

## Degrees for Open Learning?

### Author

#### Bernd Remmele

Professor for Economics Education, WHL Graduate School of Business and Economics Lahr  
[bernd.remmele@whl-lahr.de](mailto:bernd.remmele@whl-lahr.de)

### Tags

informal learning, open distance learning, accreditation, knowledge society

Open Educational Resources (OER) can be analysed in relation to the basic tension apparent in the modern educational system: by contrasting pedagogical function with the process of selection. On the one hand we expect knowledge to be open, and for its own sake; while on the other, we expect to use it as means to develop a personal career. OER, freely accessible on the Internet, falls within the realm of educational functionality, facilitating learning processes outside of formal structures characterised by selection processes like degrees and diplomas. However, OER are lacking an associate service industry (such as Open-Source Software distributors) which could improve their usability and develop their overall economic impact.

The article explores the possibility of finding marketable services in relation to the selection function, arguing that degree-providing institutions can offer learners credits for the competences acquired during open learning, in other words, re-formalizing the process. Such accreditation would be an asset, it could provide access to better careers, and as such it might be possible to price this service in a more or less cost-efficient way. Different current developments, like the French 'validation des acquis de l'expérience', show that this scenario is realistic.

### 1. Introduction

More than thirty years ago in the 'Postmodern Condition' Lyotard (1979/1984, 51) analyzed the future of knowledge, particularly including universities, against the backdrop of the beginning computer age and in regard of the loss of the 'grand narratives', i.e. the speculative unity of truth and justice. This unity was sought in 'the University' and in the interrelated possibility of emancipation through knowledge and education. Lyotard denies these grand narratives their former legitimitative ability. Accordingly, he conceives the (future) discourse concerning universities as merely related to an improvement of performativity of the social system by generating experts with relevant skills.

Looking at the debates concerning the development of Higher Education, e.g. the goal of improving Europe's economy based on the Lisbon-process, it is beyond doubt that Lyotard had a point here. However the general right to knowledge is still of high relevance for the discourse and the development of the educational system. Concerning the 'professionalist student', as Lyotard calls him, and the saleability of higher education there is an aspect of the computer age which he could not foresee. The conception of digital knowledge, particularly if produced in 'open' networks, refers continuously to general emancipation through knowledge and as such influences Higher Education. By changing "the way we create and exchange information, knowledge, and culture we can make the twenty-first century one that offers individuals greater autonomy, political communities greater democracy, and societies greater opportunities for cultural self-reflection and human connection." (Benkler, 2006, 473) Other

authors even see a kind of “gift-economy” emerging by open resources. But as Carr (2008, 141) points out: The utopian rhetoric ignores the fact that the market economy is rapidly subsuming the gift economy.” The following analysis rather suggests complementarity between market and collaborative production. Also the UNDP (2004) assumes that “unleashing entrepreneurialism” in the educational field will stimulate access to education on a global level.

Thirty years ago Lyotard could not see the set-off of a sphere of voluntary communication and co-operative production of knowledge based on the decentralized communication structure of the Internet. What he could not see is that in a plenty of fora on the Internet knowledge and justice still go hand in hand and propagate the possibility of emancipation. The current political protests in a set of states aiming at just and democratic societies and the role of communication technology for these protests support this argument. So even worse for Lyotard this resurgence of the grand narrative is due to the ‘open’ conditions of discourse in the Internet.

The sphere of open production of knowledge has relevance for the future of the university. So it has been noticed that this sharing attitude of intellectual ‘property’ is similar to or even originates from the academic attitude to intellectual and scientific progress (Himanen, 2001). And sure enough, the educational and scientific sector is an important (non-commercial) contributor to the content (and infrastructure) of the Internet and World Wide Web. Especially sciences offer extensive open access to (reviewed) scientific publications. Social sciences and humanities are catching up (cf. German Commission for UNESCO, 2008).

Due to the non-rivalry consumption of knowledge and the irrelevance of costs for digital storage and transportation this sphere of ‘open’ production has also changed (or will change) basic conceptions of our political economy (Benkler, 2006). For instance, there is a major shift from earning money with the product (e.g. software), as far as this is ‘free’ or ‘open’, to earning money with services around the product (e.g. customization). It is the intention of this paper to outline examinations as one possible service in relation to Open Educational Resources, i.e. a major issue of open knowledge in academia.

Besides the claim for open access to mostly publicly funded and scientifically secured knowledge on the one hand it has to be asked on the other hand what contribution to the funding of academic work, particularly education, can be drawn from this free provision. More so when this product becomes more and more

standardised because of European or world wide transferability and when learning is getting more and more learner-controlled and self-regulated. Are there possible services around this product which can contribute to the funding of universities (cf. EC, 2006)? As learning can be based on OER or other sources, i.e. independent of a formal learning path, it might become normal that (degree related) examinations are a ‘saleable’ service. Just recently the London School of Business and Finance turned the usual “convention on its head”. Instead of paying for courses in advance the LSBF opened the full course contents of its ‘Global MBA’ course in Facebook and wants students to pay only when they sit the exam to receive their accreditation (LSBF, 2010).

The question mainly discussed in this paper is thus how these – seemingly contradictory – topics: the development of OER and the commercialization of Higher Education. The paper will start by describing relevant aspects of OER and their developmental potential. Then the two basic functions of the (modern) educational system will be outlined: fostering learning and selecting for careers (by providing degrees), and how OER fit into this tension. Lacking quality control and thus ‘customer-orientation’ will be identified as a major problem of OER which might foster the willingness to pay for certain services, like examinations. The result could be called: ‘exams to go’. Finally this will be discussed in relation to the general issue of accreditation of prior learning.

## 2. The Case of Open Educational Resources

For a start we have to look closer at OER as they “... are understood to be an important element of policies that want to leverage education and lifelong learning for the knowledge society and economy.” (Schaffert & Geser 2008: 15) As part of this understanding the OECD (2007) published a report on the world wide ‘emergence of open educational resources’. Though it mentions a set of difficulties (e.g. financing, quality management, interoperability, granularity, and dominance of English) it is rather optimistic in regard to the further development of OER and its role for general development of world-wide and lifelong learning.

Depending on the development of some institutional problems (Remmele, 2006) it only seems a question of time until the influence of OER will be of high significance for Higher Education. This optimism concerning OER is strongly based on the success of Free-and-OpenSource-Software (FOSS). A major reason for this success was however the participation of profit-seeking

companies and thus the development of customer-oriented products. A similar commercialisation of OER is though hardly discussed in relevant circles up to now (e.g. UNESCO, 2009).

The fundamental change in the process and organisation of learning fostered by OER particularly applies to adult education, thus to higher education and lifelong learning. Among adults the self-regulated acquisition of knowledge is of higher importance than among younger students. The whole learning process is less formalized and less teacher-centred. In this field however diplomas and degrees are also of high importance, as they provide access to certain career paths and payment options, which are a main driver to learn among adults and even to pay for the possibility of gain a degree. Hence, the target group is fitting: adults can use OER (they also more likely have individual learning paths) and they have money and interest to pay for improving their further careers. This possible willingness to pay for degrees can provide options for an OER business model and might speed up the solution of some problems of OER which are due to lack of customer-orientation.

The social structures from which digital common goods like OpenSource Software or OER derive are decentralized non-market-like institutions. They are the kernel of the production and distribution processes of these common goods. Nevertheless also in this field the function of market prices can be useful to have things done, which would not be done otherwise. Until now the development of OER is production-driven, be it for instance on the basis of an individual will to share and to establish an educational commons, or be it for instance on the financing power of philanthropic foundations and public authorities (cf. Downes, 2006). Business models however based on payments by donors, contributors or by advertisers often miss the specificity of information provided by the mechanism of prizes paid by customers. Significant concepts explaining the 'commons based peer production' (Benkler, 2002) or the productive interaction between FOSS sponsors and adopters (Demil & Lecocq, 2003) derive from the fields of institutional and informational economics. These started with the questions of how information is transmitted in markets by prices and which institutional setting (market, hierarchy, network) is most effective for which problem. Payments for specific examinations, e.g., could lead to better information about educational resources and guide their improvement, thus to highly usable OER.

A prerequisite for such customer-oriented developments would however be the - market-based - solution of a major problem in

current educational developments, particularly regarding OER: the assessment and accreditation of competences, which have not been gained in formal educational contexts. The dimension of this problem is reflected in the reference given to accreditation of prior learning in the Bruges-Copenhagen and Bologna-Process. The accreditation of knowledge and competencies acquired by open learning might be a service which could be priced high enough to gear the prize mechanism in a way that highly usable OER would be made accessible.

To conduct exams is already often charged with a specific fee. Also there are already legal and administrative frameworks, e.g. in France or Finland (see below), which foster the accreditation of informal and non-formal learning by granting acknowledgement and, as a consequence, access to degrees independently of how competences are acquired. Both the institutional framework in relation to 'pricing' of this service as well as the general legal framework – at least in certain countries - are thus not in contradiction with our scenario.

### 3. Basic Tension of the Educational System

Looking at the basic tension of the modern educational system allows us to understand possible paths of development of (commercial) academic services. The educational system has two basic and partly contradictory functions for society: fostering learning and selecting for careers by examinations and providing (or refusing) degrees. The selection function is mainly oriented to labour market. In this regard educational institutions are producing a differentiated output of possible workforce. The education function however in regard or conscious disregard of the divergent socialization of the pupils and students is to proceed according to equality (homogenisation of learning group by classes of age, by standardised test etc.). Educational 'reform' is oscillating between the two functions (cf. Luhmann, 2004, 218 ff.): e.g. from equal chances to merit-orientation or from individualized learning to optimal output.

The allegedly necessary monitoring of learning/education, i.e. mainly of the individual learning process, with methods like grades, certificates, degrees is generating means for later selection. Other societal systems, particularly economy, are selecting according to these means. Human capital theory assumes for example that certificates in the first line do not serve as a proof of competence, but provide employers with a screening device (cf. Woodhall, 1994, 23).

This basic tension can be found in the EC's 'Modernisation Agenda for Universities'. In accordance with the selection function the European Commission wants universities to "provide the right mix of skills and competencies for the labour market". The equality-oriented education is mentioned alike with regard to funding: "Student support schemes today tend to be insufficient to ensure equal access and chances of success for students from the least privileged backgrounds. This applies equally to free access, which does not necessarily guarantee social equity." (EC, 2006) The two functions also directly relate to the "two major globalizing trajectories for education": these are "education as a human right under the Education for All/Millennium Development Goals banner; and ... education as an emerging market and new services sector" (Robertson, 2008).

OER are strongly promising in regard to the education function as they offer educational possibilities with rather equal access. The optimistic interpretation of OER goes along with favoring this function. As learning, particularly adult learning, is becoming more diversified and more self-directed, the 'openness' of OER is valuable, because the possibilities to learn are increased.

Particularly with regard to continuing academic education, the task of universities to prepare their 'clients' for the labour market is a social and political claim. Some sceptics criticize this as an instrumentalisation to meet employers' demands. They emphasise the emancipatory and critical task of academic education without which academia as such is endangered (cf. Brödel, 2004).

At least the students at the author's university are rather career oriented. They are mainly part-time students studying for a further degree in business and they accept this claim of labour market relevance to a large extent. They (577 students and graduates) as the most important reasons why they started their course: improvement of prospects on the labour market; broadening the academic horizon; interest in the subject matter; improvement of promotion prospects (Keller et al., 2004).

At the same time the interest for 'quality' is increasing because the sources of content are hardly controllable any more. And students are conscious of this problem. Thus they call for quality of educational resources. In a comparative study quality of information was rated the most important characteristic of e-learning material in higher education in four of six countries (France, Germany, Italy and Spain). Students from the Netherlands and Sweden rated 'ease of use' most important shortly followed by quality of information (further categories were:

speed, interactivity, up-to-date-ness and - rated least important by all – design; Lam & Ritzen, 2008).

However the definition and assessment of quality in relation to OER is a problem. Without control of who is accessing which resource and the ascription of learning paths to a certain educational resource, the evaluation of their respective didactic quality is rather difficult.

As such OER hardly contribute to the selection function. There is no accreditation of quality of the acquired competences, i.e. the improvement of individual employability based on their usage. So there is no inference regarding the feasibility or quality of a certain resource in a specific educational context and no (official) documentation of how successful an individual learner has been using it.

One does not have to like the selection function but it provides sustainable structures, even commercial ones. The awarding of certificates and degrees, i.e. a main dividing line between formal learning on one side and informal or non-formal learning on the other, is where the power of the educational system shows up – and is partly exchanged for money. Degrees pay off. At least in national contexts where there is a focus on formally acquired knowledge like in Germany (cf. Colardyn & Bjornavold, 2005: 40).

## 4. Users' Motivations and Problems of OER

Compared to FOSS there are specificities of OER concerning their possible marketability. A major problem is the lacking 'customer-orientation' and in direct relation to that the problem of quality control. The user of FOSS as open code (not as self-installing software) is usually a software-developer himself and thus likely to improve the product; the user of OER as open learning material is often a learner who does not have much opportunity and incentive to feed back on the product or to the producer systematically. Atkins et al. (2007, 55ff) see this problem however their recommendation of an „open participatory learning initiative" with peer learning as major part does seem convincing, because the motivation to get involved in such a way is not clear.

On the one hand a learner does not have sufficient knowledge about alternative educational resources and on the other hand he might come to the conclusion that the adequacy or inadequacy of a certain OER is due to his personal aims. The main

problems are rather to be found in the dispersedness of OER and in the contextuality of their quality.

So looking at FOSS we have one problem in relation to the form of communication of OER. It is the absence of a central structure which makes the crucial difference between FOSS and OER. OpenSource initiatives show a very centralistic attitude regarding the communication between the contributing 'hackers'. Responsibility for the coordination of one project is clearly given to one person and so called forking, i.e. looking for different solutions to the same problem, is held as an exception and needs very good reasons to be accepted by the community (Raymond, 1998). There is strong feedback between users-producers, so that there can be spoken of 'user-driven innovation' (Hippel, 2002). These characteristics are even more obvious in view of Wikipedia, where there is usually – except for very specific wikis and the like – one per language. With such centric structures information about what is done and has to be done in regard to a certain task is easily communicated and self-ascribed (Benkler, 2002).

In contrast, the production of OER though based on the same Internet-technologies is highly dispersed. If made publicly accessible in the Internet, educational resources are to be found on the website of the teacher's institution. The resources uploaded and systematically referenced on a server for exchange of materials are only a minor part of the whole set. So it is possible to find a set of different resources on the same topic at different sites. And even if the motivation to produce OER is taken for granted this does not imply the motivation to adhere to general standards of metadata and interoperability (in the case they existed). There is thus also no established system to publicly and systematically review OER in order to generate more transparency in the world wide thicket of learning objects (cf. Kollock & Smith 1996) – not even the specialized search engines (e.g. <http://www.oercommons.org/> or <http://opencontent.org/googleocw/>).

OER are however not only dispersed in a technical sense but also content-wise in a qualitative sense. The other and more important problem is that educational resources are usually produced to fit a specific educational context. Such contexts are rather complex and need (hermeneutic) interpretation as they include, e.g., age and experience of students, the wider course curriculum, the preferred didactical methods of the providing institution, and – last but not least - the personality of the teacher (the 'context' of FOSS is standardised computing

machines, which read the code; cf. Remmele, 2006). The production of educational resources implies a certain concept of their usage, i.e. the educational setting in which the intended teaching and learning takes place. It is thus doubtful if OER can close the gap between "teaching and learning as framed and maintained by typical educational institutions and the fabric of work in a knowledge-based economy 'out there'." (cf. Schaffert & Geser, 2008, 15) All together it is difficult for a user of OER to find adequate OER and to estimate their quality and usefulness, because quality and usefulness have to be conceived in relation to the context of the user.

## 5. Formal, Informal, Non-formal Learning – Self-regulation

The OECD (2007) expects OER to "bridge the gap between non-formal, informal and formal learning." They can be used for different purposes and in the context of different practices of the user/learner. The problem of context-dependency is also obvious when looking at that gap. OER are typically used in informal and non-formal learning. For non-formal learning, like in formal learning context, they can be structured in terms of learning objectives, learning-time, learning-support etc. However taking the perspective of informal learning it is difficult to define in advance which piece of information is actually an educational resource. What is educational in one context is not necessarily educational in another.

Now the importance of informal and non-formal learning is growing due to the increase of social and economic differentiation. The accelerated multiplication of social and economic contexts of action cannot be dealt with completely in the framework of formal learning. Centralized curricular planning is systematically lagging behind these developments. The (decentralized) multiplication of certificates and degrees is an observable reaction to this. One would assume that the adaptation is faster if it proceeds in a kind of market form than by centralized administration.

At least partly this adaptation process is a formalization of informal and non-formal learning thus also bending it back into the realm of the selection function. Such formalization is intended to facilitate the access to certain contexts/careers. A future of education institutions could be to speed up their supply of degrees and certificates to keep track with the developments in labour market and science.

For the learner this implies a high degree of self-regulation not only regarding the question how to learn, but also what and to which end to learn. A self-regulated learner is setting his learning-goal, allocating resources necessary for the learning process, and monitoring the learning success himself. Such autonomy is however easily frustrated if the conditions for successful learning are rather constrained. This might apply to the choice of learning resources in accordance to the learner's goals and to the uncertainty regarding how he will be able to verify his efforts and to prove that he reached his goal for others but also for himself.

Thus OER are only partly adequate for self-regulated (and other) learners – their goal setting (content-wise and regarding better access to career paths) and their interest in learning efficiency might go beyond the scope of 'openness'. This has to be kept in mind as e.g. the OLCOS-Roadmap (Open eLearning Content Observatory Service) points to further adjusting OER to self-regulated learning as the future of OER (Geser, 2007).

### 6. Marketability of Competence-Based Certificates

The usage and usability of OER ought to be adjusted also to more prosaic learning goals. To do this however additional features that deal with the mentioned problems would have to be applied. Mainly there are two such additional features. First the 'didactical context specific quality assessment' of the resource would make the learner's deployment of means for learning more efficient. Regarding efficiency a (self-regulated) learner would try to avoid assessing the quality of an OER for himself. Assessing the resource would at least be partly using it, and this costs time. He would thus be interested in curricular or didactical specifications and quality assessment of educational resources – done by others. Knowing that this specific resource would lead to fulfil a specific course requirement would be helpful and motivating.

Surely this reduction of uncertainty would not be worth enough for the learner that his willingness to pay would suffice to run a business. Learners probably would not pay for that but at least a proportion of this group might reciprocate by evaluations of resources done by them. In a suitable context some social software application (grading, tagging etc.) could harness the provision of quality information on different OER.

The second additional feature to complement OER would be the possibility to (officially) document one's learning, as this would

even enhance goal setting. A quick high quality adaptation of examinations to (labour market) requirements could further exploit this issue. If a learner wants to foster his career with his learning efforts, he might be willing to pay for accredited proof of his acquired competences. The question is if this would be so valuable for an OER user that he would pay enough that others could run a business on it. With such a service the OER-user will be transformed from a self-regulated user of a common good to a customer demanding certificates. Could such a framework even provide at least in certain fields relevant curricular specification and quality assessment of OER?

This question can be answered again in terms of quality. OER are up to now mainly producer (or sponsor) driven. Goodwill is however not user- or customer-orientation. To pay for mere access to OER is of course a self-contradiction. To put a price on an educational supply is necessarily combined with a minimum amount of quality-standards. Quality in educational arrangements can be evaluated in relation to three dimensions. Input-quality is evaluated e.g. in respect to standardised curricula, evaluation of learning-materials, requirements on the competence level of the producers (teachers), i.e. having an academic degree or testified teaching experience, technical standards of the platform and so on. The process-quality can be related to the didactical arrangements, the organisation of feedback-loops and so on. Finally output-quality can be measured by the performance of the learner in a standardised examination, the self-assessment of his learning-progress and so on. It's evident that the second approach does not fit at all with the process of producing and using OER. To provide an assessment of the input quality of a OER is however possible, e.g. an education institution can commit itself and its employees to respective standards (cf. MIT's OpenCourseWare). But it cannot be done in general; so many interesting resources are left out. To include the third approach could be adequate: certified learning with OER and whatever other resources. The CEDEFOP (1997) took a similar position in the general discussion: "Discussions have centred on the relative worth of sources of evidence, when they should be concerned with the quality of the evidence regardless of its source."

In analogy to methods applied in other contexts we see two possibilities of certified learning. There are monitored self-assessment-procedures like the French 'bilans de competence' (Gutschow, 2003) or the similar procedure of the German 'Profilpass', which misses however the legal framework of the 'bilan de competence' (DIPF et al., 2003). In OER-related contexts the

guided design of an e-portfolio could be a comparable method. As e-portfolios often only reframe the question of accreditation on another level, there are a lot of questions left (Lorenzo & Ittelson, 2005), e.g.: "Should an e-portfolio be an official record or a student's work... If an e-portfolio does not include a professional evaluation, should it be an official document? ... Should alumni be charged a fee to keep their e-portfolios on an institution's server? Who owns the e-portfolio? ... Should anyone other than the student be able to make changes to the student's e-portfolio? ... How are e-portfolios evaluated in a manner that is both valid and reliable?" (For a further discussion on the functional dilemma of e-portfolios, i.e. decoupling them from the formal assessment process see also: MOSEP, 2007).

The other method of certified learning would be fully fledged accreditation of predefined outcomes like in the NVQ (National Vocational Qualifications) in Great-Britain or other procedures of APL (Accreditation of Prior Learning) (Eraut, 2003). Also in 2003 the Ministers of Higher Education of the Bologna Signatory States defined recognition of qualifications as one of three priorities (Berlin, 2003). In this context they emphasize the necessity to improve the recognition of prior learning including non-formal and informal learning (EC, 2007). These considerations directly relate to the European Qualifications Framework (EQF) which applies both to vocational and higher education as it focuses on learning outcomes and thus mentions the accreditation of informal learning (Hanf, 2006, 57). In Germany e.g. there was a series of pilot projects trying to find ways to credit vocationally acquired competences for higher education ([www.ankom.his.de](http://www.ankom.his.de)). And such a certification always implies a documented third party evaluation usually based on structured exams in relation to fixed standards and reference levels (DIE et al., 2004). Hence OER-related certificates could only be such 'competence-based certificates'.

If one looks at the commercial education market and the focus of pertinent advertisements, then it is quite obvious what could be a realistic commercial service in relation to OER. Specific knowledge and (branded) degrees are what is paid for. "Relevance and accreditation are themselves information goods, just like software or an encyclopaedia." (Benkler, 2006, 12)

With OER we have knowledge for free. Thus there will not be any willingness to pay for it or any unstructured compilation. Providing advice regarding OER fitting to a certain certificate would be a reversal or a recontextualization of the opening-process of OER. The opening of OER is an informalization of often formal

materials. They are taken out of their original educational context (if there is such) and 'opened' for varied individual use. To specify distributed OER in relation to a competence framework would thus be the reverse process. Degrees and certificates are paid for because it is of major interest to have officially documented one's learning-path and competences, i.e. to have one's self-regulated non-formal and informal learning processes formalized. Educational institutions or general accreditation agencies could thus specify the conditions for certain degrees etc. and open their examination procedures to self-learners. They could offer 'exams to go'.

Looking at the success of FOSS it has to be acknowledged that the involvement of companies trying to make money with and around FOSS (e.g. services and additional software, partly written by paid programmers) was a major factor for its success in the mass market. The influence of these companies lead to more user-friendliness of FOSS. These developments were market-driven. The user/producer driven innovation was supplemented by customer orientation.

## 7. Infrastructure of 'Exams To Go'

Now a broad scenario can be outlined of how such an examination service could be organised. The degree providing institution would have to explain the exam structure, and give hints to adequate OER also for enlisted students who follow the probably still dominant formal learning path. This information would include the partly lacking curricular specification of OER and specify them in relation to the requirements of formal education.

The degree providing institution could charge fees for different services or just for admittance to the exams. It would also save costs because it would not be necessary to produce and update all materials on its own.

There could be different kinds of additional services around (commercialized) degrees, e.g.:

- *Pre-test and/or learning contract*

On the basis of different methods, e.g. tests or portfolios (see below), the certifying institute could estimate the possibility of a successful examination process for (enlisted and external) students. This estimation might also be priced with a minor fee because it would save the aspirant expenses for the examination fees if he is not yet ready to take the full exam. They could

then even offer a kind of learning contract, referring to knowledge and skills which have still to be acquired and to possible resources for this acquisition, i.e. they would provide specific information of what competences are still to be acquired and where they can be found. In addition, schemes analogue to diploma supplements used in higher education could be 're-engineered' based self-descriptions, portfolios etc.

- *OER-quality assessment*

The educational institution could provide an assessment tool for OER. Staff and students can select and evaluate the quality; they can give advice to their students, customers, and fellows on positive and negative experiences. They give links to educational websites they consider high or low quality and they categorize in accordance with the respective competence framework. This could be organized as 'social bookmarking' and 'tagging' and with different levels of access, i.e. partly free of charge and partly restricted. This would provide a kind of centralized communication for the specific content in regard of the supplied degrees.

- *Improvement of OER*

It might be possible that such a system which is based on individual willingness to pay would generate information that would direct efforts into relevant fields of OER. The above mentioned quality assessment could include feedback (or even payment for improvement from the exam providing institution) to the author of a resource. Reputation could be gained by documented usage for certain degrees and reference to respective assessments. This would stimulate quality and maintenance of resources. Even translations could be triggered.

- *Study centres*

The educational institutions can subcontract (on mutual or franchise basis) local centres to conduct and survey written and/or (online) oral exams. Of course also online exams are possible if personal identity is confirmable and cheating not possible.

## 8. Accreditation of Prior Learning

Irrespective of whether the examined competence is a consequence of processes whilst carrying out the work or was gained within the course of institutionalised educational activities or with the use of an OER, the evaluation remains identical. As already mentioned to make all these learning results comparable to each other requires an underlying competence model. This

approach thus implies descriptions of learning results based on complex competence models, which allow differentiation according to general and domain-specific analysis and according to different levels of proficiency (Seeber & Keller, 2006).

This is however not as easy as it sounds. The certification of informally and non-formally acquired competences is associated with considerable measurement problems and a considerable amount of work. Several measurement processes regarding learning-on-the-job (Erpenbeck & Rosenstiel, 2003) and standardised certification processes of informally acquired competences exist now for several years, e.g. the "National Vocational Qualifications (NVQ)" system in Great Britain (cf. Ertl, 2003) using five competence levels, the European Qualification Framework with eight levels (including vocational and higher education), the "Credit Framework Baden-Württemberg" four levels and so on (for overviews regarding accreditation in the field of VET systems cf. UNESCO, 2005).

In the UK the national vocational qualifications framework (NVQ) was started in 1986. By 1994 there were 500 NVQs covering 150 occupations, representing 80% of all jobs (QCA 2000). They include the (modular) description of the occupation. APL is now integrated into this framework. For the accreditation process a portfolio is matched against target requirements; there can be tutorial support for the development of such portfolio.

Since 1998 the certification of prior learning on different educational levels is a personal right in Finland, i.e. the Finish VET system allows for competence-based examinations as described above. "Vocational skills are demonstrated through competence tests, regardless of how and where the skills have been acquired." (CEDEFOP, 2006) For each vocational certificate the necessary competences are defined by a national board. Institutions are accredited to conduct exams. They take fees for their competence tests.

A similar legal framework with a national register of respective certificates open for 'validation des acquis de l'expérience' can be found in France since 2002. To have their skills assessed the learners have to present a portfolio possibly followed by counselling, assessment at their workplace etc. (MEN, 2008)

## Conclusions

We argued that the further development of OER could be fostered if there was a shift from user/producer-innovation to user/learner/customer-orientation. This specific development would be part and expression of the basic tension of modern education. On the one hand we want to foster and generally open (self-regulated) learning with OER; on the other hand we want to funnel it into certain degrees. On the one hand we expect the learner to take knowledge for its own sake; on the other hand we expect him to use it as means for personal career. To a certain extent this is even a reversal of the fundamental paradox of education in a modern society: to educate in a given way in order to breed a free subject (Rousseau, 1762). Here we presuppose a free subject wanting to learn and freely deciding to bow before the system. However it would be an interesting trick of reason if the mercantilization of knowledge, i.e. a commercial service promoting better access to high quality resources, would contribute to the general education function also of other learners and thus to emancipation.

## References

- Atkins, D., Brown, J., Hammond, A.** (2007). A Review of the Open Educational Resources (OER) Movement: Achievements, Challenges, and New Opportunities. Report to The William and Flora Hewlett Foundation, retrieved Feb 1, 2011 from [http://www.oervedes.org/wp-content/uploads/2007/03/a-review-of-the-open-educational-resources-oer-movement\\_final.pdf](http://www.oervedes.org/wp-content/uploads/2007/03/a-review-of-the-open-educational-resources-oer-movement_final.pdf).
- Benkler, Y.** (2002). Coase's Penguin, or, Linux and The Nature of the Firm, Yale Law Journal 112, retrieved Feb 1, 2011 from <http://www.yalelawjournal.org/pdf/112-3/BenklerFINAL.pdf>.
- Benkler, Y.** (2005). Common Wisdom: Peer Production of Educational Materials, retrieved Feb 1, 2011 from <http://www.lulu.com/content/162436>.
- Benkler, Y.** (2006). The wealth of networks. How social production transforms markets and freedom. New Haven.
- Berlin Communiqué of the Conference of Ministers responsible for Higher Education** (2003). Realising the European Higher Education Area. Berlin, retrieved Feb 1, 2011 from <http://www.bologna-berlin2003.de/pdf/Communique1.pdf>.
- Brödel, R.** (2004). Weiterbildung und lebenslanges Lernen, in Meyer, R. et al. (Eds) Kompetenzen entwickeln und moderne Weiterbildungsstrukturen gestalten. Münster.
- Carr, N.** (2008). The Big Switch. Rewiring the World, from Edison to Google. New York
- CEDEFOP** (1997). Identification, validation and accreditation of prior and informal learning - United Kingdom, retrieved Feb 1, 2011 from [http://www.cedefop.europa.eu/etv/Upload/Information\\_resources/Bookshop/112/5070\\_en.pdf](http://www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/112/5070_en.pdf).
- CEDEFOP** (2006). Spotlight on VET Finland, retrieved Feb 1, 2011 from [http://www.cedefop.europa.eu/etv/Upload/Information\\_resources/Bookshop/441/8019\\_en.pdf](http://www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/441/8019_en.pdf).
- Colardyn, D., Bjornavold, J.** (2005). The learning continuity: European inventory on validating non-formal and informal learning. National policies and practices in validating. Cedefop Panorama series 117. Luxembourg.
- Demil, B, Lecocq, X.** (2003). Neither market or hierarchy or network: The emerging bazaar governance, retrieved Feb 1, 2011 from <http://opensource.mit.edu/papers/demillecocq.pdf>.
- DIE - Deutsches Institut für Erwachsenenbildung** et al. (2004). Kurzfassung der Machbarkeitsstudie des BLK-Verbundprojektes „Weiterbildungspass mit Zertifizierung des informellen Lernens“, retrieved Feb 1, 2011 from [http://www.die-bonn.de/esprid/dokumente/doc-2004/die04\\_01.pdf](http://www.die-bonn.de/esprid/dokumente/doc-2004/die04_01.pdf).
- DIPF - Deutsches Institut für Internationale Pädagogische Forschung** et al. (2003). „Weiterbildungspass - Zertifizierung informellen Lernens“, Machbarkeitsstudie im Rahmen des gleichnamigen BLK-Verbundprojektes, Frankfurt/Main, retrieved

Feb 1, 2011 from [http://www.bmbf.de/pub/weiterbildungspass\\_mit\\_zertifizierung\\_informellen\\_lernens.pdf](http://www.bmbf.de/pub/weiterbildungspass_mit_zertifizierung_informellen_lernens.pdf).

**Downes, S.** (2006). Models for Sustainable Open Educational Resources, retrieved Feb 1, 2011 from <http://www.oecd.org/dataoecd/3/5/36781698.pdf>.

**EC - European Commission** (2001). Making a European Area of Lifelong Learning a Reality, retrieved Feb 1, 2011 from <http://www.acc.eu.org/uploads/LifeLongLearningCom.pdf>.

**EC - European Commission** (2006). Delivering on the Modernisation Agenda for Universities, Education, Research and Innovation, retrieved Feb 1, 2011 from [http://ec.europa.eu/education/policies/2010/doc/comuniv2006\\_en.pdf](http://ec.europa.eu/education/policies/2010/doc/comuniv2006_en.pdf).

**EC - European Commission. Directorate-General for Education and Culture** (2007). From Bergen to London. The Contribution of the European Commission to the Bologna Process, Brussels, retrieved Feb 1, 2011 from <http://ec.europa.eu/education/policies/educ/bologna/report06.pdf>.

**Eraut, M.** (2003). National Vocational Qualifications in England – Description and Analysis of an Alternative Qualification System, in Straka, G. (Ed) Zertifizierung non-formell und informell erworbener beruflicher Kompetenzen, Münster, 117-123.

**Erpenbeck, J., Rosenstiel, L. von** (2003). Einführung. In: Erpenbeck, J./Rosenstiel, L. von (Eds.), Handbuch Kompetenzmessung. Erkennen, verstehen und bewerten. Kompetenzen in der betrieblichen, pädagogischen und psychologischen Praxis, Stuttgart, IX-XL.

**Ertl, H.** (2003). Standardsetzung und Zertifizierung beruflicher Qualifikationen im Rahmen des Systems der „National Vocational Qualifications“. Zeitschrift für Berufs- und Wirtschaftspädagogik 99/3, 368-389.

**German Commission for UNESCO** (2008). Open Access – Opportunities and Challenges. A Handbook, Brussels, retrieved Feb 1, 2011 from <http://www.unesco.de/openaccess.html?&L=0>.

**Geser, G.** (2007). Open Educational Practices and Resources – OLCOS Roadmap 2012. Salzburg, retrieved Feb 1, 2011 from [http://www.olcos.org/cms/upload/docs/olcos\\_roadmap.pdf](http://www.olcos.org/cms/upload/docs/olcos_roadmap.pdf).

**Gruber, H.** (1994). Expertise. Modelle und empirische Untersuchungen. Beiträge zur psychologischen Forschung, Bd. 34, Opladen.

**Gutschow, K.** (2003). Erfassen, Beurteilen und Zertifizieren non-formell und informell erworbener beruflicher Kompetenzen in Frankreich: Die Rolle des bilan de compétences, in Straka, G. (Ed) Zertifizierung non-formell und informell erworbener beruflicher Kompetenzen. Münster, 127-139.

**Hanf, G.** (2006). Der Europäische Qualifikationsrahmen – Ziele, Gestalt, Verfahren, in Grollmann et al. (Eds). Europäisierung Beruflicher Bildung – eine Gestaltungsaufgabe. Münster, 53-64.

**Himanen, Pekka** (2001). Hacker Ethic and the Spirit of the Information Age, London, 2001.

**Hippel, E. von** (2002). Open source software projects as user innovation networks. MIT Sloan School of Management, retrieved Feb 1, 2011 from [http://idei.fr/doc/conf/sic/papers\\_2002/vonhippel.pdf](http://idei.fr/doc/conf/sic/papers_2002/vonhippel.pdf).

**Keller, H.; Beinborn, P.; Seeber, G. Boerner, S.** (2004). Selbstgesteuertes Lernen im Fernstudium. Schriftenreihe der Wissenschaftlichen Hochschule Lahr 5, Lahr.

**Kollock P, Smith M.** (1996). Managing the Virtual Commons, in Herring S. (Ed) Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives. Amsterdam, 109-128.

**Lessig, L.** (2000). Code and other laws of cyberspace. New York.

**LSBF – London School of Business and Finance** (2010). Welcome to The LSBF Global MBA, retrieved Feb 1, 2011 from <http://apps.facebook.com/lsbfglobalmba/>.

**Lorenzo, G., Ittelson, J.** (2005). An Overview of E-Portfolios. Educause, retrieved Feb 1, 2011 from <http://net.educause.edu/ir/library/pdf/ELI3001.pdf>.

**Luhmann, N.** (2004). Schriften zur Pädagogik. Frankfurt am Main.

**Lyotard, J.-F.** (1979, engl. 1984). The postmodern condition. Minneapolis.

**MEN - Ministère de l'Éducation Nationale** (2008). Fonctionnement de la V.A.E., retrieved Feb 1, 2011 from <http://www.education.gouv.fr/cid1106/la-validation-des-acquis-de-l-experience-vae.html>.

**MOSEP - More Self-Esteem with my e-Portfolio** (2007). Grab your future with an e-portfolio! Summary Report, retrieved Feb 1, 2011 from [http://www.mosep.org/images/stories/attachments/mosep\\_study.pdf](http://www.mosep.org/images/stories/attachments/mosep_study.pdf).

**Moser, K.** (2003). Diagnostik beruflicher Kompetenzen, in Straka, G. (Ed) Zertifizierung non-formell und informell erworbener beruflicher Kompetenzen. Münster, 41-55.

**OECD – Organisation of Economic Co-Operation and Development** (2007). Giving Knowledge for Free. The Emergence of Open Educational Resources. Paris, retrieved Feb 1, 2011 from <http://213.253.134.43/oecd/pdfs/browseit/9607041E.PDF>.

**QCA – Qualifications and Curriculum Authority** (2000). The story of NVQs, retrieved Feb 1, 2011 from <http://webarchive.nationalarchives.gov.uk/20100210151716/http://qcda.gov.uk/6642.aspx>.

**Raymond Eric** (1998) Homesteading the Noosphere. Firstmonday 3/10, retrieved Feb 1, 2011 from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/621/542>.

**Remmele, B.** (2006). Open Educational Resources – anonymity vs. specificity, *European Journal of Open and Distance Learning* 2006/2.

**Robertson, S.** (2008). The New Global Governance Paradigm in Education: Public-Private Partnerships and Social Justice. *Education and Development Working Paper Number 6*, Amsterdam, retrieved Feb 1, 2011 from [http://educationanddevelopment.files.wordpress.com/2008/06/slr\\_wp6.pdf](http://educationanddevelopment.files.wordpress.com/2008/06/slr_wp6.pdf).

**Rousseau, J.-J.** (1762). *Émile*.

**Schaffert, S. Geser, G.** (2008). Open Educational Resources and Practices, in Carneiro, R., Tarin, L. (Eds) *eLearning Papers. Promoting innovation in lifelong learning*, Barcelona, 14-19, retrieved Feb 1, 2011 from <http://www.elearningeuropa.info/files/media/media14907.pdf>.

**Seeber, G., Keller, H.** (2006). Die Anrechnung beruflicher Kompetenzen in Angeboten der wissenschaftlichen Weiterbildung, in Cendon, E., Marth, D., Vogt, H. (Eds) *Wissenschaftliche Weiterbildung im Hochschulraum Europa. DGWF Beiträge 44*, Hamburg, 115-126.

**Stangl, W.:** Das E-Portfolio, retrieved Feb 1, 2011 from <http://arbeitsblaetter.stangl-taller.at/PRAESENTATION/e-portfolio.shtml>.

**UNDP - United Nations Development Programme** (2004). *Unleashing Entrepreneurship: making Business Work for the Poor. Report to the Secretary General from the Commission on the Private Sector and Development*, New York, retrieved Feb 1, 2011 from <http://www.undp.org/cpsd/report/index.html>.

**UNESCO** (2009). *OER Toolkit*, retrieved Feb 1, 2011 from [http://oerwiki.iiep.unesco.org/index.php/UNESCO\\_OER\\_Toolkit](http://oerwiki.iiep.unesco.org/index.php/UNESCO_OER_Toolkit).

**Völzke, R., Jütte, W.** (2008). *netzwerkarbeit 2.0 – Die neuen Möglichkeiten des Internets. Weiterbildung*, 2/2008, 8-11.

**Woodhall, M.** (1994). Human Capital Concepts, in Husén, T., Postlethwaite, T. (Eds) *The International Encyclopedia of Education*, Oxford.

## Edition and production

Name of the publication: eLearning Papers

ISSN: 1887-1542

Publisher: elearningeuropa.info

Edited by: P.A.U. Education, S.L.

Postal address: c/Muntaner 262, 3r, 08021 Barcelona (Spain)

Phone: +34 933 670 400

Email: [editorial@elearningeuropa.info](mailto:editorial@elearningeuropa.info)

Internet: [www.elearningpapers.eu](http://www.elearningpapers.eu)

## Copyrights

The texts published in this journal, unless otherwise indicated, are subject to a Creative Commons Attribution-Noncommercial-NoDerivativeWorks 3.0 Unported licence. They may be copied, distributed and broadcast provided that the author and the e-journal that publishes them, eLearning Papers, are cited. Commercial use and derivative works are not permitted. The full licence can be consulted on <http://creativecommons.org/licenses/by-nc-nd/3.0/>

