

TERMINOLOGY MANAGER, INNOVATION MANAGER, E-LEARNING MANAGER: HOW THE EUROPEAN CERTIFICATION AND QUALIFICATION ASSOCIATION ECQA CERTIFIES NEW JOB ROLES AND COMPETENCES IN KNOWLEDGE-RICH PROFESSIONS.

Gabriele SAUBERER

TermNet - International Network for Terminology
Mooslackengasse 17, Vienna, 1190, Austria

ABSTRACT

The paper will introduce the harmonized ECQA certification for new professions and professional qualifications by presenting some of the most relevant professions for knowledge generation, communication and management, such as the Terminology Manager, the Innovation Manager and the E-Learning Manager. It will also show the pedagogical model and learning cycle of all ECQA certified professions.

Keywords: Terminology, Knowledge Engineering and Communication Management, International Network for Terminology, European Certification and Qualification Association ECQA, Innovation, E-Learning

WHAT IS ECQA?

ECQA stands for “European Certification and Qualification Association” and is a non-for-profit organization headquartered in Krems, Austria.

The main objective of ECQA is to act as platform for the certification and accreditation of new job roles (professions), training providers and examination bodies within the large network of its members and co-operation partners.

Members of ECQA are companies, universities and organizations mainly from European countries, but also from the US (James Madison University, Virginia), Russia (Institution of the Russian Academy of Sciences Geophysical center of RAS) or international networks, such as the International Software Quality Institute (iSQI) or the International Network for Terminology (TermNet) [1]

As a matter of fact, ECQA is the result of a number of European Union (EU) supported initiatives in the last ten years: Within its Life Long Learning Programme (LLP), the EU decided to follow and to foster a joint process for the certification of persons.

EU PROJECTS THAT HELPED BUILDING THE ECQA PLATFORM AND STRATEGY:

- FP5 Project MM 1032 CREDIT: Development of skills portals, skills assessment functions, standards for skills sets in Europe (1998-2001);
- E-Learning Project EPI: Development of new learning methods and portals integrating e-learning with skills assessment (2003-2005).
- E-Learning Project PLATO: Application of EPI portals to new ways of certification delivery between universities and industry in placement schema (2006-2007).
- LLP project EQN: Design of Europe-wide valid quality criteria to empower a Europe-wide quality control in course delivery and certification for courses in the LLP schema. These guidelines formed the basis to form the ECQA association legally with defined quality and certification guidelines (2005 - 2007).
- LLP multilateral project EU Cert Campus: An online training campus has been established supporting skills assessment, online training, certification and a trainer pool (2008 - 2009).

- LLP multilateral project DEUCert: Dissemination of ECQA and the EU Cert Campus takes place in all European countries and regional certification centers are being set up (2010 - 2011).

Source: <http://www.ecqa.org/index.php?id=222>

WHAT IS ECQA DOING?

ECQA organizes the Certification of Persons in leading and innovative sectors and industries in Europe and beyond: ECQA brings together the experts from industry and research and supports the development of the knowledge required for these professions, represented and defined in “skills sets”. ECQA defines and verifies quality criteria for training organizations and trainers to assure the same level of training all over the world.

As a result, ECQA provides a unified certification scheme for numerous professions, such as ECQA Certified E-Learning Manager, Innovation Manager, IT Security Manager, Integrated Design Engineer, Information and Communication Engineer, Terminology Manager, etc.

Thousands of professionals and managers have been certified so far by ECQA – and the number of professions and professional qualifications is growing: there are ECQA Certified Diversity Managers and CSR Managers in the pipe line, and an ECQA Certified Researcher-Entrepreneur coming soon. [2]

Supported by industry representatives, universities and training organizations from all over Europe and abroad, the ECQA activities resulted in a pool of professions in which a high level of European comparability has been achieved by a Europe wide agreed syllabus and skills set, a test questions pool and European exam (computer automated by portals) systems, and a common set of certificate levels together with a common process to issue certificates. The Rules and Process Steps for Certification of Job Roles are described in details in the “ECQA Guide” [3]

WHY ECQA IS DOING THIS?

In a common European market, work forces are flexible and need to work for industries across Europe. In this environment, EU-wide recognized certificates are a real benefit for all parties involved. The recognition by certifiers and training providers in all European countries including large countries like France, Germany, Italy, Spain, Scandinavian and Eastern European countries, etc., leads to better job and business opportunities in European and global markets. ECQA follows the success story of the European Computer Driving Licence (ECDL):

In 1995, the Council of European Professional Informatics Societies (CEPIS) created a task force, supported by the European Commission through the ESPRIT research programme, to examine how to raise the levels of digital literacy throughout Europe. The new certification programme was launched as the European Computer Driving Licence (ECDL) in Sweden in August 1996.

In 2009, ECDL has over 9 Million Candidates in 148 Countries. The ECDL Foundation continues to work with its nationally appointed operators to extend the reach of its certification programmes through an

international network of approximately 24,000 Test Centres spanning 148 countries. [4]

HOW DOES ECQA WORK?

The methodological framework of ECQA is based on a skill card strategy and the success factors of a modern learning organization [5] [6] [9].

Skill Card Strategy

In Europe, a common set of skill sets is needed due to the free mobility of workers and students.

European countries such as UK, The Netherlands, and France have already well-established open universities, which support Accreditation of Prior Learning (APL). In APL the skills of students are assessed, already gained skills are recognised, and only for the skill gaps a learning plan is established. The skill assessment bases on defined skill units and a skill profile displaying how much of the skill units are covered. [7]

ECQA followed this approach, adopted the skill card strategy and supports the European Educational Strategies.

This strategy requires:

- A standard way to describe a skill set for a profession, job, or specific task.
- A standard procedure to assess the skill and to calculate and display skill profiles. [7]

Skills Definition Model

The ECQA skill sets are based on the skills definition proposed by the Department of Trade and Industry in the UK for the National Vocational Qualification standards. [8]

A skills definition contains the following items (see Figure 1):

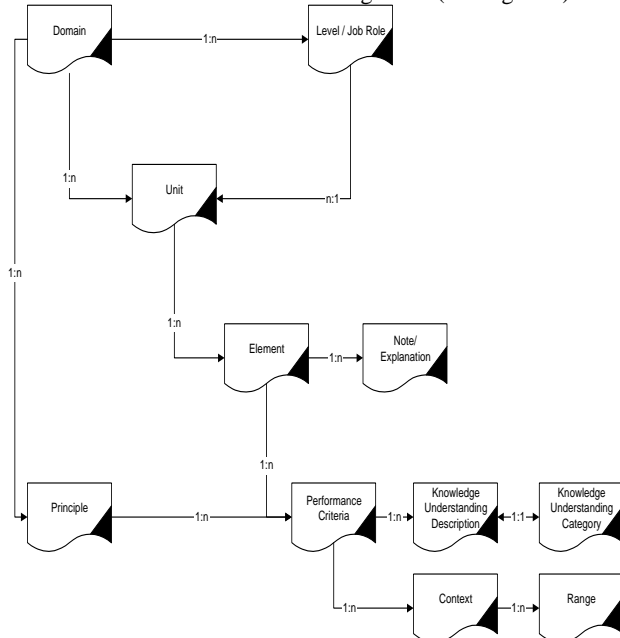


Figure 1: The Skill Definition Model (1:n = one to many relationship) [7]

To better understand the examples of ECQA skill cards given below, the most relevant terms used in this model are the following:

Domain: An occupational category; e.g. childcare, first level management or software engineering.

Job Role: A certain profession that covers part of the domain knowledge. E.g. domain = Terminology, job role = ECQA Certified Terminology Manager_Basic

Unit: A list of certain activities that have to be carried out in the workplace. It is the top-level skill in the UK qualification

standard hierarchy and each unit consists of a number of elements

Element: Description of one distinct aspect of the work performed by a worker, either a specific task that the worker has to do or a specific way of working. Each element consists of a number of performance criteria. Note

Performance criterion: Description of the minimum level of performance a participant must demonstrate in order to be assessed as competent. A performance criterion may have relevant contexts

Skills Assessment Model

The ECQA assessment model contains the following 7 steps [7]:



Figure 2: The Skills Assessment Model [7]

Step 1 – Browse a Skills Set: You select a set of skills or competencies, which are required by your profession or job using national standards or your company standards. You browse different skills cards and select a job role you would like to achieve.

Step 2 – Register for Self-Assessment with a Service Unit: This can be a service unit inside your own company (e.g. a personnel development department) or a skills card and assessment provider outside your company, which offers skills assessment services. In case of the Innovation Manager Project the registration will automatically assign a predefined service unit.

Step 3 – Receive an Account for Self-Assessment and Evidence Collection: With the registration you automatically received an account to login to the working space in which you can go through the steps of online self assessment and the collection of evidences to prove that you are capable of certain performance criteria.

Step 4 – Perform Self-Assessment: You log into the system, browse through the skills required and self assess performance criteria, whole elements or whole units with a standard evaluation scale of non-applicable, not adequate, partially adequate, largely adequate, and fully adequate. A skills gaps profile can be generated and printed illustrating in which areas your self-assessment shows improvement potentials.

The system provides a multiple-choice test for each performance criteria so that you can check your capabilities as realistically as possible.

Step 5 – Collect Evidences: Before you want to enter any formal assessment you need to prove your skills by evidences. Evidences can be any electronic files (sample documents,

sample graphics, results of some analysis, etc.) or any references with details (e.g. a certificate received from a certain institution). Evidences you can then link to specific performance criteria or whole elements of skills units.

Step 6 – Receive Formal Assessment: Formal assessors are assigned by the service unit to the skills assessment. Once formal assessors log into the system they automatically see all assigned assessments. They select the corresponding one and can see the uploaded evidences. They then formally assess the evidences and assess the formal fulfilment of performance criteria, whole elements or whole units with a standard evaluation scale of non-applicable, not adequate, partially adequate, largely adequate, and fully adequate. In case of missing competencies they enter improvement recommendations, a well as learning options.

Step 7 – Receive Advise on Learning / Improvement Options: After the formal assessment the participants log into the system and can see the formal assessment results from the assessors, can print skills gaps profiles based on the assessor results, and can receive and print the improvement recommendations and learning options. If required, the generation of learning options can also be automated through the system (independent from assessor advises).

The ECQA Learning Cycle

The pedagogical model and learning cycle of all ECQA certified professions is illustrated in the figure below:

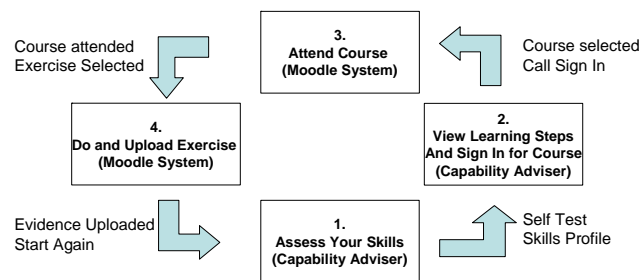


Figure 3: The Pedagogical Model and Learning Cycle of ECQA [6]

1. Participants (Learners) log into the Capability Adviser, a web based assessment portal system [10], browse the skills tree, assess their skills against performance criteria, upload evidences to prove their skills, and print a skills profile
2. Participants (Learners) select the “Learning Steps” option the Capability Adviser, access recommended learning references, and can call “Sign In” to log into courses on the Moodle web based training server system.
3. Users (Learners) on the Moodle System attend the courses, perform exercises, upload results of their homework, and receive feedback from the trainer.
4. Users (Learners) switch to the Capability Adviser window or log into Capability adviser as participant and upload their homework results as evidence into the system to prove their competence.

The Learning Management System Moodle is used in combination with the Capability Adviser Platform, allowing trainees and interested professionals to browse and perform a self assessment on the content of the various job roles, such as Terminology and Innovation Manager.

ECQA CERTIFIED INNOVATION MANAGER

In 2005, an international standard for process innovation (ISO 15504) has been released, and the industry sector of automotive

and systems engineering issued a request to all suppliers for implementation of ISO 15504 and innovation principles.

At the same time, an international project co-financed by the European Commission, came up with a detailed and practice oriented skills set of the innovation manager profession (product innovation, process innovation, market innovation) with guidance, courses, and assessment functions.

The training is based on assignments, active elaborations by the course participants, and discussions. All course participants create a learning organization concept for their company or organization. This is the main outcome of the course. The course emphasizes the following exercises [11]:

- Analysis of core competencies and learning cycles
- Analysis of distributed learning teams
- Definition of innovation processes, which are adapted to learning organizations
- Analysis of cultural differences and their impact on the innovation processes
- Analysis of the required technology infrastructure
- Design of a convincing concept presentation to the top management

The main strength of this job qualification which can also be done as blended learning course is its focus on the realities of modern knowledge societies: highly multi-cultural and diverse working teams and learning environments.

The same applies for many other innovative job roles of ECQA, such as the ECQA Certified Integrated Design Engineer [12]:

Due to the involvement of many different experts, Integrated Product Design can only be done in teams, which are inherently heterogeneous and also increasingly international. Although design tools support this collaborative work increasingly better, Integrated Design Engineers need to have skills that go beyond tool operation in order to be successful collaborative engineering tasks. We list below the ones that we will focus on in the development of the Integrated Design Engineer’s profile:

1. Teamworking skills,
2. Intercultural skills,
3. Knowledge Management,
4. Knowledge Capitalisation,
5. Knowledge Sharing [12]

For detailed information and registration for ECQA Certified Innovation Manager Courses please refer to: <http://www.ecqa.org/index.php?id=33>

ECQA CERTIFIED TERMINOLOGY MANAGER

In the globalised knowledge and information societies, specialised language has become a prerequisite of any kind of efficient and effective communication, management and inter-operability of technical systems and methodologies.

Terminology and terminology management build an integral, quality-assuring part of the end products, services and tools in the fields of

- information & communication,
- classification & categorisation,
- translation & localisation.

The new job profile "ECQA Certified Terminology Manager - Basic" combines and bundles the various competences of professionals active in these areas.

Main target groups of the ECQA Certified Terminology Manager qualification are professionals who work as

- Information & Communication Engineers,
- E-Business and ICT specialists
- Translators, Localizers and in Technical Documentation

The Skills Hierarchy for the Job Role “ECQA Certified Terminology Manager_ BASIC” contains 6 Units with a maximum of 5 learning elements per unit, developed by TermNet and the Job role committee of the ECQA Certified Terminology Manager_Basic:

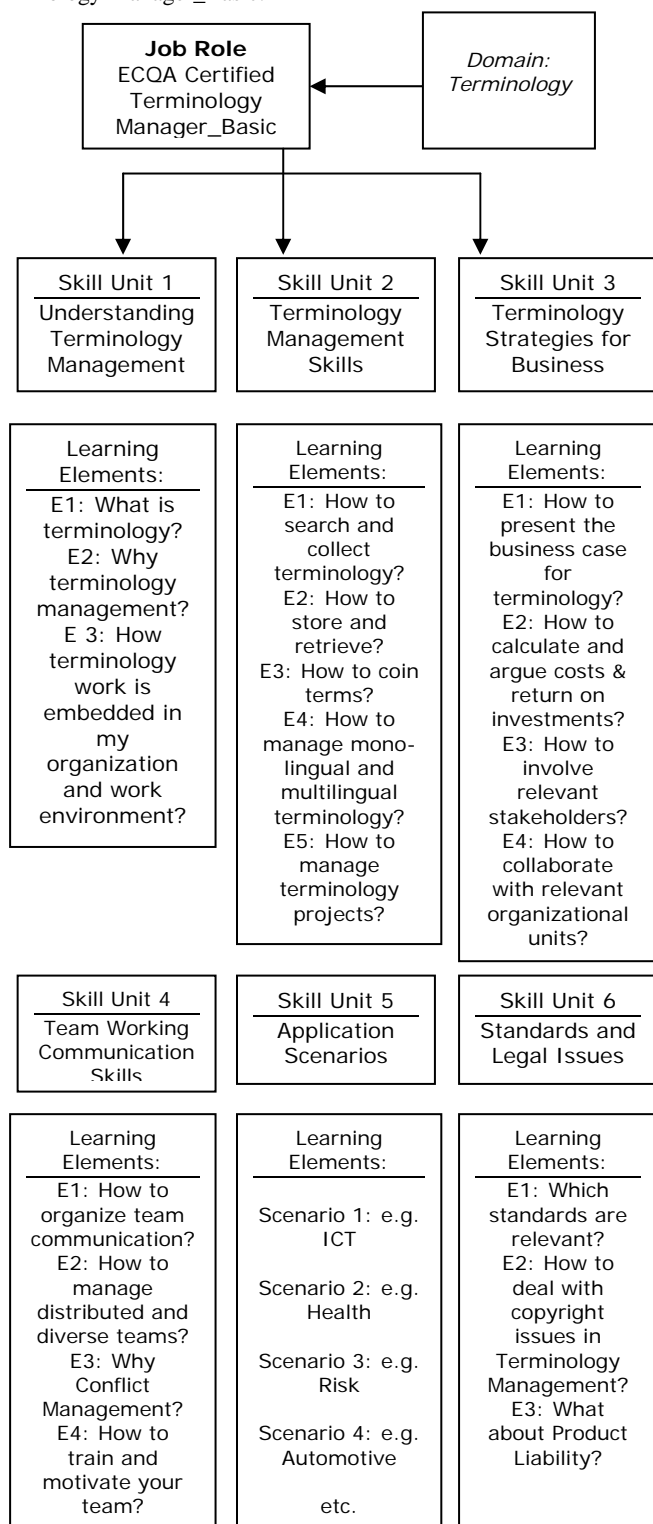


Figure 4: Skill Units 1 to 6 of the “ECQA Certified Terminology Manager_ BASIC”

For information and registration for ECQA Certified Terminology Manager Courses please refer to:

http://www.termnet.org/english/products_service/ecqa_ctm-basic/index.php and <http://www.ecqa.org/index.php?id=52>



E-LEARNING MANAGER

The ECQA Certified E-Learning Manager has been developed in a context where e-learning has become the most successful educational technology of all time, reaching into all aspects of traditional education and training but where no specific Europe-wide accreditation existed either for those charged with implementing e-learning solutions in their professional working lives or those who hold it as their profession to specifically manager e-learning teams and developers. The skill card is divided into 3 main units:

1. Pedagogy
2. Technology
3. Management

The following figure gives an example of the a skill unit with learning elements of the ECQA Certified E-Learning Manager:

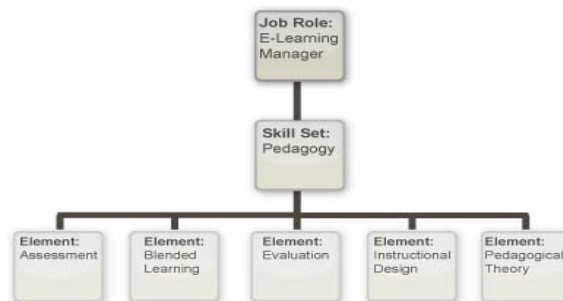


Figure 5: Skill Unit “Pedagogy” of the ECQA Certified E-Learning Manager

The ECQA Certified E-Learning Manager has been developed within an EU funded project. For more detailed information about the project please visit <http://deis.ie/elm>. Training opportunities will be launched soon, please refer to <http://www.ecqa.org/index.php?id=49>.

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