

A Proposed Approach for Professional Training Programmes Design

Diana Florina

Politehnica University Timisoara, Romania
diana.robescu@student.upt.ro

Anca Draghici

Politehnica University Timisoara, Romania
anca.draghici@upt.ro

Stephanie Reiner

SoWiBeFo e. V., Germany
reiner@sowibefo-regensburg.de

Abstract

The paper aims to describe a scientific approach for designing professional training programmes by providing solutions for establishing the qualification framework also known as the skill card. The conducted research was based on an inductive approach of a qualitative nature based on authors experience in designing training program. In the first part, some case studies will be presented and an inventory of skill cards solutions and approaches for designing professional and vocational educational training programs will be defined. This will create the basis of the induction process for designing the skill card (through an already tested and validated approach) and which offer a complete overview of the training program design and support its efficient and effective implementation (could be measured using the predefined performance criteria per each training element). In the final part of the article, will be presented the conclusions of the research.

Keywords: Human resources, training and development, competences, training programmes, skill card, inductive approach

INTRODUCTION

The design of professional training programs is a complex approach in which numerous stakeholders are involved: trainers, trainees, human resources managers, financiers, consultants, employees, and employers, etc. The efficiency and effectiveness of these programs can be measured immediately after completing the training process, but the long-term impact and effects are reflected in the motivation of employees, their promotion, and the development of their professional careers (Mikołajczyk, 2022).

The development process of human resources (HR) is designed to shape and equip employees (trainees) by updating their skills and competences, up-skilling their abilities, knowledge but most by positive affecting their professional performances and behaviour for shaping a culture of lifelong and vocational individual development (this encourages learning, teaching, and re-learning during the whole professional life) (Mikołajczyk, 2022). Consequently, employees' professional life is expected to be improved and much satisfying (Aruldoss et al., 2022) because of their work processes that can be developed effectively and quickly (Ichsan, 2020). "Employees are expected to take more responsibility for enhancing current skills and adding new ones to meet current job demands, prepare for leadership opportunities and ensure their own employability to move and adapt within and between organizations as needed" (Mikołajczyk, 2022). Such behaviour is expected from employers, being supported by innovative training programs, with immediate impact and particularly effective (e.g., online education, the creation of learning communities or the implementation of mentoring, coaching or buddy systems) (Juraev, 2022). This dynamic of the professional training activity was determined by the context of the dynamic environment in which organizations currently operate, the acceleration of digital transformation in all economic fields, the intensification of migration flows in Europe, global conflicts, as well as the current COVID-19 pandemic, the crisis, and the economic recession. Organizations are facing with many changes and uncertainty that are faster than before and has a global reach. Thus, the radical transformations of HR approaches, and the training, learning and development activities are still in the process. There have been seen that the Covid-19 pandemic situation has act as a disruptor redefined the area of learning and development in organisations (Gartner Report, 2020; Raheja, 2021). Development in companies is a topic more important than ever today. The time of radical changes means the need to re-evaluate beliefs, attitudes and redefine the required competences. Radical changes require the need to reassess beliefs, attitudes and redefine the necessary professional skills. Thus, it was found that the roles of general managers, leaders, HR managers and those responsible for the employees' training, learning and development were completely redefined (Mikołajczyk, 2022). In the specialized literature, in the practice of organizations and in the reports and studies of consultants, the importance of employee development through well-founded training programs is recognized, but a coherent, generally valid approach that ensures guaranteed success is still under debate.

In this context, the main purpose of this research is to identify a coherent approach for the skill card definition for a described professional job role, for using it in a certification approach and world-wide recognition of the skills and competences. The paper aims to describe a scientific approach for designing professional training programmes (for a specific target group of trainees) by providing solutions for establishing the qualification framework also known as the training skill card. The present paper is structured as follows. In the first part, some case studies will be presented and an inventory of skill cards solutions and approaches for designing professional and vocational educational training programs will be defined. This will create the basis of the induction process for designing the skill card (through an already tested and validated approach) and which offer a complete overview of the training program design and support its efficient and effective implementation (could be measured using the predefined performance criteria per each training element). In the final part of the article, will be presented the conclusions of the research.

THE EUROPEAN REFERENCE

Current trends regarding the design of professional training programs are influenced by national and European policies. So, the European Skills Agenda has been developed for 2020 - 2025 to support

individuals and organizations in the competences management field: develop better their need skills, exploit better the existing or developed skills and competence, plan and. This agenda has taken into consideration: the sustainable competitiveness, as set out in the European Green Deal (2019); the social fairness as defined by the first principle of the European Pillar of Social Rights (2021): “access to education, training and lifelong learning for everybody, everywhere in the European Union”; building resilience to react to crises, based on the lessons learnt during the COVID-19 pandemic (European Commission, 2020).

During the pandemic crisis, the New Skills Agenda have set objectives for “up-skilling (improving existing skills) and re-skilling (new skills development through training and development programmes) for the next five years”. The new initiative from 2020 consists of 12 actions focus on skills for jobs, companies, and social partners to work together for change, by empowering people to embark on lifelong learning, and by using the EU budget as a catalyst to unlock public and private investment in people’s skills” (European Commission, 2020). A great interest is given to green and digital skills development. In addition, the transferability and recognition of the update and news skills (certified by some accredited, recognized body) is of great concerned and important steps have been done by the Europass, European Education Area (EEA), European Qualifications Framework (EQF), the European Key Competences Framework, and the European Credit Transfer and Accumulation System (ECTS) and European credit system for vocational education and training (ECVET).

SKILL CARD DESIGN – A COLLECTION OF CASE STUDIES

The adopted research approach is an inductive one, which considers our experience in the development of various professional training programs within European projects. Below is a set of 5 case studies (from 2010 - 2023) associated with our involvement in international consortia for the development of professional skills associated with job roles/titles.

CertiBPM skill card

The first case refers to the Certified Business Process Manager project (Leonardo da Vinci Programme, 2010-1-RO1-LEO05-07445) implementation with the support of an international consortium of five partners from Romania (one university and one company), Slovenia (two companies), Austria (a company) and (CertiBPM, 2009). The created training and certification program has been a result of several transfer of innovation processes between different partners; CertiBPM qualification and certification schema address to employees from different companies' departments as: quality management, customer relationship management, enterprise resource planning, supply chain management, and enterprise information system’s specialists, etc. who want to complement and/or certify their developed and trained BPM skills. The CertiBPM training materials were elaborated following the European Certification and Qualification Association schema (ECQA, 2022). The original training programme and materials have been developed through the collaborative work the project partners (from 2011 to 2012) and were translated in Romanian, Slovenian and German languages. The core of the CertiBPM training and certification programme was the skill card (Table 1) related to the Business Process Manager job role. The training and certification have been provided face-to-face and on-line using the ECQA e-learning system (Moodle platform); a pool of questions was used to provide online tests for the trainees’ certification process.

LeadSUS skill card

The second case study refers to the LeadSUS - Leadership in Sustainability – Sustainable Manager (LLP-LdV/TOI/2013/RO/022) project implementation with the support of an international consortium of six partners from Romania (one university and one company), Slovenia (a company), Austria (a company), Belgium (an association) and France (a university) (Draghici, 2019). LeadSUS project's goal was to develop and provide a training and certification program (provided (in class and/or on-line), under the ECQA umbrella, to enrich the sustainable development skills and competences of different type of managers and specialists from quality assurance, product design, logistics departments, (LeadSUS, 2013). The core of the LeadSUS training and certification programme was the skill card (Table 1) related to the Leadership in Sustainability – Sustainable Manager job role. For all the skill elements, training material were provided in several languages (English, Romanian, French) and were available on-line via the ECQA e-learning system (Moodle platform). The training materials are available as open education resources (OERs) after the trainee is registered in the e-learning system. A created pool of test questions has provided the basis for the trainees' certification process (Draghici, 2019).

TeachSUS skill card

TeachSUS project was implemented by an international partnership consisting of two universities and a company from Romania, a company from Slovene, a company from Hungary and an association from Portugal (TeachSUS, 2018). The objective of the TeachSUS non-formal education structure was to develop sustainable development skills and competence, to enable institution and organizations involved in education and adult training, professional development from all over Europe to develop and evaluate alternative visions of a sustainable future and to work creatively with major stakeholders from economic sector to assure the practical link between education for sustainability and real economy and the community needs" (Draghici, 2019). TeachSUS training programme was developed based on the designed skill card (Table 1), which fit the competencies required for teaching and educating sustainable development; the training materials have been provided in English, Romanian, France and Slovenian languages and they are available on-line (using the facilities of the e-learning system associated to the Sustainable Excellence Center in Romania and on the project web page). The training materials are available as OERs on the project web page in the digital library section. A pool of test questions was defined, which provides the basis for the trainees' examination process.

MUST skill card

MUST project (Multimedia Competencies for University Staff to Empower University-Community Collaborations, 2020–1-RO01-KA203-080399) aims to develop and implement an innovative blended curriculum and training program dedicated to university staff to support their multimedia skills development; these refer to the design and use of digital technologies in creative, collaborative, efficient ways to better facilitate teaching-training-learning-assessment process of Millennials, Generation Z and future Generation Alpha students or for other actors in universities' community (vocational education for lifelong learning) (Draghici, 2021). MUST training programme support the ideas as: "visual media within a transmedia strategy make learning independent of time, allow for repeating the content as needed and can be designed to promote language proficiency, digital skills, a sense of initiative and self-efficacy at the same time" (Draghici, 2021). MUST project is developed in an international consortium consist of five universities from Romania, Slovenia, North Macedonia, Lithuania and Spain, a

non-governmental organization from Germany and a company from Portugal. MUST skill card (Table 1) was designed by analysing, filtering and integrating information from: a survey based on a questionnaire of the training needs assessment (done in 2020); the European frameworks as the OpenEdu Framework, and the DigCompEdu framework for the Digital Competence of Educators; the provided studies of university partners' capacity to support multimedia competences development. The created skill card was transferred accurate in the MOOC-based training curricula and the training programme available in English and all partners' national languages; the OERs support the trainings process which is available to be implemented face-to-face and online (see the Free Tools on <https://mustproject.eu/>) (Draghici et al., 2023).

RespectNET skill card

The case study of RespectNET project (2021) refers to a designed approach aiming to develop a training programme for university staff being civil society activists; the project calls for educational literacy confined to the acquisition of skills and the development of a critical structure for understanding social, economic, and communication contexts. The RespectNET training program is developed by an international consortium of four partners: a university from Italy; a school of business from Slovenia; a university from Romania and a company from Germany which have agreed to collaborate and share their knowledge and experiences to create an innovative content as OERs for training. The training program structure has been developed after the definition of the RespectNET matrix of competence, a 4x4 shape matrix, which has been the result of several collaborative research activities developed by the RespectNET partners: collection of best practices and debates during several focus groups, literature review and identification of relevant approaches; empirical study based on a designed questionnaire (RespectNET, 2021). Finally, the complete description matrix of competence will be exploited in the development of RespectNET training programme for the course modules design. Furthermore, this has been designed considering courses and associated lessons; for each lesson has been defined important topics to be address, learning objectives and outcomes, and two templates for providing presentations and additional explanations. Training sessions are and will be provided face-to-face and online (using Zoom and the created e-learning facilities, Moodle platform).

SYNTHESIS OF THE CASE STUDIES

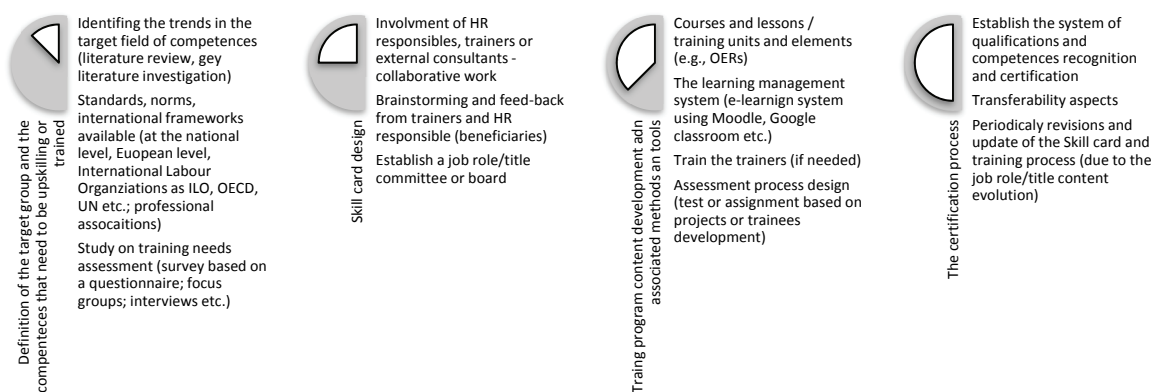
For the application of the induction method, and the identification through generalization, of an approach to establishing a skill card, we resorted to the centralization of case studies and their characterization by means of elements of interest. It should be mentioned that these case studies are not from the same time (the research describe skill card approaches since 2010), and that they also demonstrate the evolution of some reference elements of the sought approach. As a result, the generalization will consider the dynamics of the "space" for acquiring a qualification or developing competences through professional training programs. In Table 1 is presented the synthesis of the case studies, with relevant information about how different the professional training programmes have been designed. Figure 1 presents the proposed design approach without going into procedural or specific details for a job role/title year. A linear approach was preferred, although in the design practice of professional training programs there are numerous feedbacks between the proposed stages, and which have the role of refining and synchronizing the approach terminologically and procedurally.

Table 1: Synthesis of the case studies – description of skill cards related to training and certification programmes design.

Research results, guidelines, framework, standard followed in the design process	No. of training units	No. of training elements	Certification levels Other details
CertiBPM - Certified Business Process Manager (LLP-LdV-ToI, 2010-1-RO1-LEO05-07445)			
Business Process Manager Job Role/Title			
<ul style="list-style-type: none"> - Results of a research regarding the training needs assessment with a consistent sample of the target group - ECQA guidelines (ECQA, 2022). - ISO/IEC 17024 Conformity Assessment – General requirements for bodies operating certification of person - ISO 9000 Quality Management Systems - Guidelines for Lifelong Learning - Leonardo da Vinci projects implementation (2010 version) 	4	16	<ul style="list-style-type: none"> - 2 certification levels: basic and advance; - The training program is accredited by ECQA (partners organizations are ECQA accredited training providers); - Qualification and certifications are given by ECQA (Draghici et al., 2014); - CertiBPM job role is accredited by ECAQ
LeadSUS - Leadership in Sustainability – Sustainable Manager (LLP-LdV/TOI/2013/RO/022)			
Leadership in Sustainability – Sustainable Manager Job Role/Title			
<ul style="list-style-type: none"> - Results of a research regarding the training needs assessment with a consistent sample of the target group - ECQA guidelines (ECQA, 2022). - ISO/IEC 17024 Conformity Assessment – General requirements for bodies operating certification of person - ISO 9000 Quality Management Systems - Guidelines for Lifelong Learning - Leonardo da Vinci projects implementation (2013 version), Transfer of Innovation 	6	21	<ul style="list-style-type: none"> - 2 certification levels: basic and advance; - The training program is accredited by ECQA (partners organizations are ECQA accredited training providers); - Qualification and certifications are given by ECQA (Draghici, 2019).
TeachSUS - Teaching and educating for Sustainability (2018-1-R001-KA204-049253)			
Extend and update the sustainable development competence of teaching staff			
<ul style="list-style-type: none"> - Results of a research regarding the training needs assessment with a consistent sample of the target group - ISO 9000 Quality Management Systems - Guidelines of ERASMUS+, KA2 - Cooperation for Innovation and the Exchange of Good Practices, KA204 – Strategic Partnerships for adult education 	6	22	<ul style="list-style-type: none"> - 2 certification levels: basic and advance; - Qualification and certifications are given by organizations partners in the project (Draghici, 2019).
MUST - Multimedia Competencies for University Staff to Empower University-Community Collaborations (2020–1-RO01-KA203-080399)			
<ul style="list-style-type: none"> - Extend and update the media, multimedia skills and competence of higher education institutions staff - DigiCoach Job Role/Title, which correspond to the occupation 2166 - Graphic and multimedia designers as defined by the International Standard Classification of Occupations 8 (ISCO 8) 			
<ul style="list-style-type: none"> - Results of a research regarding the training needs assessment with a consistent sample of the target group - Filtering and analysis of three European frameworks (DigCompEdu, OpenEdu) 	5 courses	20 lessons	<ul style="list-style-type: none"> - 2 levels of training programmes: theoretical and applicative/demonstrative; - Qualification and certifications are given by organizations’ partners in the project, as an

<ul style="list-style-type: none"> - European Commission Digital Education Action Plan - Guidelines for Erasmus+ projects implementation (version from 2018) 			internal/external service (Draghici et al., 2023).
RespectNET RespectNET - Respectful Communication through Media Education Network (2021-1-IT02-KA220-HED-000027578) (Extend and update the media and communication competence of higher education institutions staff)			
<ul style="list-style-type: none"> - Definition of the matrix of competence - Filtering and analysis of three European frameworks (DigCompEdu, OpenEdu, Competences for Democratic Culture) - European Commission Digital Education Action Plan - Guidelines for Erasmus+ projects implementation (version from 2021) 	4 courses	13 lessons (with 26 planned outcomes)	Qualification and certifications are given by the organizations' partners in the project, as an additional internal/external training

Picture 1: The proposed approach for the professional training programmes design



CONCLUSIONS AND FINAL REMARKS

In conclusion, it can be observed that the induction process (research methodology) led to the development of an appropriate methodology both for industrial and business organizations, but also for those in higher education (because this differentiation is not manifested in the case of professional training programs associated with lifelong learning and vocational education). Reference frames, standardization, guidelines, or other professional norms can help a designer, but they can act as a “brake” on the progress of training for new, actual skills and competence. The graphic modelling of skill cards is most often done in the form of a tree and includes the names of the training units/courses and the training elements/lessons for which performance criteria are associated (according to the competencies identified to be acquired by the trainees) and which serve for the evaluation acquired knowledge (based on a test with multiple chosen questions or through evidence provided by projects).

The paper was financially supported by the Project “Network of excellence in applied research and innovation for doctoral and postdoctoral programs / InoHubDoc”, project co-funded by the European Social Fund financing agreement no. POCU/993/6/13/153437.

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