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US DEGREE QUALIFICATIONS PROFILE: A CATALYST FOR TRANSPARENCY, QUALITY AND PERMEABILITY? REFLECTIONS ON A WORK IN PROGRESS

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***Abstract**: Education and training stakeholders worldwide in government, business and practice try to address challenges of quality and labour market needs by qualifications frameworks. US education politics on postsecondary education currently focuses on measures to promote institution and program accountability and to increase degree and credential completion in order to address the relevant labour market demands for an advanced skilled workforce. The US Lumina Foundation has developed a draft for Degree Qualifications Profile (DQP) in 2011 with references to the European Bologna Qualifications Framework for higher education to address these targets by the shift to learning outcomes and competencies. The challenge for the DQP is whether and how this instrument can bridge academic and occupational requirements and facilitate the conversion of non-credit to credit-bearing learning in terms of permeability.*

***Key words**: Postsecondary Education, Qualifications Framework, Shift to Learning Outcomes, USA.*

Introduction

On January 29-30, 2009, experts from over fifty countries all over the world met in Brussels to discuss the recently developed European Qualifications Framework of Lifelong Learning (EQF) and to share information on and experiences with national, regional and sector approaches qualifications frameworks [11]. Government representatives from the North American countries Mexico and Canada announced the development of national qualifications frameworks as well and the participating US education expert Jeff King (US-EURO-NET) recommended the development and implementation of such an instrument in the US to tackle the ongoing lack of quality in postsecondary education and workforce development and to increase the stagnating graduation rate. [11]

These instruments, used as reference points for qualifications to promote transparency and mobility of learners and workforce, were by no means new at that time. The first national frameworks had already been developed in the nineties e.g., in Great Britain and in South Africa [2]. The first regional qualifications framework in Europe had been established in the European Higher Education Area (EHEA) for higher academic degrees as part of the Bologna process agreements [8].

From the perspective of the European Bologna (1999, EHEA) and Maastricht (2004, EQF) processes, this article tries to discuss recent developments in education policy, practice and research on this topic in the US since 2009. [8,12] The US Institute for Higher Education Policy (IHEP) finished a benchmark study on ”The Bologna Process for U.S. Eyes” in 2009 and came up with detailed recommendations on how to reform the current US Higher Education [1]. It took into account major patterns and measures of the EHEA to improve accountability of institutions and programs predominantly by a consequent paradigm shift to competencies and learning outcomes. Simultaneously, the Obama administration stressed that US postsecondary education urgently needs quality improvements and an increase of the degree and credential completion rate to meet competitive workforce requirements.[17]

The Lumina Foundation supported pilot schemes in some US states to test the IHEP recommendations. [19-21] In addition, it initiated the development of a Degree Qualifications Profile (DQP) framework for the academic US Higher Education in 2010 and currently started nationwide expert discussions and tests of this proposal for further developments.[5,16] In its recent study ”Help Wanted“ [7], the Center on Education and the Workforce (CEW), a Georgetown University-based education policy research institute, highlighted with convincing empirical data that US education policy will not achieve its objective to essentially increase postsecondary education graduation rates by focusing predominantly on promoting college completion rates. Similar to the Georgetown Center, education experts at the non-governmental think tank CLASP stressed in their recent report [4] that a rising number of competitive non-credit postsecondary credentials

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have to be taken into account to achieve this objective. Furthermore, it recommended extending the Lumina proposal for non-academic credentials and revising the traditional input-driven US credit transfer system towards an outcome and cross-sector-oriented approach.

Finally, this article discusses common challenges and possible areas of common interest for the US and Europe in terms of further developments of national, regional and sector qualifications frameworks that are embedded in the global trend of a system convergence in education and training due to societal and economic needs.

US Context

Postsecondary Education Structure

In the US education system the federal states are in charge of the legal regulations and budget issues. Traditionally they do not implement and structure education by central public standards, ordinances and acts; this is done by the education providers including non-government stakeholders. The federal government initiate and controls innovations by the promotion of specific education programs, e.g., those concerning standards of accountability and achievements.[23] Nowadays, the US Congress exerts enormous power over US colleges and universities in terms of spending, taxing and civil rights enforcement. The US government funds the vast majority of American public colleges and universities, even more than before.[4]

Nationwide standards for academic degrees at community colleges, four year colleges and universities do not exist in US higher education. These education institutions develop their study programs autonomously. The programs are validated based on accreditations and peer evaluations. Today and for the past forty years ca. 40 percent of adults have earned a two-year or four-year college degree whereas in other countries nations, more than 50 percent of young adults have earned similar degrees and educational attainment rates are on increasing.[6]

Postsecondary workforce education is delivered by public two- and four-year institutions, for-profit colleges, universities and training programs, as well as by labor management partnerships. Sub-baccalaureate postsecondary workforce education and training is a diverse sector, with a wide range of providers. The postsecondary Career and Technical Education qualified as advanced Vocational Education and Training is predominantly performed at Community Colleges.[4]

Currently numerous non-academic certificates are competing successfully with associate degrees on the US labor market. In addition, learners acquire competencies based on other non-credited forms and levels of postsecondary learning that are of value on the labor market. At many community colleges, more students enroll non-credit education than credit programs. Most of these students are enrolling in occupational education and training programs. [24] While associate degrees are generally portable and are designed to articulate towards the next higher educational credential, the portability of certificates within education is limited. This depends on institutional articulation and transfer policies, and on their value in the labor market, particularly on the employer requirements for hiring and promotion. **(7)** The lack of common definitions and standards underlying occupational credentials especially related to middle-skilled jobs, contributes to considerable confusion about their value in the labor market and how they relate to academic credentials. [4]

Demand

The dynamic global knowledge-based economy requires in the US, as in other highly industrialized countries, a higher education system that contributes significantly to the development of the knowledge and skills to become competitive. Students and employees have to be prepared for jobs that are rapidly changing due to dynamic developments in technology and work organization. Following the CEW study [6], about two-thirds of the job openings in the U.S. will require at least some postsecondary education and training by 2018, with an increasing number in the middle-skill occupations covered by workers with an associate's degree or an occupational certificate. [3,9] Increasing ethnic minorities, adult learners, and low-income people demanding postsecondary education are still faced with institutional and procedural barriers to have appropriate access to relevant programs. [5]

US education and training stakeholders insist that global competitiveness and employability increasingly require appropriate learning content and training methods, accurate assessment of competencies as well as adapted certified education, skills standards and credit transfer. [5] However, any promotion of increased degree completion in the US has up to now not been grounded in a consistent public understanding as to what constitutes a degree or a credential. Clarity on the required learning outcomes and education and career pathways are expected to motivate students to enroll and to assist them in persisting in study courses progressing toward a degree. The number of credits required for a degree varies across institutions and federal states, and the opportunity for students to take their learning from one institution and receive credit for it at another is still limited.[4]

Higher education institutions in the US are under increasing pressure to be accountable for the quality of their degrees. As yet, implemented testing samples do not appropriately inform about learning and progress through college or other postsecondary education providers. (1) The current US higher education system lacks a mechanism that defines what a degree / a credential represents in terms of what a student knows, understands and is able to do. A degree is currently defined by time and credits only. High-quality degrees

are requested by accreditors and other stakeholders to have well-defined and transparent learning outcomes that provide clear pathways to further education and employment. [5]

The credentialing process for non-credit occupational learning is not regulated. Students who complete non-credit courses receive certificates, which have varying degrees of value in the labor market. Widespread industry certification and licensures are non-credit programs as well. Additionally, the non-credit programs offered by government, employers and other training providers or vendors include a diverse number of certifications, apprenticeship training, adult education, job readiness and dislocated worker training. [4]

According to the CEW study over 7.7 million US citizens participate in non-credit programs that "can be considered to correspond to credit-bearing programs" or which "have a high potential of translating to postsecondary credentials." Interestingly, 43% of holders of licenses and certificates earn more than associate degree holders and 27% of holders of licenses and certificates earn more than bachelor degreed individuals 106. Students and employers complain that the lack of portability of skills earned in work-based and other non-credit programs costs individuals enormous amounts of time and money. Finally there is an instrumental need for recognition of prior learning and work experience. [6]

The business community increasingly demands accountability of degrees and credentials in terms of the value added and the assurance of skills and abilities needed. At the same time, academic higher education often fears that in making itself accountable in this way, it will become akin to vocational training. [5]

Policy Trends

US education politics currently are determined by the effects of the global economic crisis in 2008 on the national economy but also by the ongoing deficits in general education and workforce development. The political debate on postsecondary education currently focuses on measures to promote institution and program accountability and to increase college completion in order to address the relevant labour market demands for an advanced skilled workforce. Education experts and policy makers as well as business leaders are concluding that the economic and social challenges of the United States can only be addressed by increasing the percentage of Americans with high-quality degrees and credentials beyond high school.[5] Therefore, the Obama administration (2009) have made increased degree and credential completion a national priority. This can be performed in community college or a four-year college as well as via vocational training, apprenticeship or industry certification. [17]

The debate of just how colleges, universities and other postsecondary institutions assess the quantity, quality and pace of learning is certainly not new. The US Government commission on education concluded in 2005 that students must have clearer pathways among education levels, and institutions and colleges have to remove barriers to student mobility and promote new learning paradigms (e.g., distance education, adult education, workplace programs) to accommodate a far more diverse student cohort. Furthermore, federal states and institutions should review and revise standards for transfer of credit subject to rigorous standards designed to ensure educational quality, to improve access and to reduce time-to-completion.84 The Center on Wisconsin Strategy [7] demands a competency-based credentials system that would reduce employer search and transaction costs, increase worker security, and guarantee quality work and quality jobs.

Concept

Development Approach and Context

Many voices in the US favor higher education reform to respond to an increasingly competitive environment to educate and train the best students. The Bologna Process in European Higher Education Area (EHEA) provides an interesting benchmark for the US HE reforms in terms of transparency, permeability and quality, because Europe faced a similar challenge in the late 1990s to make HE competitive for the international knowledge economy. The IHEP study *„The Bologna process for US eyes"*[1] investigated the EHEA in which the European countries agreed on common formats for bachelor and master degrees designed along the same outcome parameters, compatible national qualifications frameworks for Higher Education with common descriptors for degree learning outcomes and a common credit transfer system (ECTS) to promote transparency, comparability, quality as well as mobility. Furthermore the study is interested in the process of reframing higher education from what is taught to what is learned and the harmonization of degrees and programs without standardization. The shift to learning outcomes is regarded as an appropriate solution to harmonize permeability (via articulation procedures) especially for associate graduates at community colleges upwards towards bachelor programs at 4-year colleges and universities. [5] Tuning created a common language and descriptions of the key categories for learning outcomes knowledge, skills, and competencies that are operational and widely accessible. [7]

The Lumina Foundation for Education has developed a draft for Degree Qualifications Profile (DQP) (Lumina 2011) with reference to qualifications frameworks in other countries, especially in Europe, to increase transparency and comparability of degrees and programs. [16] This instrument referred to the Bologna process tool *Qualifications Framework* that makes explicit via descriptors the learning outcomes

and competencies required for a degree to be awarded at a specific level. [1,5]

This draws on more than a decade of widespread debate and effort, across all levels of U.S. higher education, to define expected learning outcomes that graduates need for further education, work, citizenship and life. The DQP embraces associate, bachelor and master degrees both in applied fields like medicine as well as the traditional arts and sciences by establishing learning outcomes that are relevant to all fields. Facing changing workplace requirements, new technologies and expanded parameters of knowledge and skills, the DQP emphasizes analysis, adaptation and application both in occupational fields and in the arts and sciences. [5,16]

It is discipline-neutral and outlines what all degree graduates should know and be able to do. Furthermore, this instrument will facilitate the alignment between the nationwide competency-based Common Core Standards for secondary education (K-12, 2010) and outcome-based college readiness. The DQP is designed as a voluntary tool for HE institutions and other stakeholders to use based on mutual trust. It is not designed to standardize US Higher Education. Recognizing the decentralized postsecondary education structure, each institution and each program will retain their autonomy in this way. [5,16]

Objectives

In January 2011, the Lumina Foundation released its *Degree Qualifications Profile* draft based on expert feedback gathered in fall 2010. It intends to create a platform for competency-based education that is provided by institutions representing every sector of US higher education through clear definition for quality and development of new capacity throughout postsecondary education.[16] Through the Degree Qualifications Profile the Lumina Foundation tries to support these targets by addressing the following aspects:

- *Shift to Learning Outcomes and Competencies:* Making explicit knowledge, skills and abilities in learning and application at a specific degree level
- *Transparency and comparability:* Providing non-institution-specific reference points for all associate, bachelor and master degrees
- *Quality:* Providing reference points for accountability of degrees, programs and institutions
- *Permeability:* Supporting access, recognition and transfer of learning within and up to Higher Education and at the intersection with other areas of learning and application (e.g., the labor market). [5]

Taking into account other countries' developments and experiences with qualifications frameworks, the Lumina foundation concludes that this Degree Qualifications Framework with common learning outcomes for each degree level would provide an appropriate tool to address efficiently challenges of quality and competitiveness faced by US Higher Education. It tries to support the US goal to increase the proportion of Americans with high-quality degrees and credentials from the current 40 percent to 60 percent by the year 2025 [10].

Structure

The Degree Qualifications Profile defines overarching learning outcomes for associate, bachelor and master degrees, the major postsecondary academic credentials awarded by colleges and universities regardless of their disciplinary specialization. Other advanced academic degrees are not included. Doctorate degrees are not addressed because of required research skills specific to disciplines and professional degrees, e.g., for physicians or lawyers because of their discipline-specific focus on practice knowledge and skills. These degrees may be included in future DQP versions. Non-academic and non-credit credentials are also not included in this draft. The DQP describes the expected performance for each degree level through specified reference points of learning outcomes indicating the relevant incremental and cumulative learning. Focusing on essential competencies and their applications, it illustrates how students should perform progressively at ascending degree levels. [16]

The DQP is defined by five categories of competency-based learning outcomes: Specialized Knowledge, Broad Knowledge, Intellectual Skills, Applied Learning, and Civic Learning. The learning outcomes are developed for each degree addressed, presented as illustrations, presented through active verbs, intended to define the achievement of competence and non-specific disciplines, and occupational fields. At the least, in each category the learning outcomes follow the principle of incremental challenge and accomplishment from one degree level to the next.

The DQP differentiates the learning outcome category knowledge in *Broad Integrated Knowledge* acquired through an entire course and in *Specialized Knowledge* gained in a specific field of study. However the integration of ideas, methods, practice and theory across this differentiation is emphasized to achieve expertise in particular disciplines and additionally in other areas of studies to attain a degree of value for occupational application and further academic education and study. *Intellectual Skills* are defined as cognitive capacities, which include knowledge, learning, analytic, communication as well as application competencies. Learning is specified in two different categories. The *Applied Learning* outcomes describe what graduates can *do* with what they *know*. The second category *Civic Learning*, addresses a societal objective of general and higher education to prepare for responsible citizenship.

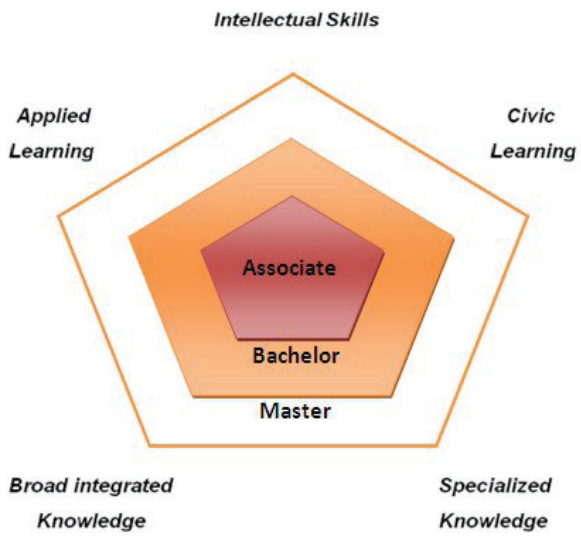

FIGURE. 1
US Degree Qualifications Profile Structure
(Lumina foundation, proposal 2011)

While the five categories of learning outcomes are described independently, they are intertwined in learning and in application in different settings across disciplines and occupational areas [16].

Analysis and Reflections

The proposed Degree Qualifications Profile framework has been initiated to promote an increase in higher education quality and graduation with high quality credentials needed by the labour market.

Shift to Learning Outcomes and Competencies

By making explicit knowledge, skills and abilities in learning and application at a specific degree level, the DQP basically provides a template for competency-oriented curriculum development and promotes assessment of higher education student learning outcomes.

Level Descriptions

The learning outcomes on each level are described in separate *intertwined* learning outcome categories but not in an integrated way to describe each degree profile from a holistic understanding of competency. The development of integrated level descriptors might provide an orientation for the degree profile level and help to avoid category level imbalances. The DQP draft emphasizes bridging academic and occupational requirements. The descriptor wording is competency-oriented but still focuses predominantly on *college readiness*. To address the competency orientation for academic as well as occupational requirements, overarching terms like *field of action* might replace the sector-specific terms *study*, *research* and *work* in an appropriate way. Additional indicators for differentiating the levels could be *responsibility*, *interactivity*, *autonomy*, *reflexivity* and *complexity*.

The DQP draft emphasizes a non-standard approach which functions as a reference point. The question may be raised as to whether the learning outcomes have to be described in such a detailed and elaborated way [ ]. To avoid a *meta-curriculum* design that might reduce the flexibility of higher education institutions in developing courses and degrees, the descriptors could concentrate on the essential characters and objectives of the relevant degree level.

Learning Outcome Category Design

• *Applied Learning / Civic Learning*

The differentiation between *applied* and *civic* addresses well established notions and demands in society and on the labour market. However, this seems to be questionable because it is arbitrary and artificial from a holistic and methodological point of view. In addition *application* cannot be reduced to "interaction of academic and non-academic settings" because academic research or even project-based study modules can regarded as fields of application as well. An integration of both learning perspectives into one category as an extra functional competency and revision of the descriptors with respect to academic, non-academic, societal and work demands might solve the problem.

• *Intellectual Skills*

A specification of "intellectual" skills seems to be arbitrary from a holistic understanding of competency. Skills describe the ability to apply knowledge and use know-how to complete tasks and solve problems; they are described both as cognitive and practical. A redefinition of this category as *Integrated Skills* might be more appropriate.

Transparency and Comparability

By using a non-institution-specific and competency-oriented wording to describe learning outcomes on each degree level the DQP provides an transparency and comparability reference point for all associate, bachelor and master degrees exclusively, i.e., neither for further advanced academic qualifications nor for non-credit learning outcomes (e.g., certificates). It provides, as well, reference points for degree planning and the development of programs, courses, assignments and assessments at the education institution level. Furthermore, the DQP provides a common vocabulary that is not discipline-related. It uses a terminology which is competency-, action- and application-oriented, which is not yet fully implemented or accepted in the academic world. It should to be clarified whether this

terminology covers occupational requirements in initial and advanced Career and Technical Education (US VET) as well. The development of a glossary defining essential terms like knowledge, skills, competency, learning outcomes, degree, qualification, and credential might support this clarification for all users and stakeholders.[8,12,19]

Quality

Describing and differentiating precisely the degree levels in a non-discipline way by learning outcomes in competency categories, the DQP also provides reference points for the accountability of degrees, programs, and institutions which are far stronger than, for example, test scores. It offers benchmarks for improving the quality of learning and assessment. The DQP can be used, for example, by higher education institutions as well as by employers, as a quality assurance device, ensuring that graduates possess competencies. It can support accreditation processes by providing a common template for institutions for reporting or comparison purposes and for relating disciplinary objectives to institutional ones.

Permeability

Facilitated by its approach as an outcome- and application-oriented quality device as well as by its non-disciplinary design and common language, the DQP has the potential to support access, recognition and transfer of learning within, to and from Higher Education. By ratcheting the learning outcomes at each level the DQP clarifies the differences between degrees. This facilitates a consecutive curriculum development at each level as well as the development of articulation agreements and the articulation procedures, such as those between associate und bachelor degree programs. Furthermore, the DQP approach facilitates permeable pathways between secondary schools and postsecondary educational institutions, because it can be aligned to the competency-oriented *Common Core Standards* (2010) for general education. At the least, creditable prior learning potentially can be facilitated by the DQP approach.

The challenge for the DQP as a competency-based framework is whether and how it can facilitate the conversion of non-credit occupational education and training to credit-bearing instruction that can be counted towards postsecondary credentials, in order to realize its permeability objective at this intersection.[4]

Conclusions and Outlook

The proposed Degree Qualifications Profile is a promising tool for addressing, in an appropriate way, the education policy and economic demands in the US to increase accountability and postsecondary education attainment by the shift to learning outcomes and competencies. Like qualifications frameworks in Europe and other highly industrialized areas, it intends to promote transparency, comparability and permeability of qualifications in postsecondary education. [8,12,18]

In terms of lifelong learning and a reform of Career Technical Education, US education policy requires that after high school, students earn either a postsecondary degree or a certificate/industry-recognized certification for successful careers. [9]. It is evident that the competency-oriented DQP approach to address both academic and occupational requirements requires clarification of the compatibility between its outline for core academic degrees and other advanced academic degrees, as well as the intersection with secondary education and with non-credit education and training.

A current report [4] on credit transfer options for non-credit education and training demands an additional sub-baccalaureate DQP level for one-year certificates below the associate level and an outcome-oriented revision of the current US credit system. Facing the competitiveness of some certificates with associate degrees, non-credit learning outcomes could be linked both to a required additional sub-baccalaureate level and to the associate degree level or even a higher level as well. Such a framework would bridge credit and non-credit workforce education and training programs, and make occupational credentials more transparent to employers, workers, and educational institutions. [4]

The question is how to incorporate non-credit instruction facing the highly decentralized US postsecondary education system. The report refers to state and institutional innovations in “cross-walking” credit and non-credit learning to assess prior learning. Indiana’s Ivy Tech Community College System uses a “certification crosswalk” to automatically award a consistent amount of academic credit for industry certifications and apprenticeships. [13] Wisconsin’s technical colleges system considers apprenticeship programs to be credit relevant for an Applied Associate in Science (AAS) degree [15]. The Kentucky Community and Technical College System offers *embedded credentials*[14] and the University of Wisconsin-based Center on Wisconsin Strategy recommends portable, sub-baccalaureate occupational credentials, e.g., relevant for the emerging clean energy sector. [7]

The innovations described above are a response to the growing and urgent need to award academic credit for occupational instruction that takes place outside of the traditional, credit-bearing venues and makes required knowledge, skills and abilities explicit. The current US credit transfer system does not properly accommodate the accumulation of credits at various postsecondary education institutions. The Lumina Foundation suggests that the DQP approach might facilitate the development of a credit transfer system

which moves from credit hours to competence as the measure of learning and allows accumulation from different institutions. [5]

This wider perspective might support the use of the term *credential* in the DQP framework title to stress its transformational and catalyst function for US postsecondary education in terms of learning outcome orientation, *permeable* transparency and labour market requirements. However it has to be clarified whether and how these conceptual developments are compatible with the DQP approach of academic degree profiling.

As it is already mentioned above the DQP referred to the Bologna process tool *Qualifications Framework* that makes explicit via descriptors the learning outcomes and competencies acquired for a degree to be awarded at a specific level and provide a mechanism to define quality. The DQP provides higher education pathways into the workforce by a vertically inclusive design of learning outcomes as well. [8] The Bologna Framework and the DQP both provide a common discipline-overarching reference point for HE academic degree attainment.

The DQP differs in the following structural aspects. It is offered to HE institutions as a voluntary tool in recognition of their high degree of autonomy. The proposal contains learning outcomes designed in a *meta-curricula* way but not as descriptors for learning outcomes. The learning outcomes categories are somewhat different and defined in a different but compatible way. The Bologna framework category *Communication* is integrated in the DQP category *Intellectual Skills.* The Bologna framework explicitly contains the categories *Making Judgments* and *Understanding* (combined with *Knowledge*), whereas they are integrated explicitly and implicitly in the two DQP categories of *Knowledge* (broad, integrated and specialized) and *Intellectual Skills*. In both frameworks the learning outcomes as well as the descriptors are designed in a competency- and application-oriented manner. The DQP does not offer additional levels for advanced academic degrees (e.g. doctorate) but, interestingly, provides an independent level for associate degrees, whereas the Bologna Framework addresses equivalent short cycle qualifications as integrated cycle of the bachelor degree cycle. The associate degrees are implemented US-wide whereas short cycle degrees do not exist in all European countries as academic qualifications.

With respect to education policy and instrumental developments, the proposal for a US Degree Qualifications Profile framework did not benchmark the fact that the relevant EU education and training stakeholders at the government, provider, social partner and research levels did not agree to extend and to open the Bologna framework for Vocational Education and Training and for General Education. However, in the US, the DQP discussion has started on analogous approaches to the European Qualifications Framework for Lifelong Learning that addresses all kind of formal, non-formal and informal learning outcomes in terms of transparency, comparability and permeability [4,12].

Embedded in the global trend of education system convergence [18], the DQP might support a concept of higher academic education that can be accountable on a high level for both academic and non-academic labor market needs without being transformed in another sort of vocational education. US federal policy supports this perspective by emphasizing that the promotion of lifelong learning includes an increase in postsecondary education credential completion to address workforce requirements that can be achieved at college and in non-academic ways. [9]

The US education and training stakeholders involved will have to discuss whether the DQP proposal might be extended to address further postsecondary credentials or whether alternative framework models (e.g., sector-oriented) to address non-academic and non-credit learning might be developed complementarily to the DQP. The Lumina Foundation started by the first step encouraging the leading US higher education accrediting associations to test the DQP. To increase acceptance, Lumina intends to expand the DQP dialogue to other major stakeholders of postsecondary education such as federal and state government agencies, education providers and employers. [5,16]

Supported by the Foundation, the pilot schemes already started in some Federal States to test the tuning approach in selected disciplines will be expanded, including how to write criterion-based learning outcome statements and how to develop effective formative assessments. [19-21] The vision is to create a US version of a zone of mutual trust in terms of transparency and portability of achieved learning outcomes, which might be joined by a rising number of federal states and education stakeholders. [1]

Although the European Union, as a confederation of independent states, and the United States of America, as a federal republic, are different in their constitutional and political structures, both have to deal with a high level of political autonomy of federal states (US) and member states (EU) in terms of education policy. Both highly industrialized areas are faced with analogous challenges of quality and global competition in the economy and on the labour market.

Embedded in the transatlantic dialogue on education and training at the policy, practitioner and research levels, from the European point of view it might be interesting to investigate and discuss the following issues. How will the DQP and other relevant approaches (e.g., sector-based) in the US promote implementing the shift to learning outcomes and relevant developments of curricula and assessment methods? How does this approach contribute to clarification and possibly revision of the traditional concepts of *degree* and *credential*, e.g. towards a holistic, competence-driven concept of qualification and an overarching language

for education and training? How will it contribute to bridging academic and occupational requirements by the development of learning outcomes, for example, for associate degrees (i.e. EQF level 5). How will an overarching cross-sector credit transfer system be generated which has not yet been achieved in Europe because of the differing approaches of ECTS and ECVET?

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VULNERABILITY AND TRAINING-EMPLOYMENT RELATIONSHIP THE FRENCH CASE

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Abstract: *In this communication, we stress on the vulnerability at work in the French labour market. We analyse the conditions according to which vulnerable individuals can enhance their adapting capacity and opportunities overtime.*

Keywords: *Vulnerability, employment, lifelong education, France.*

1. Introduction

In an increasingly complex and unstable environment, competences become rare and unsuited. This rapid change of the socio-economic context makes individuals vulnerable in the labor market. This situation weakens in a notable way the activities and employment on the level of their contents and their volume. This instability of employment is reinforced by the policies of flexibility (multiplicity of the contracts, etc) implemented by the companies. Consequently there is a need for lifelong education to accompany the adaptation to employment and the change in the activities. In order to meet the new requirements of professional insertion and the need to be educated permanently throughout the life, the supply of formation should contribute to the adapting capacity of the individuals. It is thus important to wonder about both the concept of long-term employment and its measurement. The long-term employment refers to the security of the professional trajectories. The concept of security is associated with the right to a lifelong education through the validation of the assets of the experiment, which requires a continuous approach in term of activities and competences. In this communication, we mainly stress on the categories of individuals particularly exposed with structural constraints of economic, social and cultural order. Then we analyse the conditions according to which these vulnerable categories can enhance their adapting capacity and opportunities overtime.

2. Employment in France: Insecurity and Vulnerability

2.1. The Persistence Of Unemployment And The Rise Of Precariousness

In 2007, France recorded a rate of aggregate employment of 64.3%, far from the European objective of 70% for 2010 (European Council in Lisbon in 2000). The digging of the variation should continue with the current crisis (Forecasts INSEE[3]: unemployment rate from 10 to 10.5% in 2010). The feminization of employment makes it possible France to achieve the European objective of 60% because of the big continuous rise of the female activity. On the other hand, the European targets are far from being reached for the seniors (55-64 years) and the young people (less than 25 years) respectively reaching 38% and 30% in 2006. In addition to recurring unemployment, the precariousness of employment remains a concern. The recruiting in part time, in short duration contract, limited time contract (CDD) and on mission of interim are the most current forms of precarious employment. In 2006, the form of employment the most represented for the employees was the permanent contract (CDI) with a rate of 86%. The CDD and missions of interim, for most short duration accounted for respectively 11% and 3%. Between 1990 and 2000, the CDD increased by 60%, the interim missions of 130% and the training courses and "helped contacts" of 65%. The professional trajectories of the individuals are more marked by unemployment and flexibility (CDD, interim). The risk growing to lose an employment combined with the precariousness of employment leads to mobility and "unstable" or "discontinuous" professional trajectories, thus reinforcing the differentials of wages, the inequalities in the use and of the forms of socio-economic insecurity. The question of the vulnerability to work arises since the economies and the individuals evolve in a dubious environment.

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2.2 Vulnerability And Professional Trajectory

The concept of vulnerability deals with a systemic vision; it is regarded as the exposure to a shock or a definite catastrophe itself a "rupture in a trajectory, in the reproduction of a system (…) followed by the emergence or the junction of a new trajectory and the installation of a new system" [1]. From the microeconomic point of view, the vulnerability of an individual is defined like the probability of seeing his situation or his living conditions to worsen and of falling into poverty, below the line of poverty. The resilience of an individual refers to the capacities of reaction and adaptation when the risk occurs. The individuals having the capacities required to face the risks are those having endowments mobilizable within the framework of strategies in order to reduce the degree of vulnerability and to protect themselves. Also the State and the institutions must offer a favorable framework through public goods (education, health, justice, rights and freedoms) contributing to improve the capabilities of the individuals and to reveal their potentialities [4]. The vulnerability work deals with the idea that the participation of an individual in the job market does not make it possible to ensure his wellbeing. In term of risk, the vulnerability is then associated with the probability of entering or of being maintained in the precariousness of work, the under-employment or unemployment. Several types of factors are likely to reinforce the vulnerability of an individual. There are the individual determinants (sex, age, degree of schooling reached, origin, place of residence, marital status) to which it is necessary to add characteristics of the employment occupied by the individual at one moment (forms of employment, types of contracts, compliance with the rules of the Labor regulation, period, time). The organizational and institutional forms related to the job market must be also taken into account. The segmentation of the job market can affect the vulnerability of the individuals and their professional trajectory [3] when several internal markets of work coexist within the same firm. Mobility between groups of workers (workers - employee office-executives) is rare. The segmentation is also related to the external market, comprising the workers occupying of "less standard" jobs, more precarious often part-time, of short duration, within limited time contract, associated with low qualification level, weak wages, low education levels and of without hope of career. Individuals can go beyond the poverty line and become "working poors" according to the economic contexts, social and family environment. Among the salaried workers, there are the precarious status but also the people being located on unstable professional trajectories marked by successive periods of unemployment, employment and inactivity. This phenomenon appeared in France during the Nineties. The number of working poors in France is estimated between 1.8 million and 3.6 million in 2000 according to poverty line [2]. The vulnerability at work is thus determined by several types of factors of a nature individual, social, economic but also organizational and institutional. On the job market, resilience refers to the capacity of adaptation and response, which will depend on the external environment and the endowments. According to the segments of labor markets, the endowments will thus not be valued in an identical way. Among the mobilizable endowments, the investment in education by the lifelong education remains a factor likely to reduce the vulnerability under certain conditions.

3. Reducing the Vulnerability at Work through the Lifelong Education

3.1. Human Capital and Formation Throughout

For the individuals, the formation is an investment when where they decide to acquire new competences making it possible to increase their total stock of knowledge associated with the human capital. As a firm invests in the physical capital, the individual can decide to invest in the human capital. Like initial training, continuing education allows the individual and his firm an increase in human capital and thus contributes to the increase in the productivity and the wages. In fact, the investment in continuing education constitutes one of the most notable characteristics of the job market in the industrialized countries. This investment is the outcome of a partnership between public authorities and firms for the financing of professional training [5]. In France, the negotiations between social partners led to grant rights to the employee based on the responsibility for firms of financing trainings for their employees (Professional training, law 1971, ANI 2003, ANI[4] 009).

3.2. Access to Continuing Education: Deep Inequalities

In France, between 1999 and 2004: whereas the expenditure in favor of the training increased by 5%, the related spending with continuing education increased by 13.4%. The institutional context marked by agreements in 2004 contributes to the Individual right to the Formation allowing the employee with his request and with the agreement for its company to profit 20 hours of formation per annum. This law encouraged firms to contribute more to the financing of the training of their employees. This right to education is associated with schemes of validation of the assets, by the experiment

[4] Accords Nationaux Inter-branches (in English : National Agreements of Inter-branches).

(VAE) and professionals (VAP). There are inequalities in terms of access of the individuals to continuing education according to the situation on the labour market, the size of the company, the education level initial reaches by the individual and the professional category. In 2006, 44% of the employees in France benefitted from one or more trainings; for the majority, it was about an initiative of the employer. Comparatively, the employees of the public sector (53%) have more access to continuing education than the employees of private sector (47%). In the private sector, the employees of the large companies have more frequently access to continuing education. The categories of the graduates (BA) and the executives have also more access to continuing education. On average, the duration of the formations followed as well by the employees remains short (a little more than 50% the formations do not exceed 20 hours). 75% of the followed formations refer to courses and training courses, of which the goal is to reinforce the effectiveness the professional context. These inequalities reveal the strategies, the organization and productive choices expressed by the companies and their branch of industry. The more dynamic branches of industry are affected by rapid technological changes and have impacts on the level of the organization and processes of work [6]. These sectors express needs in competences (transversal: competences in languages, communication aptitudes, etc.) and specific competences (technical or specialized: tools trade, machines, etc.). Thus the sectors of industry, energy, recycling, transport, tourism, hotel increased their financial participation in continuing education. At the level of the firm, the type of formation depends on the strategic choices related to the company in terms of human resources management (rotation, promotion, formation). The access to the lifelong education remains unequal and conditioned by the professional context (size of the company, branch of industry) and the initial personal dotations of (initial level of employment, education level, family context). The lifelong education thus can be in certain cases a factor of vulnerability for the individuals in terms of access but also according to the nature and the competences aimed by the formations. A relevant lifelong education implies for the individuals to have the same rights (included the education) independently the status. It is thus important to specify the possible way of improvement in terms of right to lifelong education.

4. Right to Lifelong Education and the Competences Approach

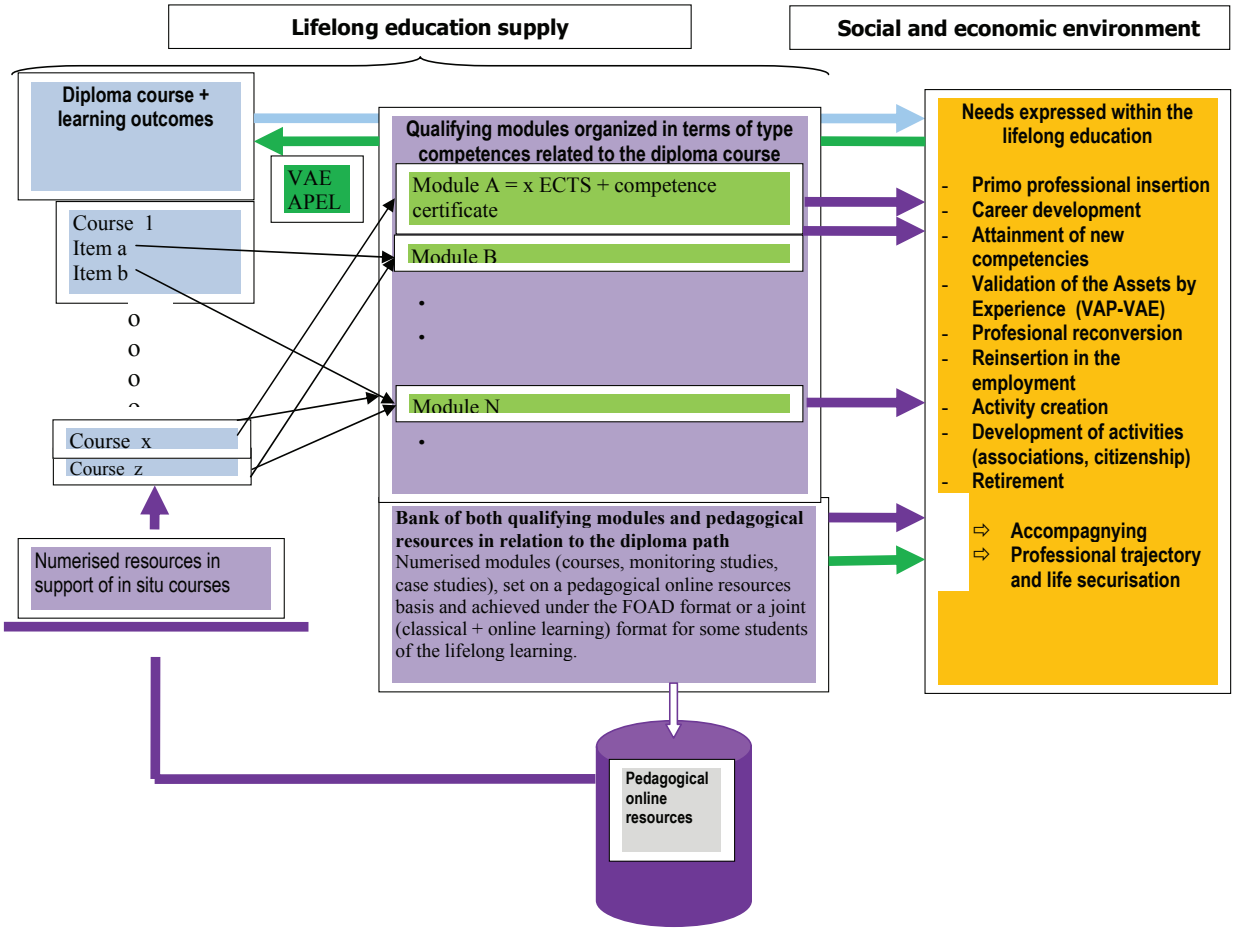
4.1 The Necessary Emergence of the Right to Lifelong Education

Whereas in the past, there were relatively linear professional trajectories, the contemporary period is marked by a multiform discontinuity and very unequal rights, as well in the relation with the legal status of the person as in their implementation. Thus, we can observe a development of several professional paths with ruptures having various consequences. For some individuals, it is a periodic alternation "employment at limited duration - lay-off", or it is about a durable rupture with traditional employment by entry in long-term unemployment (examples, the senior unemployment and the pluri-generational in accordance with the disappearance of the main economic activities on a territory like mining, iron and steel industries, textile). Job loss may be related also to the closing of a company. It can be due to the rapid technological and organizational change leading to a relative obsolescence of competences and to a need for reintegration and reconversion in other activities. We consider also the ruptures decided within a career strategy making it possible to build a professional and ascending social mobility. The negotiation is then based on a competition among proposals for an employment (inside or outside the firm). These elements refer to a form of professional social security. The securization of the personal professional paths, required the rights granted to the individuals with the possibility of mobilizing social actors. It requires also that society copes with the implementation of rights and of instruments of regulation. In the context of crisis which reinforces the personal insecurities, we stress on the necessity to build an alternative model of development more respectful of human and of territories with a more equitable and better balanced economy. In this perspective, it is important for an individual to achieve rights to the lifelong education which have to be guaranteed collectively. It is necessary also to set up the partnership and territorial organizations and guarantee the effectiveness of their implementation. The right to the education constitutes an human right, founder of the citizenship, and the sustainable development requires its implementation, guaranteed for all, in long temporalities [5].

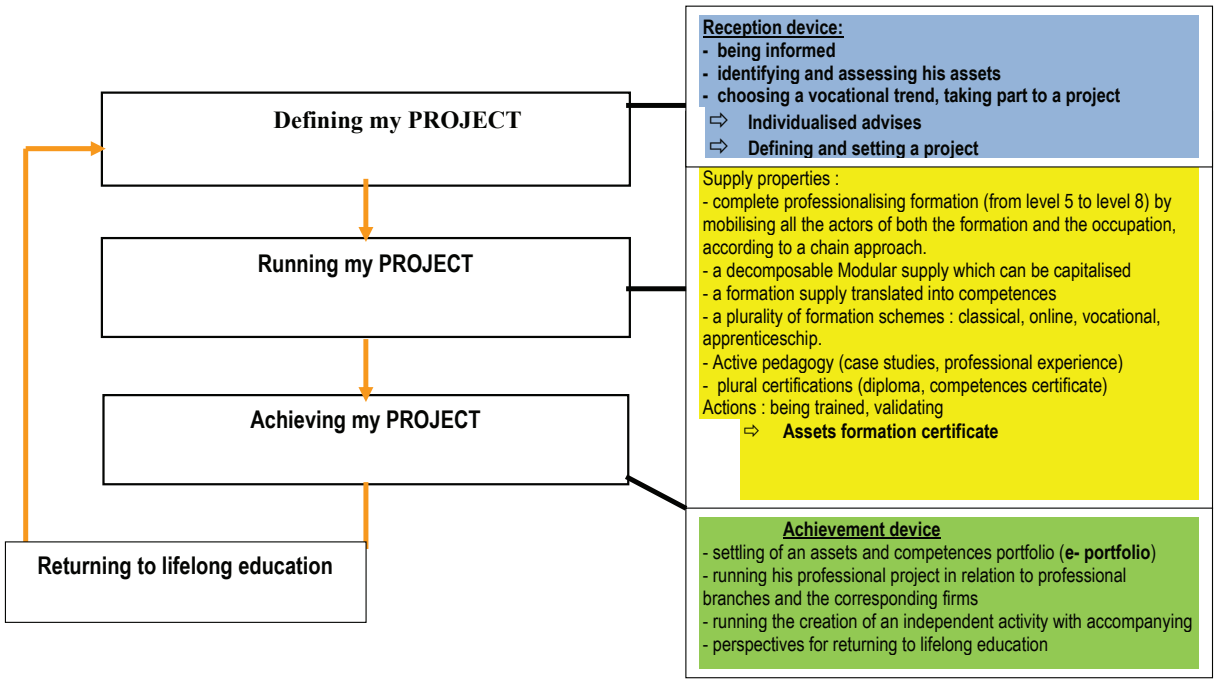
4.2 Personal Project and Approach by Competences: Elements Structuring the Schemes of Lifelong Education

The concept of professional social security currently advanced by certain organizations constitutes a structuring element of sustainable development. Rene Bagorski, CGT negotiator in the ANI 2003 and 2009 develops this approach. The personal professional insecurity refers to the job seeker for the first time and to the deprivation in terms of employment. It reveals the lack of their qualifications or competences insufficiently valued on the job market. Beside the personal professional insecurity there is also the insecurity expressed by firms vulnerable on the market, the insecurity felt by territories weakened by the vulnerability of the main activity sectors resulting in disappearance of public services, exodus of population.

The securization deals with objectives: employment for individuals, sustainable activities, sustainable development of territories in terms of economic, social and environmental aspects. The security of the professional paths in a random economic context deals with a widened and permanent access to the knowledge coupling with a system of valuation of the assets attained by experience. At various times of his life, any person experiences various forms of training, producing a set of competences (formal competences, non-formal and informal) corresponding to the "know how" abilities to act in a given context to achieve a goal. The implementation of the securization requires that any person can constantly make a general evaluation of his assets from experience and that some solutions adapted to his needs are provided, according to his availability and his profile in order to achieve the personal project. The main foundation of the scheme of lifelong education relies on the concept of competence, how to acquire competences, how to make recognize attained competences, how to enhance his competences. The implementation this process of securization requires cultural and organizational transformations in academic institutions in terms of diplomas building and teaching organization. It is essential to relate diploma course and employment favoring both professional insertion and continuing education. For building diploma courses, the approach in terms of learning outcomes (knowledge, know-how, behavior aptitudes) is essential to formalize the association between employment, activities, targeted-competences and diploma. It implies an official registration in the National directory of professional certifications (RNCP) related to the europeean quality framework (EQF).



The structure of diploma is organized in blocks of competences and must make it possible to implement a system of validation of the assets of the experience. It results in the delivery of a certificate of competences and the attribution of the corresponding of European Credits (ECTS) based on logic of capitalization over time. Considering the characteristics of different public concerned by the lifelong education (profile, availability, time allocation, residence), it is necessary to diversify the methods of course (classical education, on-line education, apprenticeship, e-learning) requiring innovation tools like the use of the TICE.



5. Conclusion

The communication makes it possible to highlight the learning outcomes of a diploma in terms of competences. A course cannot be defined independently of the formalization of a personal project. This project requires the identification of needs and means to be implemented to achieve the goals. Il remains essential to guarantee at the collective level the individual rights to education.

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EMPLOYABILITY AND EUROPEAN HARMONISATION: THINK GLOBAL, ACT LOCAL. EUROPOLYTEC, A EUROPEAN PROJECT[1]

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Abstract: *At a European, and even international, level the harmonisation of standards for describing academic curriculum can be seen through the introduction of the LMD (Bachelors/Masters/Doctorates) and the introduction of national and European qualifications.*
To that extent, we can talk about subsidiarity states in the implementation of educational programs, but also, more broadly, of multiculturalism. Each country has its own employment policy and businesses their own recruitment processes.
A first response is to define harmonisation as covering learning outcomes and assessment as covering the competencies acquired, competencies belonging to a framework developed in partnership between universities and businesses.
But employability and occupational mobility also require local competencies. More specifically, they require an understanding of how to build one's own personal milieu and networks, which Web 2.0 tools can foster and enhance.
The EUROPOLYTEC portal, which is the result of a European project funded through a Leonardo's Transfer of Innovation grant, integrates these two broad issues.

Keywords: *subsidiarity, multiculturalism, competencies, employability, e-portfolio, Web2.0, lifelong learning*

Introduction

On the 23rd of October 2008, the EU announced the development of the first European technology competency framework, presented as bridging the workplace and the end of studies. The associated job descriptions will enable Europe-wide mobility by providing a common language for describing and measuring competencies. This framework will help training and educational organisations build relevant and endorsed curricula at an international level. The five areas of competencies are defined in relation to those of the European Qualifications Framework (EQF).

This sector is a prime example of integration and harmonisation that will provide employment or occupational mobility solutions to employment seekers, employees and young people entering the labour market.

However, even if harmonisation tools exist, the question of employability and the relevance between training and employment can't be reduced to using these tools.

Harmonisation: The Global

I.1. From ECTS to Outcomes

The implementation of the EQF requires a complete re-appraisal of the description of European degrees. Training organisations must shift from an "up" approach that focuses on knowledge, to a "down" approach that draws on the competency framework for training, where these competencies constitute the degree's outcomes.

At the core of this "down" approach of training processes lies the training's objectives, which is the opposite in a more traditional approach, where a course's outcome is an aggregation of knowledge and skills acquired within strict disciplinary modules.

Subsequently, the stages of curriculum development are as follows:

- Development of the competency framework (areas and competencies)
- Development of a reading grid or user guide
- Development of the training modules required to acquire those competencies

Each European country, according to the principle of subsidiarity states used in defining education policies, independently manages its learning processes, while the harmonisation of qualifications for mobility and employability are managed, at the level of learning outcomes, in relation to the EQF.

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I.2. Designing Competencies

The description of training objectives requires the use of a method for designing competencies. These groups of competencies organised in a framework by existing industry sectors' areas are directly related to existing job compendia.

Developing a training competency framework is thus a collaborative effort between educators and industry sector players. This collaboration ensures that the competencies acquired through training are relevant to the occupational competencies required.

This constitutes the "diploma supplement", the first two levels used in describing training programs.

Level 1: Areas of competencies

Level 2: Competencies per areas

It is then essential to associate competencies with the EQF's 8 levels.

Level 3: The relationship between the framework's competencies and the EQF's 8 levels

Level 4: The list of modules described in terms of required "knowledge", "skill" and "competence" in order to acquire the competencies.

The description in terms of competencies is not in opposition to traditional knowledge. The main difference lies in the assessment process. Learners' competencies are assessed "in context", which renders conventional exams used to assess the skills acquired obsolete, but enables the assessment of lifelong learning informal and non-formal competencies.

I.3. The European E-Competency Framework For ICT Professionals

Dimension 1	Dimension 2	Dimension 3				
5 e Comp. areas (A – E)	32 e Competences identified	e Competence proficiency levels e 1 to e 5, related to EQF levels 3 8				
		e CF levels identified per competence				
		e-1	e 2	e-3	e-4	e 5
A. PLAN	A.1. IS and Business Strategy Alignment					■
	A.2. Service Level Management			■	■	
	A.3. Business Plan Development			■	■	■
	A.4. Specification Creation		■	■	■	
	A.5. Systems Architecture			■	■	
	A.6. Application Design	■	■	■		
	A.7. Technology Watching				■	■
B. BUILD	B.1. Design and Development		■	■	■	■
	B.2. Systems Integration		■	■	■	
	B.3. Testing	■	■	■		
	B.4. Solution Deployment	■	■	■		
	B.5. Technical Publications Development	■	■	■		
C. RUN	C.1. User Support	■	■	■		
	C.2. Change Support		■	■		
	C.3. Service Delivery	■	■			
	C.4. Problem Management			■	■	
D. ENABLE	D.1. Information Security Strategy Development				■	■
	D.2. ICT Quality Strategy Development				■	■
	D.3. Education and Training Provision		■	■		
	D.4. Purchasing		■	■	■	
	D.5. Sales Proposal Development		■	■	■	
	D.6. Channel Management			■	■	
	D.7. Sales Management				■	■
	D.8. Contract Management		■	■	■	
E. MANAGE	E.1. Forecast Development			■	■	
	E.2. Project and Portfolio Management		■	■		■
	E.3. Risk Management		■	■	■	
	E.4. Relationship Management			■	■	
	E.5. Process Improvement			■	■	
	E.6. ICT Quality Management		■	■	■	
	E.7. Business Change Management			■	■	■
	E.8. Information Security Management		■	■	■	

Dimension 3	Level 1	Level 2	Level 3	Level 4	Level 5
e-Competence proficiency levels (on e-CF levels e-1 to e-5, related to EQF levels 3 to 8)	—	—	—	—	Provides strategic leadership to reach consensus and commitment from the leadership management team for the construction and implementation of long term innovative solutions.
Dimension 4					
Knowledge (k) and skills (s) examples					s1. analyses business processes and architectures s2. determines requirements for processes related to ICT Services s3. identifies, analyses and defines user/customer needs s4. …. k1. knows ERP system potential and opportunities k2. …

Each competency is described in terms of "knowledge", "skill" and "competence".

Employability: the local

While the competency framework is core to harmonisation, other tools are linked to employability.

These tools include:

- those that help develop a career plan and/or professional project;
- the personal professional e-portfolio to capitalise on and formalise competencies acquired. This e-portfolio/blog enables users to develop their own professional networks at a European level;
- social networks, such as Facebook;
- a tool that describes training programs and jobs in relation to the common competency framework;
- a tool to validate the competencies acquired; and
- targeted information to help undertake and finance a professional project.

We can see that these tools need individualised and localised services around a common language, which is the basis of harmonisation.

The EUROPOLYTEC Project

In this project, we have linked global and local issues.

This partnership includes universities and businesses from four countries (Germany, Spain, France and Romania). This project university/business partnership draws on both IT and mechatronics sectors. Businesses bring to the project a pledge of professionalism and the universities a pledge of scientific rigour. A collaborative approach is a constant of the project, from the development of the competency

framework to the formalisation of public institutions and tools describing competency training modules.

More specifically, this project includes 15 partners: 6 universities which are UVSQ and UPJV (France), Barcelona (Spain), Timisoara (Romania) as well as Karlsruhe (Germany); 3 businesses (HP, MOEC, FESTO); and expert and distribution networks (competitiveness pole Mo'veo, Valeo, SYNTEC, Artema, European Universities Continuing Education Network, Pascaline)

Lifelong learning participants will have the necessary tools to define and formalise their professional projects, backed by European documents. The analysis of their situation will enable them to understand the targeted career in relation to competencies acquired, to validate them and select the additional modules needed to broaden their competencies.

The results of the project will therefore help increase intra-European mobility in the areas of mechatronics and IT for several reasons: the development of a European competency framework in the field of mechatronics will help transparency and the recognition of qualifications in this sector between the different partner countries; and the portal will give access to Europe-wide employment opportunities.

III.1. The Europolytec Portal

One of the project outcomes will be a multilingual Web portal.

The section where users can select a language

The section where users can select an ICT sector

The section of the ICT portal where users can define and develop their professional projects.

The EUROPOLYTEC portal isn't a generic portal, but a sector-based portal (by country, type of users and industry sector). It takes the various users' needs and career plans' into consideration. These aspects of the portal as well as the involvement of businesses in this project thus allow the development of professional skills in relation to market needs. Competency is at the heart of the tool with all that it entails in terms of recognition of formal, informal and non-formal learning. The European labour market is present on our websites through partners' News, employment or internship offers, RSS feeds and the broad nature of a transnational partnership.

Each partner country of the portal has its own "national" space where the hosted information is relevant to that country. Each country has an editor who manages its dedicated "national" pages.

The portal's architecture is scalable, allowing for the easy integration of new pages for countries and professional sectors.

III.2. Web2.0 Tools

The portal houses Web 2.0 tools (blog, wiki, web dynamics...) in order to provide interfaces allowing users to interact both with the content of personal pages, and with each other.

The first tool can be used to define professional projects, for which there is a methodology, competency frameworks, job sheets, training modules described in relation to the frameworks and a web interface for data entry.

The second tool is a portfolio that allows users to highlight their work (e.g. documents produced), manage their professional projects, develop their networks, favourites, RSS feeds and blogs as well as complete their Europass (résumé, language passport…)

MODERN APPRENTICESHIPS AND RAIL UNIONS IN SCOTLAND: UNBLOCKING LINES

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Abstract: *This paper briefly locates the role of trade unions in the promotion of Modern Apprenticeships in contemporary Scotland despite initial concerns about their introduction. It describes the largely positive political context for the development of Modern Apprenticeships. In light of this, it assesses the potential for the emergence of a Modern Apprenticeship for the Rail sector and identifies a number of blockages to this development, in particular the assignation of level 2 to the Scottish Vocational Qualification for train drivers, a key component for any possible Modern Apprenticeship in the sector.*

Key words: *Levelling of competences, modern apprenticeships, rail workers, youth unemployment.*

Introduction

Modern Apprenticeships (MAs) available in Scotland since 1994 were not initially seen as an unalloyed good by many in the trade union and Labour movement. There are a number of reasons for this unease. Firstly, MAs were introduced in conjunction with modularisation and competence-based learning (for a discussion on the latter see [1]. Secondly, Trade Unions lost control of apprenticeships as a result of the new apprenticeship model. Thirdly, MAs increased the likelihood that learning itself would became open to increasing commodification. Arguably, the combination of all of these innovations undermined the traditional trade union understanding of the nature and purpose of learning [2]. This is not to ignore the observations of writers like Penn [3] who note that trade union influence was not always benign, especially when they reflected ideas and attitudes prevalent in the wider society. As an example:

Skilled work in the Glasgow and Belfast shipyards and in the Liverpool docks were reserved for white Protestant workers. ... In many areas of skilled work, the trade unions, or more precisely the trade unionists, had a powerful voice in the selection of apprentices [3].

Generally though, as Johnathan Payne argues [4] Trade Unions ensured that wages and conditions for apprentices were at least decent. There is no doubt that the absence of trade unions from its traditional influence has impacted negatively on the quality of MAs:

Current research suggests that many of these problems may be related to a number of factors including the UK's deregulated labour market, its 'voluntarist' training system, the lack of a regulatory role for trade unions in the governance of apprenticeships, and the low level of employer demand for skill across large tracts of the British economy [4].

Nevertheless, the stated aims of the MA programme are most certainly not seen to be in opposition to those of the Scottish Unions. The desire to increase the pool of people trained to intermediate level skills is very much in accord with objectives of Scottish Unions to support their members in skill formation and its associated benefits of more satisfying work and better pay and conditions. This is reflected in the Scottish Union Learning (SUL) MA Project as outlined on the SUL website. The SUL project began in June of 2010 and among other things aims to:

- *identify the level of union awareness of, and involvement in, the Modern Apprenticeship programme in Scotland;*
- *identify examples of good practice by unions in engaging and supporting apprentices and build a national bank of such case studies;*
- *raise awareness levels amongst unions of the benefits of Modern Apprenticeships through the development and delivery of workshops and seminars[5].*

How Are Modern Apprenticeships Constructed?

MAs are built on Scottish Vocational Qualifications (SVQ) level 3 or higher. The other elements of a MA are a mixture of sector-relevant SVQs/NVQs and core skills/transversal competences (communication, information technology, problem solving, numeracy and working with others) and, in some cases, other sector-specific qualifications. The content of the MA is

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described as a 'framework'. Frameworks are developed by the relevant Sector Skills Council (SSC). In the case of transport that is *GoSkills*. The likely length of time needed to complete a MA varies among frameworks.

The SVQ, is the Scottish version of the National Vocational Qualification (NVQ) for England, Wales and Northern Ireland. NVQ and SVQ have identical criteria.

As noted above, SVQs they are work-based and competence-based. Consequently they do not necessarily require attendance at college or in a training centres, although the necessity of developing underpinning knowledge, as well as the support and resources necessary to acquire the core skill elements (not required for VQs), means that academic support is essential for successful completion of a MA.

SVQ and NVQ qualifications can be achieved at the following levels:

- Level 1 equivalent to Access 1
- Level 2 equivalent to GCSE or Standard Grade qualifications
- Level 3 equivalent to Scottish Higher qualifications.
- Level 4 equivalent to Higher National Diploma HND
- Level 5 equivalent to Masters Degree.

The current funding criteria set by Skills Development Scotland are that anyone undertaking a N/SVQ or MA must be aged between 16 and 19. At the present there is no Skills Development funding for anyone aged 20 and over. This is clearly a major issue in relation to the possibility of developing an appropriate MA for the Rail sector, especially for train drivers, because it is not legally permissible to drive a train until 21 years of age.

The Political Context

In England the limited number of MAs in the Transport Sector has been acknowledged. GoSkills, is described as being in the 'Red', the least developed section for MAs. This was a 'traffic lights' categorisation developed by The Learning Skills Council [6]. According to this report the sectors which are in the Red:

"... are the sectors with a traditionally low take-up of Apprenticeships but with potentially the greatest long-term impact on numbers because of this... The National Apprenticeship Service will need to ensure that the relevant occupational frameworks are developed for the sector. In the meantime, these employers should be targeted with cross-cutting frameworks which are not occupation-specific..." [6].

The Scottish Government sets targets in relation to the number of apprentices in training in Scotland. There have been some significant arguments between the two main parties in Scotland, The Scottish National Party (SNP) and Labour, about the extent to which MAs are being promoted.

In an effort to both highlight political differences and to increase the number of MAs, John Park, Member of the Scottish Parliament, launched a Bill in the Scottish Parliament in 2008 with the intention of:

- *Expanding the number of apprentices*
- *Supporting employers in taking on apprentices for the duration of their training*
- *Ensuring adequate support from government and relevant agencies in expanding the number of apprentices*
- *Stimulating demand amongst employers for a more highly skilled workforce.* [7]

The leadership of the Scottish Labour Group in the Scottish Parliament are in full support of MAs as a way to address youth unemployment. In response to this, the SNP has used its position in government to continue to increase the number of youth involved in the programme. In April 2010 Skills Development Scotland announced at the Skills-Scotland's Opportunity Summit in Edinburgh that 7,000 youngsters and adults had been secured, claiming that the target for the previous year of 20,000 MAs had been exceeded [8].

In June 2010, the Scottish First Minister, Alex Salmond, announced the creation of 5,000 new MA places funded by the European Social Fund. This meant that the targets for 2010-11 had been overtaken. Skill-Development Scotland sought to offer 15,000 new MA opportunities in 2010-2011. The provision of an additional 5,000 all-age MAs took the total offer to 20,000 places in 2010-11. Employers were encouraged to consider young people who might otherwise struggle to obtain an apprenticeship place.

The campaign for the Scottish Parliament which is currently underway has if anything intensified support for MA by the two main Parties in Scotland (SNP and the Scottish Labour Party). The latter, for example, has pledged "*A guaranteed MA for every suitably qualified young person who wants one*" [9].

Modern Apprenticeships in the Rail Sector: the Age Barrier

The focus of the political debate underlying any discussion on MAs highlights both the strengths and the obstacles in the path of developing a MA route for Rail services in Scotland. On the one hand the Rail Sector is supported by government subsidy and is a critical part of the national transport infrastructure, therefore, it is in a strong position to be able to forecast the numbers of replacement skilled staff required to meet skill shortages as older staff retire. The MA is generally seen as an effective way of skill development as noted above.

On the other hand, the political emphasis at the moment is very much on *youth* unemployment. Consequently the current need is to find opportunities for young people not in work or employment, or more generally who find it difficult to get an apprenticeship. This age group, however, would not be able to access the train driving option for the Rail Services MA. Furthermore the numbers for the Rail Transport Engineering do not make encouraging reading (see Appendix). There are currently only 4 apprentices in this framework.

The Rail Services MA is arguably more attractive. It covers the various occupations necessary to deliver rail services and includes key occupational skills: driving trains, operating signals, crossing barriers, communicating between stations and trains, assisting passengers both on board trains and at stations, and moving trains into position at stations. Apprentices are invited to choose an area of specialisation alongside the core skills requirements.

The list of job roles in the rail sector includes the following:

Train Driver, Shunter, Signal Operator, Control Room Operator, Train Movements, Traction, Current Fleet allocation, Maintenance provision, Passenger Services, Welcome Host, Station Services, Customer Services, Station Announcer, Train Dispatcher, Ticket Examiner, Guard, Conductor, On Board Services, Steward, Travel Consultant, Reservations & Enquiries, Travel Centre, Call Centre

However, the age ban on the one hand, and the lack of funding for older MA applicants on the other, means that the current lack of demand for rail sector MA is likely to remain the case. This is a problem for the sector as a whole.

Are Train Driving Competences at the Wrong Level?

It should be stated at this juncture that there is probably a problem of 'framework levelling' in the case of train drivers. The competences required for driving seem to be pitched below the actual competence required and this issue needs to be examined.

We could usefully examine Unit 1 of the 8-unit competence framework for train drivers in Scotland [10] to illustrate this point. Unit 1 considers some of the competence criteria and knowledge requirements, and it selects some of these from the four sections of unit 1 to assess whether the qualification appears to be at the correct level or not.

The four sections are:

1.1.1. Situational awareness
1.1.2. Personal behaviour and vigilance
1.1.3. Decision making and problem solving
1.1.4. Co-operation

It is useful to evaluate these four transversal competences with reference to SCQF level 5 (SVQ2) where the qualifications are currently judged to be, and to compare them with SCQF level 6 (SVQ3).

In terms of the SVQ 2 the core area of area of *Knowledge and Understanding* in the SCQF framework (Level 5) are described thus:

Demonstrate or work with basic knowledge in a subject/discipline which is mainly factual but has some theoretical component; a range of simple facts and ideas about and associated with a subject/discipline; knowledge and understanding of basic processes, materials and terminology [10].

Whereas this may be relevant for some elements of the competences for a train driver, just as it would in any occupation, consider the first competence criteria in1.1 Situational Awareness:

Monitors the state of signalling and train/traction unit systems and responds appropriately taking account of the train/traction unit characteristics and the environment in which it is operating.

Can this really be described as 'basic knowledge' comprising 'simple facts and ideas'? The same questions could be asked of a range of the competence criteria. For example, in section 1.2 covering personal behaviour and vigilance the definition is as follows:

Takes appropriate actions to control distraction risk using approved methods (e.g. risk triggered commentary driving etc).

This is further extrapolated in the knowledge requirements supporting the competence criteria where we learn that:

The driver is aware that human memory is limited and knows when and how to use methods to control this risk, e.g. making use of optional methods such as cue cards, risk triggered commentary driving, other aide memoirs or memory enhancement techniques.

In these examples the theoretical level of knowledge in relation to the limitations of human memory and the knowledge required of the state of signalling or characteristics of the environment are more appropriately described by SCQF level 6 (SVQ3).

Demonstrate and/or work with: generalised knowledge of a subject/discipline; factual and theoretical knowledge; a range of facts, ideas, properties, materials, terminology, practices, techniques about/associated; with a subject/discipline. [10]

Here the knowledge is not described as 'basic', and the facts and ideas are not described as 'simple'.

In section 1.3 *Decision making and problem solving* the issue of level is even more problematic. Point four of the Knowledge Requirements is:

When faced with a problem or situation that requires a decision to be made, the driver

- *Seeks to understand and define the problem*
- *Breaks it down into manageable parts*
- *Collects the appropriate data to inform the decision*

- *Is logical in developing a solution with a clear purpose and scope*

It is very clear from this that the problem, by virtue of the fact it requires such analysis, is not routine; otherwise it would not be treated in a way that suggests it is unique. Yet SCQF level 5 in relation to generic cognitive skills covering problem solving reads:

Use a problem solving approach to deal with a situation which is straightforward in relation to a subject/discipline" as opposed to the equivalent text in SCQF level 6 which reads: Obtain organise and use factual and theoretical information in problem solving. [10]

There seems to be an assumption that, because some of the tasks a train driver is expected to undertake can fairly be described as routine, it can be assumed that all tasks are. For example under 1.4 *Cooperation* in the knowledge requirements we have:

The driver participates actively in safety briefings e.g. asks questions and contributes to discussions.

The level of the contribution may of course vary, but given the nature of the job it would surely be safe to assume that some require a level of understanding that is better covered by: *"produce and respond to relatively complex written and oral communication in both familiar and unfamiliar contexts"* [10] which is the guidance for Communication, ICT and numeracy skills at level SCQF 6 (SVQ 3) rather than "*produce and respond to detailed written and oral communication in familiar contexts"* [10] which is how it is described in the corresponding area of SCQF level 5.

The brief analysis above refers only to unit one of eight units of the proposed competences for drivers, but similar anomalies appear throughout, whereby some of the units - for example 2 which deals with *preparing for duty* - can certainly be ascribed this level of competence. Others like unit 5 - which covers actually driving trains, and 6 which covers *altered working/out of course situations, failures, incidents and emergencies* – would, under the current assessment of train driving, reduce managing a derailment and controlled train evacuation to a routine task. This would suggest a review of the current level is required in order to make a more accurate assessment of the actual knowledge and skills required by a train driver.

Conclusions

Whatever the limitations of trade unionism in relation to the development of apprentices and apprenticeships, there is little doubt now that the trade union movement is committed to both enhancing the quality of the learning experience, and demonstrating a commitment to training, that exceeds that of employers.

The Learning and Skills Council report [6] noted that the absence in Scotland of any MAs in the Rail sector with the exception of the Engineering MA with its small take-up, is a clear indication of the need for action. There is a difficulty here: engaging the post-18 group in apprenticeships is not a government imperative, and given the financial situation at present, this lack of enthusiasm will intensify.

Furthermore building a MA around the current SVQ is hampered by the levelling of that VQ at level 2 which this paper argues is contestable.

It would therefore seem sensible to address these issues by reviewing the current levelling of the driver competences. There is also a need to continue to lobby the political parties to identify some funding at least that might allow a pilot MA in the Rail Sector to go forward for those over 21 years old seeking a career in the Railways.

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REFLECTIONS ON IRELAND'S EDUCATION/TRAINING POLICY MAKING PROCESS LEADING TO THE NATIONAL FRAMEWORK OF QUALIFICATIONS: NATIONAL AND INTERNATIONAL INFLUENCES

Tom DUFF [1]

Abstract: *This paper reflects on the various influences, especially from the 1980s, that shaped Ireland's policy direction leading to the National Framework of Qualifications which was launched in 2003. The paper also provides a broad overview on Ireland's economic development especially from the 1960s, citing the influence of higher education and training structures in this regard. Among the matters explored in the paper are: the policy-making process; the national, EU and international influences that shaped the policy direction; 'policy-borrowing' and policy networks; linkages between the political process, employer needs and education/training structures; and the Bologna process. The range of influences is highlighted in the flurry of policy initiatives during the 1990s.*

Key words: *National Framework of Qualifications*

Introduction

From the mid-1980s, Ireland had evolved an extensive tertiary sector – the term most preferred by the OECD for post-school education and training; there was a plethora of awards and awarding bodies. Within this broad scope of tertiary provision, both the EU and the OECD considered that most countries would benefit from a greater coherence within a framework that brings together discrete awards and structures. This would improve the linkages, co-ordination and international recognition of awards to facilitate the mobility of labour. But no country was working from a green field situation: there was an inherited infrastructure where the universities have a tradition of autonomy. International competition and the education and training approaches in other countries also influenced the policy direction in Ireland aimed at improving economic performance.

Because of its size and location on the periphery of Europe, Ireland's social and economic policies are inevitably linked to trends in other countries, which now see education and training as the key to competitiveness, economic success and prosperity (NESC 1993a). The influence of other countries such as Australia, New Zealand (NZ) and the United Kingdom (UK) were significant in shaping Irish policy, even though certain statistics from the time illustrate the scale of differences: their populations – 18m, 3.3m, and 50m; their HE provision – 36 universities; 7 universities, 25 polytechnics and 3 wananga; and, some 140 universities and colleges respectively, compared with Ireland's 3.5m population and 7 universities and 14 Institutes of Technology (ITs).

Industrial Expansion And Educational Change From The 1950S

The publication in 1958 of the *Programme for Economic Expansion* was a key influence in Ireland's development (Chubb 1992, p23). The shift from protectionist to more open policies based on industrial development and trade was a major change in political thinking. Although Ireland was not essentially a manufacturing economy, it went through a period of modernization from the 1950s marked by an increasing prominence of industry and urbanisation. At that time almost half of the Irish workforce was engaged in agriculture but by 1990 the figure was 15%. In the decade 1961-70, industrial production grew at an annual rate of 6.6%, matching the best of other industrialized countries and from 1971-80 the annual growth was 4.5%, almost twice the European Community (EC) average. In 1966, the population was half-urban and half-rural and by 1986, two-thirds of the population lived in towns (pp24-25). The government responded to the economic and social developments by establishing a HE Commission in 1960. In parallel with this, two OECD studies were conducted in conjunction with the DES – *Training of Technicians in Ireland* (1964) and *Investment in Education* (1966). The findings resulted in major policy changes. During the late 1950s and 1960s, which saw Ireland on the threshold of considerable economic progress, there was

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recognition of the need for the provision of HE courses geared towards projected manpower requirements. The *Training of Technicians in Ireland* report found that:

> a serious obstacle to industrial expansion is the lack of… personnel suitably educated and trained so that they can play their parts in the development, management and operation of different kinds of industry. (OECD 1964, p13)

In addressing these needs and having regard to the emerging findings of the *Investment in Education* report, government proposals were announced in 1964 in relation to new colleges. While Dublin and some other urban areas were reasonably well catered for, the shortage of appropriately qualified personnel in the regions was inhibiting the predicted economic expansion. It was evident that there was a need for apprentice and technician courses in regions of the country previously unserviced by HE institutions. A Government Steering Committee report recommended the establishment of nine regional technical colleges (RTCs) located in regions already identified to spearhead the industrial expansion (DES 1967, 11). The report was a force in changing the paradigm governing Irish education policy replacing personal development with the human capital paradigm as the institutional rationale for education (O'Sullivan, 1992).

The setting up of the RTCs, combined with the existing Dublin technical colleges, reinforced the two educational traditions of liberal education for the elite and middle class and vocational education for the less well off. International competition and technological development had led to skills shortages in newer industries and a more interventionist approach by government in education and training provision (Heraty and Morley 1998, p90). Henceforth, education in the technological sector – the term used for these colleges – was geared toward manpower requirements. The decade from 1980 was a period of considerable growth in HE in Ireland, in terms of increasing student enrolments and expansion of research and development.

Since the 1960s, competitiveness, economic policy, manpower planning and prosperity were linked in many developed countries to education and training provision through state investment in new institutions over which control was exercised. Ozga (2000, pp9-24) outlines tensions in UK education and training policy-making, contrasting governments seeking to use it for instrumental purposes associated with productivity improvement, and educationalists arguing in favour of its role in contributing to societal and cultural development with the individual at the centre. Education was similarly being re-organised in Australia according to Kenway (1993, p15) to suit "the skill and knowledge required in a post-Fordist society … of a kind typified by Japan", and that "underlying these models is the belief that education should perform a utilitarian function … [to meet] the requirements of the … economy … [and] flexible skills in the workplace … the instrumental 'human capital' rhetoric" (pp22-9).

Human Capital And Competences

The 'human capital' concept as a policy approach is arguably the most distinctive feature of the economic system of the mid-twentieth century (Little 2000, pp286-7). In a NZ context, Fitzsimmons and Peters (1994) express the view that human capital theory is … the most influential economic theory of education as a twin pillar with industrial training strategy. 'Human capital' is central to the OECD's view of economic development as is illustrated in the following extract from one of its publications:

> Knowledge, skills and competencies constitute a vital asset in supporting economic growth and reducing social inequality … This asset … often referred to as human capital, [is] … one key factor in combating high and persistent unemployment and the problems of low pay and poverty. As we move into 'knowledge-based' economies the importance of human capital becomes even more significant than ever. (OECD 1999, p3)

In a consideration of the human capital theory of education, which they see as having its origin in slavery, Wilson and Woock (1995, pp8-11) discuss the theory of economic rationalism that views education as a branch of social policy. In an Australian context, Taylor and Henry (1994, p105), refer to the creation of "an effective skilled and adaptive workforce … as necessary for economic growth and recovery … [but] this explicitly 'human capital' approach to education has been joined by ongoing assertions of the necessity to address the educational needs of specified disadvantaged groups". It is contended by Lynch (1992, p14) that Irish education has also been guided for the past twenty-five years by the principles of human capital theory informed by technological functionalism, and argues that human capital assumptions are now part of the rhetoric of governments and the OECD.

Educational institutions receive varied signals from the DES and employers, some of which are diffuse and ambiguous. On the one hand, they argue for education to be geared more toward employable skills and competences that will be of immediate value to employers while, on the other, they argue for a broad education that facilitates problem solving ability (de Weert 1996, p30). Workers are required to learn employer-specific systems and skills rather than generic capabilities. The argument against this is the desirability for ability in the principles of problem solving and decision-making, broad intellectualism and associated theoretical capability. It is contended by Richardson (1993, p240) that employer interest groups

and politicians have constructed a climate where there is a national concern about the need for education/training to respond to workplace skills requirements. McLean (1995, p2) refers to this as the politicians' "parable of imminent doom"; they can construct a 'truth' or 'spin' about their policies.

National Influences

Because of Irish government changes and a lack of political continuity in the DES from the early 1980s, policy development was rather dormant. Within the DES there was a sense that the legislation was not current enough. In the period from 1980 to 1993, there were ten different Ministers for Education; some were in office for very short periods and are unlikely to have made an impact on policy development. In the early 1980s some antipathy towards liberal arts degrees had surfaced on the basis that in a period of economic decline there was a need for more emphasis on science and technology disciplines (White 2001, p188-92). In the meantime, the economic effects of Reagan-Thatcherite policies had impacted on Ireland. The unemployment figure in 1987 stood at some 260,000, a peak of almost 17% of the labour force. It stood at 15.6% in 1991, and by 1999, it had fallen to 7.4% (Nolan *et al*, 2000).

The 1992 report from the Industrial Policy Review Group (IPRG) was a watershed in the context that it influenced proposals in an education Green Paper later that year, with its utilitarian emphasis in education and in reinforcing the binary structure of HE. The IPRG was critical of the education system and considered that the perceived skills' deficiency should be addressed both by industry and the education system. The report claimed that the most successful education and training systems are those where companies are involved in the development of programmes and where the curricula include on-the-job training. The IPRG report recommended the setting up of an agency to establish industry/HE linkages as a means of ensuring that industry needs were met (pp52-7).

Other Influences Informing The Irish Policy Direction

The EU (Maastricht) Treaty (1992) represented a process of European citizenship which began in 1985 with a European Commission White Paper that promised "the free movement of goods, services, people and capital" (EU, 1992). It brought the EC to a higher level of integration with the introduction of the Single Market from January 1993. The involvement of the Council of Ministers enabled the emerging Irish education and training intentions to be incorporated in the 1992 Green Paper (DES 1992, pp77-80). The objective of the Treaty was to promote economic and social progress through greater cohesion and the establishment of economic and monetary union. In Article 126 dealing with education, vocational training and youth, there is an emphasis on the development of quality education and encouraging mobility through the recognition of qualifications. Article 127 has the aim of facilitating adaptation to industrial changes, in particular through access to vocational training and retraining and stimulating co-operation between providers and employers.

The European Community (EC) was sensitive about intruding in education as it was zealously safeguarded by member states. However, since 1985 when the Treaty on European Union began to emerge, that changed considerably. The OECD, in addition to country reviews – again linking national and international influences – addressed a series of thematic studies focusing more on education than previously. Such studies formed a reference from which education ministers in OECD countries have drawn and ministers responded to commissioned position papers from the perspective of their own culture and tradition. The OECD acted as a policy reference for the DES since the 1960s and it was also consulted by Irish government officials during the 1990s. The OECD encouraged 'human capital' strategies for promoting economic prosperity, greater employment and social cohesion. However, OECD comparative data are generally statistical and fact-finding, and most of its comparative studies generate findings that are positivist in character through surveys and empirical and statistical data.

It was necessary for the DES to interpret the emerging Treaty articles for application locally and it is evident from the 1992 Green Paper's multiplicity of references to the OECD, EC and education and training practices in other countries that these provided a resource of different models to consider. International comparisons are often used by governments to legitimise radical changes in domestic policy, and Australia, NZ and the UK were important in this context. There was a flurry of education and training policy development in the countries under consideration and at EU and OECD levels from the late 1980s. Since then, governments in Australia, NZ and the UK identified a need to respond to global economic challenges and introduced a series of reforms to their education systems. The binary system of HE, which had existed in Australia since 1965, differentiated the 24 universities and the 47 colleges of advanced technology (CAEs) (Meek 1990, p283). However, in the late 1980s the government there decided, because of concerns about the relevance and effectiveness of the HE system, to abolish the binary system and establish a unified system that amalgamated universities and CAEs (Ministry of Education [Australia] 1989). For historic and geographic reasons, Irish education has close parallels with the UK. From the mid-1980s, though, conflicting policy signals were emerging from the latter. For example, the 1985 Green Paper, *The Development of Higher Education in the*

1990s, (DfE [UK], 1985) envisaged the continuation of the binary system, comprising polytechnics and universities, each with separate missions. However, within a few years this policy was reversed by the 1991 White Paper, *Higher Education: A New Framework* and the binary structure was abolished (DfE [UK], 1991).

In a coincidence of timing, the NZ government of the late 1980s undertook an 'across the portfolio' approach to the review of post compulsory education and training (Hawke, 1988). A working group which addressed the binary structure of education, defined the respective roles of the universities and the polytechnics, and recommended a national qualifications framework, led to new legislation within two years (Ministry of Education [NZ] 1990). Subsequent legislation reinforced NZ's binary system of HE and greater responsibility was placed on providers to facilitate flexible movement within a range of learning outcomes (OECD 1998, p131). A qualifications framework in which all qualifications have a relationship to each other was implemented in 1990. The education and training developments in Australia, NZ and the UK took place during the late 1980s and early 1990s at the same time as the policy was developing in Ireland and provided interesting overseas comparisons. The Irish policy-makers had several approaches to choose from in relation to binary or unitary structures of HE, for example. NZ seemed to relate well to Ireland's social and historical situation and ongoing networking encouraged this influence.

The 1992 Green Paper, 1993 Education Convention And 1995 White Paper

In Ireland, as elsewhere, there were cultural and ideological struggles in addressing education and training reforms. The 1992 Green Paper, *Education for a Changing World*, contained a number of broad educational aims but no stated philosophy. In the context of increasing integration and economic, monetary and political union within the EU, the Green Paper noted that: "Ireland's education policies must make it clear that the modern world is a single entity, and many of its problems call for a global approach" (DES 1992, p75). Themes permeating the Paper related to obligations under the emerging Maastricht Treaty, which seem to have been interpreted by the DES as: utilitarianism in education, certification and qualifications framework arrangements; and governmental control through the 'dual system' (the so-called binary divide), and quality assurance. The utilitarian focus was represented by an emphasis on enterprise and individualistic values in contrast with a lack of emphasis on artistic and cultural aspects of educational development (Walshe 1999, p33). The Paper claimed that:

> it was generally recognised that the achievement of economic growth and industrial development depend … on the availability of qualified personnel with the necessary technical and vocational skills and competences … requiring a great level of flexibility in the labour force … transferable skills [and] the development of knowledge, skills and competences. (DES 1992, pp. 109-113)

At HE level, the Green Paper proposed that all institutions develop a policy of linkages with industry (DES, p21). It linked economic growth and industrial development to the availability of personnel with the appropriate technical and vocational skills and competences – again there were connections to the IPRG findings. The Green Paper stressed the need for employer involvement in the development of vocational skills, and in the assessment/certification of the levels of skills and competences. The 1993 National Education Convention's timing coincided with the publication of several official reports and some of its findings appear to have been influenced by them. The *National Development Plan 1994-1999*, for example, suggested that economic success was reliant upon "a highly educated and skilled workforce and a continued growth in productivity" (Government of Ireland 1993, p77). This was a signal of support for the Green Paper's utilitarian emphasis at all educational levels. Another important influence was the National Economic and Social Council's (NESC) *Education and Training Policies for Economic and Social Development* (1993a), which stressed human resource development strategies:

> Workforce skills and management – "human capital" – are widely seen as a key determinant of economic performance. The human capital perspective – which treats education and training as an investment and emphasises the direct impact of skill creation on productivity – has been prominent in recent developments in economic theory. (p18)

This report analysed education/training and economic performance in a number of EU countries, emphasising that "there is no conflict between strategies to promote skill development and economic growth" (p199). Supporting this view, the NESC report, *A Strategy For Competitiveness, Growth and Employment* (NESC 1993b, p494) expressed concern at the incoherence in education policy, which "has not been based on a complete or coherent view of the educational process, [that] ad hoc initiatives and schemes exist at all levels, [with] … little linkage or continuity between them". The EU report *The Challenge to European Education* (IRDAC 1994, p22) concurred with this view and stressed the need for education and training reform to meet the challenges of the changing employment environment. Following on from the Green Paper and the National Education Convention, a White Paper, *Charting Our Education Future*, was published in April 1995; it was driven more by economic needs than by a

concern for the learner, as is illustrated by the following passage:

> The development of the education and skills of people is as important a source of wealth as the accumulation of the more traditional forms of capital. National and international studies have identified the central role of education and training as one of the critical sources of economic well-being in modern society … in shaping … national competitiveness. Interlinked with these trends is the emerging economic necessity for life-long learning … The contribution of education and training to economic prosperity has been underlined in … independent studies. (p5)

Among the studies were the 1994 EU White Paper, *Growth, Competitiveness and Employment* (EU, 1994) and the OECD reports *Education and Economy in a Changing Society* and the *Jobs Study – Facts, Analysis, Strategies* of (OECD, 1989 and 1994), all of which placed an emphasis on the value of a vocationally skilled and adaptable labour force (DES 1995a, p75). Coinciding with the White Paper's publication, a European White Paper, *Teaching and Learning,* called for "a more cohesive approach to the development of all vocational education and training to maximise the benefit to students, society and the economy" (EU 1995, p42). Ireland's Irish White Paper in outlining what it called the general acceptance of "the need for a more coherent and effective system of certification for the non-university sector of higher education", proposed a new body, TEASTAS (Irish language word for certificate), with responsibility for:

- The certification of all non-university third-level programmes, and all further and continuation, education and training programmes;
- The plans, programmes and budget of the NCEA and the NCVA, which will be reconstituted as sub-boards of TEASTAS;
- The national qualifications framework
- The national authority for ensuring international recognition for all the qualifications under its remit. (p 83)

Arguing for the continuation of 'system differentiation', the emotive 'binary system' term was avoided just as it had been in the Green Paper, the White Paper reiterated the importance of the different missions and the diversity of the two sectors. It stated that the system "will be maintained to ensure maximum flexibility and responsiveness to the needs of students and to the wide variety of social and economic requirements" (DES 1995, p93). It emphasised outlined the importance of the course provision in the technological sector in addressing economic needs.

Policy Networks And Policy Borrowing

During the period from 1988 to the mid-1990s, there were study visits to Ireland by visiting education and training delegations from a range of countries and these were reciprocated by Irish delegations. Such visits enabled the establishment of policy networks which were valuable in facilitating the consideration of other policy approaches. In borrowing policy from other countries, however, care is needed to ensure the appropriateness to the 'borrowing' country and in reconciling them with other national social policies. A former Secretary-General of the DES, observed that:

> It was my view, in the context of us being a small country, that when embarking on a new policy initiative it is important to ascertain what is happening elsewhere. There is no shame in picking up good ideas from other countries. Of course these models must be viewed through your own lens; you cannot abstract away the differences. New Zealand was interesting to Irish policy-makers in a range of public policy areas because of issues of size and language. (Thornhill, interview with author)

NZ's policy was especially interesting to Irish policy-makers. Exchange visits continued during the 1990s, and representatives of TEASTAS visited NZ in 1996 to study its education/training legislation. Ireland did not have the same manufacturing base as the UK whose education and training experience was different, so it was not an especially relevant model. But some other European countries might well have been more relevant, although they do not appear to have been seriously considered by the DES. By 1996, 'off-the-shelf' qualifications frameworks adopted in Australia and NZ were available and UK framework proposals had also emerged. In 1995, the qualifications framework introduced in Australia provided for twelve levels with credits assigned, each allowing transfer from certificates of education in schools, certificate to advanced diploma in vocational education and training and HE levels from diploma to doctorate.

TEASTAS and the Consultative Process

TEASTAS was established on an interim basis in September 1995. Its purpose was to achieve co-ordination of qualifications outside the universities and to establish a qualifications framework. With the establishment of TEASTAS, the consultative process took on a greater momentum. TEASTAS viewed lifelong learning as an important component in the framework, and envisaged it linking with school and university qualifications, thus providing a national system through which student progression would be facilitated. TEASTAS identified quality assurance; accreditation; access, progression and mobility; and

international recognition as issues to be addressed (p4). In a second report (DES 1997c) there was an emphasis on the need for "a *single* national basis for co-ordinating, evaluating and comparing the quality of awards and the various systems that produce them" (p1). In explaining its philosophical context, the report stated that:

> a national frame of reference is fundamental to the achievement of access, progression and mobility for learners and … a national basis for the comparability and recognition of awards. … The resulting transparency will contribute to the continuous upgrading of the skills, knowledge and expertise of the population, which will be crucial for future economic wellbeing, social cohesion and personal development. (p1)

The aim of the then Minister for Education was to ensure that education and training providers worked closely with business interests, and stated that "human capital is being continually identified as one of the keys, if not the key, to our present prosperity" (p9). He also said the proposals were not simply as a "result of pressure from Brussels", but had been part of the National Development Plan agreed with the EU (p12). However, the Minister's comments do not reflect the undoubted influences of the EU, the OECD and the emerging Bologna Declaration (European Commission, 1999). The DES was a signatory to the latter which committed Ireland in the first decade of the third millennium to harmonise the architecture of European HE, and to:

- Adopt a system of comparable degrees – a qualifications framework
- Establish a system of credits;
- Promote mobility
- Promote co-operation in quality assurance
- Promote a European dimension and co-operation in higher education (p2).

The 1999 Education (Qualifications And Training) Legislation

The Qualifications (Education and Training) Bill was published in the Oireachtas (Irish Parliament) where the Minister for Education commenced the Second Stage reading on 9 March 1999. In the context of its claimed learner focus, he outlined four principal aims of the Bill as follows:

- To establish and develop standards of knowledge, skill or competence
- To promote the quality of further education and training and higher education and training
- To provide a system for co-ordinating and comparing education and training awards
- To maintain procedures for access, transfer and progression (Seanad Éireann, 1999)

The Bill established a National Qualifications Authority of Ireland (NQAI) – the word 'TEASTAS' was dropped as it is identified in the Irish language as a certificate award and the use of it did not reflect the range of awards to be accommodated. There were to be two new councils – the Further Education and Training Awards Council (FETAC) and the Higher Education and Training Awards Council (HETAC) – to take over the roles of existing awards bodies. Following the passing of the Act by the Irish Parliament the National Qualifications Authority of Ireland was established in February 2001; FETAC and HETAC were launched in June 2001. The National Qualifications Authority of Ireland (NQAI) had the task of developing and maintaining a National Framework of Qualifications which was launched in October 2003. A ten-level structure contains 15 award types – from level 1 certificate to level 10 doctorate – for which descriptors were developed. The Authority engaged in a wide consultation process in developing the Framework and it has been well received by all the interest groups in Ireland, including the learners.

Conclusion

The Act highlights the growing instrumentalist influence in policy provision with education/training systems increasingly becoming an important tool for governments in economic development terms. It also highlighted human capital theory, which is based on the assumption that vocational education is a productive investment and a means by which societies can achieve sustainable economic growth. Clearly there were a range of national, European and international influences involved in formulating the policy direction that led to Ireland's National Framework of Qualifications, but clearly no single model was paramount. However, NZ did provide an overseas example that fitted with the cultural and political precepts of education in Ireland. It is clear that policy formation is complex with many competing interests seeking to influence its direction.

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METHODOLOGICAL APPROACHES TO TEST THE EQF DESCRIPTORS ON QUALIFICATIONS AND CURRICULA: EXPERIENCES DRAWN FROM LDV PILOT PROJECTS

Dr. Irene PSIFIDOU[1]

Introduction

The enhanced goals of the EQF imply in particular a learning paradigm that focuses on the achievement of learning outcomes and the development of knowledge, skills and competences, irrespectively of where, when and how (European Commission/Parliament, 2008). Learning outcomes are best understood as a collection of useful processes and tools that can be applied in diverse ways in different policy, teaching and learning settings. It follows that there is no single correct or apt way of approaching them. The term can have a range of connotations and denotations, precisely because it is used in different contexts. The evidence contained in a new Cedefop study (2010) strongly suggests the need to be sensitive to the particular context in which learning outcomes are brought into use. Notably, learning outcomes are also required to perform multiple functions in national education and training systems in European countries: recognition of prior learning, award of credit, quality, learning plans, key competences as well as modernising the governance of education and training as systems are reformed to encompass lifelong learning (Cedefop, 2009).

Although the concept of learning outcomes is not a new aspect in the teaching and learning context (and especially for VET), the current focus on traversal key competences and holistic learning outcomes is discussed as a "shift of paradigm" underpinning a different mental model of valuing outcomes for all those involved in education and training. As a consequence of this new learning paradigm, learning outcomes have a pivotal position in redefining qualifications and VET, general and higher education curricula and learning programmes, and yet this happens at varying speeds as national developments are in different stages of progress (Cedefop, 2010).

Additionally to this core approach underpinning the EQF, learning theories and social and cultural values shape the definition of the distinctive features of qualifications and curricula; as knowledge, skills and competences are differently understood in each country and education and training subsystem, the learning outcomes approach varies accordingly. Increasingly, outcome approaches to qualifications and curricula seem to be more aligned to constructivist learning theories according to which the learner must play an active role in the construction of meaningful relationships between cognitive, functional, emotional and social skills to be competent in a particular situation (Cedefop, 2010). Past experiences have shown that too detailed and narrowly defined learning outcomes oriented solely on functional performance have imposed limitations to the learning process (Psifidou, 2009).

Finally, the legal framework endorsing the education and training system in each country, influences the design and value of qualifications as the law defines rights, duties, and the possibilities educational institutions have in these contexts (Cedefop 2010). On top of all these regulations, we find internal institutional regulations and guidelines. And finally within these institutions, there are commissions or committees that, at the end of the day, do the actual work of designing a qualification profile and learning programme. Evidence shows that an outcome-oriented approach has important implications at all stages of developing official documents which describe and certify qualifications, requiring stronger and broader involvement of the different stakeholders concerned (Psifidou, 2010a).

These different factors influencing the definition and development of qualifications and curricula raise many challenges to policy-makers and practitioners. Traditional processes on the design of qualifications

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(specification of knowledge and skills the students need to learn) is not sufficient anymore to meet new employment needs. New qualifications should:

- be in alignment with the EQF context (national developments with regard to the establishment of National qualifications frameworks and/or the introduction of the Dublin descriptors in higher education, etc.);
- define learning outcomes in such a way that allow comparability, transparency and mutual trust at sectoral, national and international level; and
- take on board the experience and views of all actors concerned, and especially these of learners.

However, key questions to this learning outcome approach remain open and evidence of what works and what not still remains scarce. While intensive reforms are taken place by national authorities to redesign qualifications and curricula with an outcome-orientation, the impact of these reforms to the individual learners is not yet visible nor measurable (Psifidou, 2010b).

This paper analyses how learning outcomes can be used for defining and describing single, specific qualifications. To do so, it explores the different - but often complementary – methodologies developed by selected test and pilot projects[2] to define qualifications profiles and curricula having as a common denominator the use of learning outcomes, and discusses the challenges arisen and lessons learned.

1. Sectoral Approaches to Define Learning Outcomes

Learning outcomes should function as a "transmission belt" facilitating a linkage between those outcomes described in the level descriptors of the EQF or the national qualifications frameworks, and these found in national documents describing and certifying qualifications (qualification profiles, curricula, standards, etc.). However, the development of this linkage is often complex and should be underpinned by transparent approaches to inspire mutual trust. To illustrate how the interpretation of general EQF descriptors has been carried out at sectoral terms examples taken from the studied LdV pilot projects are presented and discussed in continuation.

In the **AMOR** pilot project for example, project promoters analyse curricula in two initial vocational trainings from the electrical engineering industry in Germany and Luxembourg, reformulate them on the basis of learning outcomes by the identification of seven working situations for electrical specialists and develop an activity matrix, to classify them to the EQF.

The analysis of the relevant curricula allowed collecting information about possible working situations that the graduates of the chosen programmes usually cope with. Working situations were considered as independent areas of professional activities (planning, organisation/implementation and control) and were divided in working situations of primary nature, meaning corresponding to branch-specific actions, and of secondary nature, representing supporting areas of action (according to the value chain by Porter, 1992). The analysis of working situations was necessary to identify these typically informally and non-formally acquired learning outcomes that could not be found in the curricula, but are important to perform in job.

Based on this analysis, fifty learning outcomes were defined nineteen out of which were newly defined and added by the project experts in the electro industry. The results were put in an activity-matrix structured into seven working situations and checked for consistency. The industry experts had to decide if single cells of the activity-matrix have a higher importance than others and attribute weighting factors and the corresponding EQF level. This was the basis for classifying learning outcomes to the EQF referencing levels carried out by experts in vocational training of chambers and research institutes for VET and validated by industry experts. Each cell of the matrix (cell A I to D III) – as a crossing of primary and secondary working situations – was assigned to the EQF in two ways: by an undifferentiated classification- learning outcomes as a combination of knowledge skills and competences) (see table 1) and differentiated into knowledge, skills and competences (see table 2.)

TABLE 1
Eqf Levels Per Cell Across 5 Partners[3] – Undifferentiated Eqf Assignment

A. Safety	4	4	4
B Taking care of customers	4	4	4
C. Documentation	3	4	4
D. Quality management	4	4	4
	I. Planning	II. Install, put into operation and deliver	III. Mantain, measure and repair

Source: AMOR project report, p.17

[2] For simplicity, each time reference is made to the aforesaid projects, their acronyms rather than the full title is used. For the full name of the project please refer to Annex. It is also important to note that projects' results are not presented here in a detailed way, but only those outcomes that are relevant to the objectives of this comparative analysis have taken into consideration.

[3] Germany, Luxembourg, Austria, Poland and Hungary participated in this project.

TABLE 2
EQF Reference Levels Per Cell Across 5 Partners – Results Of The Differentiated EQF Classification

A. Safety	4	4	4
	4,0 / 3,7/ 4,1	3,3 / 3,8 / 4,1	3,6 / 3,9 /3,9
B Taking care of customers	4	4	4
	3,8 / 3,3 / 3,8	3,8 / 3,6 / 3,8	4,1 / 3,7 / 3,9
C. Documentation	4	4	4
	4,0 / 3,4 / 3,4	3,8 / 3,9 / 3,8	3,9 / 4,2 / 3,7
D. Quality management	4	4	4
	3,1 / 3,4 / 4,0	3,4 / 4,0 / 4,0	3,6 / 4,0 / 4,2
	I. Planning	II. Install, put into operation and deliver	III. Mantain, measure and repair

Source: AMOR project report, p.18

For the final attribution of the corresponding level, the results per cell were compared between the two procedures. The matrix with the differentiated procedures was only slightly lower than this with the undifferentiated procedure.

A similar approach was followed by other pilot projects such as the **TransEQFrame**. However in this case, for identifying learning outcomes, the project partners referred to and analysed a richer source of national documents certifying and describing qualifications. National qualification profiles, EU Certificate Supplements (where available), framework curricula, legal executive orders, education acts, as well as training and examination regulations (including examination and occupational standards) from four occupational fields (business administration, chemistry, electronics and logistics) were analysed. Based on this document analysis, the selected qualifications to be referenced to the EQF have been first broken down into smaller sub entities "core activity areas" (similar to working situations identified in the AMOR project), mainly, directly taken from the descriptions of the respective occupational profiles. Then, learning outcomes including knowledge, skills and competences assigned to each "core activity area" were used for referencing "core activity areas" to EQF-levels (see table 3). Similarly, as in the majority of LdV projects examined both educational as well as trade specialists have been highly involved in this process.

TABLE 3
Transeqframe Template Referencing

Source: List of core activity areas:	**Knowledge** Theoretical and/or factual knowledge	**Skills** Cognitive (involving the use of logical, intuitive and creative thinking) and practical skills (involving manual dexterity and the use of methods, materials, tools and instruments)	**Competence** Responsibility and autonomy	**EQF level**
	Description / comments for clarification			Referencing to EQF levels / comments for clarification
....				**EQF level**
....				**EQF level**
Overall referencing				**EQF level**

Source: Project TransEQFrame, Synthesis report work package 6, p. 28

Other projects focused on a single sector. This is the approach used for example in the **EQF-Frame** pilot project in the sector of tourism. Concepts and descriptions of explicit and implicit learning outcomes found in official sources were analysed and evaluated against occupational standards, level of academic and practical difficulty, and competence required at the labour market. Then the best fit approach was applied to match the learning outcomes identified with these of the EQF descriptors. Sector experts were systematically involved to debate and map the identified learning outcomes to the descriptors of the EQF.

Similarly, the **Tiptoe** project analysing the trade sector, compares nationally developed occupational

profiles with national educational qualifications or programmes to arrive at a transparent overview of differences and similarities between countries and between the labour market and the educational point of view. Four occupations have been identified within the trade sector (shop assistant, shop manager, logistics assistant and logistics manager) and analysed in terms of knowledge, skills and competences. Then these learning outcomes identified by employers were compared with those delivered by educators. Within each qualification and/or educational programme, "core tasks" were identified and associated with knowledge, skills and competences as in the case of the TransEQFrame project.

TABLE 4
KSC Analysis of Educational Programmes for the Trade Sector

	Knowledge Theoretical and/or factual knowledge	Skills Cognitive and practical skills	Competence Responsibility and autonomy
List of core tasks /possible subtasks Description/ comments for clarification of KSC-items			
Core tasks A:			
(Subtask 1)			

Source: TIPTOE Working guidelines for WP4: Researching trade qualifications from an educational point of view, September 2009, p.20

Likewise, sectoral and educational experts, participating in the **€qualifise** project analysed in terms of learning outcomes syllabuses and assessment materials of qualifications in the financial services sector. On the basis of existing levelling methodologies in UK, a panel of experts developed one single approach for assigning EQF and NQF levels to examined qualifications and tested it in fifteen countries and thirty qualifications. The panel had to distinguish whether qualifications are predominantly based on Knowledge (K), Knowledge and Skills (KS), or full Competence (KSC). Once this distinction was made then each of these components was weighted in terms of approximate percentages according to the extent to which its learning is based on (a) 'Knowledge' / *knowledge and understanding*, (b) 'Skills' / *application and action* and (c) 'Competence'/*autonomy and accountability*. The analysis showed that qualifications may reflect aspects of all three learning categories, or of one or two of them. When assessing a qualification that it is mostly made up of pure knowledge, with some elements of skill but little or no elements of 'competence' assessed, the panel was recording the following result:

TABLE 5
Example for Levelling Knowledge-Based Qualifications

Learning Category	**Weighting**	**Level**
Knowledge	90%	4
Skills	10%	3
Competence	0%	n/a
Overall Level = 4		

Source: €qualifise project, 2009, Quality assurance system: A guidance for levelling qualification in the financial services sector. Annex 2, p. 16.

Equally, a qualification based on competence assessment might have the following result:

TABLE 6
Example for Levelling Knowledge-Based Qualifications

Learning Category	**Weighting**	**Level**
Knowledge	10%	3
Skills	20%	4
Competence	70%	4
Overall Level = 4		

Source: €qualifise project, 2009, Quality assurance system: A guidance for levelling qualification in the financial services sector. Annex 2, p. 16.

Once each unit of the qualification was reviewed and allocated a level, the overall level of the qualification was determined. Similarly, when each unit was reviewed and a percentage weighting for each learning category recorded, the overall weighting for each learning category was determined. For this process, the best fit approach was again followed.

The **Food-fit** project developed an inventory

of occupations in the food companies linked to the EQF descriptors. Project partners analysed the key occupations in the food sector, identified functional areas within each occupation and partner country and related them to the most relevant technical occupations in the sector. For each occupation, "areas of knowledge" were identified which were then related to learning outcomes (knowledge, skills and socio-labour competences required for carrying out the job). The final result is presented in the figure below:

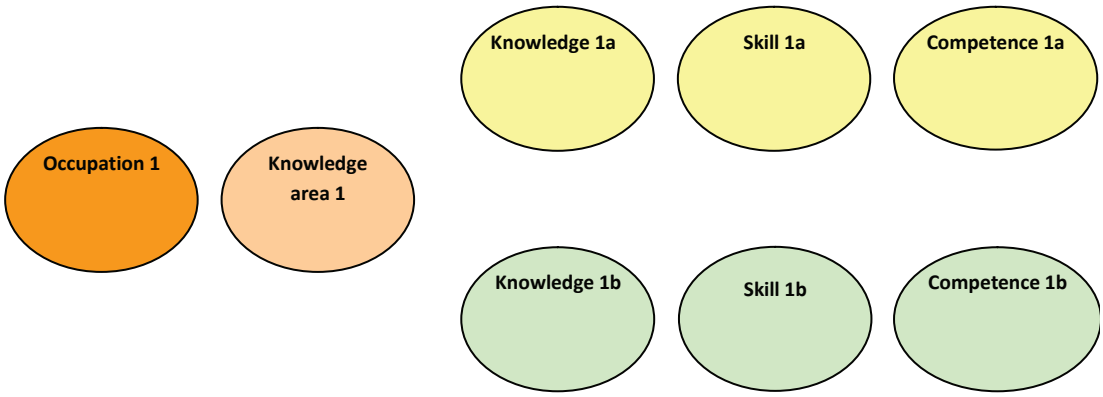

FIGURE 1. Structure For Description Of Learning Outcomes*Source: adapted from Food-fit project report. Work package 3. Design of tools for the sectoral development of EQF, p. 26.*

For the description of learning outcomes, two methodological references were used: functional analysis[4] and Bloom's taxonomy[5]. A common lexicon was developed to describe and write learning outcomes, using the principles of the European Qualifications Framework (EQF), verbs of action identified in Bloom's Taxonomy (cognitive domain) and the dictionary of skills Hay McBer, recommended by the OIT / Cinterfor. For the description of knowledge, action verbs were used within the fields of knowledge, comprehension and analysis of situations. Skills were described using action verbs within the fields of implementation, synthesis and evaluation, while competences were described within the field of social, organisational and personal skills more frequently used in the labour market (see table 7).

TABLE 7
Model of Descriptive Table for Learning Outcomes: Example of the Occupation Quality Control Technician

Occupation	Knowledge area	Description of knowledge	Skills	Competences
Quality Control Technician (ISCO CODES: 211- Physical and earth science professionals. 214- Engineering professionals (excluding electrotechnology). 2265- Dieticians and nutritionists)	Food safety	Food hygiene Microbial and parasitic contamination. Microbiological deterioration. - Path of access to knowledge: ISCED 6.	Techniques of evaluation of nutritional state, critical analysis and interpretation of results - Path to access: university training. Masters degree. Permanent training	Focus on order and quality. Continual verification and control of work and information. On-the-job learning
	Quality control	Standardisation and food legislation - Path of access to knowledge: ISCED 6.	Necessary processes for adapting the food industry to ISO rules. - Path to access: Self-study. Updating of knowledge. Seminars.	Conceptual thought. Ability to identify the relationship between situations that aren't obvious. On-the-job learning.

Source: adapted from Food-fit project report. Work package 3. Design of tools for the sectoral development of EQF, p. 19

[4] Functional analysis is a method used to identify the required competences of a productive function by means of a deductive strategy. By concentrating on the functions or results/outcomes instead of the activities, the descriptions produced are independent of the technology or methods used to achieve the function. In other words, instead of describing what people are doing, functional analysis describes what people have to achieve (Mitchell, L. and Mansfield B., 1996).

[5] Blooms taxonomy distinguishes between the cognitive, attitudinal (affective) and psychomotor domains, and between the levels knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom,1956).

Once occupations were described in EQF terms for each functional area, the best fit approach was applied for referencing levels to the occupations. The final tool developed for the referencing process contained: the name of the occupation in question; the attributed functional area; the functions and tasks to be performed; the official name of ISCO occupation; the NACE code; the EQF level; the evolution of the occupation (whether it is an emerging occupation in medium or larger companies, or a traditional occupation with new skills and competences, etc.), and the reasons for choosing to analyse and reference this occupation.

Other LdV projects aim at the development of a sectoral -usually competence- meta-framework. The partners of the **EQF-sports** pilot project, for example, aiming at a European sectoral framework on sport activities, use functional analysis to develop a functional map (this is the graphic representation of the results of the functional analysis) to specify the current and future needs of employment in sports sector. On the basis of this functional map, a detailed sector competence framework based on units and credits is developed. This describes both the competences acquired in occupations as well as the competences to be achieved through curricula and learning programmes. This competence framework is divided into manageable units made of learning outcomes – broken down by level into competences, skills and knowledge and the range and scope of coverage required (in line with the EQF). These units then are given a level from the EQF and corresponding credits.

TABLE 8
Example of Competence Framework in Fitness for Ehfa Basic Instructor

B1.1 Analyse the needs, abilities and potential of individuals and groups			**Instructor Learning Outcomes Mapping to a separate document**	
Competency	**Skills**	**Range**	**Basic**	**Advanced**
B1.1.3 Analyse information and determine risk factors	1. Interpret all recorded data using accepted criteria	All data gathered Using standard criteria Norms	2.7 3.9 3.10 4.10	8 This number refers to the section in the knowledge framework
	2. Prioritise key needs and responses	According to client health status According to client fitness status According to clients expectations	2.7 2.15 3.10 3.9 4.10 4.11	5 8 9
	3. Identify and prioritise risk factors	Medical, physical and psychological Injury status Fitness levels Factors that might affect clients ability to participate in programme	2.7 3.9 4.10	8
	4. Review and confirm data with client	Clarify data Utilising communication and Interpersonal Skills		
	5. Develop a summary profile of client to assist in the design of a programme to meet clients needs	Collate and categorise data		5 8 9

Source: EQF sport project, WP 5, Guide to develop a sector competence framework based on units and credits, March 2008, p. 6

Another example is drawn from the approach applied in the **EASCMF** pilot project which develops a European automotive sector competence meta-framework. To do so, project partners analysed and compared publicly recognised professional profiles. Based on the criteria of topicality, comparability and availability in the partner countries, four national descriptions considered as national variants of a profile in the automotive sector were selected for more detailed analysis. Additional material which could *implicitly* comprehend information about the abilities required to perform in work was also analysed (prerequisites

of access to training, curricula, methods of training, learning locations, examination regulations, etc.). Then, the EQF categories were identified within the descriptions of national profiles: knowledge, skills and competence required to achieve the reference objective, in this case, to: *deliver a car which works to the optimum satisfaction of the customer, at the same time meeting the requirements of the enterprise.*

The **EQUFAS** project followed an original approach somehow beginning from what for other projects is the last step and going backwards. Project partners first defined the EQF level to which they wanted to refer the qualifications from the agriculture sector (level 3) and then defined a common framework based on which learning outcomes-based curricula and assessment tools were designed. The other originality of this project is the way learning outcomes have been identified. While other projects have analysed official sources and/or performed a work analysis in each partner country for identifying learning outcomes, the EQUFAS project developed an experiential method: observed and assessed students while working in companies associated with six different branches of the Agricultural sector (during pilot study periods organised by the project partners) outside of their country of study. This approach allowed first to conclude on those generic competences which are of outmost importance for mobility reasons (language skills, communication skills, intercultural competences, etc.) and to assess whether more specific competences acquired through their studies in their country matched with these needed to work in a different country. They then developed a common framework for the agriculture sector on the basis of the 8-EQF levels and the four domains and eleven dimensions of the 4CYOURWAY-framework[6] (see below). The three main building blocks of the EQF (knowledge, skills and competence) were then covered by at least one or more dimensions of the 4CYOURWAY-framework.

TABLE 9
Equfas Common Framework for the Agriculture Sector.

		1	2	3	4	5	6	7	8
Responsibility	**Responsibility**								
	Autonomy								
Range	**Public**								
	Timeline								
Complexity	Tasks								
	Procedures								
	Knowledge and understanding								
Transfer	Ambiguity								
	Change								
	Range								

Source: EQUFAS project report, p.15-16

2. Insights and Lessons Learned from Pilots

The examined LdV pilot projects have developed and tested interesting methodologies to identify the expected learning outcomes in the respective sectors and to redesign curricula and qualification profiles accordingly. This testing exercise allowed project promoters to draw important conclusions summarised in the following points:

1. The degree to which outcome orientation is realised in curricula and qualification profiles differs across the partner countries of the studied projects

Some projects analysed curricula and found a weak outcome-orientation (e.g. certain occupations in the €qualifise project). Although curricula contain a lot of information on study times, methods and contents, there was little (or none) information on expected learning outcomes. In this case, project partners have redesigned curricula in terms of learning outcomes using different methods. Other projects found that actually in opposition to earlier assumptions, the analysed curricula contain a strong outcome-orientation (e.g. AMOR); but still curricula should be redesigned to take into consideration learning outcomes not captured in formal curricula acquired though non formal and informal means.

The degree to which curricula are outcome-oriented varied significantly between sectors and countries. In the TransEQFrame project for example, project promoters concluded that some curricula of the examined qualifications were strongly outcome-oriented (in the Netherlands), in other cases this outcome orientation was supported by framework conditions -system characteristics (in Denmark); other were broken down into learning units defined in terms of learning

[6] www.4cyourway.nl and http://www.linqueconsult.nl/nieuws/index.php?id=59

outcomes and assessment criteria (in Finland); other were partly outcome oriented containing elements more or less geared towards learning outcomes, but with no systematic description of levels or dimensions of learning outcomes. In other cases, the focus was rather on the description of input factors (in Austria); and finally some were totally input-oriented (in Bulgaria).

In any case, at the level of curriculum, it is too simplistic to characterise these approaches only as input- or outcome-focused curricula. There is actually no pure type of input- or outcome-curriculum defined in theory. It is possible to say on the basis of empirical research (Cedefop, 2010), that curricula are always mixed and that the kinds of "outcomes" they define varies hugely among the countries, so that even two outcome-oriented curricula look very different. So often, learning outcomes do not replace learning inputs (contents, teaching and learning methods, timetables, etc.) but in most cases, may have a more or less prominent role for defining these inputs. LdV pilot projects have described curricula and qualifications using a balance between input and outcome elements. Referencing tables include information on knowledge, skills and competences of the respective qualifications as well as the name of the qualification degree giving access to this occupation, the duration of studies, etc. (e.g. Food-fit project).

2. When learning outcomes are formulated in a very operational way for specific occupations, there are matching difficulties to the generic descriptors of the EQF.

The analysis of national sources documenting qualifications shows that learning outcomes may be expressed in rather broad or narrow terms and this determines the degree of difficulty for the referencing process. When learning outcomes are defined at the level of units for example, they express the specific outcomes/objectives of single teaching units and thus precisely determine the contents of training and education programmes. In some cases, learning outcomes refer directly to the professional context, whereas in others they rather refer to a body of knowledge to be assimilated by the learner. Some countries define assessment criteria/performance criteria, whereas in other countries outcome statements are too vague to be used directly for assessment.

Differentiations also exist along the divide between competence and associated knowledge. In some cases, a difference is made between what students should be able to do, and what they should know and understand, whereas in other cases associated knowledge is not formulated in terms of learning outcomes but rather as a list of items to be addressed in classroom. These differentiations and the often disparity between expected learning outcomes in curricula and achieved learning outcomes defined in qualifications have posed difficulties to project partners testing different referencing approaches (e.g. in €qualifise project).

3. Complementary research methods to desk analysis are required to identify learning outcomes acquired also by informal and non formal means, often not explicitly stated in official documents.

Promoters of different pilot projects noted that national documents describing qualifications are not easy to be interpreted in EQF terms as there were found conceptual ambiguities between the EQF key terms and their understanding and use at national and/or sectoral level. This is the case even in countries with an inherent outcome orientation in their systems. Another conceptual issue of that kind is present when there are differences between the competence models used in national qualifications systems and the EQF dimensions (e.g. the German national qualifications framework). It was also found in many cases that the official documents describing national qualifications can not supply the information that corresponds fully to the EQF criteria. Therefore, complementary methods to desk research were used by LdV projects' partners to identify these learning outcomes required for carrying out the job of a specific occupation and acquired though non formal and informal means.

In many projects functional analysis is used for the identification of work requirements (e.g. the Food-fit project). The starting point for determining the work requirements and training needs are the study and analysis of the system of production and the labour market. Occupations are divided into tasks and duties, of which the function is identified to determine skills and knowledge requirements independently of a specific work-place. These requirements are clustered and transformed into learning outcomes with associated performance criteria.

4. Tools developed within the LdV projects can be valuable bases for designing qualification and curricula based on learning outcomes as well as for referencing qualifications to the EQF levels.

These tools may be "competence matrixes" for mapping competences to a specific type of course; templates for curricula covering the structural and legal aspects of a curriculum; guidelines on how to write a qualification profile; and checklists for curriculum designers with relevant things to keep in mind. Others, such as the AMOR project, develop an "activity-matrix" based on curriculum analysis and identification of learning outcomes via working situations.

The DACUM method[7] and Bloom's taxonomy[8] are often cited as tools for the clustering of learning

[7] An acronym for Developing A Curriculum, DACUM is a Structured Group Interview (SGI) Technique commonly used to develop curriculum for both academic and vocational course content.

[8] See note 5.

outcomes (e.g. Food-fit project). Bloom's taxonomy remains until now the most widely used taxonomy for describing learning outcomes and assessment criteria. Especially due to the increasing implementation of national qualification frameworks and outcome-based approaches for the design of curricula, the use of this taxonomy is very popular in the European member states but other taxonomies are used as well (Psifidou, 2010c). In addition to these well-known methods, other projects use a broad set of empirical research methods (such as surveys, workshops, interviews, observation, etc.) to carry out the levelling process.

5. There is room for different interpretations concerning the individual categories of learning outcomes in the EQF (knowledge, skills and competence).

Despite the explanations on the three learning outcome categories in the EQF there is still room for interpretation concerning the individual categories. For example, the EQF describes competences as "taking responsibility and acting independently". The term "responsibility" was understood by some project partners basically as a legal responsibility, others, however, rather saw it as an informal "taking care of" or operative participation in the process of qualifications establishing. Project promoters explained that without clarification among different stakeholders involved in the referencing process, this might lead to a distortion of future EQF classification.

6. Identifying and involving the key stakeholders concerned is crucial for a transparent and comparable approach to learning outcomes in designing curricula and qualification profiles.

All LdV projects have involved both education specialists as well as experts in the respective sector for developing the referencing tools and deciding on the levelling of the piloted qualifications. In many of them, the involvement of experts from different backgrounds (especially employers and employees) in the process of work analysis was an essential element of the methodological design. On the basis of their personal experience and knowledge of a sector or an occupation, they provided inputs in the curriculum development process or gave feedback on the results. Some projects (the AMOR, €qualifise, etc.) even recommend the type of stakeholders who should be involved in the entire process (teachers, educationalists, sector experts, etc.), the qualifications and knowledge that should have and the different functions that should perform. To identify and contact the key stakeholders, different approaches have been used by project partners (surveys, questionnaires, workshops, *in-situ* research, etc.).

Concluding Remarks

To summarise, the presented examples show how an approach of identifying and describing learning outcomes in curricula and qualifications can take different but complementary forms among LdV projects testing the EQF, with some of them piloting on qualifications from different sectors (occupational domains), while other focus on one specific sector (tourism, sports, financing, food, etc.). All of them though use the learning outcomes approach as a means to carry out this "interpretation" process, breaking down qualifications into smaller entities (core-activity areas, core tasks, working situations, etc.) and using the best fit approach for associating levels to units and/or qualifications.

A commonality in the approaches of these projects is their starting point; they all use the same sources for collecting information about learning outcomes: they refer to national documents underpinning qualifications (curricula, syllabuses, qualification profiles, training and study regulations, training programmes, etc.), and usually, complement the information found in these sources with learning outcomes identified through work analysis. Some LdV pilot projects while interpreting the generic EQF terms into sectoral concepts, aim to develop also a sectoral meta-framework which can take different forms (this is usually a competence framework).

The results of this preliminary analysis highlight issues requiring attention and actions from policy-makers and practitioners in vocational education and training. However, they also reveal the limits of our knowledge and understanding of current developments and of the effects and implications of learning outcomes approaches in vocational education and training. Building on new EU and international analytical studies of learning and teaching processes, there are still many issues in need of further research.

In recent years, Cedefop's analytical work has increasingly focussed on learning outcome approaches in vocational education and training to design and describe qualifications, to set standards and to influence quality assurance, validation and certification approaches. Between 2009 and 2011, Cedefop organised two International Workshops[9] to debate about innovative curriculum policies and practices in Europe and beyond. In 2010, a comparative study in nine European countries on learning outcome approaches in VET curricula was published to provide a better understanding of recent curriculum policies and point to main tendencies and challenges in this field (Cedefop, 2010). This research is now being expanded in all 32 countries participating in ET 2020 and will continue in the coming years.

[9] http://www.cedefop.europa.eu/EN/events/4432.aspx and http://events.cedefop.europa.eu/curriculum-innovation-2011/

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Annex: Ldv Projects' Acronyms

AMOR: Approach for the Matching process of Outcome-based curricula to the EQF in vocational education
EASCMF: European Auto Sector Competence Meta Framework
EQF-Frame: EQF Flexible References and Methods of Evaluation
EQF-sports: Implementing EQF in the Sports Sector
Equalifise: European Qualification Assurance League in Financial Services
EQUFAS: Experiences with the EQF in the Agricultural sector
Food-fit: Methodological proposals to facilitate the introduction of the European Qualifications Framework (EQF) in the food sector of the European Union
Tiptoe: Testing and Implementing EQF- and ECVET-Principles in Trade Organizations and Education
TransEQFrame: Trans-European Qualifications Framework Development

PECULIARITIES OF LEARNING OUTCOMES DESCRIPTION IN VOCATIONAL STUDIES.
CASE STUDY: THEOLOGY

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1. Introduction

1.1. The present observations are elaborated according to the experience as an long-term expert, responsible of Theology studies, within the European Project POSDRU no. 2/1.2/S/2, "Developing an operational system of qualifications for higher education studies in Romania", in the period 2008 – 2011.

1.2. Our main idea refers to the NQF as a result of quality and quantity data and key-concepts storage, deriving from each fundamental field/study field/ curriculum plan of the national system of higher education studies, based on general data of the EQF. The analysis of each field with its own peculiarities, allows the selection of principles and criteria for the development of a general valid theoretical framework, strong enough to reflect, in a coherent and unitary way, the Romanian higher education studies, but flexible to build an efficient tool for each curriculum plan.

1.3. The working material includes 5 skills grids corresponding to 5 curriculum plans of the Theology faculties, as well as theological departments from different faculties of Romania, according to GD 635/2008 and further government decisions:

1. Pastoral Theology (PT)
2. Theology – Social Assistance (T-SA)
3. Teaching Theology (TT)
4. Sacred Art (SA)
5. Religious Studies (RS).

One of the field peculiarities, herein debated, refers to the placement of these curricula within the corresponding fundamental field/study field. We will discuss again this matter at the right time.

1.4. The working method for this presentation follows the way in which grids are created. Actually we mainly refer to the analysis of the national matrix content in its frame-grid, in comparison with curriculum contents from specialized faculties/departments (correct, with curriculum plans and analytical programs). In the next stage, there have been made proposals for the elaboration of professional and transversal competences, at the level of short-term experts, constantly re-elaborated and improved by confronting the developer partners from specialized institutions, with representatives of the employers, professional associations, scientific institutions, direct beneficiaries and student unions. These debates included direct contact, correspondence (especially electronic), as well as 9 workshops organized by ACPART, in different geographical areas, where all the previously mentioned categories participated.

The Supreme Court that amended and validated these grid proposals was the Theology Committee, whose works took place between the 31st of May and the 1st of June 2010, in Bucharest. There were 108 participants from the Theology faculties – 26 Theology faculties and institutions – for all the confessions that organize higher education studies in Romania: Orthodox, Roman-Catholic, Greek-Catholic, Baptist, Pentecostal, Adventist, Reformed, Lutheran Evangelical, Franciscan Roman-Catholic. Among the participants, there were also representatives of certain state-run and private institutions involved both in the theologians' training and in their hiring process (The Romanian Government, through the Departments of Cults and through the Ministry of Education, Research and Innovation, school inspectorates, the leaderships of the religious cults, scientific institutes, companies, different organisms and organizations, student unions representatives). No less than three former and present ministers - secretary of state from the Department of Cults, from the Romanian Government, have been present.

The domain we present here imposed as well a totally particular working style. Having in view the differences in point of religious dogmas and the tense relations imposed by the social-political history of the coexistence of the respective religious communities, we managed to impose a collaboration in an irenic and ecumenical spirit, in full harmony with the double mission of the trainers and the employers involved in this project – educators and God's servants on Earth, and also models of human, intellectual, Christian

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conduct for their fellows. During the sessions, some of these asperities came to light, however, but only temporarily and partially. The formulation of some items regarding the skills reflects the immense effort of finding a common denominator in this mosaic of dogmatic orientations.

2. The framework matrix, between NQF and EQF

As it is known, the conception of the skill grid is part of an complex process of renewal of the Romanian higher education, in an attempt to update it in agreement to the European strategies established through the Bologna Process and with the efforts made on a global scale to solve the serious problems mankind is faced with today, through changes operated in education and in the professional-civic and ethical training. The skills grids – mirror of the university qualifications (of all levels) – represent just a small wheel in this ample machinery, a relatively small part, yet with a great impact on the higher education contents, for each of the 72 curricula considered by the above-mentioned POSDRU project, as well as for the macro-economic and social system, in general. And this, because they (the grids) impress the change from the upside down, namely from the product of the scientific-didactic activity ***(and missionary activity, too, in the case of Theology),*** as today's society claims, to the way the periods of study and professional practice are organized, and last, but not least, to the working and relating style of all the people involved in the process (managers, professors, students, Master students, doctoral students etc.).

In other words, what we are trying to determine here is what a higher education graduate must

a) know; b) know to do; c) know to be.

These demands were synthesized and codified in the Matrix of the national qualifications framework for the Romanian higher education[1], published in the *CNCIS Methodology*, which we shall call, from now on, *Methodology*.

It was made official by the Romanian Government[2]. Through this high-level official process, the matrix was set in agreement with the European grids resulted from the application of the EQF documents. We refer to the EQF/NQF relation, from our scheme.

The matrix comprises, as one can see, what we have just mentioned:

- 2 skills related to the cognitive dimension of learning (descriptors 1 and 2);
- 3 items referring to action competences – abilities (descriptors 3 - 5); they describe the following competences:
  - how the graduates manage to apply in their everyday practice what they learnt;
  - how they can evaluate, from the specialist's perspective, the quality of certain processes, working methods and even theories;
  - the capacity to create and innovate, within the limits of their training level, L-M-D, and in the case of Theology, ***within the limits imposed by the ecclesiastical canons.***
- 3 descriptors reflecting transversal competences, namely those of role and personal development (descriptors 6 – 8):
  - autonomy and responsibility, within the same limits, namely concerning the training and ***canonic, in the present case;***
  - social interaction, horizontally and vertically, so, let us say, ***in the present case, in the ecclesiastical hierarchy and also in the community under his care;***
  - become aware of the need for lifelong professional and development.

In other words, this framework grid describes the three fundamental components of the way in which a higher education graduate becomes professional, which we mentioned previously: 1. what he/she must know; 2. what he/she must know how to do; 3. what he/she must know about how he must be, when he/she "comes out of our hands" to put it metaphorically.

3. The Rigors Related to the Elaboration of the Grids

In the practical application of this framework grid to the fundamental domain / domain of studies / curriculum, the expert teams had to deal with a long series of difficulties.

The respect for the principles of the elaboration and implementation of the National Qualifications Framework for Higher Education generated numerous challenges among all the DOCIS working teams. According to the *Methodology*[3], they are the following:

a) Consensus and inclusion
b) Research and prevision
c) CNCIS quality assurance
d) Facilitating change
e) Collaboration and international transparency
f) Autonomy and subsidiarity.

As they appear extracted here, these principles seem just some nice words and nothing more. Taken out of their context, they sin by dry theorization (of which some of the pious fathers professors involved in the project were actually afraid, deceived by the wooden language of the EU documents …). Yet, reintroduced in the context of the *Methodology* and especially, concretized on the structure of the domains of study

[2] The Methodology of the National Qualifications Framework for Higher Education, ACPART, Bucharest, 2009, p. 14.
[3] According to the Ministerial Order OM. Nr. 4.430/29.06.2009, published in Official Journal, Part I, no. 545/5.08.2009.
[4] According to the Methodology (Methodology), p. 5-6.

			DOCTORATE			
			MASTER'S			
			BACHELOR			
Transversal competences	Personal and professional development competences	8. Personal and professional development	Awareness of the need for continuing training; efficient use of learning techniques and resources for personal and professional development	Self-control of the learning process, diagnosis of training needs, reflective analysis on own professional activity	Development of creativity-centred projects as the basis for self-accomplishment	
Transversal competences	Role competences	7. Social interaction	Familiarisation with the teamwork-specific roles and activities and with task allocation for subordinated levels	Assuming management roles/functions for the activities within professional groups or institutions	Assuming responsibility and capacity to organise and lead the activities of professional groups, scientific research groups or institutions	
Transversal competences	Role competences	6. Autonomy and responsibility	Responsible performance of professional tasks in an autonomous manner, with qualified assistance	Undertaking complex professional tasks under autonomy and professional independence conditions	Innovative initiation and development of complex theoretical and practical projects	
Professional competences	Functional-actional dimension	5. Creativity and innovation	Development of professional projects by using well-known principles and methods within the field	Development of professional and/or research projects using a wide range of qualitative and quantitative methods in an innovative manner	Design and undertake original research, based on advanced methods leading to the development of scientific and technological knowledge and/or of the research methodologies	
Professional competences	Functional-actional dimension	4. Critical and constructive reflection	Adequate use of standard assessment criteria and methods to appraise the quality, merits and limitations of processes, programmes, projects, concepts, methods and theories	Pertinent and appropriate use of assessment criteria and methods to formulate judgements and fundament constructive decisions	Critical-constructive assessment of projects and scientific research results, appraisal of the stage of theoretical and methodological knowledge; identification of knowledge and applicative priorities within the field	
Professional competences	Functional-actional dimension	3. Application, transfer and problem solving	Use of basic principles and methods for solving well defined problems/situations that are typical to the field, with qualified assistance	Integrated use of the conceptual and methodological apparatus in incompletely defined situations in order to solve new theoretical and practical problems	Selection and use of advanced principles, theories and methods of knowledge, transfer of methods from one field to another, interdisciplinary approaches to solve new and complex theoretical and practical problems	
Professional competences	Cognitive dimension	2. Explanation and interpretation	Use of basic knowledge to explain and interpret various types of concepts, situations, processes, projects etc. that are related to the field	Use of specialised knowledge in order to explain and interpret new situations, in wider contexts associated to the respective field	Use of advanced principles and methods to explain and interpret, from multiple perspectives, new and complex theoretical and practical situations/problems that are specific to the respective field	
Professional competences	Cognitive dimension	1. Knowledge, understanding and use of specific language	Knowledge and understanding of basic concepts, theories and methods within the field and the specialisation area; their adequate use in professional communication	In-depth knowledge of a specialisation area and, within it, of the programme specific theoretical, methodological and practical developments; appropriate use of specific language in communication with different professional environments	Systematic, advanced knowledge of concepts, research methods, controversies and new hypothesis specific to the field; communication with specialists from related fields	
Learning outcomes		Generic descriptors		Level descriptors		

and curricula, they may give the exact measure of their importance in the academic life and the truthful image of the difficulties the grid conceivers had to overcome. We will try to prove this truth by the following.

3.1. Harmonization of the qualifications with the labor market demands

For example, principle a) *consent and inclusion*, aims mainly to harmonize the qualifications in higher education with the labor market demands. Shifting the problem a little bit, we must show that a large part of the time and effort budget consecrated to these grids was consumed with the mentioning of the "possible occupations" that appear in the technical sequence of the *matrix forms*. There have been, in this context, two extreme tendencies, valid, actually, for any other domain of studies, yet ***concretized in a specific manner for the case of Theology.***

The experts' first tendency, which reflects the tendency of any specialized trainer, (*id est*: academic staff of the theological education, etc.), is to include in the rubric entitled "Possible occupations" a number as high as possible of occupations that we claim our students might have, after graduation.[5] And this actually did happen - in the beginning - out of the desire to have as many socio-professional doors as there can be open for the graduates that we trained. Some of them were removed since our first working sessions, such as that of "town hall employee". Others have been kept in the final grids, such as that of "editor" (for the specialized publications or publishing houses, or radio-televisions, such as "Trinitas"). The reason why we worked one way or the other is formulated in the above-mentioned sub-principle ("*h**armonization of the qualifications with the labor market demands***"). We cannot pretend that we are teaching students to have occupations in other fields/curricula, (such as Public Administration, Office Support, Public Relations, etc., in the case of the above mentioned occupation – town hall employee). Of course that in real life there are different cases (opera soloist with Psalm music studies: folk music interpreter with Pastoral Theology studies, or even foreign minister, agriculture minister, etc.). All these are rare cases but we must see the main view. These grids have the quality of emphasizing this tendency of overbid the professional opportunities that graduates might have (as they provide much more *interesting* aspects regarding higher education in Romania!...).

This happens because, according to the occupations, either registered in COR[6], either proposed by us to be officially registered (we also are entitled to this), skills are completed on a horizontal line, from C_1 to C_{4-6}, and then vertically. Even if someone makes the great effort of finding acceptable formulations for the first set, it will be practically impossible to vertically complete the skills imposed by all 5 (8) items! The grid shows as clearly that our proposal is not a realistic one. Anyway, a developer who easily enumerates possible occupations for his graduates proves to be unserious towards his work's specificity! Grids elaborators, as well as external partners with an efficient and responsible collaboration, took care to avoid this kind of situations, and the Committee members have also completely managed this aspect. Therefore, a contrary case emerged – the inclusion of „solitary" registered (?) – incredibly – in COR. A certain proposal becomes hilarious at least for two reasons: 1. The denomination can reflect an occupation but not a job, because it doesn't entail a previous professional training and it is not manifested through a productive activity of material or spiritual goods, socially validated. It is just a personal choice of a human being who wishes to repress any social presence – active and useful to their fellows, in favor of meditation used for a strictly personal use. 2. Consequently, a certain person cannot pretend to be officially recognized as performing an „occupation", because it entails social procedures, including payment from an institution, social contributions etc.

3.2. Articulation of the three higher education qualification levels

The correspondence of skill descriptors on horizontal line, meaning education levels (L-M-D), has been a fundamental concern of the Methodology authors, as well as for the grids' authors. The items were created in order to verify the rational increase of work tasks of the students, master and PhD students, within a coherent system of initial and stage training, with progressive evolution – we use the pleonastic expression – from one educational level to the other.

It is an aspect derived from the methodological sub-principle of the higher educational correspondence (levels 5-7(?)) of undergraduate and post-graduate studies in Bologna version.

Actually, the first impulse of the one working at these grids is to offer – in theory – as much skills as possible to the licensed graduate. It is a mistake I have also made myself in a former stage, and that experts from DOCIS team, managers and their colleagues, from college or from the country, have also made, and it is almost certain that college managers also make this mistake. Of course, that we cannot allow a licensed graduate to be overburdened with more than the curriculum is designed to offer! The overburden can have negative effects on our own activity. Too many skills for licensed graduates compromise Master studies and then, doctoral studies. Those who overburden the level of License curriculum are killing Master

[5] We ourselves have fallen prey to this sin, a few years ago, when we conceived a first grid, much simpler than today's ones, for a different domain of studies.

[6] Classification of Occupations in Romania.

Grid 1L – *Description of professional and transversal skills of the domain/curricula*
Main field: ***Theology*** **Subject field:** *Theology* **Curricula: Pastoral Theology**

Qualification title: **Pastoral Theology** Qualification level **BACHELOR**	**Possible occupations:** primary education professor, COR code – 233101; lower secondary education professor - 232201. Archbishop –246001, Vicar bishop– 246002, cantor – 246004, chaplain – 246005, cardinal -246006, chevrasames - 246007, vicar choral – 246008, cults counselor – 246009, archbishop head – 246010, deacon – 246011, Bishop – 246012, exarch – 246013, haham – 246014, harmonist – 246015, hatip – 246016, imam – 246017, cults inspector– 246018, majgyan – 246019, melamed – 246020, metropolitan – 246021, muezzin – 246022, mufti – 246023, organist – 246024, pastor - 246025, patriarch – 246026, priest – 246027, cults president – 246028, protopope – 246029, pro-vicarius – 246030, rabbi – 246031, cults secretary– 246032, abbot – 246033, treibar – 246034, herald – 246035, vicar – 246036. **New occupations proposed for C.O.R. :** Clerk/priest (sacerdos)/cult servant, religious teacher, referent for missionary structures of cult (mass-media, publishing houses and publications, pastoral – social – missionary and ecumenical centers, – with correspondent complementary studies), monk – sister, hegumen, archimandrite, archdeacon etc.

Professional skills* / Level descriptors of structural elements of the professional skills**	**C1** **Fulfillment of faith diffusion mission in the irenical spirit**	**C2** **Design and elaboration of an argumentation speech based on sacred texts (written and oral)**	**C3** **Correct enouncement of the cult/Church dogma, as well as their ways for the man and world accomplishment**	**C4** **Efficient pastoral activity of the believers: their counseling according to literal rules (laws, canons), as well as moral norms**	**C5** **Analysis and interpretation of data regarding cult/church history and religions history**	**C6** **Accomplishment of cult rituals**
KNOWLEDGE						
1. Knowledge, understanding concepts, theories and fundamental methods of the field and specialization field; proper usage in professional communication	C1.1. Identification and proper usage of concepts, theories and missionary paradigms in professional communication	C2.1. Definition of composition rules of a written or oral speech according to essential exegesis and hermeneutic principles	C3.1. Definition and proper usage of specific terminology of dogmatic theology in professional communication	C4.1. Identification of specific needs of the target group from the perspective of moral, canonic and pastoral norms.	C5.1. Description of concepts, methods, and research fields specific to historical theology and religions history	C6.1. Emphasizing the relevance of cult rituals content, as well as the need of their correct accomplishment
2. Usage of essential knowledge for explanation and interpretation of different types of concepts, situations, processes, projects, etc, associated with the field.	C.1.2. Explaining the need of missionary diffusion of faith in the secular postmodern society	C2.2. Adaptation of types, styles and discursive methods in different contexts	C3.2. Interpretation of dogmas, teaching, concepts and theological statements in the inter-confessional, inter-religious, intercultural context	C4.2. Adaptation of the communication style and pastoral strategies according to the believers categories	C5.2. Interpretation of historical realities through the development of the field fundamental researches	C6.2. Explanation and interpretation of cult acts
SKILLS						
3. Implementation of essential principles and methods in order to solve determined problems/situations, specific to the field in conditions of qualified assistance.	C1.3. Efficient implementation of essential missionary methods and techniques in order to diffuse the missionary's qualities	C2..3. Usage, as essential auxiliaries of sacred texts communication, of the languages used for the first time	C3.3. Development and implementation of dogma systematization methods in order to express and defend some essential learning of the cult/church	C4.3. Elaboration of some behavior strategies regarding the efficient manage of believers towards the accomplishment of moral – religious ideals	C5.3. Implementation of the correct interpretation principle of the historical phenomenon by a fair connection with its way of influence upon the present	C6.3. Optimal solution of specific situations of the professional activity, implementing principles and essential methods for cult service (diction, musical ear, voice, mime, gesture, etc.)
4. Proper usage of criteria and standard evaluation methods in order to observe quality, progress and limits of processes, programs, projects, concepts, methods and theories.	C1.4. Self analysis and critical and constructive evaluation of the own missionary	C2.4. Critical analysis of the speech and exegesis enouncement and correct	C3.4. Support of the own dogma in a critical apologetic irenical relation to	C4.4. Development of some relevant indexes in order to evaluate pastoral activity	C5.4. Critical, correct evaluation of historical data and ability to observe the events	C6.4. Differentiation between canonic cult acts and innovations, local customs,

		hermeneutics	other learning and ideologies		dynamic	superstitions, occultism, etc.
PROFESSIONAL AQUISITIONS						
5. Formulate professional projects using well known principles and methods of the field.	C1.5. Elaboration of some innovative missionary strategies, adapted to ignorance by usage of some established methodologies	C2..5. Elaboration and public speech of some works pertaining to the dogmatic and catechist type, respecting exegesis and hermeneutic norms	C3.5. Usage of dogmatic resources in concrete actions of confession and diffusion of faith (at fundamental level)	C4.5. Supervising problematic cases in moral and social aspects, as well as constant evaluation of improving level of these situations	C5.5. Design of the profile of emblematic personalities for the cult/church history, with an essential bio-bibliographical description	C6.5. Dynamize the ritual through personal implication, keeping untouched the canonic cult stipulations
Minimum performance standards of skill evaluation	Developing the usage of proper missionary strategies, in irenical spirit, regarding faith diffusion	Elaboration of a speech according to an established plan, including truths from the sacred texts	Loyal and argumentation reproduction of the essential dogmatic definitions	Theoretical elaboration of a case study for a situation of counseling and pastoral orientation	Reproduction of some essential historical landmarks regarding cult/church history and religions history	Practice of cult rituals accomplishment in standard conditions

Level descriptors of transversal skills	**Transversal skills**	**Minimum standards of performance for skill evaluation**
6. Responsible execution of professional tasks in conditions of limited autonomy and qualified assistance.	**CT.1.** Implementation of strategies for rigorous, efficient and responsible work, based on a missionary punctuality and seriousness; canonic, dogmatic and moral-religious principles, norms and values	Elaboration of a project on a specialized subject, applying defining principles, norms and values for the pastoral – missionary activity
7. Familiarization with specific teamwork roles and activities and distribution of tasks for subordinate levels.	**CT.2.** Implementation of efficient teamwork techniques, with different subjects (intra and extra theological), on different hierarchical stages, taking into consideration religious principles	Elaboration of a case study regarding the accomplishment of some essential theological activities, from different levels of pastoral - missionary service
8. Awareness of the need for continuous training; efficient usage of resources and learning methods for personal and professional development.	**CT.3.** Elaboration of an optimizing strategy for continuous professional training by updating learning content, using information technologies and foreign languages	Elaboration and desktop-publishing a synthesis paper on a current subject, using bibliographical sources in Romanian/the teaching language, but also in an international language

studies with their own hands! A simple process to limit this compromising fact has been to ask from the beginning the simultaneous accomplishment of all 3 grids (L-M-D) for each curriculum plan, according to the Frame-Matrix. Then we announced that in the first stage of the project we will mainly focus on 1L Annex, and then on 1 M. As for doctoral studies, the curriculum will be codified in a future project. At the time being, in Romania there are almost 3-4 big European projects designed for doctoral studies (but not regarding skills).

3.3. Correspondence between Grid L_1 (and L_1 bis) and NQF and EQF

The grid for each curriculum (specialization in old terminology) cannot be very different from the National Framework nor from the European Framework, no matter how special we believe our curriculum is. This is when vocational studies peculiarities are emphasized and become less compatible with the Methodology's requirements. But, if we pay attention to these peculiarities, any other field can also present their own peculiarities. Starting from this kind of logic thinking, plastic arts or music faculties can also say that they represent a special segment, which is also valid for medical or engineering studies, etc. Therefore, the relative conceptual unit, based on the harmonization of the 2 matrices (NQF/EQF) and their harmonization with the grids of each curriculum (specializations), offer the opportunity of mobility for young graduates, in the country but also abroad, from one university to another one, between faculties or departments, in educational systems that might be different from ours, but which comply with the same general requirements, by adopting the strategies that created such working tools.

The gained skills of our graduates must be compatible with those of the students from abroad, in order to obtain a job anywhere they are needed, in the nowadays socio- professional context[7].

Under these conditions, the correspondences have represented a source of principles relevant for the experts' team activity. There must be a balance between the skills' "loading" at level L and the other levels M and D, the last ones being developed in a concentric way, in the same parameters of the frame-grid.

3.4. The Terminological Principle of Skills Elaboration

The initial training of DOCIS experts has been the familiarization with the specialized terminology, useful for work tools elaboration process in the case of higher education qualifications. We actually refer, first of all, to the use of essential terms, worldwide used[8]:

qualification = the formal result of the evaluation/ validation process, embodied in an official recognition presented in study papers (diploma, certificate) issued by a competent institution, according to the effective legislation.

teaching results = what a student can recognize, understand and perform; this can be defined in other 3 terms[9]:

a) knowledge = „the result of information assimilation"[10]

b) abilities = „the faculty to use knowledge"

c) skills = „the proven capacity to select, combine and properly use knowledge, abilities and other acquisitions (values and attitudes)" – the last ones have a special role in theological education.

Now I would also like to define the concept of „association", which has upset some of the national university principals: it is the occasional reunion of the representatives from a field/curricula (specializations) – developers (teachers), employers, students, etc – in order to debate problems from specialized fields (it is not an association of three or four universities, and maybe some companies, as it is known in previous higher education developing methods in Romania between 1995 - 2005).

In EQF *responsibility and autonomy*[11] are important and also the skills categories – strictly professional a transversal, which we will discuss later on.

Secondly, we had great problems with the terms' semantics which define skills. There has always been a tendency to elaborate descriptors which reflected learning processes, learning mechanisms or particular manifests of abilities and *not their results* translated into *knowledge*, *skills*, eventually *values* and *attitudes*.

One can easily overlook the fact that the used terms must not reflect the teaching process in development, but its results – measurable, understood and codified by

[7] Of course that we can object that this procedures encourages the exodus of qualified specialists on the expense of the Romanian state budget. It is true, but in fact, nobody is entitled to limit the need of recognition of a young man by professional training isolation. And what if things happen the other way around: specialists trained abroad – foreigners, not Romanians that go for studies – come to occupy key posts, well distributed on the Romanian labor market, where the Romanian educational system proved to be deficient in training adequate personnel. Finally we must take into consideration, in this case, that young Romanian Theologians can serve – as priests, professors, social assistents, ecclesiastical painters, restorers – in buildings and institutions abroad, for the benefit of co-nationals or even for different European etnolinguistic communities etc.

[8] According to Methodology..., pp. 8-9.

[9] Recommendation P. E...., p. 4.

[10] Ibidem.

[11] Ibidem.

the evaluators, either developers (teachers, meaning, no matter what job they have at the university), employers, direct subjects (the students themselves), or any other interested person from the labor market.

There have also been created word lists which we must/ must not use (Iuliana Traşcă lists, comments of Prof. Dr. Dan Potolea).

This constant fight with the „words core" lasted until the last moment, until the grids validation by the Association' members, and some terms that do not correspond to the nature and specificity of the grid, might be discovered at the moment of application in universities. It is possible for the reverse action to happen: universities may formulate terms that do not describe skills, but preceding processes.

3.5. The Logic of the Descriptors' Succession

Another ax of debates regarding the skills' elaboration consisted in repeating their succession on vertical and horizontal line. Strongly connected to the qualifications' harmonization principles with the market demands, and the levels harmonization L/M/D, the C_1, C_2, C_3 skills must follow the hierarchy of possible occupations for a certain curriculum graduates, and $C_{1.1.}$, $C_{1.2.}$, $C_{1.3}$ the skills hierarchy, as they are structured in the Frame-Matrix. It is true that their enumeration from 1 to 8 doesn't mean that one is more important than the other one, but methodologically speaking, an order must exist to ensure coherence and unity of the grids. From this point of view, as well as the Aristotle fundamental logic, a skill such as for example „*problems **identification** from the area of activity of the graduate*" must be placed before „***solving** problems from the area of activity of the graduate"* for the simple reason that one has, first of all, to *identify* a problem and then to search for a *solution*. Nevertheless, we have often noticed such logical inversions, at the end of a work stage, in the case of each of the four grids, and not necessarily with these two terms, but also others which reflect fundamental issues of the skill descriptors. This kind of challenges emerged even in the last stage before the finalization of the version for the MECI, not taking in consideration none of the following: the grids were carefully elaborated, by individuals and by team; their content and version was modified by high professional professors from the faculties of the team's members (deans, professors in chief); the grids were sent to proofreading, completion, revision by developers from national universities and some employers; the grids were analyzed and amended in all the nine regional sessions of training, with colleagues from all national universities, united on geographical areas, in different stages of their collaboration. The credit is granted to the technical office of Acpart, "the clear head" of the grids elaboration process which noticed such deficiencies that "slipped", during the entire development of the project. But, again, it is possible that universities/faculties may still observe such discrepancies of formal logic.

3.6. The Unity Of Transversal Skills

Another series of constraints is the elaboration of codified skills through descriptors 6-7-8, respectively, transversal skills. Given the trans-disciplinary character, generally valid, the process can seem simpler than in the case of strictly professional skills. Practically, any higher studies graduate, level L in this case, must prove teamwork abilities – interaction on horizontal and vertical lines with the ones from their activity, but with any other person, orally and written, in mother tongue and a foreign language; then one must know how to use modern information and communication technology (ICT), to resolve problems and take decisions in the spirit of truth, respect and tolerance towards the diversity and multiculturalism diversity, be aware of the professional improvement need during their life, as we already mentioned previously.

Based on all these principles, generally valid and known by everybody, there have been controversies, dysfunctions, reformulations until the last moment of the grids elaboration. **In the case of theology, vertical relations, meaning hierarchical relations have their specificity. For example, if one must „obey", in what terms such skill can be formulated? We actually talk about tradition and church canons that impose very strict hierarchical relations, based on unconditional obedience towards the authority, often, in more hard conditions than in military hierarchy, reality which cancel the dialogue principle. Regarding ICT, it has been debated the fact that technology is compatible or not with ecclesiastic painting, for example, and on the other hand, if such skills must already be proven by the end of high school studies (level 4). In other words, what is obligatory for T-SA or TT, can be modified in other programs. In communication, they discussed the compulsory foreign language teaching, since theologians are already studying classical languages (Hebrew, Greek, and Latin). The integration of the church in modern society disjoints these problems...** Less debatable were the requirements regarding the need of self-improvement and participation at continuous training stages, organized in different forms.

Anyway, the obligation of finding formulations that correspond, at least in essential terms, to all four-five curriculum plans of Theology, was, as we were saying, another task not as easy as it seemed to be for the team T.

3.7. Compatibility of Curricula in the Specialization

3.7.0. Linked to the transversal skills but even more difficult than these ones were the problems of unity and

coherence of the curricula in the fundamental field and study field. We can say again that the skills grids reveal „interesting" realities (and we deliberately use one again this vague term with euphemistic sense!) of the curricula/domains content from Romanian universities and institutes. Following the domain unity principle has generated four big problems series, which progressively move towards the deepest specificity of the domain – Theology in our case.

3.7.1. At the surface there has been noticed the *difficulty of connecting secular terminology (*psycho-pedagogical, logical, administrative, artistic, linguistic, etc.*) with theological terminology*, given the fact that even the debated concepts come from these big area of objects. Actually, the Theological curricula content was "poured" in an evaluation grid, valid for any other study domain. The following consequences can be easily guessed... But this was the smallest problem; all other fields (engineering, medicine, military) resolved it in one way or another, because the Matrix was designed to allow unity and diversity at the same time.

3.7.2. At the next level is the need of *ensuring coherence between those 5 curriculum plans*. ***In the case of Theology, they are quite different by nature. In fact, only PT and RS are fitting easily in the domain, first – very good, the second – in theory and philosophy. In the case of the other three, it is all about transfers from other domains and adaptations to Theology. Actually, RS proved to be a fitted curriculum in other fields, secular – of Arts, Philosophy, etc. And we have two new delicate aspects resulted from here:***

a) the need of a constant balance between the two elements of each one of these curriculum plans T-SA, TT, SA. On the one hand, may emerge the danger of formulating skills that favor a specialization – social assistance, teaching, Arts (ecclesiastical painting, restoration-preservation, etc.). In this case, developers of those fields (main fields, from an objective view: Sociology, Psycho-pedagogy, Arts!) may notice a trespassing of territory[12]. But this version – of encouraging non-Theological subjects – is less possible in Theology faculties. From our experience (resulted from a quite long coexistence with Theological teaching) we tend to believe that the transfer to the other side will have to wait: wanting to offer a Theological character to these curricula (not to mention other reasons!), the specialized contents are minimum, sometimes just a symbolic representation, so that may justify the curriculum denomination. The rest of it, 70-90% of the curriculum is occupied by strictly theological subjects (Dogmatic, Church History, Christian Doctrine, Missiology, etc.). Even in this case, there is a serious danger for the graduates' socio-professional future, because the unbalance of the contents leads to the unbalance of skills. And grids objectively reflect this aspect. This time, teachers and other responsibility factors (meaning developers from secular faculties, then employers, law representatives) can contest the right of theological graduates to occupy the same jobs, in the public system (social assistant in town halls or institutions that protect unprivileged categories, museum restorers, etc.) (!...). Such mistake has been noticed even in the denomination of a curriculum plan: for social assistants well prepared in Theology, it was denominated "Social Theology", because of the Theological-Managers that wanted to offer a better specificity (and of course for the recognition of this curriculum in Theology) to social assistance practiced within the ecclesiastical mission[13]. The decision resulted completely uninspired, even catastrophic for graduates since the labor legislation for specialized jobs didn't provide the post of "(Social!) Theologian" or something similar to social services, but only the post of "Social Assistant" etc. Consequently, only a few graduates were hired for this post but paid as unqualified employees. Of course that for the ones who were unlucky to be trained in faculties were the distribution of educational subjects followed the mentioned percentage (80% Theology vs. 20% Social Assistance) the employment was not far from the truth! The government decision from 2009 changed the denomination in "Theology – Social Assistance", which satisfied everybody, a sign that the Church always finds resources sent by the Holy Spirit, to adapt modern and secular realities for the use of ... the faithful people.

b) Sometimes, the relation's dynamic "Theology/ Allogeneic specialization" is still much more complicated than liberties which the domain assumes, in the same context of ensuring/ recognition of the curricula specificity. It is the case of "Sacred Art" curricula, recently introduced to Theological faculties structure. Developers of secular faculties of Arts have questioned themselves how much Theology one must know in order to paint icons, churches, sculpt rock or wood for themes or faces of the Bible. Isn't enough a clean faith based upon a good knowledge of the sacred texts, and eventually completed by a post-graduate specialization course? We assume that in Arts – either secular or sacred – talent is fundamental, which they say, in all cases, that it is a "gift from God". The answer of Theological Managers, even of the Ministry of Education and legislated by the Romanian Govern, was: No! An ecclesiastic painter

[12] In this matter we actually have a particular case: the Sacred Arts grids have already been taken by the laic faculties, whose experts had no personal achievements until the last moment. This was possible thanks either to the fact that STE Dumitru Radu discussed with his laic coleagues regarding the technical, artistical aspects, either an ACPART employee has exceeded their attributions and has distributed grids already elaborated, before their validation, to some specialised professors from the Arts domains, thinking that they might help them, even if they weren't asked to do so.

[13] According to GD no. 635/2008.

must study in a systematic and institutionalized system, with specialized professors, the Pastoral Theology subjects: Dogmatic, Church History, Christian Doctrine ... so they have created Sacred Arts "departments" within the Theology faculties. But "Arts", sacred or not, mean more manifestations in the spiritual creation area... Each faculty has filled with contents as they considered best. In most of the universities, they study "Ecclesiastical Painting" and "Restoration - Preservation", considered to be closer to the Church specificity and needs. Secular Faculties from the Plastic Arts Universities represent 2 completely different specializations, because they present two different activities, meanwhile Theological faculties develop under one and the same generic denomination "Sacred Arts". Moreover, there is a national university, where, under the same name – all-embracing – of "Sacred Arts", they study ... "Music" (they say is actually Psalm Music).

These complicated adaptations to the field's specificity have created huge difficulties for the skills grids authors. First of all, it has been voluntarily ignored the fact that, actually, there were developed two curricula (on two groups of students), given the fact that the government decision stipulated just one curriculum officially approved. After many proposed versions, they have come to a compromise, meaning a hybrid grid which entail – on horizontal line – two descriptors regarding Arts in general, according to the curriculum official denomination, two descriptors regarding skills for ecclesiastic painting and other two regarding skills for restoration/preservation. Since the Frame-Grid doesn't provide more than 6 horizontal items (C1, C2,… C6), there was no place left for Musical Arts, curriculum developed in higher educational institution of Theology in Romania, therefore compulsory for inclusion in the grid. For this one, there has been found a saving solution of L1bis Grid, where universities/faculties can add skills corresponding to some important peculiarities of their curriculum (very special subjects, a certain practice stage, etc.). But adaptations didn't stop here. In administrative aspects, a Theology student is grant-aided by State with a smaller amount of money than an Arts student. As a consequence, there were "high interventions" so that Sacred Arts students, even protected by the Theology Faculty, may receive subventions similar with Belle Arte institutes! Again, Holy God sent the good will and the servants use money in the name of His Glory!

Experts that elaborated specialized grids acted with extremely caution at the skills balance, taking in consideration the direct beneficiary of this evaluation – college graduate. It is a sample of the way in which skill grids encourage *student oriented education* and not professors' interests.

3.7.3. The third level – the most profound – of curricula compatibility, results from the formal obligation of proving that these are part of the same domain in a logical, justified way. More precisely, except the three transversal skills, which must correspond, in essential points, with the entire domain, and moreover, be even similar with all other domains, there is the obligation that at least two professional elements be relatively close, comparable, within the domain, so that, the curricula affiliation to the common domain, may be demonstrated.

Actually, the skills of an ecclesiastic painter are other than the ones of a social assistant or a priest. Nevertheless, the affiliation to the common domain, Theology, has provided resources, from the Theological component, to find solutions, even if later on, for these common skills.

We refer to the first two elaborated elements: **C1 – Accomplishment of the faith proliferation mission …,** ***respectively,*** **C2 – Projection and achievement (of some specific activities).** ***The first one could be generalized to all 5 grids, but with debates upon we shall come back. The second one, is common not only in the idea of "projection" but also "achievement"; each grid continued with the specific content of the curriculum: in PT, a graduate must know how to project/elaborate a speech "an argumentative speech, based on sacred texts"; in T-SA, graduates must know how to project/accomplish "social diagnoses from the Theological perspective", and in TT and SA projection regards, obviously, the educational-instructive process, and Arts…***

From this perspective, nobody should wonder about a certain forced elaboration, in specific situations (fortunately it is about maximum two professional common skills). It is an area where improvisation cannot emerge, moreover when in another annexed grid (Annex 2), exclusively elaborated in each faculty, in front of each skill they present subjects that form them, including credits. And this operation reveals more debatable aspects regarding the higher educational contents[14]...

3.7.4. ***Elaboration of valid skills for Theology Faculty graduates of any confession***. Of course that we don't approach the subject of unification of what the dogma doesn't allow! But we cannot elaborate grids for each church! In this situation, we had to measure each written word, by experts meetings at working sessions, by online constant transfer of documents, as well as wide collaboration of partners from different faculties, institutions, etc.

Therefore, from the perspective of Apostolic,

[14] Different denominations of the subjects (sometimes exaggerative) actually represent the same contents, offering the same skills. At a higher level, different curricula prepare students for the same profession. On the other hand, European transferable credits are granted according to strange paradigms (id est, according to moods and interests of the decision factors in the department, faculty, etc. For eg. The subject teached by the dean has more credits than the one teached by a common lecturer, etc.).

Orthodox and Roman-Catholic confessions, C5* – Analysis and Interpretation of Data regarding Cult/ Church History and Religions History, *should have been placed on the first level of skills, according to the well known reason of the need of knowing the past for a better building of the present and future. Even if they received an explanation that the skills order doesn't count, because once established, they have all the same relevance, some of the association participants have opted for this "privileged" position. Protestants and neo-protestants, whose history is much more recent, didn't see this aspect as a very important professional reference point. Obviously, we sustained the idea that more important than the dust of the historical charters is the actual mission of the Church – in a world that becomes more laicized and confused. Eventually, C1 was formulated as the following: "Accomplishment of the faith proliferation mission, in irenical spirit". The last aspect of the phrase was meant to underline the good offices under which the formative Theological act develops, in the name of faith in one God, no matter what the dogma is. Actually, even here there were different positions. In T-SA the last part of the phrase was formulated as: "... in social, pluralist and irenical spirit", meanwhile for all others the term "irenical" was considered enough. Given the obligation of completely unification of at least one of the six skills, we finally opted for this adequate and ample formula.

For totally exceptional cases, when a special skill has to be included, the Methodology stipulates, as we mentioned, the use of a very useful working tool – Annex L1 bis, where there can be added maximum three supplementary skills, enough for an extreme particularization.

4. The Experts' Team

These issues, as many others, that we shall not mention here, have been mainly solved by the experts team that managed to surpass professional and religious training differences: Prof. Lecturer Dr. David Daniel Pestroiu, Orthodox Theology Faculty, Bucharest; Prof. Dr. Isidor Mărtincă, Dean of the Roman-Catholic Faculty, Bucharest; Sister Lecturer Dr. Cristiana Mareş, scientific secretary of the Roman-Catholic Theology Faculty from Bucharest; Conf. Univ. Dr. Alin TAT, Greek-Catholic Theology Faculty, Babeş-Bolyai University from Cluj-Napoca; Brother Prof. Univ. Dr. Ioan Otniel Bunaciu, Dean of the Baptist Theology Faculty, Bucharest University, president of the Baptist Union from Romania, vicepresident of the Baptist Union from Europe; Conf. Univ. Dr. Dumitru RADU, professor in chief of Sacred Arts, from the Orthodox Theology Faculty, Bucharest.

Together we designed not only a skills grid for students, but also a real ecumenical model. Of course that there have been many different opinions and hard debates, but this happens in any working team. With professionalism, seriousness and dedication, the team's members have encouraged harmony, truth spirit and love for their pastoral mission and theological education.

5. Conclusions

Principles and conformism of the grid, resulted from our presentation, are in balance with *flexibility and reach information* that offer these grids, as we have tried to suggest in a few lines, during this presentation. They represent an objective and global image of the Romanian educational system, structured on fields of activity and curricula, before being considered some evaluation tools of the general training level of our college graduates.

They seem some dried sketches, similar with statistic tables, maybe filled with words – more or less comprehensible, but which are actually creating a live image of the teaching results.

For limit-situations, for some institutions specificity, incompatible with the desired unit, as well as for further knowledge of the relations between what developers declare they do and what they actually perform, the so-called grids (L1, M1, D1) receive other working tools such as grid L1 bis, L2, etc.

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PREPARATION OF PAPERS IN TWO COLUMNS FORMAT FOR THE EUROPEAN JOURNAL OF QUALIFICATIONS FRAMEWORKS

John SMITH[1], Daniel DEAN[2], Michelle BROWN[3]

Abstract *— All full papers must include an Abstract. The Abstract and Key words text should be 10 pt. Times New Roman italic, full justified and contained without one paragraph. Begin the Abstract with the word Abstract - in Times New Roman italic Bold text, only the word Abstract should be bold. Do not indent. Use a long dash after the words "Abstract" and "Index Terms". Do not cite references in the abstract. The abstract should be maximum 15 rows. The abstract has to be in English.*

Key words *— About four, alphabetical order, key words or phrases, separated by commas.*

PAGE LAYOUT

These instructions serve as a template for Microsoft Word, and give you the basic guidelines for preparing camera-ready papers for the European Journal of Qualifications Framework, published inside of the HEQ_Bridges project. Please follow the instructions provided in this format to ensure legibility and uniformity. The guidelines are designed to reduce the amount of white space and maximize the amount of text that can be placed on one page.

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Information for each author such as department or college or university will be listed as footnote, left centred, Times New Roman, 9 pt.

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Do not abbreviate "Table"; use Roman numerals to number tables Use the following format guidelines for Figures and Tables:

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- Leave one blank line above and below each Table or Figure.
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Table I and Figure 1 give examples of the Table and Figure formatting. Avoid placing figures and tables before their first mention in the text. When inserting figures or tables be sure you insert the figure and not just a link to the figure. The best way to make sure you are doing this correctly is to save your paper to a floppy disk then open the file on a different machine and make sure all your figures are correct. If you insert the link instead of the figure or table, a box with a big red x will appear in the location where the table or figure is supposed to be located.

TABLE I
POINT SIZES AND TYPE STYLES

Points	Place of Text	Type Styles
10	Table number	ROMAN NUMERALS
10	Figure and Table Headings	UPPERCASE
9	Figure and Table Captions	SMALL CAPS
9	Reference list	
10	Abstract and Key words	Bold
12	Section Titles	Italics
10	Main Text and Equations	SMALL CAPS, BOLD
10	Subheadings	
12	Authors' names	Bold
14	Title	Italics UPPERCASE, Bold

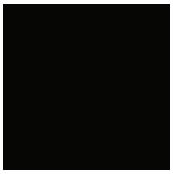

FIGURE. 1
OLD LOGO

ACKNOWLEDGEMENT

If any, place before the references.

REFERENCES

Place references in separate section at the end of the document, do not footnote references. Refer simply to the reference number, as [3] or [5]-[8]. Do not use "Ref. [3]" or "reference [3]" except at the beginning of sentence: "Reference [3] shows….". Provide up to five authors' names; replace the others by "*et al*." Do not put figures or anything else after the references.

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[1] Author's Last name, First initial, Middle initial, "Title", *Journal or book (italics),* Vol, No #., date, pp.

[2] Author's Last name, First initial, Middle initial, "Title", *Journal or book (italics),* Vol, No #., date, pp.

[3] Author´s Last name, ….

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A presentation of the authors must be mentioned at the end of the article and must not exceed 10 lignes. Times New Roman, 12 points, Italic, right centred.

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