An innovative concept to increase the innovative ability of enterprises at the European level: Qualification and Consulting Concept for sustainable management

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Background – sustainable management and innovative ability of enterprises
It is adequately proved that small and medium-sized enterprises (SMEs) in which sustainable management is firmly established in the corporate strategy and in the every-day working processes obtain a competitive advantage (see e.g. Mandl, Dorr 2007, European Commission 2007). The transition to a sustainable economic model and the implementation of sustainability principles in all business processes require a significant degree of innovative ability (ZIT 2004). Fichter and Arnold (2003) assess in a study that, generally speaking, the main driver for environmental innovations is cost pressure along the value chain (Fichter, Arnold 2003.24f). Thus, innovation measures are rather aimed at saving material, energy and waste management costs than at 'saving the environment' (ZIT 2004.19).

Apart from these externally driven innovation measures, the internal capability of enterprises to initiate innovations1 and to successfully implement these in the long term largely depends – besides organizational and technical conditions - upon the people who work in the respective enterprise (Henning, Oertel & Isenhardt 2003.133). With reference to predominant organizational structures and proceedings in enterprises it can be stated that enterprises often lack 'innovative milieus'. Hierarchical structures, internal bureaucracy, a lack of feedback as well as learning cultures or a business culture based upon secrecy and discretion can be impediments to the creation of an innovative culture of ideas (ZIT 2004.24; EFA, WI 2001.37). A poorly developed learning culture and an unconstructive way of dealing with mistakes and criticism, f.i., can be indicators for a business culture that inhibits innovations (Hartmann, Brentel & Rohn 2006).

It can be observed that a business culture that is conducive to innovations can be linked with the existence of a form of participation of the employees (Klippert 2009, Anlauf, Holm & Wirner 2007.144, Stuhldreier 2002), with an adequate culture of mistakes (Hartmann, Brentel & Rohn 2006), with enabling structures for organizational learning as well as with individual qualification and the development of competencies (Hartmann, Brentel & Rohn 2006, Anlauf, Holm & Wirner 2007, EFA, WI 2001).

As an important condition for the innovative ability of enterprises is knowledge and (further) training of decision makers and employees in the companies, it is a necessary condition to enhance the status of professional and methodical knowledge as well as competencies concerning sustainability in general and sustainable management in particular.

Approach of Euro Crafts 21

Project context
Most SMEs in Europe are located in the crafts sector. For the European craft sector appropriate qualification and consulting possibilities are still missing especially for employees in small-sized enterprises. Yet, due to the employment figures (European Commission 2009.15ff) and the huge significance concerning the support of jobs and the influence regarding growth, innovation and initiative, the European craft sector is a significant target group for an enhancement of innovative ability for a more sustainable global business.

For this reasons, a German project was selected for realizing an innovation transfer of it’s project product, a German “Qualification and Consulting Concept” (WHKT no year listed). The German Qualification and Consulting Concept (in the following: QCC) was developed in a national context of selected craft enterprises and was rated as very useful because of its (European) relevance, the modularity and flexibility on a structural level and its excellent documentation. This innovation transfer was now realised within the project “Euro Crafts 21 — Vocational Education for Sustainability in the European Craft Sector” (2008-2010). Within this project, the German product was adapted and expanded to the European level in order to improve the vocational education in Europe. Germany, Finland, Austria, Slovakia, Spain and Hungary are among the participating partner countries and are working together until the end of the project (December 2010). Target groups for the development of competencies in the field of sustainable economy and management within the European craft sector

1 For the definition of innovation see Schumpeter 1993.
are educational staff at further vocational education and training institutes, enterprises owners and business executives as well as consultants and multipliers (Rohn, Bliesner 2009). The main aim of Euro Crafts 21 is the development, pilot testing and dissemination of the adapted and expanded German QCC. In terms of education policy and economic strategy, the project is well placed among political efforts to achieve a more sustainable mode of production. The project is embedded into the Lisbon and EU Sustainability Strategy as well as the UN Decade of Education for Sustainable Development and is supposed to contribute essentially to their implementation. The QCC of Euro Crafts 21 is linked with the term “Innovation” from two perspectives. On the one hand, the approach itself makes use of innovative elements, on the other hand, the approach aims at the promotion of the innovative ability of enterprises through qualification. In the following, first, the approach itself is described, and, secondly the cohesion between innovative ability and learning in the context of the project Euro Crafts 21 is explained. Lastly, the perspectives of the approach beyond the project are reflected.

**Euro Crafts 21: An innovative concept**

**Sustainability as an integrated factor**

The QCC is designed to integrate the guiding principle of sustainability into existing business processes in SMEs. It considers the context of SMEs in the craft sector, in particular, that they are driven by day to day business and can afford little additional resources (UNEP 2003.5) but still wish to improve their competitive position by incorporating sustainability (Fraunhofer IAO 2010). The QCC considers existing business processes that take place in SMEs, and frames these within the guiding principle of sustainability - in contrast to an additional measure, this approach offers a framework in which the implementation of steps towards more sustainable business processes can be mentally categorized and, thus, implemented more easily, since the concept is based on existing structures and operations. Sustainability as integrated element can be identified within the content of the QCC and its approach in consulting, assessment and qualification.

**Modularity of the concept**

The QCC is a modular concept that is composed of basic and specialized modules freely chosen, and made up of components and learning materials (see figure 1). The concept can be enlarged on every of this levels by adding a whole new module, a single component (new subtheme) or/and a new learning material. This is due to the fact that qualification needs can vary drastically across countries and enterprises.

The basic modules (marked with „B“) contain the core aspects necessary for the qualification in sustainable business in the crafts sector and consist of an introduction to the topic of Sustainable Development (B1) and of module B2: Self-Check Crafts - self-assessment of sustainable management in craft businesses (see figure 2). Module B1 and B2 can basically be used independently, but module B1 creates the basis for the instrument Self-Check Crafts concerning sustainability issues. The specialization modules (marked with „S“) serve to address the qualification needs that are a result of the self-assessment (see figure 3).

By realizing country-specific pilot-testing with trainers and enterprises, the special qualification demands of the partners countries of Euro Crafts 21 were identified and were in a second step transferred into concrete qualification materials. The, thus, expanded concept now includes 14 specialization modules, illustrated in the following figure 2.
1. **Module description** – introduction into the topic

1.1 **Components** to relevant sub-themes (3-5 components: A, B, C,...)

1.1.1 **Working sheets** per component (3-5 working sheets/learning materials: A1, A2, A3/B1, B2,...)

Figure 1: Structure of the Qualification and Consulting Concept (QCC), source: own source

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**Basic Modules**

- B1: Sustainable Development
- B2: Self-Check Crafts

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**Specialization Modules**

- S1: Mission statement / Strategy
- S2: Customer needs
- S3: Sustainable business segment
- S4: Marketing-concept
- S5: Process management
- S6: (Internal) Corporate communication
- S7: Key figures for corporate management
- S8: Continuous improvement process (CIP)
- S9: Sustainability communications and reporting
- S10: Product cycle and usability
- S11: Project management
- S12: Innovation
- S13: Situation leadership
- S14: Cleaner technologies

Figure 2: Euro Crafts 21 product: Enlarged Qualification and Consulting Concept (QCC), source: own source
Promotion of the innovative ability through competence development

Advisory and qualification aspects within the QCC
The approach of the QCC brings together advisory and qualifying aspects that consider the particularity of SMEs in the craft sector: scarce time, financial and human resources limit possibilities for implementing training for sustainability on own initiative (UEAPME 2010). They, therefore, need a flexible approach and often a certain degree of support. An inevitable element in this process is the participation possibility for enterprises’ employees (as explained at the beginning of this paper). Within the QCC, such a moment does not only take place when employees are in qualification processes (module B1 and specialization modules) but also during the self-assessment. Self-assessment is a typical instrument in consulting processes in order to identify the problem areas and improvement potentials in a business. The QCC envisions that after an introduction to the topic of sustainable economic activity (B1), companies perform a Self-Check Crafts to clarify their training needs (B2). The aim of the approach Self-Check Crafts is to point out specific needs for information, training and development in crafts businesses, based on strengths and potentials that they have recognized themselves by conducting the Self-Check Crafts in their companies. Compared to many other evaluation tools and/or company assessments, the Self-Check Crafts provides the advantages of involving employees, of developing participants’ self-appraisal competence and of contributing to increased motivation by enabling target-oriented discussions. The following figure 3 illustrates a “radar chart” that represents a fictional result of the Self-Check Crafts\(^2\). The strengths/potentials are described on three process levels: Planning, Implementation and Review.

![Radar-Chart, Self-Check Crafts](image)

**Figure 3: Radar-Chart, Self-Check Crafts, source: translated Rohn (no year listed)**

Didactic Approach of the QCC and Train-the-Trainer workshops
After an introductory module description the content is presented in form of three to five components which introduce the topic. References to further literature, useful media and links are given. Each module includes a number of working materials from which a selection can be taken. The working material contains working sheets, tasks and notes as well as tips for the trainers how to conduct the sessions and what is the necessary time-frame for the implementation of the relevant material. Competence and knowledge acquisition through direct reference to the participants’ individual scope of action is supported through the different modules of the QCC. The modules as well as the components and learning materials are independently usable, so no fixed order has to be followed. Although the learning material has been designed for the target group of managers in the crafts

\(^2\) Cuts into the centre of the diagram point towards a low performance meaning an area in which improvement may be desirable.
sector, the provided working sheets, methods and media can be useful and educational to a wide range of users from the highly advanced to the one with no previous knowledge.

The didactic approach of the QCC was important in another context as well: To ensure that on termination of the Project Euro Crafts 21, the trained leaders of the self-evaluation process and the consecutive qualification process would continue the QCC, a “Train-the-Trainer” concept was developed. The concept is designed for a workshop format of 1,5 days duration. The Train-the-Trainer workshops include informational input-parts and active working-parts. Using concrete learning material of the modules, the participants, on the one hand, make an active experience with the existing material. On the other hand, they become more familiar with the structure of the QCC.

**Euro Crafts 21 – lessons learnt**

The finalized product of the QCC will be offered expectedly in November online in the format of a multilingual tool (upcoming on: www.eurocrafts21.eu). Coming to an end in December 2010 the question arises concerning the lesson learnt from the work on Euro Crafts 21. Especially the process of the Train-the-Trainer seminars was evaluated quite well and the feedback from external trainers concerning the QCC, that was presented during the seminars, was collected fairly accurately. The results of the evaluation and the direct feedback of the QCC and the Train-the-Trainer, are presented below (Rohn, Bliiesner 2010)³.

At first can it be stated, that the prior knowledge of trainers in further vocational education is characterized by a wide range concerning the knowledge about trainings in general and about sustainability. Therefore pre-training in the topics of sustainability, sustainable business and sustainable production could be beneficial for those with less pre-knowledge. Concerning the workshops, the participants felt that it was not enough time for more exercises and a deeper look on the content.

The Self-Check Crafts (B2) was rated as very useful. To draw more attention on the Self-Check Crafts, a short preview could be made at the beginning of the first day of the workshop and time for practicing could be enlarged (even if it is already assigned a long time slot). Furthermore the specialization modules component could be expanded, since the majority of the participants wished for a deeper examination of these.

**Euro Crafts 21 – starting point: Conceptual Framework for a European Qualification and Consulting Concept (EQCC)**

The work on Euro Crafts 21 has shown, that the innovation transfer of the German approach was successful and that the QCC as an instrument is useful also for European contexts. During the project, the QCC attained a higher level when being adapted and enlarged on a European level in the purpose of an European Qualification and Consulting concept (in the following: EQCC). Taking into account the lessons learned, the obvious question is what adaption and what kind of further development are necessary to build up a fully developed EQCC. First ideas are explained in the following:

- Ways: In which way(s) is the EQCC to be further developed?

Based on the project Euro Crafts 21, the basic product that is to be advanced to a full-value EQCC is, at the moment, a modular concept that is available for the target groups in form of an online-tool. It needs to be analysed whether such an online-tool could be freely accessible for supplements. This way, an instrument could be offered for the experiences, ideas and qualification necessities of a large target group in European vocational education. In this context different forms of networks on communication platforms could be initiated (f.i. usergroups, forums).

Furthermore, it needs to be examined to what extent the EQCC should refer to concepts of Blended Learning in its implementation by trainers of vocational training who consult companies with the help of the EQCC. As Blended Learning combines and unifies two forms of learning (face-to-face learning and E-Learning), it could help to prevent excessively time consuming periods of face-to-face learning and could make long-term qualification measures more feasible. Experiences from project work in the Euro Crafts 21 during the implementation of the Train-the-Trainer instructions suggest the exploration

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³ It is important to note that the results are derived from the specific project context and are, thus, not transferable in a general manner onto other EU situations nor do they possess much empirical scope. Nevertheless important lessons for educational models in the European context in respect to sustainability in business, and for the further improvement of the developed the QCC can be learnt.
of further forms of dissemination of an EQCC. In this context, offering diverse forms of media, f.i. films, blogs, etc., might as well be interesting.

- Educational system: On which level of the (national) educational systems is it to operate?
  Whereas in the framework of the project Euro Crafts 21 so far mainly the sector of non-formal (vocational) further education was addressed, the question arises whether an advancement might serve the integration of target groups on additional levels of the educational systems. In Finland, for instance, the Train-the-Trainer workshop raised great interest not only among the ‘main’ target group of the trainers but also among students. An analysis of the curricula of relevant fields of study might reveal to which extent these already contain topics like sustainability and sustainable business etc. and where there are possible ‘points of entry’ to integrate aspects of sustainability. This would create a remarkable value added for education in the tertiary sector in Germany and on comparative levels in the educational systems of other European countries. Consequently, an adjustment of the curriculae on different levels of the European educational systems should as well include a qualification of teaching staff. Trainees of crafts enterprises could be a further target group for the EQCC in formal vocational training and further education.

- Educational policy: How can it be linked and aligned to European educational policy?
  Educational policy is central to the endeavours for the establishment of a Sustainability-orientated economy on the European level. With regard to the subject matter of Euro Crafts 21 the efforts of European educational policy with reference to the development of skills and to European comparability are central and provide ‘guidelines’ for the development of an EQCC. Qualification and the development of competencies in the corporate context serve the aim to enable the employee to get involved in innovation processes with his/her expert (technical) know-how. Furthermore, knowledge and skills that go beyond the expert qualification are very important (Kaiser, Pätzold 1999.57-58, Arnold, Nolda & Nuissel 2001.176). Such skills are methodological and social skills to constructively involve with changing processes of sustainable business, to initiate these and keep them running.
  With regard to the existing product of Euro Crafts 21 it can be stated that this ‘competence approach’ is implicitly represented in the didactic design of the tested and further developed QCC but should be made more explicit, still, in the advancement process. With reference to European educational policy and the attempts to achieve comparability of competencies on the European level and in terms of a stronger output-orientation, educational objectives of the respective modules or of separate learning material should be made explicit and clear in the framework of monitoring educational goals. This is the first prerequisite for the achievement of European comparability with respect to the learners’ competencies, skills and qualifications. It, furthermore, serves the alignment with the European Qualification Framework (EQF).
  Before designing educational material in alignment with the eight levels of the EQF, a terminology discussion is due. The EQF describes people’s actions with reference to the three dimensions “knowledge”, “skills” and “competence” on eight levels (European Commission 2008). Still, the terminology with respect to these three dimensions is not homogeneously used or consensually agreed upon, neither on the national nor on the European level – consensus-building in this reference is already a challenge in the context of a cooperation project (Bliesner 2009.55-58). Nonetheless, this is a main aim in European competence-oriented cooperation in which further European instruments and concepts such as the “European Credit Transfer System for Vocational Education and Training” (ECVET) and the activities with regard to the aim “European Quality Assurance in Vocational Education and Training” (EQAVET) should, as well, be integrated.

References


4 For the latest ‘state of the art’ in this respect see Higher Education Authority, National Qualifications Authority of Ireland 2010.
5 For Germany: National Reference Point for Quality Assurance in Vocational Training (DEQA-VET) affiliated to the Federal Institute for Vocational Education and Training.


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