

COMPETENCES FROM A NATIONAL CURRICULUM PERSPECTIVE - CONCEPTUAL ANALYSIS

Codruța GAVRILĂ¹, Viorica BOACĂ¹,
¹ULST 'King Mihai I' from Timisoara, Romania
Corresponding author: vioricaboaca@usvt.ro

Abstract. Skills are a key determinant of competitiveness and innovativeness and are an absolute necessity for social cohesion and personal well-being, according to the European Commission. Due to continuous technological change and rapid economic restructuring, people need to engage in lifelong continuous learning. EU Member States, in line with European Commission and national priorities, are carrying out reforms aimed at improving education systems to provide high quality competence-based education. The aim of this paper is to raise awareness of the knowledge of the competences foreseen in the specialized curriculum by the students who follow the initial level of psycho-pedagogical training of the University of Life Sciences "Mihai I" from Timisoara, Romania. The study emphasizes the need for optimal design of instructional-educational activities based on appropriate teaching strategies. The results presented in the paper were obtained following the activities carried out within the Didactics of Specialization, in which students of the Faculty of Agricultural Management, Faculty of Food Processing Technologies, Faculty of Animal Science and Biotechnology and Faculty of Veterinary Medicine participated. The ability to develop competences depends on the use of technology and educational resources, facilitating a process of education that leads to performance. Competence thus becomes a significant stake for everyone, regardless of the specific nature of the organization.

Keywords: competence, competency, knowledge, skills, learning situations, didactic strategies, lifelong learning

INTRODUCTION

There is no universally accepted definition of competences, as there are different theoretical, methodological and practical understandings. Psychologist D.C. McClelland (1973) is considered the father of the concept of competencies. He demonstrated that intelligence tests used to predict job performance were no longer relevant. From the United States, these ideas were transferred to Europe in the 1980s through multinational companies. (Miliband, 2006) Three models distinct from the American one developed, namely British, French and German (Winterton, 2009).

Based on the work "To have, to be" (Fromm, 1979), author Mark K. Smith (2022) distinguishes between "to be competent" and "to have competence". Thus, if competence means *doing*, then a competent person must know what to do in order to achieve a result. You can be competent in certain situations. The term **competence** refers to the quality/set of qualities of a person that enable them to act in certain situations. The term **competency** refers to a set of character traits that predispose you to certain actions, specific competencies, set of activities.

Ph. Perrnoud (1998) considers competence as a genetic potentiality of the human spirit. B. Rey (1996) emphasizes the transdisciplinary desirability of competences at content level. According to Y. Lichtenberger (2003), combines four dimensions: it is the ability due to knowledge (knows, is able to); it is the evaluation of recognized abilities; it is the ability to act, to decide, to take responsibility; as a commitment, it emphasizes professional responsibilities.

The European Qualifications Framework defines competence as the proven ability to use knowledge, skills, and personal, social, and/or methodological abilities in work or study situations and for professional and personal development (Ecomm, 2009). The European Qualifications Framework (EQF) has developed eight key competences that emphasize critical

thinking, creativity, initiative, problem-solving, risk assessment, decision-making, and constructive management of emotions (https://reform_support.ec.europa.eu).

The introduction of competences as learning outcomes in the Romanian pre-university education curriculum, starting in 2001, represents a significant methodological innovation. Among the eight subjects of the Level I psycho-pedagogical module that students complete, the subject of Didactics of the specialization closely focuses on developing specific competences for the successful application of the curriculum.

MATERIAL AND METHODS

The Teacher Training Department is an academic structure focused on professional development in teaching careers and scientific research in the field. Through psycho-pedagogical training programs, students prepare for the teaching profession. The Didactics of the specialization aims to engage with a series of specific concepts, emphasizing the correct and creative design and implementation of teaching activities specific to Life Sciences, such as differentiated planning and execution of educational programs and activities adaptable to an open pedagogical and social context; assessment of learning processes, academic outcomes, and progress; and the application of principles and norms of professional ethics.

The present study is based on qualitative methodology and observations made by students at the University of Life Sciences "King Mihai I" in Timișoara who are enrolled in the Didactics of the specialization. Several groups of students from these faculties underwent a two-semester period during the 2023-2024 academic year. The students collaborated in multidisciplinary professional teams, integrating new information and communication technologies into teaching practice and leveraging effective training methods and techniques from the perspective of lifelong learning.

RESULTS AND DISCUSSIONS

Competence consists of a set of knowledge, information, data, attitudes, values, and skills; it denotes the ability to adopt behaviors and values, and to make appropriate decisions. It involves a range of intellectual, emotional, sensory, and motor skills aimed at successfully completing a task. A person's competence measures the value of what they can produce in relation to professional standards and quality, as well as the ability to act within a field of conditions and resources (Dulamă, 2011).

In the educational field, the formation and development of competences represents a process that occurs throughout one's career, based on specialized training. In pre-university education, being a competent teacher involves: transmitting knowledge to students; providing the necessary materials for instructional activities; proposing discussion topics; offering guidance throughout the learning process; developing specific skills related to the chosen field; creating opportunities for researching social phenomena; and using evaluation criteria for assessing activities (Bishop, Downes, Farber, 2021)

In the National Education Law (198/2023) (<https://edu.ro>), key competences are clearly defined, indicating that their inclusion represents the objectives of the educational process. Article 29 stipulates that extracurricular education contributes both to the development of competences within the national curriculum and to the development of complementary competences. Article 85 highlights that the main objective of pre-university education is the formation of competences, understood as a multifunctional and transferable set of knowledge, skills, and abilities.

The process of developing competences should consider: a) the use of collaborative learning techniques, including project-based learning; b) the use of problem-based learning

techniques; c) the use of online educational resources; d) the use of innovative techniques and technologies in teaching/assessment/learning processes; e) the use of transdisciplinary, interdisciplinary, or multidisciplinary approaches. To achieve the targeted competences, teachers create individualized learning plans. These plans serve as a tool for planning and monitoring learning at each student's level, forming the basis for individualizing the learning opportunities provided by the school.

The individualized learning plan has the following characteristics: a) it is based on the results of formative and summative assessments of the student; b) it considers the learning needs of each student, which are different and must therefore be addressed differently; c) it builds on the student's previous learning experiences; d) it establishes the immediate and long-term goals of the student; e) it designs new learning experiences according to the needs, interests, and pace of the student; f) it is developed through interaction between the teacher, student, and parent.

Article 89 refers to the National Curriculum for pre-university education, focused on competences promoted at the European/international level for lifelong learning—competences that form the basis of the graduate profile. The graduate profile serves as a regulatory component of the national curriculum, a reference for its design, implementation, and evaluation, and is approved by a ministerial order. It indicates the expected levels for acquiring competences, depending on the developmental stages of the students.

Article 91 states that the National Curriculum for primary, secondary, and high school education is centred on key competences promoted at the European level, which determine the profile of student formation:

- a) competence in reading, writing, and understanding messages;
- b) competence in multilingualism;
- c) mathematical competence and competence in science, technology, and engineering;
- d) digital competence, including internet safety and cybersecurity;
- e) personal, social competence, and the ability to learn how to learn;
- f) civic, legal competence, and environmental protection;
- g) entrepreneurial competence;
- h) competence in cultural awareness and expression.

Article 153 specifies that the formation and development of competences for lifelong learning are based on the categories of competences outlined in Article 180 of the Higher Education Law No. 199/2023.

Article 180 of the Higher Education Law No. 199/2023 states that the main objectives of lifelong learning focus on the comprehensive development of individuals, enhancing their ability to integrate or reintegrate into the labour market, and promoting sustainable societal development. Lifelong learning is centred on the formation and development of competences. These competences can include: a) key competences defined by the Council Recommendation of May 22, 2018, on key competences for lifelong learning (2018/C 189/01); b) professional competences specific to a particular field of activity or qualification; c) transversal competences, which are generally considered not to be specifically tied to a particular job, task, academic discipline, or area of knowledge, but rather as skills that can be used in a wide variety of situations and work environments, including those listed in the European ESCO portal.

The concretization of the competences presented above is achieved by applying them to concrete learning situations, with an emphasis on constructing authentic learning activities that lead to performance. From the student's perspective, competence denotes their ability to resolve a particular situation based on previously acquired knowledge and existing skills.

Starting from the idea that knowledge is formative through the process by which it is attained (Iucu, 2001), the teacher designs learning situations that stimulate and support students in forming these new concepts.

Analysing the curricular documents for specialized subjects together with students, it was observed that in grades five to ten, the school curricula, planning, and instructional design focus on the concept of competence (general competences pursued throughout these grades and specific competences pursued for each grade). General competences are defined by subject area and are developed over several years. They have a high degree of generality and complexity and serve to guide the teaching process toward the final acquisitions of the student. The fundamental component of the curriculum is related to the system of specific competences and content. Specific competences are defined by subject area and are developed over the course of a school year and a specific grade. They are derived from general competences, serving as detailed elaborations of these. Specific competences are associated with units of content through the curriculum.

CONCLUSIONS

Competence is the central term in the school curriculum, being a priority in most curriculum reforms across European education systems. The emphasis on developing competences stems from the need for lifelong learning, the need for the transferability of learning outcomes, and an integrated approach to education (Lee, Huh, Lin, Reigeluth, 2018)

The pre-university education system faces the challenging task of developing the necessary competences for graduates to become high-performing employees. The profile of pre-university graduates should aim for objectives such as: the ability to learn and work collaboratively and independently, to organize their learning, and to persevere; the use of learning techniques and the discovery and application of preferred learning strategies; the demonstration of tolerance for different viewpoints, openness to conflict resolution, trust, and empathy; a positive attitude towards personal well-being and the adoption of a healthy lifestyle; and the manifestation of resilience through stress management and approaches to obstacles and change in various life contexts.

By understanding the competences required by employers, schools gain essential feedback that enables the alignment of teaching, learning, and assessment activities to effectively meet community needs.

Competence is socially recognized and validated within the social environment. A professional is truly competent if they can work as part of a team.

The ability to develop competences depends on the use of technology and educational resources, facilitating a process of education that leads to performance. Competence thus becomes a significant stake for everyone, regardless of the specific nature of the organization.

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