

Summary

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Higher education, in its widest meaning, has been recently facing fundamental changes triggered by globalisation, altering expectations of stakeholders and society as well as novel insights in educational sciences that are related to transition from teaching to learning. As a response to these various factors, modern forest education has to focus more on competencies than the knowledge itself. It has to put much more attention towards integration of methods of various disciplines as well as communication across disciplinary borders. The development of skills that enable the graduates to tackle complex problems has so far been widely missing.

Effective education of foresters at the university level is a difficult process that requires a great commitment of both students and the teaching staff. At the same time it is multidimensional and its efficiency strongly relates to the curriculum and didactic tools used. The final desired output of the education, i.e. a high quality graduate, results from the organisation of this process, starting from the recruitment and ending not only at the graduation itself, but also including further monitoring of graduate's performance. On the other side, it is not possible nowadays to conduct the training without relating it to the current scientific research and requirements of the potential employers. Only in that way it is possible to transfer the experience and understanding of natural processes as well as useful vocational skills into the educational process. And what is not less important, fully trained graduate is given the opportunity to explore new environments or different perspectives on the subject of the future professional activities. For young people, the time of studying is understood as a period of their intensive development, both in intellectual and professional terms. This development is realised through number of stimuli that include inter alia current contacts and opportunities to exchange opinions with academic and moral authorities, co-operation and work in teams, participation in research, conducting social activities as well as contacts with various cultures. All these factors must be supported by right infrastructure in order to make their existence possible and have a real impact on shaping the knowledge, personality and skills of a student. This infrastructure should not be understood only as technical elements, but also as an intellectual fund. As pictured with examples both from Poland (Kraków, Poznań and Warszawa) and abroad (Western Europe, Japan) such opportunities and infrastructure can be provided only by large universities with large faculties that carry out long-term and multidimensional cooperation with other teaching and research entities, associations, employers and many others, not only on the national, but also an international level.

Achieving an adequate level of education is not just a case of development of good and innovative curriculum. Equally important is the use of appropriate tools and techniques of knowledge transfer. Analysis of Polish and international (European, Asian) curricula points out that in most of them the need of a holistic approach to forest management education, which should express reference not only to global issues but perhaps regional and local circumstances above all, plays the key role. Moreover, improvement of the curricula and assessment systems should be based on continuous development of learning outcomes, i.e. what student knows, understands and is able to do after receiving a university degree. Effects of university education in forest sciences should also indicate creative innovation and independence of action and a sense of responsibility for one's deeds and words.

Current range of knowledge about forests and in forestry can be treated as a constant reference point in the development of new curricula only to a certain extent. Natural, climate and geographic influences cause, together with simultaneous overlapping of cultural, social and economic factors,

that it is impossible to create a universal educational proposal of a global character. Forest education at university level should provide high quality of knowledge and skills of graduates that will enable realisation of the quintessential tasks of conducting forestry. However, as the Authors of individual chapters often emphasise, the development of new programs and improvement of the quality of forest education at university level should start with the adoption of model requirements for and from the graduate foresters. Crucial questions include the following:

- What do our students learn?
- What should they learn?
- Do they learn what they will need later?
- What would our graduates make successful in their careers in the labour market?
- Do the exams assess what professors intend to teach, or what student wanted to learn, or what the labour market needs?

Answering those questions is still an open case. However, in this search for the best solution of problems that modern forest education faces now we should still keep in mind the basic principles and concepts that allowed the proper preparation of forest service staff for the last two centuries.

Presenting the results of several scientists' studies we are convinced that with the start-up of this so-far the largest research on innovative solutions in forest education at the university level we do contribute both to development of forest sciences as well as to introduction of new concepts in practical forest management.