9th European Quality Assurance Forum

13 – 15 November 2014

University of Barcelona, Spain

Changing education – QA and the shift from teaching to learning

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Short bio (150 words max):

Kathrin Wetzel is a research assistant in the field of Further Education and Educational Management at the Institute for Education at the German Carl von Ossietzky University of Oldenburg. In 2012 she deputized for Dr. Marlen Arnold, worked as a collaborative project coordinator and managed the project MINT-Online in the competition "Advancement through Education: Open Universities". The project is funded by the German Federal Ministry of Education and Research (BMBF). She is working on her doctorate in the field of the financing of extra occupational study programs. Prior to her work in Oldenburg, she was a research assistant for the professor of Educational Organization and Management at the Institute for Education Research at the School of Education at the German University of Wuppertal. Besides she works as a scientific tutor in several extra-occupational study programs at the Center of Lifelong Learning in Oldenburg.

Dr. Marlen Arnold is a senior researcher in the field of sustainability. Currently she is working at the University of Oldenburg managing a joint research project concerning distance learning. Since her beginning of her scientific career in 2001 she has been dealing with strategic questions regarding sustainability. Marlen Arnold has been working in several research projects at the University of Oldenburg, the Technical University of Munich and the Institute for Ecological Economy Research (IÖW) in Berlin. She was a research fellow at the Hanken School of Economics and the University of Vaasa, Finland. Her main fields of research are to be found in sustainability, strategic and innovation management. In addition, Marlen Arnold has gained comprehensive experience in the fields of project management, financial resource management and innovation management. Since 2004 she is successfully teaching these main subjects among others at the Center of Lifelong Learning in Oldenburg.

Proposal

Title: Diversity and culture as pull factors for successfully practiced quality standards in virtual higher, further education and scientific trainings

Abstract (150 words max): The Bologna process considers a greater internationalization and cultural diversity. In virtual higher education quality is particular important but difficult to manage and to reach. This paper shows the relevance of quality in the field of e-learning offers and demonstrates why quality standards are practical and

indispensable for further academic education programs. In the field of virtual higher education students are often faced with uncertainty. The development of quality standards is not only useful because of the uncertainties but also to face diversity and cultural differences at a high standard. This paper presents the importance of the standards and linked them with the cultural characteristics of students. Moreover, it highlights gender and diversity aspects in the quality framework.

Text of paper (3000 words max):

Introduction

The German Government has been taken an active role in strengthening Germany's path towards the knowledge society in the last few years. Therefore, in 2008 the federal government launched the qualification initiative "Advancement through Education: Open Universities" which seeks to increase the educational opportunities of heterogeneous students and to ensure a solid base of professionals for the future. The objectives of the reform efforts are to secure the offer of specialists, to improve the permeability between vocational and academic education, to transfer and integrate knowledge more rapidly into practice, and to safeguard the international competitiveness of the science system to strengthen a sustainable profile in terms of lifelong learning strategies and occupational studies. The target groups of this initiative are heterogeneous students, such as people with family responsibilities, professionals, such as people in employment or bachelor-graduates, as well as people with professional skills, who do not have a classical higher education entrance qualification, job-returnees or drop-out students. Due to the demographic changes, extension of working time, shortage of skilled experts, academisation of the world of labour (WOLTER 2011, STOCK 2012), the orientation of the universities towards lifelong learning and studying is necessary in particular. The continuing education programs need a great technical support and they differ in a significant way from the traditional campus programs and the form of teaching. Due to the fact that students have specific conditions to study, such as the professional activity, a flexible learning setting and the support of the connected companies, HEI is necessary (e.g. E- or mobile learning, flexibility in location and time, flexible working hours, practical linkage between knowledge into real job situations). Our study shows that there is a need of comprehensive quality requirements resulting i.e. the necessities of the teaching staff and the flexibility of the study organization. The relevant research questions of the study are:

- Which quality criteria are adequate to virtual higher education management?
- How do culture, gender and diversity have an impact on the respective development of the quality criteria?

Quality in HEIs and in scientific further education and training

The Bologna process strengthens the interlinking of lifelong learning and the internationalization of study programs and thus makes the development of high quality standards obvious. The scientific discussion about quality is characterised by a variety of terms and definitions. In education science one of the most common definitions of quality is based on HARVEY & GREEN (1993) that distinguish five perspectives of quality: excellence, consistency, fitness for purpose, value for money and transformation. In higher education the fitness for purpose and more recently the excellence are dominant. As varied as the quality definitions are the views on how quality in virtual learning contexts or e-learning has to be assured (HOLTEN & NITTEL, 2009). Some authors are convinced that quality can be generated by external institutions such as accreditation agencies or quality audits. Others, however, argue that higher education institutions (HEI) themselves have to account for quality internally. It is required that online-based courses at HEI must meet the same standards as traditional classroom teaching. Other authors assume that the conventional teaching at HEI is obsolete anyway in terms of

their methods, didactics and concepts of quality, so that online-based study programs provide innovation stimuli for classroom teaching (JUNG & LATCHEM, 2012). According to JUNG and LATCHEM (2012) online-based learning concepts include the following three aspects: Disaggregated processes, team organisation, as well as visibility and openness.

In virtual higher education quality is particular important (BENZ et al., 2009). Due to incomplete information students face tremendous uncertainty regarding the provider and media-didactic effectiveness (DANIEL, 2010). Therefore, the development of clear quality standards is important to address the prejudice and hostility towards the techniques and methods used in the field of virtual higher education and especially e-learning (DANIEL, 2010). Some common criticisms are that virtual education or e-learning makes students lonely, it is more favourable and less burdensome compared to conventional classroom teaching (WIGGER, 2013). Other objections to the virtual or e-learning are that it is too much focused on the associated technique(s) or used tool(s) and too little focused on teaching content. Thus, it supports the trend of commercialization of higher education institutions. As a result of this teaching in a virtual surrounding is still facing an image problem that only can be solved by the help of a stringent quality work.

In German-speaking countries the issue of quality in e-learning contexts has rarely been perceived as a research topic. It is rather assumed that programs have to meet uniform standards, regardless of the standard presentation or the target groups. In the international context, however, the argument is to be found that special learning designs are accompanied by special quality requirements that have to be considered in the design and evaluation of online-based courses (JUNG & LATCHEM, 2012; KIDNEY et al., 2007).

Culture

The participants of virtual course offerings become increasingly international, so that academic learning becomes more and more an intercultural learning experience (CAMPBELL, 2011). Individuals from different cultural backgrounds have different expectations of higher education and have different learning styles (Jonassen, 1999). It is culturally constructed, what and why something is to be considered as meaningful learning. The particular challenge for program development is the alignment of E-Learning towards the cultural characteristics of the participants. Similar to the concept of quality culture is not easy to define, too. Culture can be seen as an accumulation of institutions, meanings, values, norms and symbols that form the perceptions, thought patterns and behaviour of individuals. Culture particularly influences learning processes as it can affect social behaviour, communication, cognitive processes, and the handling with technology (VATRAPI, 2008). There are different approaches to measure the impact of cultural differences on learning processes as well.

Methodology

In this paper the quality standards that are adequate to the design of high-quality virtual extra-occupational study programs in Germany will be developed. Therefore, the three quality assurance approaches for e-learning concepts used in the U.S., Australia and the United Kingdom are analyzed, compared and presented (QAA, 2013; QMP, 2013; ACODE, 2013). Virtual learning arrangements are increasingly being offered across national boundaries. This results in additional demands on the quality of virtual teaching, because different cultural contexts and gender mainstream requirements are closely interlinked with different expectations for academic teaching and learning styles (CAMPBELL, 2011). It becomes clear that the three different countries use similar indicators for quality assurance. We identify the following quality standards for e-learning in the German higher education system: teaching-learning interaction, teaching material, educational technologies, testing and evaluation, teaching staff, consulting and infrastructure, responsibility and management structures as well as evaluation and information management. The identified quality standards provide an appropriate quality framework

for virtual higher education. In a second step the cultural dimensions of learning and gender mainstreaming requirements are linked with the developed quality standards. It is analyzed what cultural and gender-related particularities have to be considered for an international audience in the developed quality standards. The analysis is based on intercultural teaching and learning research in the specific context of virtual teaching (PARRISH & LINDER-VANBERSCHOT, 2010). The researched standards concerned different levels allowed to break down five quality standards for the course, program and organizational level and associated structures, which are presented below (see table 1).

Level of course and program
1. Learning outcomes, i.e. formulate clear objectives, determine of participants skills and competencies 2. Teaching-learning interaction, i.e. open a variety of opportunities, support of active learning 3. Course material, i.e. professional didactic methods, regular review and update loops 4. Educational technologies, i.e. save user-friendliness, offer a variety of communication tools for an active learning process 5. Examination and assessment, i.e. regular feedback on the individual learning progress, development and communication of an assessment-system
Level of organization
1. Management, i.e. embedded further education into meaningful and appropriate responsibilities and management structures 2. Design of admission and transition, i.e. review of further education offers in terms of the transfer and crediting of earlier achievements 3. Consulting and service, i.e. adapt of consultancy offers and infrastructure on the needs of heterogeneous participants 4. Requirements for lecturers, i.e. give professional and methodological trainings of lecturers, competence of lecturers in dealing with non-traditional students, further qualification and practical orientation 5. Evaluation and information management, i.e. regular evaluation of the offers, feedback of the results to all involved persons, introduction of improvement measures

Table 1: Developed quality standards and exemplary indicators of course, program and organizational level in HEI (source: authors' compilation)

Normally, further education areas in HEI include an extension of the priority areas of this institution. In consequence, the existing quality assurance systems have to be enlarged to take the special quality needs of these areas into account. Quality in further academic education is a critical factor to achieve success and to get participants paying – no matter, whether they pay the course of study on their own or their employers do. The identified and developed additional quality standards can help to make programs better and successfully. Even in the fields of developing the teaching personnel, the practical orientation of the contents or the respective marketing strategy of the study programs, some important areas of action have been identified and described.

Results

Our findings show that for international target groups, the standards must be culturally adopted, because of different expectations, objectives, modes of communication and learning styles. In terms of social relations between the learners and the lecturers the power distance has to be taken into account. While designing interactive teaching-learning situations it is equally important (and depending on the participants) to establish individualistic or collectivist learning arrangements. Depending on the temporal perception and uncertainty avoidance of the participants the e-learning process should be structured culturally appropriate. Our main aspects are shown in the following table.

Course and program level		**Organisational level**
Teaching-learning interaction	**standards highlighted by selected**	**Teaching staff**
Promoting activity: use of wikis, blogs, videos, quizzes, simulations, group discussions and interactive learning cards **Competencies development**: motivation for self-learning processes independent of time and place **Clear articulation**: Definition of learning objectives and competencies before each unit		**Requirements**: technical, communicative, methodological and intercultural competences; competence in the use of educational technologies; reflexion of the internal and external culture **Support and training**: educational concepts like training, conversion of accessibility **Incentive systems**: monetary, organisational, immaterial

Diversity: varied, stimulating learning settings		**Diversity**: expertise on appropriate theoretical and practical interrelation
Teaching materials		**Consulting and infrastructure**
Timeliness and diversity: absorption by practice and reflection tasks **Feedback loops**: peer-review and evaluations before the use of materials **Verification**: compliance with scientific standards **Cultural background**: Diversity oriented preparation of documents		**Support by administration and technology**: introductory courses and general consulting services **Flexibility**: accessibility on weekends and in the evenings, 24 hour access to resources (digital library services, databases, frequently asked questions or handouts); communication spaces **Credit of inputs**: transparency and contact persons **Focus on participants**: consulting of organising and realising the study
Education technologies		**Responsibilities and management structures**
Interface options and flexibility: interaction with service facilities (examining offices, counselling or library) as well as external applications, web 2.0; possibility of representing the contents on a variety of mobile devices **Media diversity and multi-directionality**: text-based , visual and auditory media (in the form of digital texts , podcasts, videocasts, multimedia contents) as well as forums, chats and virtual seminar rooms **Data protection**: transparency and anonymity **Actuality**: innovative learning formats such as animated case studies, simulations, laboratory facilities and hands-on test questions, additional illustration material highlighting problems and solutions		**Anchoring of mission statement**: significance of offers **Embedding in organisational structure and process-oriented organisation**: higher education and examination regulations, relevant written statutes; types of authorisation regarding offers and organisation; testing administration and process; responsibility of program contents; issuing certificates and charging **Organisational development** **Networking and cooperation**
Testing and evaluation		**Evaluation and information management**
Competency-based and diversity: different test formats on different media (e-mail for writing, online chats, phone interviews for discussions, video sequences for experiments, sample solutions for self- checks) **Formative and summative assessments**: feedback on the level of performance by solving task, homework, tests and exams **Regularity**: facilitating informal communication for exchange between the participants **Clear criteria and methods**: Accessible assessment criteria, compatibility between testing forms and set learning objectives		**Regularity**: evaluation of the offers (individual courses, complete courses, units like department or virtual teaching centers) **Satisfaction of students and teachers**: survey of relevant quality characteristics, disclosure and realisation of ongoing optimization potential **Establishment of feedback culture**: feedback to course managers and identification of improvement measures, design based on needs and demand **Variety of methods**

Table 2: Quality standards highlighted by selected indicators (source: authors' compilation)

Conclusion

E-learning promises a particularly high flexibility to study as it allows a space-and time-independent learning for the participants by various approaches. Temporal, spatial and socio-economic barriers of learning are easier to overcome due to the increasing acceptance of new media and access to the Internet (Usoro & ABID, 2008). At the same time, the participants have access to a broad expertise, which would be unavailable locally. In this paper, relevant quality standards for the virtual higher education were worked out taking the cultural characteristics of the students in the field of e-learning into account. Virtual contexts obtain peculiarities that have to take into account regarding quality assurance. To the level of a course or program the following areas belong: teaching-learning interaction, teaching materials, educational technologies as well as testing and evaluation. The corporate level considers quality measures concerning the teaching staff, consulting and infrastructure, management and responsibility structures as well as evaluation and information management. The standards must be culturally adopted for an international audience, because different expectations, objectives, modes of communication and learning styles are given. The prevalent power distance has to be considered in terms of social relations between the learners and the lecturers. It is

equally important to use rather individualistic or collectivist learning arrangements while designing the interactive teaching-learning situations depending on the mixture of the participant group. The decision how good the e-learning process should be structured and what form the reviews and assessments should have should be made culturally on the temporal perception and uncertainty avoidance. In total, e-learning and the increasing internationalization and thus the consideration of cultural diversity provide new dynamics concerning the traditional understanding of quality in German universities. These challenges need sustainable solutions. EHLERS (2009) argues for a holistic understanding of quality in education that goes far beyond accreditations and standards.

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Questions for discussion:

- Is cultural-sensitiveness referring to quality management important in other countries?
- Which cultural experiences are gained in HEI, especially in quality management?
- Which indicators are moreover relevant for a cultural-sensitive quality system?