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Teleology of the Competence-Oriented Approach in the System of Higher Education: Traditions and Innovations

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Abstract: This paper is dedicated to the study of competence-oriented approach in higher education. Currently there is a growing interest with regard to the study of the competences and their relevance in the methodological planning in the higher education. The key ideas refer to the fact that the modernization of the goal or competences-oriented approach is due to the fact that it represents the modern tendencies and changes within the society. The competence-oriented approach requires an interdisciplinary, contextual and teleological approach in order to be relevant in the university teaching practice and ultimately in the professional development of the student.

Key words: competence, competence-oriented approach, teleology, educational goals

Ensuring the quality of higher education at the national level highlights the search for new solutions, approaches and strategies for its reform. The most significant of them are:

- Implementation of new mechanisms in the higher education management
- Elaboration of modern university curricula;
- Development of new, personality-oriented pedagogical techniques;
- Establishment of the competence-oriented approach in the higher education system, etc.

The problem of the competence-oriented approach has been widely discussed in the last couple of years, at the higher education level, both in theory and in practice.

There appeared a wide range of publications which conditioned and developed the problem of competence-oriented approach: Rogers H. (2001), Ciolan L. (2008), Lebedev O. (2004), Gulyaev V. (2003), Sokolova N. (2007), Cartaleanu T. (2002) etc.

Despite the fact that the notion of "competence-oriented approach" has not acquired a worldwide definition yet, it is already possible to identify generally accepted characteristics of the education based on competence - formation:

- The idea of education is to develop students' ability of solving problems independently in various contexts (educational and professional), on the basis of social and personal experiences.
- The idea of the educational process is to create conditions for developing students' cognitive, communicative, managerial and value-centered experiences.

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- The idea of learning outcomes assessment is to establish the personality development level and its competences, etc.

The problem of competence-oriented education is connected to the general changes that occur in the postmodern society. Moreover, it seems very difficult to predict how the society will be like in 30–50 years. Therefore, the universities should promote such qualities as dynamism, initiative, constructivism, creativity, autonomy, etc.

It is worth mentioning that the idea of the competence-oriented approach derives from a deep study of the labor market and its requirements for a modern professional. These demands mainly include the ability to work in groups, to take decisions independently, to express and promote new ideas, to resist stressful situations etc.

The competences (knowledge, skills and value attitudes/orientations), required by students nowadays, can be formed only in the framework of an interdisciplinary, contextual and teleological approach.

Teleology is the field of science which deals with goals setting and learning outcomes.

From the point of view of teleological perspective, learning outcomes represent the basis of the competence-oriented approach in education and derive from:

- establishment of general cross-curricula competences;
- integration of learning courses;
- integration of learning and scientific activities;
- problem solving and activity-centered education;
- development and implementation of active pedagogical techniques in the education;
- assessment of learning outcomes expressed in competences, etc.

In the framework of competence-oriented approach, the relationship between the goals of educational system and the expected outcomes is of great importance, demanding a competence-oriented characteristic.

This relationship can be established in the following way:

(A) *By means of goals set by education management*:

- classification of goals according to their complexity, contents and composition;
- identification of sources and tools meant to provide various types of goals;
- establishment of techniques and procedures employed for goals planning;
- establishment of correspondences and relationships between various types of goals;
- identification of contents and didactic strategies for achieving different types of goals;
- identification of strategies and tools meant to determine the possibility of goals achievement;
- students' involvement in the development of goals system.

(B) *By means of goals' functions in education:*

- to model the results of the educational activities, thus contributing to the accomplishment of the social mission of education;
- to provide quality criteria of contents selection and ranking;
- to provide quality criteria for the education and professional qualification of teaching staff;
- to act as a stimulus for students in order to enhance creativity and learning abilities;
- to establish the level of society's support for education;
- to develop educational techniques and strategies;
- to assure the achievement of common approaches directed towards the final educational outcomes.

The classification of goals in the context of competence-oriented approach can be implemented in accordance with the established criteria and can be presented as follows:

(1) According to the *complexity,* there may be defined the following goals:

- the common goals of the education system;
- the common goals of the higher education system;
- the common goals of the professional fields (economics, law, education, etc);
- the common interdisciplinary goals;
- the common goals of specific knowledge areas (languages, mathematics, arts, etc);
- the common goals of academic subjects (courses);
- key/basic learning goals within specific subjects/courses;
- operational learning goals within specific leaning forms: lecture, seminar, laboratories, etc.

(2) According to the *typology of the objectives,* there can be distinguished the following groups of goals:

(A)

- Objectives at the level of knowledge.
- Objectives at the level of skills.
- Objectives at the level of value-centered attitudes/orientations and behavioral characteristics.

(B)

- Objectives at the level of competences, including and integrating the knowledge level, skills level and value-centered attitudes/orientations level.

(C)

- Objectives at the level of comprehension.
- Objectives at the level of application.
- Objectives at the level of integration.

(D)

- Objectives at the level of reproduction.
- Objectives at the level of production.
- Objectives at the level of creativity.

(3) A three dimensional classification of goals according to their: complexity, typology and hierarchy.

(4) According to the psychological criteria, there can be distinguished: cognitive, affective and psycho-motor objectives.

The teleological basis of the competence-oriented approach in the higher education system implies firstly the identification and formulation of key/basic competences and their correlation with different types of goals.

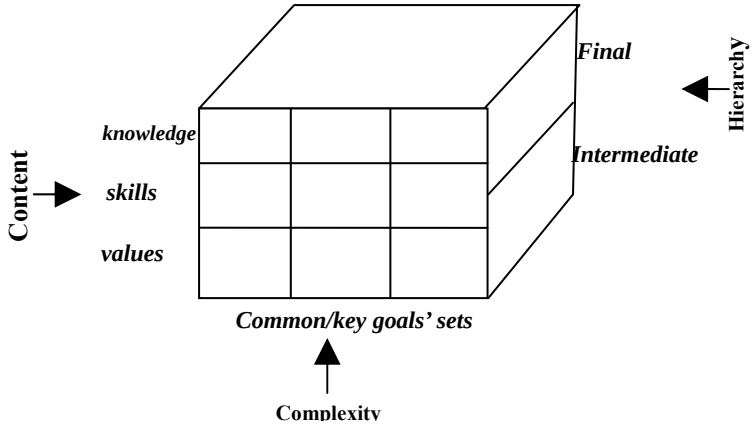

Figure 1 Three Dimensional Classification of Goals Sets

The key competences represent an integrality (multifunctional/cognitive) of knowledge, skills and value-centered attitudes required by the student in the process of social and professional integration (Ciolan L., 2008).

In our opinion, the competence can be defined as a "set" of interrelated skills needed to carry out specific activities in various situations, including non-standard and ambiguous ones. This definition implies the following characteristics:

- the field/sphere of activity;
- the indefinite activity context;
- the possibility to choose the activity means;
- the argumentation of activity means selection (empirical, theoretical, axiological).

"The competence represents an amount of knowledge, skills and value-centered attitudes, acquired in a contextualized environment and necessary for specific situations' employment" (Guțu V., Muraru E., Dandara O., 2003).

Thus, the concept of "competence" includes in itself, in addition to the general amount of knowledge and skills, some knowledge concerning possible consequences of specific courses of actions.

The notion of competences should not be opposed to that of knowledge and skills. The concept of "competence" is much wider than that of "knowledge and skills". It includes both these notions, but not as a sum of constituent elements, but as a complex integrality.

It is of significant importance the definition of competences formulated by S. Ryagin:

"The competence represents a complex and integrated quality of the personality, providing the ability to perform specific activities. It does not simply separate knowledge and skills or an amount of separately operating procedures, but the characteristics which offer the possibility to perform integral activities" (S. Ryagin, 2003).

In accordance with this specific approach, the concept of competence includes the following structural elements:

- mobility of knowledge;
- flexibility of the method;
- critical thinking;
- responsibility of actions.

The mobility of knowledge implies in this context, the permanent updating of a successful problem-solving activity at a specific time and in specific conditions. The flexibility of the method means the use of different methods which depend on various circumstances. Critical thinking implies creative, original thinking.

The theory of competences is widely developed in the studies of L. Ciolpan. The author does not only include in his research the cognitive and operational-technological components, but also the motivational, ethical, social and behavioral ones. This approach reflects the learning outcomes: knowledge, skills and value-centered attitudes. In the pedagogical practice there were pointed out, the so called "key competences" and the special competences.

The justification of key competences resides in a range of theoretical assumptions, primarily related to the theories of personality and society, but also to the socio-economic and political conditions in which the personality and the society develop.

The conceptual justification of key competences can be represented by the following scheme:

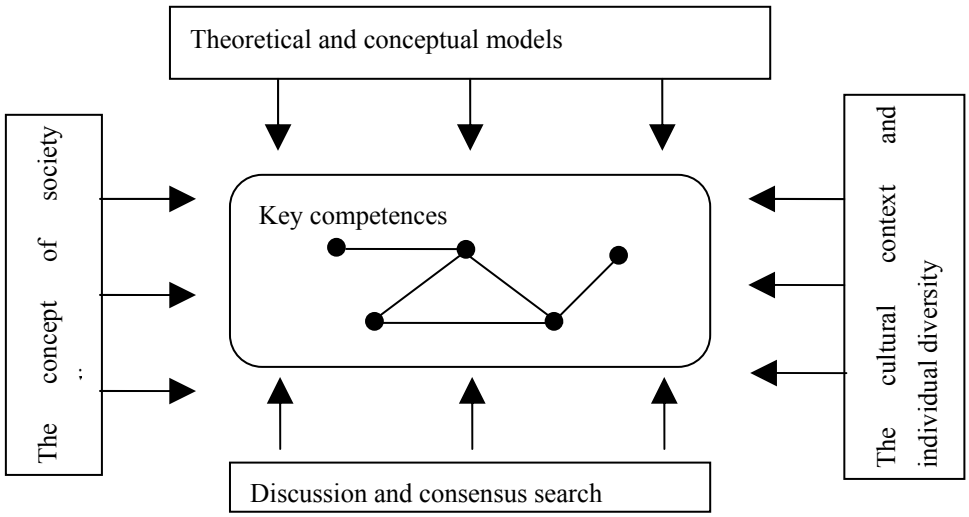

Figure 2 Key Competences

In the framework of this definition there can be defined different approaches to the concept of key competences. One of the most well-known approaches to the key competences structuring is the model proposed by UNESCO. This model includes the following:

- Cognitive component — to know; to know how to do.
- Social component — to know to cooperate with others: to know how to be (behavioral component).

It is of great importance to justify the key competences in the context of three life spheres:

- *personal accomplishment and development* during the entire life: the key competences enable the person to set and to achieve individual goals in accordance with the needs and interests and to exercise the lifelong learning practice;
- *active citizenship and socialization:* the key competences enable people to become active members of the society;
- *employment:* the ability of each person to find a decent job on the labor market.

L. Ciolan tries to generalize different approaches to the elaboration of key competences and proposes the following classification:

- Independent activity and reflection. Independence/autonomy refers to the ability of the person to "build" his/her identity in the context of a dynamic world, to act in accordance with his/her own interests and needs, to interact with the outside world, to develop and implement personal projects etc.

This reflection supposes the acknowledgement and the understanding of social, economic, cultural, political and value-based structures of the society, the ability to live according to the "rules".

- Active/Interactive employment of means/instruments. The notion of "instrument" is used in a very broad meaning. It comprises physical phenomena, language, knowledge, laws, etc, i.e., everything that implies social and professional activity in the modern society. "The instrument" is a means to communicate with people, society and environment.
- Participation/membership in social groups. This competence determines the person's ability to communicate with other people, to establish various relationships, to properly understand his/her role and responsibilities, to be able to make compromises, to accept different cultures, points of view, etc.

For the higher education system, of great importance are the classifications of key competences elaborated

within the Tuning Project and Dublin project.

According to the first project, the key competences can be presented in the following way:

(A) Instrumental: cognitive, methodological, technological and linguistic skills.

(B) Personal and interpersonal: social skills — interaction, collaboration, cooperation, etc,

(C) System competences: integrated skills represent the interaction of the first two groups. In other words, the instrumental and personal/interpersonal competences form the foundation of system competences. In our opinion, it is important to define these groups of key- competences.

Instrumental competences:

- ability to analyze and synthesize;
- ability to apply the knowledge in practice;
- time management abilities;
- basic knowledge different areas;
- ability to use information technologies;
- ability to communicate in the native language as well as in one or two foreign languages.

Personal and interpersonal competences:

- ability to work in groups;
- ability to collaborate with other people;
- ability to perceive the multicultural society;
- ability to work in various contexts.

System competences:

- ability to learn;
- ability to investigate;
- ability to manage and analyze the information;
- ability to think critically;
- ability to provide new ideas;
- ability to solve problems;
- ability to take appropriate decisions;
- ability to manage processes and guide people;
- ability to work independently;
- ability to respect and value ethical and moral standards;
- ability to be responsible for the quality of one's own actions;
- ability to adapt to new situations.

According to the Dublin project, the key competences can be classified as follows:

(A) knowledge and understanding;

(B) knowledge application;

(C) analytical skills;

(D) communicative skills;

(E) learning skills.

Within the European classification system there was an attempt to integrate these two approaches (projects) of key competences development into:

(1) knowledge;

(2) skills;

(3) personal and professional competences:

- autonomy and responsibility;
- learning skills;
- social and communicative skills;
- professional competences.

When developing key competences it is important to take into consideration two factors. The first refers to traditions which characterize the development of the national educational system, while the second factor refers to the perspectives of its development.

Although the retrospective education was oriented to skills, we can easily notice that its basic purpose was the knowledge acquisitions (a sum of knowledge). It is generally accepted that knowledge acquisition does not always assure their turning into skills, even if this is one of the most important conditions of the teaching-learning process.

Concerning the second factor, we made an attempt to classify the key competences in the context of higher professional education standards.

This classification can be presented in the following way:

(1) epistemological competences;
(2) practical competences;
(3) prognostic competences;
(4) managerial competences;
(5) communicative competences;
(6) professional competences;
(7) social competences;
(8) research competences.
(9) life -long -learning competences (Guțu V., Muraru E., Dandara O., 2003).

From the point of view of teleology and the ways of designing an integrated curriculum in the higher education system, our attempt to change the national curriculum was based on two important arguments:

(1) each competence consists of a system of subcompetences (constituent structures: knowledge, skills and values).

(2) the process of competence building has several stages. It is not possible to form a particular key competence without forming its subcompetences. Competence formation process bears a longitudinal, long lasting character.

Thus, the models of competence classification may include three contexts:

- knowledge level;
- knowledge application level;
- knowledge integration level.

In fact, the first two levels form the basic elements of a competence, while the third level confers them an integrated form, which characterizes the concept of "competence". It is important to note that the process of competence formation is not only a consequent chain of elements: knowledge – skills – competences. This process bears a much more complicated character and is defined in the context of pedagogical techniques.

In this classification we attempted to combine the best approaches that refer to the development of the

problem and to present a more practical and effective model from the pedagogical point of view.

The most important peculiarity of key competences is their interdisciplinary and transferable nature. These characteristics provide an additional value to the education oriented to competence formation.

The transversal and transferable nature of the key competences is tightly connected to system of goals. The system of goals' classification presented at the beginning of this article and the above mentioned key-competence classification allow us to arrange them in the following way:

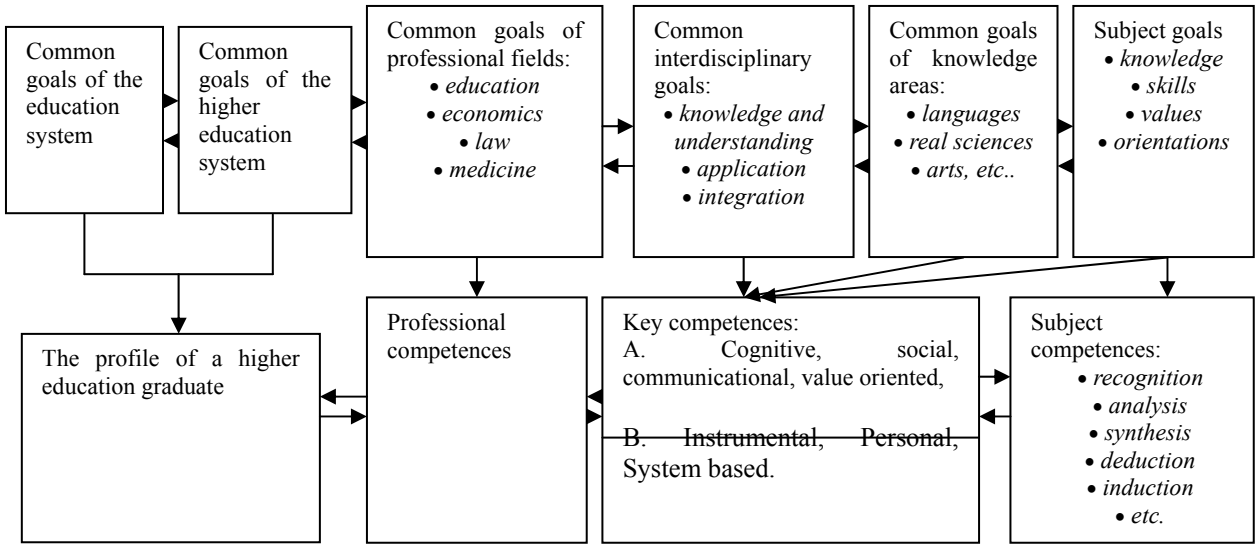

Figure 3 Interrelation of Educational Goals Sets and Competences in the Structure of the Basic University Curriculum

From our point of view, the opinion concerning the significant difference between the goal-oriented approach and the competence-oriented approach is not really convincing. In essence, it is important to correlate the goals to different types of competences (or vice versa) which need be formulated in terms of competence-oriented approach.

It is also important to mention that a competence is not static. In some conditions (cases), this phenomenon/quality may function as an initial, key competence, which is composed of general subcompetences. In other cases it can function as a component (subcomponent) of a higher order competence. For example, the ability to work with information is a constituent element (subcompetence) of the lifelong learning competence.

On the other side, a subcompetence can become the leading competence: in the previous example the ability to work with information may become a key competence with the following component elements:

- ability to identify information needs;
- ability to search and select information;
- ability to synthesize and interpret information etc.

In other words, in order to establish the type of a certain competence in terms of its priority, it is mandatory to determine its initial value: whether it is, in a particular case, a basic/key competence or it is just a constituent element of a subcompetence.

The importance of this competences acknowledgement allows an appropriate design of university curriculum structures and a well-organized didactic strategy, directed to competence formation.

In conclusion, it is important to underline the benefits of the competence-oriented approach to the development of various aspects of the higher education:

(1) To build up a national qualification system oriented towards the concept of outputs in the professional higher education, in terms of the competence-oriented approach.

For each cycle of higher education are established common (key) competences. At the basis of this process stays one or another key/specific competences classification model. It is important for each competence, as an indicator of the professional qualification, to be in relation with the study course (courses) designed to form this specific competence.

(2) The university curriculum also implies a different paradigm for didactic documents planning as well as for the whole learning process planning.

The new generation curricula include a system of required competences and subcompetences correlated with the content units and the didactic activity methods.

In this case the competence-oriented approach involves:

- use of active/interactive didactic technologies;
- active involvement of students in the study and researching process;
- high level of independent activity of the student;
- changes of the traditional teaching methods in the higher education (lecture, seminar, laboratory work). The focus should be laid on the training and practical forms of learning instead of the lectures forms.
- increase the importance of various practical activities: practical activities should be regarded as the main factor in the implementation of the competence-oriented approach in the university system;
- professional development trainings for the university staff;
- modernization of the students' knowledge evaluation system: to determine their real competences in one field or another.

The creation of quality management systems within the university system is impossible without the introduction of competence-oriented approach and a student-focused education.

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