

LLL Course on ‘Land Management in Rural Areas’ at BOKU University Vienna: The Making Of ...

Reinfried MANSBERGER and Christina PAULUS, Austria

Keywords: Land Management Education, Life Long Learning, Academic Vocational Training, Curriculum Development and Implementation

SUMMARY

In summer of 2010 the *Land & Forst Betriebe Österreich*, a stakeholder association for land and agricultural owners and enterprises, approached the University of Natural Resources and Life Sciences in Vienna (BOKU) with the request to deliver a lifelong learning course on rural land management. In December 2010 a working group was installed with the objective to design and to implement such a university course.

The development of the curriculum for the study program was outlined in several steps: Describing the activity fields of the target groups, the identification of learning outcomes and the structuring of modules and lectures. The final result was a an extra-occupational CPD program ‘*Land Management in rural areas*’ with a duration of four semesters and a student’s workload of in sum 60 ECTS. The course started in February 2013 and in April 2014 the first students finished their academic education.

The paper gives a detailed description of the development and the implementation process of the study program. Experiences gained are documented. Additionally, quality management activities outlined during the development and the delivering phase of the course are introduced.

ZUSAMMENFASSUNG

Im Sommer 2010 traten die *Land & Forst Betriebe Österreich*, eine Interessensvertretung für Land- und Forstwirte als auch für land- und forstwirtschaftliche Unternehmen, mit dem Ersuchen an die Universität für Bodenkultur Wien (BOKU) heran, einen Weiterbildungslehrgang über ländliches Liegenschaftsmanagement anzubieten. Im Dezember 2010 wurde dazu eine Arbeitsgruppe eingerichtet, mit dem Ziel einen diesbezüglichen Universitätslehrgang zu gestalten und zu implementieren.

Der Studienplan für diesen Lehrgang wurde in mehreren Stufen entwickelt: Die Aktivitätsfelder der Zielgruppen wurden beschrieben, die Lernergebnisse wurden identifiziert und die Module und Lehrveranstaltungen konzipiert. Das Ergebnis war berufsbegleitender Universitätslehrgang '*Ländliches Liegenschaftsmanagement*' im Umfang von 4 Semestern und 60 ECTS. Der Kurs startete im Februar 2013 und im April 2015 haben die ersten Studierenden ihre akademische Ausbildung abgeschlossen.

Im Artikel beschreibt detailliert die Kursentwicklung und den Implementierungsprozess des Studienprogramms. Die dabei gewonnenen Erkenntnisse sind dokumentiert. Zusätzlich werden die während der Implementierungsphase und der Durchführungsphase des Kurses begleitenden Qualitätssicherungsmaßnahmen vorgestellt.

LLL Course on ‘Land Management in Rural Areas’ at BOKU University Vienna: The Making Of ...

Reinfried MANSBERGER and Christina PAULUS, Austria

1. INTRODUCTION

The Austrian-American economist Peter L. Drucker increased the awareness of politicians and managers of enterprises that knowledge is an important economic as well as social element in our society (Drucker, 1993).

At European level the implementation of a European Higher Education Area (EHEA) – better known under the name ‘*Bologna Process*’ was introduced as a strategy to increase the resource knowledge. The creation of a space providing unlimited mobility for students, staff, teachers and early stage researchers, with full recognition, quality assured offers and comparable, transparent study cycles (Bacher, 2009). It was agreed to support the higher education institutions and stakeholders in their efforts to deliver meaningful changes and to further the comprehensive implementation of all Bologna action lines to enable graduates to combine transversal, multidisciplinary, and innovation skills and competences with up-to-date subject-specific knowledge (EC, 2015).

Employability as well as personal and professional development of graduates throughout their careers has to be enhanced. Lifelong learning (LLL) is one of the ingredients to meet the needs of a changing labor market (EHEA, 2012).

The objective of lifelong learning is a continuous activity to increase knowledge, experiences, and competences. Research centers and academic education institutes – like universities – have a responsible role in the development and in the transfer of knowledge. They have to promote and deliver qualified education and they have to guarantee practice-orientated training (BMWF, 2012).

The universities are following this recommendation of the ministry and they launched several life-long learning programs to satisfy the political requirements, to meet the needs of our society, and increase the employability of their alumni.

The University of Natural Resources and Life Sciences Vienna (BOKU) followed the trends of LLL and implemented an Academy of Continuing Education with the objective to deliver in service training on the fields of BOKU competences. The study program on ‘*Land Management in rural areas*’ was one of the pilot projects.

In summer 2010, the *Land & Forst Betriebe Österreich*, a stakeholder association for land and agricultural owners and enterprises, approached the rector of the University of Natural Resources and Life Sciences in Vienna (BOKU) with the request to implement a lifelong learning course on land management. After several discussions within BOKU and with other Austrian stakeholder institutions in December 2010 the decision to implement such a course at BOKU was taken and a working group was installed. Reinfried Mansberger, one of the authors of this paper, became head of this working group and later head of the scientific board of the study program.

LLL Course on Land Management at Boku University Vienna: The Making of ... (7839)
Reinfried Mansberger and Christina Paulus (Austria)

FIG Working Week 2015
From the Wisdom of the Ages to the Challenges of the Modern World
Sofia, Bulgaria, 17-21 May 2015

As an example of good practice the main stages of course development, course implementation, and the key points of the Quality Assessment System (QAS) applied for the designing and delivering the study program are presented in the following chapters.

2. CURRICULUM DESIGN

Figure 1 documents the main stages for the development of the curriculum of the extra-occupational Continuous Professional Development (CPD) study course '*Land Management in Rural Areas*'.

The whole process had a duration of approximately 12 months. In January 2012, the senate of BOKU accredited the curriculum and in February 2013, the first study class started with the academic education.

During all steps of the development, the working group involved stakeholders and communicated agreed results to the university management.

The following sub-chapters highlights the main activities as well as some crucial aspects of the curriculum development.

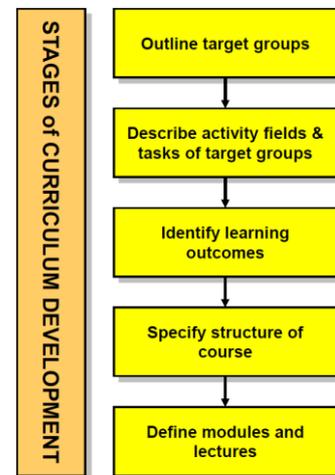


Figure 1: Stages of Curriculum Development
(Mansberger et al., 2012)

2.1 Objective

The course is intended to deliver a deeper understanding as well as practical competence in the following key areas of land management:

- Administration and documentation of land (e.g. accounting and controlling, land cadastre, land rights, assessment of land information)
- Land use and cultivation of land (e.g. farming practices, forest management, sustainability)
- Land valuation and assessment of land (e.g. property valuation, estimation of damages and compensation)
- Land use planning and development of land (e.g. project development, land consolidation, rural development).

The course has to deliver up-to-date expertise. Students have to gain advanced and extended knowledge. Their competences have to be improved and they have to be acquainted with new aspects of land management. Finally, students have to share and exchange their experience with their colleagues as well as extend their professional network.

2.2 Organizational Frame

Target Group

In close co-operation with several stakeholders the following groups were identified as potential clients/students for the course to be developed: owners and managers of land; managers and experts in private companies and/or public institutions dealing with land; consultancies (legal, financial, taxation) for land; people who are interested in all issues of land and real estates in non-urban areas.

LLL Course on Land Management at Boku University Vienna: The Making of ... (7839)
Reinfried Mansberger and Christina Paulus (Austria)

Time Frame and Organizational Specifications

Corresponding to the regulations of the university management and the request of the stakeholders the study program had to meet some requirements. Therefore, the duration of the study course had to take two years (four semesters). The workload was limited to 60 ECTS (European Credit Transfer System), which corresponds approximately 1.500 working hours for students.

The blended learning concept was the base for the course. The physical presence with an extent of 35 percent of the whole workload was provided in blocks between three and five days – satisfying the status of an extra-occupational course – mainly on the weekend. The course management pushed the integration of distance learning elements for all lectures.

The number of required students per year was defined by the financial concept. In Austria, CPD or LLL activities are not funded by the university or by other public institutions. Therefore, all costs of the course (public relation, lecturer, rooms, materials, etc.) have to be covered by the fees of students. In the case of *'Land Management in Rural Areas'* the fee for the whole course was fixed with € 13.000. To achieve the break even for running the course requires at least 15 students per year.

Needs Assessment

Before launching the detailed curriculum design, an analysis of existing LLL-offers on the topic of land management was conducted. In a desktop study, potential competitors were listed and the delivered study programs were investigated by the degree of similarity based on the following features: content, workload, duration, language, costs, didactic concepts, etc.

Afterwards, experts in market analysis carried out a needs assessment. Based on structured (telephone) interviews with persons of the defined target group (see above) the need of the proposed course was proved. Additionally, the marketing experts estimated the number of potential students with approximately 20 to 25 students per year (which is more than the required ones).

Development Team

To cover the broad spectrum of teaching and learning contents as well as the theoretical and practical aspects of the topic land management, the members of the working group were scientists and lecturers from subject-relevant institutes of BOKU, representatives of professional bodies, and practical experts. Additionally, the BOKU Centre of Teaching, the BOKU Academy of Life Long Learning, the university management, the senate of BOKU, and stakeholders were involved in the designing process of the curriculum *'Land Management in Rural Areas'*.

2.3 Content Development

Definition of activity fields for target group

In this working package, the working group – in close co-operation with practitioners – compiled an extensive list with potential tasks, activities and/or projects of experts working in the field of rural land management.

The structure of this list followed the four key areas of land management as documented in Chapter 2.1.1. In total more than 30 key activity fields for the proposed target groups were defined. The following three – surveying related - activities are given as an example (excerpt of the land administration and land documentation key area):

- Purchase and selling of parcels;
- Implementation and application of a Geographic Information System;
- Acquisition of geodata (by own and from external sources).

Definition of learning outcomes

The working group developed the curriculum in an output-orientated concept. According to the elaborated potential tasks/activities/projects of the students, the task group defined in total more than 200 learning outcomes, once again in accordance to the structure of the key fields of land management. The following six – surveying related – serve as an example:

- Students compare specific coordinate / reference / projection systems;
- Students judge the accuracy of geodata;
- Students explain the specific methods of the assessment of spatial data and select the most efficient method for their application;
- Students describe the steps needed for the implementation of a GIS;
- Students identify potential (public or private) sources for specific geodata;
- Students classify the principal methods of the valuation of land and real estates.

The learning outcomes were the basic input for determining the number and topics of modules as well as the specification of types of the lectures (e.g., reading, practical, excursion, and seminar). Additionally, all the lecturers received the document with the request to communicate the knowledge, the competences, and the experiences required by the students to achieve the lecture-related learning outcomes.

Course structure

In a top-down process, the scientific board fixed in accordance to the learning outcomes the structure of the proposed study program. In total, the curriculum consists of 28 lectures organized in 10 modules:

- Business economics and business management;
- Law and public administration;
- Sustainable land use and cultivation;
- Marketing and Communication;
- Surveying and land information; Land market and land policy;
- Valuation of land and real estates in rural areas;
- Social and cultural aspects of land;
- Land use development

LLL Course on Land Management at Boku University Vienna: The Making of ... (7839)
Reinfried Mansberger and Christina Paulus (Austria)

FIG Working Week 2015
From the Wisdom of the Ages to the Challenges of the Modern World
Sofia, Bulgaria, 17-21 May 2015

- Interdisciplinary project and excursion).

The particular type of the lecture was fitted to the purpose of teaching and learning content. In the final semester of study course, the students have to elaborate a thesis and defend it in presence of a commission.

After completing positively all lectures as well as the defense, in an academic ceremony the students will receive the title '*Academic Land Manager*'.

2.4 Curriculum '*Land Management in Rural Areas*'

The final result of the designing process was a document including the qualification profile of the study course, the admission requirements for the students, the structure of the study program, the modules and the specific lectures (including ECTS and learning outcomes), and some information about the examination regulations and about the final thesis.

After the approval of the curriculum by the senate of BOKU in December 2012, the curriculum was published on the BOKU website: www.liegenschaftsmanagement.boku.ac.at.

The curriculum fulfils all the quality specifications for European universities in general and for BOKU in particular. Defined quality criteria and standards have to be met during the curriculum development.

3. IMPLEMENTATION AND RUNNING OF THE STUDY COURSE

During the final stage of curriculum development, the university management appointed the course management (scientific board, administrative board) with the mandate to implement and to run the study course. In detail, this meant the detailed elaboration of the didactic concept, the recruitment of lecturers, the promotion of the course, the assessment procedure for students, and the setup of all the organizational and administrative procedures.

3.1 Elaboration of the Didactic Concept

As mentioned above, the concept of the study course is a blended learning approach. Due to the extra-occupational manner of the program and the nature of students, coming from different parts of Austria, the phase of attendance was minimized to approximately 35 percent of the whole workload. A challenge for the didactic concept was the blocking of lectures. Teaching units up to four days require a large variety of teaching and learning methods to keep the students concentrated and motivated to learn. Additionally, distance-learning activities have to encourage the students to learn between the blocks of presence.

The result of this work package was a compilation of techniques for knowledge transfer (e.g. ex-cathedra teaching, exercises), knowledge exchange (e.g. group works, discussions, excursion), and knowledge check (e.g. open book tests, projects). Lecturers were encouraged to use a balanced mix of learning approaches.

3.2 Recruitment of Lecturers

The spectrum of the content to be delivered to the students is – due to the characteristic of the study program – very broad and often multi-disciplinary. To cover all the different fields of expertise, a high amount on lecturers is required. A balance between scientists and practitioners (with an adequate academic education) was required. The course management also tried to involve managers from public authorities, from professional associations, and from other topic-related educational institution into the teaching staff.

The recruitment of lecturers happened in a top-down approach. In a first step, persons in charge for each of the ten modules were appointed. These persons recruited – in a second step – the lecturers for their specific module. Of course, the module officers communicated and agreed all personal decisions between themselves and with the scientific course management.

3.3 Promotion of Study Course

A big task and a big challenge was the promotion of the study course. The target group is covering several professions and therefore the distribution channels are manifold and with it cost intensive.

In detail, the following activities supported the promotion of the study program *'Land Management in Rural Areas'*:

- Preparation of a poster and a folder (see Figure 2);
- Press release to newspapers and professional journals;
- Advertisements in countrywide newspapers and in professional (national) journals;
- Implementation of a web-page;
- Round-E-mails to professional public authorities, private enterprises, associations, chambers, BOKU alumni, etc.;
- Presence and individual advertisements at topic-related conferences and workshops; and
- Telephone calls with prospective clients (e.g. human resource departments of institutions dealing with land management, agricultural or forestry enterprises).



Figure 2: Information folder of the study course (page A1)

3.4 Assessment Procedure

Two months before the launch of the study course, the course management invited all the interested students to an information session at BOKU University with the following objectives (documented as 'learning outcomes'):

- Students know all the contents, educational procedures, and the administrative frame of the study course and are able to decide about their participation;
- Course Management gained an overview about expectations on the study course and the specific interest of students; and
- Students, teachers, and course management know each other ('get together').

Additionally, the scientific and administrative course management had an admission interview with all the students. It served to get a deeper understanding about the motivation and about the existing course-relevant knowledge of the individual candidates. It also enabled a more detailed communication exchange between course provider and course participant. The official admission of the student was the final act during this meeting.

3.5 Setup of Administrative and Organizational Issues

The rollout of the study course requires several procedures at the level of university administration. At the university, students have to be enrolled and they have to get access to all facilities, e.g. lecture rooms, library, and information technology system (including e-learning system). The course management had to elaborate a detailed timetable before launching the study program and it appointed an administrative course manager, who is responsible for room reservations, teaching assignments, collecting teaching materials from the lecturers and supplying it to students. In addition – and this is an important role, the administrative course manager is the first contact person for students as well as for teachers.

4. QUALITY ASSURANCE SYSTEM FOR THE UNIVERSITY COURSE ‘LAND MANAGEMENT IN RURAL AREAS’

The *Centre of Continuing Education and Lifelong Learning* at BOKU offers several courses for continuing education at university level, starting from certificate courses up to master degree program. According to the European Qualification Frame (EQF) from the level 6 up to the level 7. (e.g. Diplom-Onology, Green Building Solutions, Life-Cycle and Sustainability of Civil Infrastructure and Protection Systems, Mycotoxin Summer Academy, Protein Chromatography - Engineering Fundamentals and Measurements for Process Development and Scale).

One of the tasks of this department is to develop, to implement and to manage university continuing education courses while concerning existing regulations and rules for the development and implementation of study programs. The Quality Management System for regular studies, adapted to LLL courses in general and to the curriculum “*Land Management in Rural Areas*” in particular will be outlined in the following chapters.

4.1 Model of the QAS

The model is based on four dimensions of quality assurance (*Figure 3*): Quality of conceptual design, quality of information, quality of implementation (realization), and quality of result (outcome quality). It is mapped to the different phases of continuing education programs.

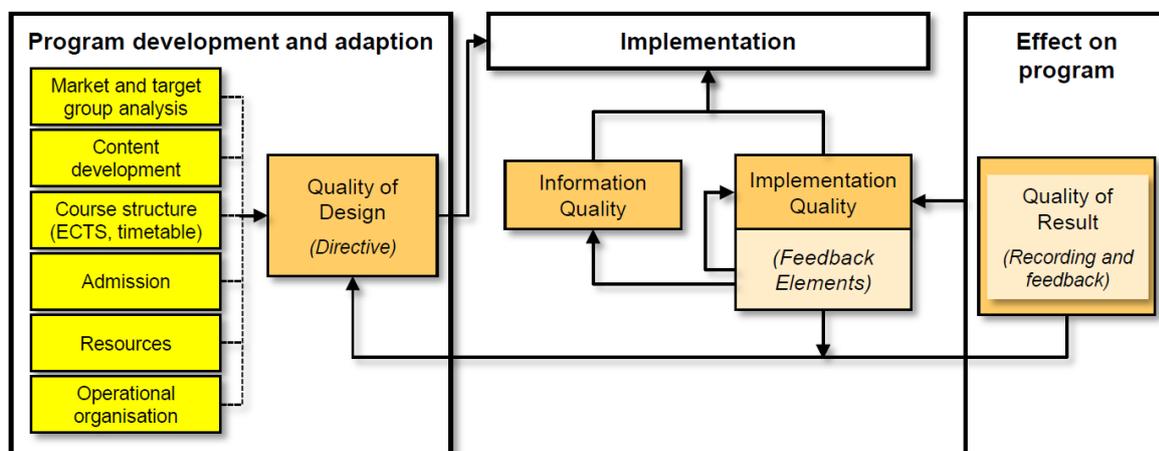


Figure 3: Model of BOKU Quality Assessment System

4.2 Quality dimensions, associated items and measures

Program development

At BOKU, a directive regulates the development and implementation of programs of further training. This directive requires a number of measures, e.g. needs analyses, goal-oriented design, planning and availability of required resources. These measures ensure the design quality of each program. Implementation quality relates to the development of the program in the strict sense and ensures the quality of the teaching-learning processes.

To secure the wide range of themes and the importance of a heterogenic member group is essential. "A special feature of scientific development for continuing education is the breadth and diversity of its participants and stakeholders. It is important to identify their values and interests in relation to the course and its information interests in relation to the evaluation." (Balzer, Beywl 2008).

The members of the working group "Curriculum Development - Land Management in Rural Areas" are scientists and lecturers from subject-relevant institutes of BOKU, representatives of professional bodies, as well as practical experts. The authors of this paper are appointed to head this working group and later the study program itself.

The Directive '*Richtlinie zur universitären Weiterbildung an der BOKU 2006 – 2010*' ensures the concept quality of a new program. The guidelines describe the required services and activities in the program.

First, a verification of the requirements on the labor market is essential. Surveys have to be carried out as well as clarification of the target groups. Qualitative interviews were conducted by external institutions to ensure the objective quality of the interviews.

The next step was to clarify the content. By developing the content the learning outcomes (knowledge, skills and competences) had to be specified by the needs of the labor market. Learning outcomes must not simply be a "wish list" of what a student is capable of doing on completion of the learning activity. To ensure the quality of the assessment, learning outcomes have to be simple, clearly described and capable of being validly assessed.

Other items and measures to evaluate the quality of the curriculum development are the structure of the course and the ability of the participants to fulfill their daily requirements while attending the course. Participants will most likely be in full or part time employment. A special focus is given to ensure that the admission - and examination procedures are as important as within the regular studies. Cost recovery is an essential quality item and the budgeting is crucial.

Quality of information

After the development of the course, the information quality is the next important issue that has to be assured. Transparency is one of the main aims. Extensive information on all relevant aspects of the program has to be given to the potential participants through relevant media. The information should contain the following points: the general theme, learning outcomes, number of seats, access control, educational qualifications (competencies), learning and teaching methodology, time structure, venues, teachers, responsible persons, organization structure, registration details, examination regulations, participants' surveys, contact persons, and complaint procedures. Standardized application forms, including motivation letters for the participants and standardized interviews for the selection of participants are avoiding "false

LLL Course on Land Management at Boku University Vienna: The Making of ... (7839)
Reinfried Mansberger and Christina Paulus (Austria)

FIG Working Week 2015

From the Wisdom of the Ages to the Challenges of the Modern World
Sofia, Bulgaria, 17-21 May 2015

participation", which leads to personal frustration, discouragement and anger, and subsequently to declining quality of teaching in general.

Quality of implementation and realization

The qualification of the teachers is the essential measure to ensure the level of professional teaching, as well as the character "BOKU" courses.

Fixed% rate of teacher-hours (or contact hours) will be held from habilitated scientists from BOKU. Teachers, who do not belong to the BOKU staff, have to prove their teaching as well as practical and thematic qualifications.

To ensure the quality of the various educational events and the actual teaching-learning processes several important items have to be checked:

- Informing the participants about respective learning objectives;
- Explain the significance of the subject matter;
- Activation and orientation of previous knowledge of the participants;
- Use of different teaching methods (lecture, discussion, team work, problem-based learning, Jigsaw, interactive exercises, using multimedia, e-learning);
- Use of helpful learning materials;
- Feedback on approach and performance;
- Lessons related to practice application; a connection of people from the practice has to be assured.

Notable features of the teaching-learning processes are specific experiences in working life of the participants, which must be linked to the teaching methods. The participants are under high time pressure and therefore they expect a high practical relevance of the content and subject them to critical scrutiny. (Gerds and Müller, 2008)

Recording the opinions of the participants and teachers for feedback information regularly after every module is one of the key success elements. Examination regulations and complaints management ensure low-threshold possibility of ad hoc announcement of complaints and criticisms.

Quality of Results

Statistics course review and documentation on the program's success and providing feedback information to optimize future programs identifying relevant key performance indicators (based on previously collected data continuously):

- Participation rate;
- Drop-out rate;
- Extent / proportion of recognized external teachers.

Review of graduate work verify compliance with the design of the program criteria for final papers and provision of feedback information to optimize future programs

A year after completion of the program, a survey of graduates reviews the sustainability of the learning success and transfer follow-up survey approximately. Visible learning effects (knowledge, skills) and the completion of transfer in professional everyday will be questioned. Additionally, a survey of employees of the graduates is essential.

4.3 Involvement of the EQF within the QAS

On a long term, the QAS is involving the recommendations and rules of the European Qualifications Framework for lifelong learning (EQF), which provides a common reference framework and assists in comparing the national qualifications systems, frameworks and their levels. It serves as a translation device to make qualifications more readable and understandable across different countries and systems in Europe and to promote the mobility of European citizens whether for studying or working abroad. In practically it means that all CPD Courses will be assigned to different levels of the EQF depending on the Learning outcomes.

5. SUMMARY AND CONCLUSIONS

The article describes the design and the implementation of the extra-occupational study program '*Land Management in Rural Areas*'. It documents in detail all steps of curriculum development and gives an overview about procedures and activities required for running the course program. The quality management system for the whole implementation process is presented.

In European Union in general and in Austria in particular, Life Long Learning is an important issue and it is part of all educational strategy papers. However, there is no extra money to initiate and to push the written objectives. Therefore, all LLL study programs have to be cost covering.

On academic level, universities have to take leadership for Life Long Learning activities. Proper educational infrastructure, existing research laboratories, and excellent teaching staff are essential ingredients for outlining continuous professional development. Nevertheless, it is necessary to centralize all LLL activities in one institution at the university to bundle common working procedures, e.g. marketing of LLL programs.

It was a great experience for the authors to develop a curriculum from the scratch. To design an extra-occupational, interdisciplinary, and cost covering LLL course was an additional challenge. Some figures from the "making of" of the scientific head of the study program (one of the authors) documents the big effort for this task: 50 meetings, 400 hours of workload, and more than 1.500 e-mails.

The extra-occupational study program '*Land Management in Rural Areas*' is a success story at BOKU. Students, module officers, teachers, course managers, university management, and stakeholders give kudos on structure, content, and execution of the study course. This acknowledgement from all involved persons and groups as well as word-of-mouth recommendations are important drivers for students' recruitment for the next study class.

REFERENCES

- Bacher, G., 2009. The European Higher Education Area: Goals Achieved & Outlook towards 2010 and Beyond. In: FIG Workshop on Navigation the Future of Surveying Education. Proceedings. Editor: Austrian Society of Surveying and Geoinformation. Österreichische Zeitschrift für Vermessung und Geoinformation (vgi). 97. Jahrgang, Heft 1/2009. pp 15-20. Vienna, Austria. ISSN 0029-9650.
- Balzer, L; Beywl, W. Evaluationskonzepte für wissenschaftliche Weiterbildung 2008. Qualität in der Wissenschaft ISSN 1860-3041
- BMWF, 2012. Bologna 2012. Bericht über die Maßnahmen der Umsetzung der Bologna-Ziele in Österreich. Bundesministerium für Wissenschaft und Forschung. Berichtszeitraum 2010-2012. p 20. Wien.
- Gerds, M.; Müller, U. (2011) Evaluation und Qualitätsmanagement in weiterbildenden berufsbegleitenden Master- Studiengängen. Qualität in der Wissenschaft ISSN 1860-3041
- Hanft, A., 2005. Qualitätssicherung, Qualitätsentwicklung und Qualitätsmanagement in der Hochschul(evaluations)praxis.
- Drucker, P., 1993. Die postkapitalistische Gesellschaft. 320 Seiten. ISBN: 3430122228. Econ Verlag Düsseldorf.
- EC Education and Training, 2012: The Bologna Process – Towards the European Higher Education Area. Homepage: http://ec.europa.eu/education/policy/higher-education/bologna-process_en.htm (Access on 26 February 2015).
- EHEA, 2012. Making the Most of Our Potential: Consolidating the European Higher Education Area. Bucharest Communiqué. EHEA Ministerial Conference. Bucharest, 26-27 April 2012.
- LLM Ländliches Liegenschaftsmanagement – Homepage des Universitätslehrgangs: <http://www.boku.ac.at/liegenschaftsmanagement.html> (Last Access on 26 February 2015)
- Mansberger, R; Navratil, G; Aleksic, I; Bozic, B. (2012): Developing a Continuous Professional Education Program for Land Management Experts in Austria and Serbia. GEO 2012 - Key Competences of Educational Backgrounds in Geodesy, Geoinformatics and Land Management, Beograd ISBN 978-86-7518-154-5 pp 188-198.
- Nickel, S., 2006. Qualitätsmanagement.-Einführung in das Hochschul- und Wissenschaftsmanagement.
- Nickel, S., 2007. Institutionelle QM-Systeme in Universitäten und Fachhochschulen.
- Richtlinie zur universitären Weiterbildung an der BOKU Beschluss von Senat und Rektorat 2006 – 07 – 05, Änderungen/Ergänzungen Beschluss Senat 2010 – 11 –17, Arbeitsgruppe Qualität in der Weiterbildung (Guggenberger, Florineth, Hackländer, Paulus, Scheidl, Sieghardt, Staudacher, Stöglehner), Mai 2006. Änderungen/Ergänzungen (Bernhardt, Christof, Hackländer, Henkel, Keber -Höbaus, Paulus, Reimann, Sieghardt, Staudacher, Toppelreither) Juli 2010.

LLL Course on Land Management at Boku University Vienna: The Making of ... (7839)
Reinfried Mansberger and Christina Paulus (Austria)

FIG Working Week 2015
From the Wisdom of the Ages to the Challenges of the Modern World
Sofia, Bulgaria, 17-21 May 2015

BIOGRAPHICAL NOTES

Reinfried MANSBERGER currently works as an Assistant Professor at the Institute of Surveying, Remote Sensing and Land Information at the University of Natural Resources and Life Sciences, Vienna (BOKU Wien). In 1982 he obtained his Master's degree in surveying at the Vienna University of Technology. He obtained his PhD degree at the BOKU Wien. He is involved in FIG as Austrian delegate of Commission 2. Reinfried Mansberger is an elected member of the European Academy of Land Use and Development and Council member of the Austrian Society of Surveying and Geoinformation. His research work is focusing on Land Use Planning, Land Information, Environmental GIS Applications, and Cadastral Systems.

Christina PAULUS

Christina PAULUS worked as a Scientist for Ecology and is now as the Head of the UNIT Lifelong Learning and Continuing Education at the University of Natural Resources and Life Sciences, Vienna. She is supporting scientists from the departments of BOKU in planning and implementation of continuing education courses and national and international certificate programs, focusing on strategic project planning, quality management and marketing for LLL. Her unit offers training for curriculum development, budgeting and controlling for other Universities to implement LLL structures. The unit also develops and manages cooperation with partners from the industry, associations and NGO's. She is the representative for the implementation of the EQF, NQF for Universities and is the representative of the Austrian Continuing Education University Network (AUCEN) and for the European Continuing Education University Network (EUCEN).

CONTACTS

Ass.Prof. Dipl.-Ing. Dr. Reinfried MANSBERGER
Institute of Surveying, Remote Sensing and Land Information (IVFL)
University of Natural Resources and Life Sciences (BOKU Wien)
Peter Jordan-Straße 82
A-1190 Vienna
AUSTRIA
Tel. +43 1 47654 5115
Email: mansberger@boku.ac.at
Web site: www.boku.ac.at

Mag.a Christina PAULUS
Centre for Education – Department of Lifelong Learning and Continuing Development
University of Natural Resources and Life Sciences (BOKU Wien)
Gregor Mendel-Straße 33
A-1180 Vienna
AUSTRIA
Tel. +43 1 47654 1038
Email: christina.paulus@boku.ac.at
Web site: www.boku.ac.at

LLL Course on Land Management at Boku University Vienna: The Making of ... (7839)
Reinfried Mansberger and Christina Paulus (Austria)

FIG Working Week 2015
From the Wisdom of the Ages to the Challenges of the Modern World
Sofia, Bulgaria, 17-21 May 2015