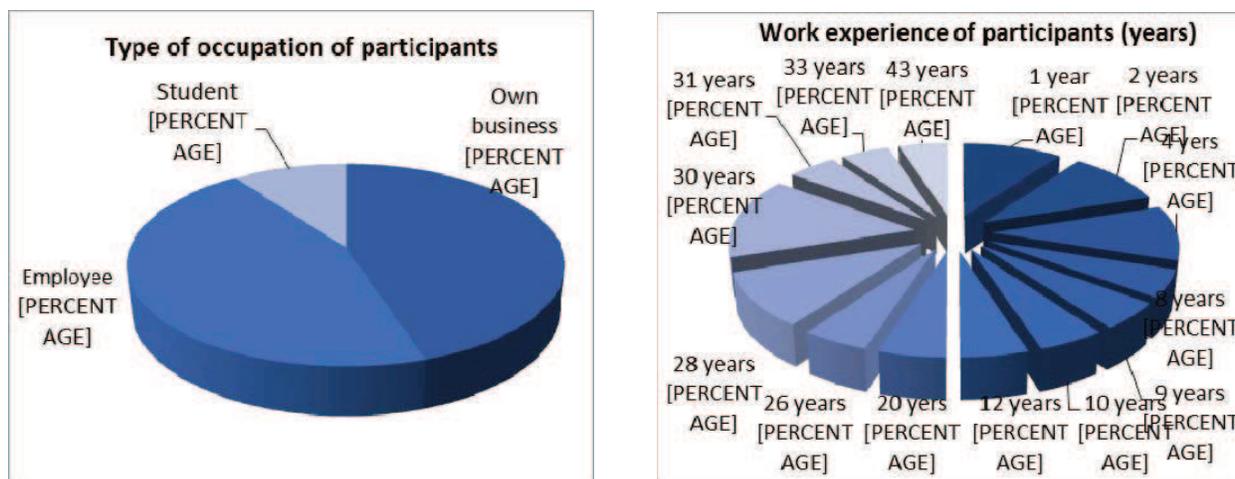


Figure 6. Feedback results of a pilot training session “ICT in Landscape architecture”. January 2015.



Figure 7. Practical tasks for landscape architects to AHP Priority Calculator for establishing priority criteria of the project.

Landscape Urbanism – Innovation Trend in Landscape Architecture Planning and Design

Involvement of experienced academics allowed bringing the most advanced theories and practices into the framework of CPD programme. Theories allowing accommodate landscape architects in the overall process of sustainable urban development are on the edge of modern science in the adjoining fields of urban planning, urban design and volumetric architecture. The blend of theories developed by Ch. Alexander, T. Turner, Ch. Waldheim and the other pioneers of the field named as landscape urbanism are involved into the CPD framework and offered for landscape architects and their interdisciplinary colleagues. Advancement of interdisciplinary approach to landscape planning, construction and management reflects a multi-layered understanding of natural, historical, social and urban patterns that come in a given priority. It is easy to understand this sequence in historical perspective as multiple cases evidently demonstrate this sequence. It becomes more complicated while analysing the cases of modern urban development as one can clearly see just the urban ice-top of this multi-layered system while the other natural, historical and social prior layers are often neglected. The scope of landscape architecture's domain is also reconsidered dramatically. From obscure understanding that landscape architecture considers just green spaces the advanced theories argue to reconsider covering the areas as infrastructure, brownfield, conversion sites, abandoned land, and many others that previously we left out of scope. The twist in understanding also requires advanced competences from landscape architects to be able to challenge the problems in sustainable redevelopment and reclaim of many areas currently left for the professional activity of transport planners, ecologists, urban designers and other professions lying just at the border of landscape architecture. This also leads to wider professional involvement of landscape architects into the domains previously abandoned by them or deprived by the others, at the same time, as multiple cases demonstrate, increasing the degree to which these settings align to the principles of sustainable urban development in general and green building in particular.

Training Subjects and Themes

Practicing landscape architects are constantly facing a problem of continued professional development, especially those working in smaller municipalities. Considering the extremely rapid technological development, exchange of understanding of natural processes and human impact on them, the deepening of the general concept of sustainability, the knowledge of landscape architects acquired at the university

get "out-dated" in few years. Modern lifelong learning program of landscape architects represents an important challenge and the necessity.

The CPD-LA team has set the following objectives to achieve the ambitious goals. First, to gain an in-depth understanding of training needs among landscape architects and their employers based on good practice of Federation of German Landscape Architects BDLA. Second, to transfer and adapt their training experience to local cultural environments, and last, to create training subject modules and corresponding training material for a full CPD training offer for landscape architects. The programme provides the most advanced professional, legal and social knowledge and skills for landscape architects.

The training subject of "*Planning Methods in Landscape Architecture*" focuses on extending the set of analysis, planning and design methods that are used by practicing landscape architects. Based on the widely acknowledged Method of Patterns the training subject provides the framework for developing professional knowledge, understanding and special skills in enabling professional to apply and make this method work in practice. It discloses the complex impact of natural, historical, societal and urban aspects on landscapes and the applicability of Pattern's Method for analysing and (re)creating historical and modern spaces. This training subject analyses cases from different locations, several selected cases are reviewed in a study trip and consolidated in lectures. The planning theme also provides a framework to further develop the skills that are needed for the practical work of the trainees including the set of references and professional resources to be used for self-study and further professional development.

The training subject "*Creating a Public Space*" evokes the debate on the concept of public space and extends into the sphere of participatory planning. The problems of public appreciation of public spaces and parks are in focus while innovative ways of community facilitated public space management are discussed herein including the tools for public participation in the design process that the design reflect on the real end user's expectations. Application of public participation methods present an opportunity to facilitate their wider and more instrumental application. This topic raises awareness about the importance of human public spaces and the role that green areas play in the city. The benefits of public participation show up especially when modern ICT based tools are applied, and the trainees have opportunity for that.

The training theme "*Creative methods for landscape planning and design*" offers in-depth analysis of Genius Loci concept looking for both theoretical and practical ways of its implementation. The aim of this topic is to deepen the understanding the site's identity and expressing it as the inspiration for artistic concept in design.

The CPD-LA programme focuses attentively on rising awareness and understanding of *legal regulation in landscape architecture*. Impact of present laws, regulations and other legal acts are analysed. One of the most important legally regulated areas - public procurement - is crucial for developing professional activities of landscape architects in the country.

The topic of *ICT in landscape architecture* allows updating on the new tools for professional work. The programme covers overall understanding of integrated (information) modelling in design (BIM) until very practical applications that can make landscape architect's work more resource-efficient and faultless. In particular, the advanced tool that allows prioritising diverse aspects in planning and design are analysed by presenting the AHP Analytic Hierarchy Process engine.

Adaptation of Training Framework

The selective analysis of BDLA experience in „Lifelong learning approach for landscape architects in Germany“ has identified the actual topics to take over. The main ideas from the manual guideline developed by BDLA was used for building the CPD-LA programme for Lithuanian and Latvian landscape professionals (Green 2014). Lithuanian and Latvian landscape architects associations prepared the programme containing in total 10 subject modules. Each module examines the area of interest in landscape architecture. Implementation of these subject modules has started in pilot trainings. The

experience of pilot seminars, the analysis and conclusions will improve or consolidate the structure of the programme to ensure its continuity and sustainability.

Some methodological rules are followed in order to ensure the stability and to enhance the quality of lifelong learning program. First, lifelong learning should be offered continuously, the aims of the programme should focus on the challenges of the professional practices, and lastly lifelong learning is expected to develop strengths and overcome weaknesses of the trainees. What is more, the market for lifelong learning should extend by involving more professionals also from the neighbouring disciplines as architecture and engineering.

The survey of feedback shows that participants of training respond very positively about the structure and opportunity to participate actively in the process of training. Link between theory and practice and training methods are relatively less favoured, still demonstrating a good response but pointing out the need to focus on these aspects in the coming training sessions.

According to analysis of feedback results, the big array of work experience and different types of work among the participants of pilot seminars was discovered. It gives an idea of using diverse methods for presenting the contents of training and to develop CPD training programme in these pathways:

- *Personal path*: Reflection of a professional path in life, perception of myself as a landscape architect, practical experience;
- *Contents path*: perception of mission of landscape architecture in natural, urban, cultural, economic, social development and interaction of these processes;
- *Methodological path*: the flexibility and efficiency of training forms, the consistency and continuity of methods, the adaptability of knowledge and feedback.

Variety of training methods correspond to the specific skills needed by the members of landscape architect's associations involved in training. As preferred by the trainees and recommended by the professional directives practice-based methods should make the biggest share. Study trips, case study analysis and workshops are the main practical training method complemented by seminars and theory-based presentations that give the outlook of recent innovative approaches to landscape analysis, design, construction and management.

Results and Impact

The major outcome of the activity is the Continuous professional development framework with adequate content that will be provided for the users in a conventional and easily accessible way. The coordinator who selects the methods, invites lecturers, collects the fee and delivers it all to the association runs each one of ten training subjects that are currently developed. Part of the material will be available on the open source platform so the wider scope of users can develop in time.

It is difficult to outline all and every field of impact that the programme is going to have. On the other hand, it is clear that professionals that are more competent will facilitate better position of landscape architects on the market, also involve more public interest into the upcoming projects. By acting together three associations intensify knowledge exchange on an international and regional scales.

Continuity of the programme is necessary as just sustained activities can bring long-term benefits to both the professionals and the society. For this reason, we expect to have active involvement from the member's side, involve our partners from the industry as well as local and international supporters. We are also inviting the new countries to join in and take one of the developed themes or bring up one of your own. Also we look for partners for engaging into the new regional and European funding initiatives.

Part of the impact of the drafted professional development framework lies in its creative implementation involving all possible partners and cooperating institutions. The public sphere partners are town planners and architects, gardener's, geographer's associations, and certainly our academic partners. On the other hand, ministries and agencies whose competence covers solving landscape issues are the partners linked by professional ties and daily work experience.

The impact of the developed CPD framework leads to increased competitiveness of landscape architects in Lithuania, in Latvia and throughout the EU. The increased efficiency of public and private investment into urban development through higher quality of planning and design projects in landscape architecture is an expected impact. More than that, closer cooperation of professionals across the whole EU promotes share and adaptation of theories and practices across the borders and across the regions. CPD-LA gives a possibility to upgrade skills for professionals from the neighbouring fields as urban planners, architects of buildings, geographers, and those who have suspended their professional activities for a certain time. CPD provides all partners with the opportunities to learn and grow by exchanging good practices and experiences. Through the period of two years when collaboration of Lithuanian, Latvian and German landscape professionals was developed the partners are still strengthening their network and laying a solid background for future interactions, including professional competitions, exhibitions and joint projects.

The analysis of experiences of Lifelong learning approach for landscape architects in Germany, training experience in Lithuania and Latvia allowed drawing the following methodological guidelines for future:

- Work with field trips and concrete examples to address experts with different professional background;
- Engage experts who assess different solutions at academic and research institutions from a professional point of view;
- Work differently with those who want to sell solutions - building contractors, engineering companies, invite designers, contractors and users of the relevant technical solutions to share their experience;
- Build up a steady network of interested experts and those who want to become expert and potential trainer in the field of landscape architecture;
- Figure out types of projects at local sites that need different approach and discuss them with all potential stakeholders, especially with local authorities;
- Find a municipality that can establish as a pioneer a new way of landscape inventory, monitoring and design system as based on multi-stakeholder platform.
- Work in teams to get the people speaking about their ideas. Confront them with the opinion of professionals from the closely related fields as infrastructure, ecology, anthropology and urbanism.
- Inspire awareness of legal thinking; invite legal experts and researchers to discuss legal innovation and their relevance for landscape architecture.

Conclusions

Activities in developing of the Continuous Professional Development Programme for Landscape Architects in the Baltics give a perfect opportunity to exchange knowledge and experience between the professionals of the Baltic Sea Region. It also activates competence development of the motivated professionals that are engaged into all types of landscape planning, design and maintenance projects and regional cooperation activities. It is an efficient opportunity to build very practical networks of professional cooperation across and beyond the Baltic Sea Region involving the other countries, primarily Poland and Estonia that gave a positive response on joining in this network.

The developed CPD tool has attracted a definite interest from Polish and Estonian landscape architect's associations, and increase of the number of partners is very probable in the closest future, covering more countries with more cultural experience and diverse cases, both of failure and success.

Continuous professional development framework has a definite impact on a national education framework requiring academia to focus on important topics including continuous and remote learning methods already at the university. The network of German, Latvian and Lithuanian landscape architect's

associations demonstrate a pro-active approach to competitiveness and professional growth of their members on the regional, national and local scales.

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