European approaches to recognition of informal learning – potentials regarding ICT-components

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ABSTRACT
In Europe the topic recognition of informal learning becomes more and more important (cf. e.g. Werquin/OECD 2007). At the same time the Europe-wide as well as the national approaches dealing with recognition are rather diverse. To present the results of a systematic analysis of selected European approaches is the aim of this paper. Furthermore a synoptical comparison of these practical examples is presented paying special attention on the use of ICT to support concrete recognition approaches. Further ideas to integrate ICT within these approaches are also introduced. To theoretically conceptualise and analyse the processes in the context of recognition of informal acquired competences beyond a mere descriptive level an institutional research perspective is required. So to examine the recognition of informal learning not only pedagogical theories but especially institutional theoretical approaches are relevant. Besides the competence theory and the certification theory the theoretical basis of the analysis is formed by the institution theory (particularly New Institutional Economics) and the governance approach (cf. Richter/Furubotn 2003 and Altrichter/Brüsemeister/Wissinger 2007).

Keywords: recognition, informal learning, typology, information asymmetry, e-portfolio

1. INTRODUCTION AND THEORETICAL BASIS
To identify differences and similarities as well as strengths and weaknesses of the analysed approaches on the basis of a theoretically derived criteria grid three ideal approach models are developed and used as theoretical benchmark for the analysis. The different approaches of recognition can be classified within a typology. This typology differentiates between the three ideal types ‘Integration’, ‘Autonomy’ and ‘Support’ (Figure 1). The integrative type is characterized by his connection to the formal educational system. Approaches which belong to the autonomous type provide a certification while they are not anchored within the formal educational system. In contrast approaches of the type ‘Support’ are marked, because they don’t provide any certification or formal recognition, but they support this. These three types are furthermore used to enhance and advance the analysed approaches as well as to structure the research area.

<table>
<thead>
<tr>
<th>Type 'Integration'</th>
<th>Type 'Autonomy'</th>
<th>Type 'Support'</th>
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</thead>
<tbody>
<tr>
<td>Obtainment of certificates/qualifications of the formal educational system</td>
<td>Obtainment of certificates without any equivalence in the formal educational system</td>
<td>Approaches for the identification and validation of informal learning</td>
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<td>Formal</td>
<td>Non-formal</td>
<td>Informal</td>
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<td>Summative (and formative)</td>
<td>Summative</td>
<td>Formative</td>
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<td>Assessment of equivalences</td>
<td>Tests, performance measurements</td>
<td>Competence balances, Portfolios</td>
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<td>Norm-oriented</td>
<td>Criteria-oriented</td>
<td>Individual-oriented</td>
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Figure 1: Typology of recognition approaches

The analysis and evaluation is done with the help of the following theoretically derived criteria: objectives, methods, norms and standards, stakeholders, rights of disposal, coordination as well as signaling and screening. These criteria result from an analysis of different theoretical approaches (cf. Annen 2010; 2011). In this paper one further criterion is the use of ICT within the approaches. The aspect of ICT-use is especially relevant with regard to the aspects of signaling and screening, because ICT can help the stakeholders to deal with the problem of informational asymmetries (cf. Annen/Schreiber 2009). The process of the recognition of informal learning entails two informational asymmetries.

The first of these informational asymmetries relates to the competences of the individual in the recognition process. Within the context of the recognition of informal learning, competences are defined as dispositions. This implies that competences are not directly observable and may only be derived indirectly. The recognising bodies are not fully informed of the competences of the individuals and neither are these competences directly observable.

The second informational asymmetry relates to the methods and criteria of the recognising body. Special methods are deployed to make visible competences acquired via an informal pathway. These procedures should be conducted in accordance with certain standards and be professionally managed. Individuals are not (fully) familiar with the process adopted within this procedure. The individuals are not fully informed of the methods and criteria of the recognising body and are not able to evaluate the quality of the procedure.

The first informational asymmetry with regard to competences may be removed of individuals represent their competences (signalling). Appropriate evidence (references, work certification or other forms of evidence) provide a possible vehicle for passing on information in respect of their competences. For its part, the recognising body may deploy competence assessment procedures in order to determine the ability of the individual (screening).

The second informational asymmetry with regard to the quality of the procedure and the methods and criteria used may be
reduced if the recognising body makes information available on quality standards applied within the scope of the procedure and thus ensures transparency in respect of methods and criteria (signalling). This also includes reputation effects, evidence of membership of a network or organisationally specific unique features against the background of competition with other providers. Individuals are afforded the opportunity to explore the market of potential providers and decide on a recognising body or certain procedure. Information and advisory provision are of particular significance in this area. Figure 2 illustrates the double informational asymmetry in the process of recognition.

![Double Informational Asymmetry in the Process of Recognition](image)

Figure 2: Double informational asymmetry in the process of recognition

Within this paper the chosen approaches, which are representatives for the above ideal types, are briefly introduced. The main results of a detailed analysis (cf. Annen 2012) are here presented in a synoptical overview. These results are discussed paying special attention to the double informational asymmetry in the process of recognition and the potentials of ICT-components in this context.

The analysed approaches were chosen with regard to three main criteria:
1. Representativeness for special European educational systems respectively learning cultures
2. Relevance of the approaches within their context
3. Diverseness of the approaches in general

2. METHODOLOGY

The presented results have been achieved through three methodical components. Firstly the approaches have been analysed within an extensive literature research. Secondly an analysis of documents was carried out. Therefore, the documents, which are available regarding the approaches, have been evaluated with the help of the above analysis criteria. Among these documents are, for instance, handbooks, guidelines, quality assurance material, compendia and laws. Finally the results of the literature research and the analysis of documents were validated by interviewing important key persons regarding every approach. These persons played a decisive role in the context of the development of the approaches or in the implementation of the approach in practice. Besides the purpose of validation the interviews serve the collection of data concerning the experiences with the approaches.

3. CONCEPTION OF THE SELECTED APPROACHES – TYPE INTEGRATION

National Vocational Qualifications

The National Vocational Qualifications (NVQs), which were in 1986 introduced in England, are job-related, competence-based or outcome-related qualifications that reflect the knowledge and skills that are required to perform a certain vocational activity. They are based on national occupational standards that are performance descriptions of what a competent person should be able to do in a particular profession. NVQs not have to be completed within a specified period or a specific learning environment. They consist of units that may be acquired when the learner is ready for an appropriate examination, regardless of how and where this knowledge, skills and competencies have been acquired. The conduct of the proceedings for the acquisition of an NVQ is ideal as follows. Prior to the completion of an NVQ, the examiner supports the candidate in identifying his/her skills, selecting the appropriate standards, analyzing the learning processes still required and the corresponding required learning activities. First a reflection of past and current work experience takes place. Thereafter, the acquired competences are identified and a portfolio with supporting documents is created (learning diaries, letters of reference, work samples, etc.). The verification of NVQs is usually based on an observation in the workplace, a survey and the preparation of a portfolio. To ensure that examiners apply the criteria in different places in the same way, they and the entire process will be monitored by so-called ‘external verifiers’. NVQs are divided into five levels, depending on which competences are required (cf. Leney/Ponton 2007, p. 36 and p. 65).

Due to the lack of a unitary national system, statistical data relating to the qualifications in the UK are only hardly available. The statistics of the former Department for Education and Skills show that just slightly more than a half of the 621,800 assigned NVQs and SVQs were awarded to learners above the age of 25 who entirely or partly received them through the recognition of formerly informal or non-formal learning (cf. Leney/Ponton 2007, p. 79).

Realkompetanse

Recognition of competences is involved in a long tradition in Norway. In 1999, the Norwegian strategy for lifelong learning began with the competence reform. In the same year, the national validation project was started to create a national system for validation and formal recognition of formal, non-formal and informal learning (in Norway called Realkompetanse). During the three-year national project, several local development projects were carried out. In this context, various methods and instruments have been developed. This was done in three sectors: in the formal education system, in the private sector with companies as well as in the so-called third sector. The qualitative and quantitative data from these development projects as well as other surveys formed the basis of the new Norwegian legal framework. This is linked with the relevant laws of the educational system and the rights of individuals. In the years 2000 to 2005, a total of about 60,000 people participated in a recognition procedure in the field of higher secondary education, of which about 80% were carried out in relation to vocational subjects (cf. Mohn 2007, p. 97f; Carlsten et al. 2006, p.46).

In the field of higher education about 6,000 persons aged 25 years and older applied for admission to a study program in 2001 (the first year in which this was possible). In subsequent years, this number decreased to 2,700 in 2006. In the years 2001 to 2006, 50 to 70% of the applicants for the study program of their choice were found to be qualified. In competition with other students, 45 to 50% of applicants, which aimed at recognition, were admitted to the desired study program. Students who were admitted due to the recognition of formal, non-formal and informal learning take a share of about 5% of all students (cf. Carlsten et al. 2006, p. 46).
4. CONCEPTION OF THE SELECTED APPROACHES – TYPE AUTONOMY

European Business Competence Licence

With the development of the European Business Competence Licence (EBC*L), the goal was to create an internationally recognized standard for economic education. This examination and certification tool keeps records that the owner has at least basic knowledge of business and management.

The international EBC*L Center in Vienna and the Curatorship Business Competence for Europe in Paderborn organizationally stand behind the EBC*L-System. At the national level, the approach is implemented by the country representations of the EBC*L and the EBC*L examination centers.

Only accredited educational institutions are authorized, in accordance with internationally valid standards and using specially trained personnel, to carry out EBC*L examinations and to offer EBC*L preparation courses. The EBC*L-system consists of a unitary curriculum that leads to an internationally accepted catalogue of learning targets.

In Total, the EBC*L concept embraces three levels. Level A provides general knowledge of professionals in manufacturing, sales and administration. The teaching of planning knowledge to key personnel with planning expertise, however, is the target of level B. According to schedule, management skills for executives are to be taught at level C as of 2011, which is not yet the case. The EBC*L certificates are acquired in handwritten two-hour tests in accredited EBC*L examination centers. The tests are related in content to the corresponding EBC*L learning target catalogues. In preparation for the EBC*L, there are different offers, such as seminars of accredited examination centers, books and e-learning programs. Currently, the EBC*L can be acquired in 31 countries in 25 languages. The EBC*L certificate has been acquired by more than 10,000 people (cf. www.wirtschaftsfuehrerschein.at and www.ebcl.de).

European Computer Driving Licence

The European Computer Driving Licence (ECDL), known internationally as ICEDL, is an internationally recognized certificate for computer users. The aim of the certificate is to certify knowledge about computer skills and certain widely used standard computer applications.

The international coordination is in the hands of the ECDL Foundation, a nonprofit organization based in Dublin, which monitors compliance with current international ECDL standards and which further develops the ECDL continuously. The ECDL is published by 30 European companies for computer science. The implementation in each country is up to the national contractors of the ECDL Foundation. Experts of the 148 participating countries update the syllabus of the ECDL regularly. The current version 5.0 dates from the year 2008.

The contents of the certificate are aimed at the basic skills needed to operate a computer, with the ECDL syllabus being formulated product-neutral. The ECDL certificate is not supposed to certify specialists but non-specialists. These exams are conducted worldwide according to a uniform standard (cf. www.dlgi.de/uploads/media/ECDL_Syllabus_5.0_ECDL_DE.pdf).

Under the so-called ECDL Core, seven complementary modules are tested and certified. Once these 4 out of 7 freely selectable modules have been successfully passed, the user receives the so-called ECDL Start. The “ECDL Advanced” additionally certifies more extensive knowledge in one or more standard application as needed by advisors of IT users.

ECDL exams are conducted exclusively by ECDL examination centers which have been approved by the national organization. Exams are usually carried out on the PC and under the supervision of exam conductors. There are different possibilities to prepare for the ECDL tests. In addition to Internet services, print and online media as well as special courses accredited by educational institutions are offered. In February 2009, the number of ECDL participants amounted to nine million (cf. www.dlgi.de).

5. CONCEPTION OF THE SELECTED APPROACHES – TYPE SUPPORT

Bilan de compétences

In France the access to the bilan de compétences is legally regulated since 1991. The approach wants to offer people the opportunity to analyse their professional and personal competences, skills and motivations. On this basis a professional project or if applicable a corresponding further training measure is fixed. The bilan means a kind of educational leave, which is connected with an educational consultation. The creation of a bilan can be initialised by an employee respectively a jobless person or by the employer respectively the work agency, while the person always has to agree (cf. Käpplinger 2004, p. 118).

The whole process can be structured in three phases. Within the so called pre-phase the candidate is informed about the approach and agreements towards the concrete proceedings and the aims are made. Within the following phase of realisation the individual’s professional and personal motivations and interests are analysed and reviewed regarding professional development options. Concrete methods in this phase are psychometric tests, work samples, biographic-discursive approaches or assessment-elements. The results of this phase are the basis for the final phase. In this last phase a so called synthesis paper is created, which documents the circumstances as well as the individual competences and skills regarding professional aims of the candidate. Furthermore it shows possible steps of realisation (cf. Käpplinger 2004, p.119).

Teams of psychologists, pedagogues and personnel with other social professions always organise the above process, which is free of charge and voluntary. In general public, private and mixed financed centres operating the bilan exist. The so called Centres Interinstitutionelles de Bilan de Compétences (CIBC) have the longest tradition, which had the biggest market share in the past, but become less important. In the year 2008 the claiming of educational leave for a bilan de compétences rose 2% compared to 2007. In 2008 OPACIF received 30.267 applications for financing a bilan whereof only 2% were rejected. The costs for the service bilan can be very different depending on the centre (cf. Käpplinger 2004, p.119; http://www.pratiques-de-la-formation.fr/Bilan-de-competences.html and Fonjecif 2010, p.10).

ProfilPASS-System

In the context of the Lifelong Learning Program of the German Federal-State Commission for Educational Planning and Promotion of Research, here in the project ‘Pass for Further Education with certification of informal learning, the ProfilPASS-System was developed. This was based on an analysis of existing German and international training passes. The development-based ProfilPASS serves as a systematic identification, documentation and self-assessment of skills and competencies, regardless of the learning context in which they were acquired. In addition, it is the intention of the ProfilPASS, to motivate the users to develop educational, vocational or everyday life-related targets (cf. ECOTEC 2008, p. 10f).

This process requires a critical reflection on the skills and competencies by the individual. With regard to the development of personal objectives, the method requires the estimation of developments and requirements in the future. With regard to the development of personal targets, the method requires the estimation of developments and requirements in the
future. The aim of the ProfiPASS is to promote the awareness of personal strengths and weaknesses, through an accompanied development of an individual competence profile. In addition to the ProfiPASS document itself, the ProfiPASS-System contains a consulting concept. The individual should be supported by qualified consultants to deal with his/her biography (biographical approach). The entire system is coordinated by Germany’s national ProfiPASS service department. Besides the trained ProfiPASS consultants there are currently trained more than 50 ProfiPASS dialogue centers (cf. Bundesministerium für Bildung und Forschung 2008, p. 44).

Based on biographical stations as a result of the ProfiPASS procedure an individual certificate of competence the individual can make use of is developed to present themselves to a third party. Aims and individual action plans are drafted on the basis of the individual proof of qualifications. So far 54,764 ProfiPASS folders and 53,043 folders of the ProfiPASS were issued to young people (cf. Bundesministerium für Bildung und Forschung 2008, p. 44f and Amnen/Bretscheider 2009; 2011, p. 192).

CH-Q Competence-Management-Model

The Swiss CH-Q Competence-Management-Model provides people the opportunity to capture, to evaluate and to eventually recognize competences systematically. This serves as a basis for the individual path of development in the areas of education and occupation and the professional flexibility and mobility will be promoted. The handbook associated with the CH-Q approach consists of two parts - a working manual dealing with the instruments as well as a folder, which is used as a systematic collection and classification of qualifications, notes and files. In combination with the CH-Q qualification book, the process is first accompanied by identification and assessment and it ends with recognizing competences. Specially trained advisors accompany the candidates (cf. Haasler/Schnitger 2005, p. 61).

With regard to the methodological design, the CH-Q approach includes the archiving of formal qualifications and skills acquired individually. On the other hand, the documentation is the reflection of the individual competence profile of a user. On the basis of this reflection process, possible deficits and necessary appropriate measures can be derived. The processing of the manual can be carried out or by the users themselves as well as in directed learning processes (for example, in the framework of company seminars) or under the guidance of a trained advisor. When the users themselves are preparing a portfolio, particularly documents on training and other competences and skills acquired serve as a basis, which will be supplemented by a CV. In case the portfolio is created with the help of career or professional advisers, dialogue-based methods are used mostly (cf. Haasler/Schnitger 2005, p. 61).

The fees for the use of the CH-Q e-portfolio amount to €60 for individuals with a subscription period of 6 months, €90 for one year, €180 for 3 years and €270 for 5 years. For institutions, the annual fee for up to 35 participants adds up to SFr2,040, for 36 to 50 participants SFr3,150, for 51 - 76 participants SFr4,500. As soon as there are 76 or more participants, the prices with CH-Q can be made by mutual agreement (cf. http://eportfolio.ch-q.ch).

6. SYNOPTICAL OVERVIEW OF THE DESIGN OF THE APPROACHES

Regarding the methodological design of the approaches the synoptic overview in Figure 3 shows that portfolios are used within almost every analysed approach. Here the use of ICT is very promising and presently yet used within several approaches. The NVQs, the CH-Q model and the ProfiPASS-System use already e-portfolios to support the individuals in managing and presenting their competences. These e-portfolios are suitable for summative as well as for formative approaches. They facilitate self-assessments and third-party-assessments similarly.

![Figure 3: Methodological design of the approaches](image326x200 to 563x524)

![Figure 4: Institutional design of the approaches](image326x537 to 558x704)

Besides portfolios several approaches use tests to recheck the individual’s competences. But actually only the ECDL uses computer based tests. Regarding this methodological component the EBC*L as well as the bilan still have potential to use ICT-supported tests.

In general one can notice that the approaches already use ICT-components, but that there is still potential to intensify this in the future.
Having a look at the results of the analysis regarding the aspects of signaling and screening (Figure 6) one can observe that the biggest deficit lies in the widely missing activities of the individuals regarding the information asymmetry II. Here the activity comes mainly from the recognizing bodies. This is due to the limited opportunities of the individuals to gain information about the methods and criteria of the recognition. Finally the recognizing bodies could facilitate the situation for the individuals by providing more information, e.g. on homepages, in data bases or by providing other ICT-supported offerings.

7. CONCLUSION, FORECAST AND RECOMMENDATIONS

Regarding the above typology one can evaluate the three above ideal models as follows. While the approaches belonging to the type ‘Integration’ contain the whole process of recognition from the identification of learning outcomes until their formal recognition, the approaches belonging to the types ‘Autonomy’ and ‘Support’ only contain parts of this process. On the other hand the type ‘Integration’ is rather deeply anchored within the formal educational system and is focused on formal qualifications as reference points rather than on individuals and their competences. In contrast within both other types the individual learning outcomes gained within informal learning processes are in the focus more than formal qualifications. As a general result one can assume that the type ‘Integration’ can be recommended in every national context to offer people the opportunity to get their informal learning formally recognized. Moreover the two other types are relevant to take the individual in an adequate way into account within the process of recognition of informal learning. Regarding this the type ‘Support’ has strengths, while putting the individual in the focus of the recognition process. The type ‘Autonomy’ offers an intermediate solution. It uses qualification structures as references for the recognition while simultaneously being geared towards individual and informal learning processes. So the three types of approaches can be combined. The approaches belonging to the type ‘Support’ can be used in preparation of the use of an approach belonging to the type ‘Integration’. That makes sense, because the latter often lack in elaborated and area-wide consulting systems. The approaches of the type ‘Autonomy’ can also complement the other ones by certifying and documenting competences, which are not part of the formal educational system, but which can be integrated in formal qualifications or in recognition procedures, which lead to formal qualifications.

Relating to the aspect ICT the analysis shows that different ICT-components are used within every type of approach, especially in the form of e-portfolios or computer based tests. While e-portfolios are actually used within some approaches belonging to the ideal types ‘Integration’ and ‘Support’, computer based tests are only used within one approach belonging to the type ‘Autonomy’. Towards the further integration of ICT within all three ideal types one gets to the following conclusions. The more standardized the competences, which are relevant within the approach, are the more computer based tests are a promising solution. Tests based on the item response theory reach good values regarding validity, reliability and objectivity compared with other instruments of competence assessment. In contrast e-portfolios are more suitable in cases, in which a more individualised form of recognition shall be done. The form of these e-portfolios can be different regarding their objective-orientation, that means e.g. to correspond to a certain qualification. Besides these methodological aspects ICT-components offer some fundamental institutional advantages.
Especially regarding the problems of information asymmetry between the stakeholders of a recognition approach ICT-solutions can be very helpful to support the signaling of the institutions providing recognition. Similarly ICT-offers give the individuals the opportunity to inform themselves about the approaches provided, which means it supports their screening. ICT-systems can be seen as effective instruments to support the exchange of information between recognizing institutions and individuals wanting to get their informal learning recognized. Mainly for the individuals it is very important and helpful to get information and orientation, which can be very well accomplished by ICT-information- and guidance-systems.

In general non-formal and informal learning and their recognition become more and more important triggered by the discussions about Qualification Frameworks and other EU-initiatives. In Europe competence-concepts still focus mainly on knowledge and less on attitudes. Skills matter especially in the field of vocational education more than in higher education. The terms ‘competence’ and ‘learning outcome’ are actually predominant in the European Union. The stakeholders of the non-profit-sector are engaged in the Norwegian, the Swiss and the German approach, while overall the private sector is the most engaged party within the analysed approaches. The analysis shows that educational or occupational standards are definitely needed if a formal recognition should be done within the approach. The rights of disposal are in the hands of the institutions of the formal educational system within the analysed approaches of the ideal type ‘Integration’. If this is not the case there is a necessity of certain accreditation and awarding structures within the approaches. Regarding the coordination one can assume that the network mechanism is the most important one and becomes even more relevant in the future.

The information asymmetry II is the main deficit, which the different countries have realised and are actually working on. Currently systems to support individuals in getting their competences recognised are missing and must be developed. Furthermore studies on the differences between the theoretical conceptualisation and the practical use of the approaches should be done. In general more empirical data on the costs and the value of the approaches is needed. Thereby not only monetary but also transaction costs or opportunity costs for the individuals as well as for the institutions should be taken into account.

8. REFERENCES