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Changing education – QA and the shift from teaching to learning

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Responsible for presenting: needs to be defined



Proposal

Title: Let's Evaluate Course Evaluation!

A comparison between two European universities of applied sciences

Abstract (150 words max):

This paper looks at the way two European universities of applied sciences (UAS) deal with the "shift from teaching to learning". It focuses on Berner Fachhochschule (BFH) and Hochschule Magdeburg-Stendal (HS MD-SDL) from the management point of view. First, the instruments used at both UAS for enhancing teaching quality are analyzed. Secondly, it looks at the evaluation of study programs and courses. To analyze the evaluation questionnaires, criteria are developed based on Ertel and Wehr (2007). Is it possible, with the given instruments, to "measure" the above-mentioned shift in teaching?

We discover that the UAS use similar instruments in different ways. We ask what one UAS could learn from the other with regard to evaluation practice. At the end, we point out the potential of a learner-centered approach to evaluation for UAS with their "learning expertise" – in contrast to the universities, which are more focused on "research excellence".

Introduction

Education is located in a crucial position between society, economy, politics. So, institutions of higher education have to cope with a variety of demands. On the European level, this attention on national level is accompanied by the movements resulting from the Bologna Declaration (1999). The Bologna Declaration initiated reforms on the structural and organizational level. Partly, these reforms were contrary to quality developments in teaching and study programs (see Wildt and Eberhardt 2010:12)¹. Nevertheless, there is broad discussion about teaching and teaching methods. The "shift from teaching to learning" (1995) represents the new paradigm in didactics which is widely recognized. As Wildt and Eberhardt (2010: 16) state, this new perspective sees the teaching from the student's point of view. The focus is on developing core competences, which aim to optimize the student's position in the labor market. These recent trends have resulted in the current focus on education practice of the institutions of higher education. The management has a crucial interest in enhancing teaching and learning quality.

This paper investigates the different approaches to this topic by universities of applied sciences (UAS) using the example of Bern University of Applied Sciences BFH (Switzerland) and Magdeburg-Stendal University of Applied Sciences HS MD-SDL (Germany). This comparison is interesting from a management point of view. BFH and HS MD-SDL are similar in size and offer a broad range of bachelor's and master's degree programs.

Table 1: Comparison BFH - HS MD-SDL

	BFH	HS MD-SDL
Foundation	1997	1991
Size	Six departments, 6800 students and 1500 employees	Seven departments (five from 2015), 6600 students and 430 employees
Courses	29 bachelor's and 21 master's degree courses	27 bachelor's and 18 master's degree courses
Profile	Architecture, Wood and Civil Engineering; Agricultural, Forest and Food Sciences; Arts; Engineering and Information Technology; Business, Health, Social Work; Sports	Civil Engineering, Engineering and Industrial Design, Water and Waste Management, Social and Health Sciences, Applied Human Sciences, Media, Economics
Specific features	Various sites in 4 different locations, multilingualism	Two sites 60 km apart

We look at the instruments in the field of didactics and evaluations. The main interest lies in the fit of these two areas. Therefore, the measures taken to promote better didactics are analyzed and compared first. Furthermore, the evaluation of teaching practice is taken into account, to investigate how this has changed in recent years and whether changes in didactics can be measured.

Instruments in the Field of Higher Education Didactics

In this chapter we focus on the different instruments used by the two UAS to improve didactics. These instruments cannot be seen as a general indicator for "good" teaching, but they reflect the importance the management attaches to the subject.

Bern University of Applied Sciences (BFH)

The subject of didactics is institutionalized in the "University Teaching & E-Learning Office²" (UTO). This office provides a broad range of advisory services and courses for lecturers³ This includes free information, publications and short films on the website.

The most effective instrument for enhancing teaching quality is the compulsory course in university teaching. Lecturers are obliged to take the certificate course within two years of being employed by BFH if they do not have sufficient methodological didactical knowledge⁴. Integral parts of this course include new teaching methods and output orientation. Furthermore, the course instructor

² Fachstelle für Hochschuldidaktik und eLearning

³ For example Moodle Workshops, Podcasting/Screen casting or Didactic

⁴ See „Gesetz über die Berner Fachhochschule“, Art. 20, Abs.2²: https://www.sta.be.ch/belex/d/4/435_411.html (14.7.2014)



visits the participants after completion of the course. This helps to ensure quality and support lecturers in reflecting on their teaching methods. As an incentive, the UTO created a Certificate of Advanced Studies (CAS). Participants on the certificate course may attend three additional courses to complete their CAS. The BFH has so-called Guidelines for Teaching and Learning⁵. These provide a framework for "good" teaching and learning and reflect a competence-oriented approach. The impact of these guidelines is thought to be rather small since their use depends on the initiative of individuals.

There are also other instruments for enhancing teaching methods, such as peer observation of teaching or analyzing one's own teaching with one's supervisor. However these instruments are voluntary and largely depend on the head of the degree program.

Unfortunately, we know very little about the overall quality of teaching and the impact of the instruments described. The only tool for monitoring teaching quality is evaluation (see "Evaluation tools").

Magdeburg-Stendal University of Applied Sciences (HS MD-SDL)

HS MD-SDL has an office for university teaching as well, the Centre for Higher Education Didactics and Applied Research (ZHH)⁶. Besides consulting services and educational offers, it also has responsibility for organizational development and applied research in the field of higher education. So, didactics forms part of the broader field of quality. It is entirely funded by the Federal Ministry of Education and Research (BMBF); this funding will end in September 2016. The ZHH offers an optional certificate course. Only a few lecturers attend this course. Peer observation of teaching is another instrument. But it is up to individuals whether or not they choose to take part in such a program. Until now, lecturers have been rather reserved vis-à-vis this possibility.

On the strategic level, quality in the study programs is a subject in the Mission statement of HS MD-SDL⁷. HS MD-SDL has also formulated a strategic document draft entitled "Good programs through good teaching"⁸. The impact of these strategic efforts is hard to quantify.

In monetary terms, HS MD-SDL is able to reward extraordinary efforts in teaching, research etc. where teaching is the most important criterion. For instance "innovative advancement" of a lecturer's own teaching methods or positive results in evaluations are reasons for paying additional money.⁹ Thus, the management is able to reward "good" teaching. According to the University management, this incentive is used in this way, but the financial effect is not substantial (only 100 to 150 EUR per month).

⁵ BFH (2009), Leitbild zum Lehren und Lernen an der Berner Fachhochschule

⁶ Zentrum für Hochschuldidaktik und angewandte Hochschulforschung

⁷ Mission Statement <https://www.hs-magdeburg.de/hochschule/portrait/leitbild.html> (4.7.2014)

⁸ "Gutes Studium durch gute Lehre", version of the 3.1.2013

⁹ See „Ordnung der Hochschule Magdeburg-Stendal für die Vergabe von Leistungsbezügen sowie von Forschungs- und Lehrzulagen (2014)“



Evaluations

Theoretical Background

If new conceptual approaches are to be improved, courses and entire study programs should be evaluated with adequate evaluation tools (e.g. Schaper et al. 2012: 75ff). Ertel and Wehr (2007: 19f.) define five crucial didactical areas for creating a learner and competence-oriented study setting (also Schaper et al. 2012). In this article, these areas are the basis for the analysis of the different evaluation tools.

The most important thing in learner-oriented courses is to be clear on learning outcomes (also Schaper 2012: 38ff; Kennedy 2007). It is essential for students to know the expected learning outcomes, but it is equally important for lecturers to align the design of their courses and exams ("constructive alignment", see Biggs & Tang 2007). Two criteria for analyzing the evaluation tools are:

- Have the learning outcomes been clearly communicated?
- Have the expectations and information about study settings and exams been made clear?

The bachelor's and master's degrees in the Bologna system correspond to certain competence levels (Dublin descriptors). In the relatively short bachelor's programs, students learn less content, but develop strong competences and skills that enable them to apply their knowledge in different situations in the professional field (also Schaper 2012: 58; Hans Böckler Stiftung 2009). The latter is especially important in the UAS, which offer practically-oriented education. The following two criteria derive from this:

- Do the different aspects of evaluation focus on competences or knowledge?
- Is the student able to apply the theoretical knowledge to practical problems in the professional field?

The learner orientation can also be seen in the assignation of credits (ECTS) for students' activities in the learning process (KFH 2011: 10f). Rather than measuring hours of lectures, the credit approach takes into account the workload of a student to reach the defined learning outcome. This approach may include the whole variety of student activities that enhance the learning process. Ideally, there is a match between the effective workload and the number of credits assigned. Therefore another criterion for our analysis is:

- Do the effective workload and the ECTS of the course match?

If we focus on the learning process, the role of the lecturer must also change. Support and coaching of students are essential (also Schaper et al. 2012: 57f, Bruppacher 2007). For this reason, another criterion is as follows:

- Is the lecturer supporting the learning process?

We added two more general criteria to the analysis of the evaluation tools in order to monitor any other indications regarding new teaching methods, the constructive alignment or general aspects regarding didactics:



- Are there any general items on didactics or the constructive alignment?
- Are the items very specific to the course or type of course?

Evaluation tools

Our analysis comprises all kinds of evaluation tools used at both UAS; these are students, alumni and lecturer surveys and self-assessments between 2003 and 2014 (in total 12 from HS MD-SDL and 15 from BFH).

During the years 2003 – 2013, HS MD-SDL used the Rindermann-questionnaire.¹⁰ As it is rather long and was used frequently, evaluation fatigue resulted. Furthermore, it was unclear how the results would be implemented in practice, which increased this effect. Therefore, in 2014 the Senate Commission on Teaching and Learning decided to introduce a shorter and more specific competence-oriented questionnaire. This decision was made according to several criteria, among other things, the competence orientation.¹¹ The GEKo-questionnaire (Grazer Evaluationsmodell des Kompetenzerwerbs) meets these criteria¹². The students' questionnaire is complemented by a lecturers' questionnaire that asks the same questions from a lecturers' perspective. Alumni are approached using a different questionnaire.

BFH has used many different evaluation tools in recent years. Prior to 2003, every department developed and used its own evaluation tools. Then, a BFH-wide questionnaire for the evaluation of courses (Q-C2003)¹³ was introduced on a voluntary basis. It defines a common evaluation procedure, whereby students use the questionnaire and lecturers carry out a self-assessment of the same course (the questionnaire and the self-assessment are not identical). The results of the evaluation are discussed in different settings with students and supervisors. After defining the Guidelines for Teaching and Learning in 2009 and adopting a concept for quality management in teaching¹⁴, a new questionnaire for the evaluation of courses (Q-C2010)¹⁵ was introduced for the whole of BFH. The evaluation items reflect the criteria on "good" teaching set out in the guidelines. Course evaluations aim very directly to improve the quality of individual courses.

Since 2012 there has also been a standard questionnaire for evaluating study programs (Q-SP2012), which is recommended for use with students and alumni¹⁶. Every organizational unit is free to add further items from an item pool. Some items in this questionnaire for the evaluation of study programs are extracted and used as steering indicators for higher management.

¹⁰ Hochschule Magdeburg-Stendal (2003), Fragebogen zur Studentischen Evaluation der Lehre

¹¹ Hochschule Magdeburg-Stendal (2014), Studierendenbefragung: Lehrendenorientierte Lehrveranstaltung, Interaktive Lehrveranstaltungen, Sprachorientierte Lehrveranstaltungen, Zusatzmodul medienbasierte Lehrveranstaltungen

¹² GEKo-Questionnaire: <https://lehr-studienservices.uni-graz.at/de/qualitaetssicherung/lehrveranstaltungsevaluierung/lv-evaluierung-in-unigrasonline/geko/> (14.07.14)

¹³ BFH (2003), Fragebogen zur Unterrichtsevaluation durch die Studierenden/ zur Selbstevaluation für Dozierende

¹⁴ BFH (2010), Rahmenkonzept Qualitätsmanagement BFH), 7ff.

¹⁵ BFH (2010), Leitfaden zur Evaluation von Lehrveranstaltungen in Bachelor und Masterstudiengängen

¹⁶ BFH (2012), Evaluation der Bachelor- und Masterstudiengänge

The following table shows the results for the evaluation tools analysed with regard to the defined criteria:

Table 1: Analysis of the evaluation tools

	BFH	HS MD-SDL
Learning outcomes	<ul style="list-style-type: none"> No items. 	<ul style="list-style-type: none"> GEKo: one item, asking if student acquired the competence to assess learning outcomes.
Clear study setting	<ul style="list-style-type: none"> Q-C2010: one item about clear information of the study setting. 	<ul style="list-style-type: none"> No items.
Competence vs. knowledge	<ul style="list-style-type: none"> In almost all questionnaires between 2003 and 2014 there are knowledge and competence items. 	<ul style="list-style-type: none"> Clear change from knowledge to competence-oriented items. GEKo: the students' and lecturers' questionnaires consist almost exclusively of competence items.
Knowledge transfer	<ul style="list-style-type: none"> In many previous questionnaires and in Q-C2010 students are asked if the lecturer were able to relate the content to the professional field. Q-SP2012: one item asks if the student has acquired the competences to work in the professional field. 	<ul style="list-style-type: none"> Until 2013: item about direct link between theory and practice GEKo focuses on methodological competence: students are asked if they can apply the knowledge acquired to different tasks. Alumni questionnaire: several items about knowledge transfer.
Evaluation fit	<ul style="list-style-type: none"> Q-SP2012: no items, but optional items in the item pool to adapt the questionnaire to the specific field of studies. 	<ul style="list-style-type: none"> Adaption to different type of courses (lecture, seminar, etc.)
Workload / credits	<ul style="list-style-type: none"> Q-C2010: one item about workload compared to course description. Q-SP2012: no items, but possible items in the item pool. 	<ul style="list-style-type: none"> Alumni questionnaire: item about whether workload was manageable.
Lecturer's support	<ul style="list-style-type: none"> Q-C2010: students are asked if the lecturer creates a good study atmosphere and supports individual learning. Q-SP2012: item about support. Previous questionnaires: different items about support, 	<ul style="list-style-type: none"> Until 2013: item about lecturer's support. GEKo: item about lecturer's accessibility and learning atmospheres. Alumni questionnaire: many

	coaching.	items about lecturers' support.
General items on didactics and constructive alignment	<ul style="list-style-type: none"> • Q-SP2012, item about didactical skills of the lecturer, which can be complemented by an optional item about the division between contact and self-study-settings. • Q-C2010: there is an item regarding adequate use of utilities and materials. • One previous questionnaire from one study program had very specific items about all kinds of study methods. 	<ul style="list-style-type: none"> • Until 2013: many items about the interaction between student and lecturer. • GEKo: item about lecturer's didactical skills. • Alumni questionnaire: items about the weight of different study methods.

Discussion

The analysis of the instruments for enhancing teaching quality shows that the efforts undertaken by the two institutions are quite similar. As academic freedom is weighted very highly, the possibilities for management intervention are limited. For BFH however, the compulsory certificate course is the most effective instrument since it is able to reach many lecturers enabling them to be sensitized to the new teaching methods. In general, we know little about the teaching practices at the two institutions. Therefore, the constitution of the ZHH is interesting. The combination of higher education didactics and research is convincing since this fosters the transfer of knowledge from one field to the other.

Regarding the evaluation tools at HS MD-SDL, it is clear that there has been a change from knowledge-oriented to competence-oriented evaluation. With the new evaluation tool, the focus has shifted almost exclusively to competences from the student's and the lecturer's perspective. These findings suggest that the shift to a learner-centred approach has been implemented in certificate courses and evaluation.

The analysis of BFH's evaluation does not allow an explicit statement regarding trends. On the one hand, through the new standard questionnaires the focus is more limited, especially with regard to the competence-oriented questions and questions about didactics. In many examples, the focus on competences was stronger in previous evaluation tools. This might be related to the timeframe of our analysis. Unfortunately there was no such data available.

The different evaluation practices might be related to the specific historical development of the UAS, but also to different quality mindsets of the management: at BFH the quality of teaching is understood and evaluated in a rather qualitative, but holistic way. The different steering indicators form parts of reports for the cantonal government. For HS MD-SDL, quality in terms of measurable learning outputs seems to be the most important steering indicator.



This is due to the fact that the state is focusing increasingly on the "output" (number of credit points and alumni "produced" by the higher education institution) in order to determine the budget allocated to the HEI. At the same time, HS MD-SDL management plans to introduce "budgetization": to meet target agreements with the departments, and so to relate the annual granting of funds directly to the quality of learning.

This means that the management should have very clear ideas when installing evaluation tools. It is not only a decision about evaluation methods and items, but first of all a matter of purpose that should determine the choice of adequate and effective evaluation tools.

We return to our original question about if and how the quality of didactics can be measured with the questionnaires used. If the quality of a study program is measured in learning outcomes (Paechter et al. 2007), it can be measured with competence-oriented evaluations (e.g. Raue & Steinbach 2009, Paechter et al. 2010, Hlawatsch & Raue 2011 and Schaper et al. 2012). However, they can at most show major trends due to the self-assessment methodology of the students (Schaper 2012: 77). It must be questioned if these results foster the continuous improvement of didactics. An exclusive competence approach might provide small inputs on how to improve the design and didactics of a course. As the example of HS MD-SDL shows, the student questionnaire must necessarily be combined with the lecturer's point of view. Only by analyzing the different perspectives can the competence approach help to improve a course's quality. If the improvement of didactics is the intended objective of an evaluation, then mixed items considering competences, aspects of didactics and the very important relationship with the lecturer should also be assessed. To complement the results the competence evaluations must also be extended to alumni and employers (Raue & Steinbach 2009:7). The use of competence-oriented questionnaires with alumni seems promising (as one example from BFH shows), since the alumni have already experienced whether or not they have learned the right things – it is in the practical field where the success of a study program becomes manifest (Hlawatsch & Raue 2011: 156).

Perspectives

European higher education institutions are currently experiencing the "shift from teaching to learning", which is impacting not only the way in which learning quality is measured, but also has consequences for their profile and self-image. Until now, the performance of HEIs has mostly been measured according to results in research (e.g. "Excellence Initiative" of the German Federal Government leading to elite universities). Since the performance area of teaching/learning has a growing importance, a paradigm shift is taking place: there is a "shift from research excellence to learning expertise", as shown by the "Teaching Quality Pact" started by the German Federal Government. This is a great opportunity, especially for Universities of Applied Sciences, to emphasize their specific profile and stress their educational mandate (Schmidt 2014). It is essential for UAS to help policy makers and public funders understand that universities of applied sciences are equivalent to universities ("equal but



different") and are efficient experts in the field of teaching/learning, especially when demographic changes lead to budgetary problems – as is the case nowadays in the Eastern part of Germany.

References:

Biggs, John B./ Tang, Catherine (2007): *Teaching for Quality Learning at University*. Maidenhead: Open University Press, 3rd Edition.

Bruppacher, Susanne (2007): Lern- und Gruppenprozesse in interdisziplinären Projektarbeiten, Herausforderungen für die Betreuungsarbeit. In: Wehr, Silke (Hrsg.): *Hochschullehre adressatengerecht und wirkungsvoll, Beiträge aus der hochschuldidaktischen Praxis*. Haupt: Bern, 139-157.

Ertel, Helmut/ Wehr, Silke (2007): Bolognagerechter Hochschulunterricht. In: Wehr, Silke/ Ertel, Helmut (Hrsg.). *Aufbruch in der Hochschullehre, Kompetenzen und Lernende im Zentrum, Beiträge aus der hochschuldidaktischen Praxis*, Haupt: Bern, 13-28.

Hans Böckler Stiftung (2009): *Studium als wissenschaftliche Berufsausbildung. Gewerkschaftliches Argumentationspapier zur Gestaltung und Akkreditierung von Bachelor- und Masterstudiengängen in den Ingenieurwissenschaften*.
http://www.gutachternetzwerk.de/gutachternetzwerk/file_uploads/studium_als_wissenschaftl._ausbildung_09.pdf (18.7.2014)

Hlawatsch, Anja/ Raue, Cornelia (2011): The Shift from Teaching to Learning. Eine überfällige Anpassung der Evaluationskonzepte des Hochschulcontrollings, *Die Hochschule* (1), 155-212.

Kennedy, Declan (2007): Writing and Using Learning Outcomes — A Practical Guide. <http://lo-hei.net/wp-content/uploads/2013/10/A-Learning-Outcomes-Book-D-Kennedy.pdf> (18.7.2014)

Paechter, Manuela et al. (2007): Kompetenzen als Qualitätskriterien für universitäre Lehre: Das Grazer Evaluationsmodell des Kompetenzerwerbs (GEKo). In: Kluge, Annette/ Schüler, Kerstin (Hrsg.): *Qualitätssicherung und -entwicklung in der Hochschule: Methoden und Ergebnisse*: Lengerich : Pabst Science Publ., 83-94., 83-94.

Raue, Cornelia/ Steinbach J. (2009): Competence Oriented Evaluation of Study Programmes – A Pre-requisite to Successful Accreditation.
<http://ben.upc.es/butlleti2/juliol2009/sefi/papers/Raue.pdf> (18.7.2014)

Rektorenkonferenz der Fachhochschulen der Schweiz - KFH (2011): Konzeption modularisierter Bachelor- und Masterstudiengänge, Best Practice KFH.
http://www.kfh.ch/uploads/dkfh/doku/111214_Best_Practice_KFH_Konzeption_modularisierter_Bachelor__und_Masterstudiengaenge.pdf (18.7.2014)



Rindermann, Heiner (2009): *Lehrevaluation, Einführung und Überblick zu Forschung und Praxis der Lehrveranstaltungsevaluation an Hochschulen mit einem Beitrag zur Evaluation computerbasierter Unterrichts*. Verlag Empirische Pädagogik: Landau, 2nd Edition.

Schaper, Niclas et al.(2012): Fachgutachten zur Kompetenzorientierung in Studium und Lehre. http://www.hrk-nexus.de/fileadmin/redaktion/hrk-nexus/07-Downloads/07-02-Publikationen/fachgutachten_kompetenzorientierung.pdf (18.7.2014)

Schmidt, Marion (2014): Bleibt anders!
<http://www.zeit.de/2014/19/fachhochschulen-promotion-doktoranden>
(19.7.2014)

Wildt, Johannes/Eberhardt Ulrike (2010): Einleitung: Neue Impulse? Hochschuldidaktik nach der Strukturreform. In: Eberhardt Ulrike (Hrsg.): *Neue Impulse in der Hochschuldidaktik*. Wiesbaden: VS Verlag.

Questions for discussion:

1. How do evaluation tools reflect the "shift from teaching to learning" in your own institution?
2. To what extent can the results presented here influence the management in your own institution?