# THE TEACHER – MAIN ACTOR IN THE KNOWLEDGE SOCIETY

# Vali ILIE<sup>1</sup>, Ecaterina Sarah FRĂSINEANU<sup>2</sup>

#### Abstract

We live in a world in continuous transformation, mainly characterized by an informational explosion as well as an aspirational one. This can arouse interest, send to searches and constructions, but it can also create confusion. Therefore, the man needs stable benchmarks. Children and young people need support and guidance. The roles of the teacher are about to be rethought, not so much from the perspective of their change, but from the point of view of adapting to the new demands. The concept of education for the knowledge society starts to be formed in the second half of the 20th century. During this period, the change of the entire educational system of the society is taking place. To effectively promote the development of the knowledge-based economy, it must be understood that information is a factor of production (as well as labor, land and capital). The process of globalization coincides with a fundamental transition to the informational society - a new global information-based community.

Key words: Knowledge society; Teacher; Skills; Roles.

#### 1. Introduction

The society we live in today is considered the "knowledge society". We should note that the notion of "knowledge-based society" was preceded by the term "knowledge-based economy". The paradigm of the "knowledge-based economy" calls for education and research in order to meet the needs for human capital of a changing market and labor economy. Defining the post-industrial stage, it is a reflex of toning human relations and developing science and technology. The specificity of the knowledge-based economy has attracted the attention of researchers from all over the world, especially due to the technological implications and open access to knowledge.

Among the aspects that characterize the society we live in today there are: accelerating the pace of innovations (processes, products, services), multiplying the applied research that calls for the interdisciplinary approach and capitalizing on nonformal and informal education. Education must take into account the main trends of the changes in the knowledge society, the educational policies to overcome the existing problems and to identify the main challenges. In a knowledge society,

<sup>&</sup>lt;sup>1</sup>Associate Professor, PhD, Teaching Staff Training Department, University of Craiova, Romania, e-mail address: brainstorming71@yahoo.com, corresponding author.

<sup>&</sup>lt;sup>2</sup>Associate Professor, PhD, Teaching Staff Training Department, University of Craiova, Romania, e-mail address: sarah.frasineanu@yahoo.com.

education is not limited to school. The occurrence of ICT allows learners to search for information and develop knowledge at any time and any place where access is available and unrestricted. Under these conditions, the ability of learning how to learn is one of the tools that helps people to valorize formal, non-formal and informal education (UNESCO, 2005, pp. 27-29).

A. Hargreaves emphasizes the paradoxical dilemmas that teachers often encounter. There are three main forces that teachers face: "First, teachers are meant to be catalysts for the knowledge society. They are meant to ignite the desirefor learning among students who will (in an ideal world) be eager and willing to learn. Secondly, teachers are meant to inspire imagination and creativity. Teachers are meant to also provide a safe haven forstudents from their sometimes turbulent lives, as well as provide stability" (Hargreaves, 2003, pp. 2-3).

The fragmentation of lifestyles and the diversification of values, the overloading of the context with new elements, the alert pace and the increasing volume of information that are processed in order to make effective decisions confuse and trouble young people, adults and students as well as teachers.

# 2. The knowledge society – dilemmas, questions, points of reflection 2.1. What characterizes today's society?

From an economic perspective, today's society is based on a knowledge economy. The key factors of competitiveness in a globalized and interdependent economy become the knowledge and qualifications of the workforce. Knowledge has increasingly influenced the economic growth of the nations which eventually led to the concept of "knowledge economy". The concept of a knowledge-based economy is dependent on the new growth theories that reflect the understanding of the role of new technologies in increasing productivity and economic growth through investments in research and development, education and training, in the new structures of managerial activity (OECD, 2006, p. 7).

In the late 1950s, F. Machlup used statistical information to examine work trends. He revised the meaning of the term "work" as a way of managing and using knowledge. A afirmat că "linguistically, the difference between knowledge and information lies chiefly in the verb form: to inform is an activity by which knowledge is conveyed; to know may be the result of having been informed. Information as the act of informing is designed to produce a state of knowing in someone's mind. Information as that which is being communicated becomes identical with knowledge in the sense of that which is known" (Machlup, 1962, p. 39). F. Machlup (1902-1983) was an American economist (born in Austria), president of the International Economic Association (1971-1974). He is considered one of the first economists who examined knowledge as an economic resource and spoke about the knowledge economy.

Management specialist, P. Drucker (1909-2005) analyzed the current society, in which competition is not based on money, but on how well the information can be used. He popularized the phrase the knowledge economy in his book "The Age of Discontinuity", published in 1969, which was based on ideas previously

developed by the author, such as the differences between the manual worker and the knowledge worker. Basically, information becomes knowledge only when used in a creative process, when it also becomes, using economic terms, a factor of production. Thus, "the next society will be a knowledge society. Knowledge will be its key resource, and knowledge workers will be the dominant group in its workforce. Its three main characteristics will be: borderlessness, because knowledge travels even more effortlessly than money; upward mobility, available to everyone through easily acquired formal education; the potential for failure as well as success. Anyone can acquire the means of production, ie, the knowledge required for the job, but not everyone can win" (Drucker, 2001, p. 2).

D. Bell (1919-2011), sociologist and American professor at Harvard, presented in 1973 a new type of society: the post-industrial society. Bell states that "the post-industrial society (...) is primarily a change in the character of social structure – in a dimension, not the total configuration of society. It is an ideal type, a construct, put together by the social analyst, of diverse changes in the society which, when assembled, becomes more or less coherent when contrasted with other conceptual constructs" (Bell, 1987, p. 73). In the other hand, "in his once highly acclaimed book, The Coming of Post-Industrial Society, Daniel Bell predicted that (1) knowledge would replace capital as the critical factor of production as societies moved to post-industrialism, (2) intellectual technologies for planning the public good would displace mechanical technologies used to boost private profit, and (3) universities would supersede industrial enterprises as the dominant kind of social organization" (Jessop, 2017). A post-industrial society not only transforms the economy but also alters the society as a whole. In a post-industrial society, technology, information and services are more important than the manufacture of real goods.

A. Toffler (1928-2016) also spoke about the types of society and the specifics of today's society. This is a well-known American writer and futurist who has attracted attention through works such as "The Third Wave" and "Future Shock". The waves are metaphorically viewed and understood as torrents of change that affect our lives. He identified three waves or phases of civilization: the agrarian phase – it appeared when humanity moved from a nomadic life to a sedentary life, establishing the first human civilizations; the industrial phase – characterized by the massification of society and the perpetuation of the key institutions of the mass industrial society: the nuclear family, the mass education system, the giant corporations, the mass union, the centralized national state; the information phase – it corresponds to the civilization of the Third Wave: it does not diminish the role of the industry, but leads to its transformation by capitalizing on new information and communication technologies; it aims at the de-massification of the industrial society) (Toffler, 1980).

From a broader perspective, which also includes culture and education, the author prospectively addresses the change of society. This might be the reason why his paradigm has been widely known. He stressed the need to adapt to new situations under the conditions of a changing society: "Today change is so swift and relentless

in the techno-societies that yesterday's truths suddenly become today's fictions, and the most highly skilled and intelligent members of society admit difficulty in keeping up with the deluge of new knowledge – even in extremely narrow fields" (Toffler, 1970, p. 87).

The result of this is the need to adapt to new living conditions, which will force us to deal more quickly with moral situations, events and dilemmas. In today's society there is a lack of meaning. Activity (playing, learning, work and creation) can be a remedy to this lack of meaning that many people today face, especially adolescents and young people. V. Frankel, professor of neurology and psychiatry at the University of Vienna, found in 1955 the existence of an "existential vacuum" present all over the world. He found that "in the foreground, in patients, there are no longer the sexual problems (as in Freud's time), nor the inferiority complex (as in Adler's time), but those of the meaning of life" (Radu, 1995, p. 153). Work is part of the human condition. The solution is for young people to have what to do (to produce, to create something) and to have a purpose, a goal, respectively a human model, to relate to.

M. Drăgănescu (1929-2010), a specialist in electronics and former president of the Romanian Academy, stated at the end of the last century that the knowledge society is a "society for consciousness" – a spiritual society, but not of a medieval type, but an emergent one, based on the information technology (artificial consciousness): "The society for consciousness will be a spiritual society. This does not mean that it will be a purely meditative society, but a society in which spirituality prevails, being at the same time an active informational, scientific, technological, industrial, agricultural, sustainable and with a protected environment one" (Drăgănescu, 2007, p. 54).

## 2.2. Why is information so important?

Man has become dependent on information, and it travels quickly, through various ways and means (we find out the facilities that the Internet and artificial intelligence have). Knowledge is information in action. The knowledge society also includes the information society and has implications both in the behavioral and institutional spheres. We know that he who controls information has the power. So information means power. Knowledge, in all its forms – expertise, experience and learning – as a human dimension, it is related to what human beings do and think, to culture and technology.

As knowledge is becoming more and more collective, we need to develop collaborative skills and spend more and more time in teams. If information (data organized and presented by someone) can be easily transferred from one person to another, knowledge (understood information, which enriches experience) has a lower degree of transferability. Knowledge is important when it sets in motion certain things, when it transforms, it enriches, it helps in evolution, in the innovation of products and services (based on ethical principles). The knowledge society will be based mostly on intelligent agents. As M. Maliţa states, "there are dominant metaphors that permeate the culture of an era, like *the clock* for the beginning of

classical modernity when mechanics were the top science of the technological revolution and *the computer* for its transition phase, when we are under the sign of the information revolution" (Maliţa, 2001, p. 191). The metaphor of the 21st century is related to artificial intelligence, and in this context it is necessary to reflect on the new roles and competences of the teacher: *Is his role as a transmitter of knowledge still current? Do digital skills become a priority in the information society? Is the teacher a social entrepreneur?* 

Against the background of globalization, the information explosion involves the use of certain systems that resort to self-regulating mechanisms to access, organize and process information. The information society or the digital society is that society where the creation, distribution and use of information has a significant impact on the economic, political, social, cultural, environment. Introducing the notion of information society, D. Bell "predicted that theoretical knowledge would become a main resource in society, affecting economy, labor, culture, and all venues of life" (Kasvio, 2001, p. 26). By opening access to information for the population from isolated areas or underprivileged areas, the information technology will allow, in complementary ways, training and education. Among the facilities offered by the information society in the field of education there are: updating information with minimal costs, a more efficient organization of the activity, removing barriers in adult education, faster and easier access to bibliographic material.

The information society is an information-based revolution. Being conditioned by the technology society, it will create new settings to meet lifelong learning needs. Society and life will change at an ever-increasing pace, with requirements that are meant to complete the basic education. Information/knowledge are raw materials for learning. From this point of view, learning becomes "a process in which the individual processes the information/knowledge acquired in various ways, producing new capabilities which emerge as enhanced skills, increased understanding, and an ability to interpret matters or approach things and phenomena in a new way" (Pantzar, 2001, p. 245).

# 2.3. Is school going through a crisis today?

The systems that are effective today have been designed to meet the needs of the first industrial revolution. The apparent inability of the education systems to deviate from such factors as rigid curricula, high stakes exams and old pedagogical practices stifle curiosity and impede learning. Although in the last decades there have been many alternative conceptual frameworks to describe the relations between the theories of learning, pedagogical strategies, didactic design and information and communication technologies, we find that school is going through a crisis of its foundations, which led to the idea of *deschooling the society* – "the society without school".

The concept of *world education crisis* was proposed by Ph. H. Coombs, in response to the challenges of the Williamsburg Conference. In his work, "The World Educational Crisis", he identifies and analyzes the world educational crisis as a state of imbalance that has emerged within the structure of educational systems, by

combining several causes: the influx of students accelerating the demand for education, for quality training; the lack of resources; increasing the real costs for each student; the inadequacy of the products of education, respectively of the graduates who, on the one hand, do not correspond to the demands of the time and, on the other hand, are not used properly; inertia and inefficiency of the school (Coombs, 1968, pp. 240-243). It results from this that: education no longer forms free, responsible and creative individuality; education cannot solve the moral crisis of society; education did not adapt to the industrialized society based on digitalization; education does not capitalize on the practical, applicative aspects of the contents.

Among the characteristics of contemporary society there are: the emergence and deepening of crises (energy, demographic, ecological, food); the emphasis of the disparities in living standards, the North-South contrasts, poor countries and rich countries; the deepening of the educational gaps, the distrust in the power of education; the crisis of conception (the ones who can tackle the problems in a systemic manner are too few). When the change is accelerated, a series of new problems arise, which cannot be solved using classical strategies or known approaches. The organizational geography of the school is characterized by turbulence in today's society, but the change from the organizational man to the associative man changes the data of the problem. The associative man is more innovative, more self-motivated, he risks looking for success, he looks for opportunities and he learns from the experience of others.

In the case of higher education and training, the provision of online courses and the approaches through which online courses are combined with face-to-face instruction have increased. Moreover, in the last years a new typology of online courses called open mass courses (MOOC) has proliferated. The evolution of communication, collaboration and learning technologies in the workplace reflects a gradual shift from separate work and learning to collaborative problem solving and a perfect integration of learning and work. Educational technologies offer many flexible opportunities, but require new teaching strategies, training methods based on innovation.

Writing about innovation in education, A. Toffler says: "Schools of the future, if they wish to facilitate adaptation later in life, will have to experiment with far more varied arrangements. Classes with several teachers and a single student; classes with several teachers and a group of students; students organized into temporary task forces and project teams; students shifting from group work to individual or independent work and back – all these and their permutations will need to be employed to give the student some advance taste of the experience he will face later on when he begins to move through the impermanent organizational geography of super-industrialism" (Toffler, 1970, p. 208).

Thus, the education that is specific to the knowledge society should aim at the following *directions*:

- The integration of new information and communication technologies;
- Broadening the area of learning opportunities beyond schools;

- Providing opportunities and alternatives for students of different ages;
- Consolidating learning in new systems by capitalizing on the experience gained in the already existing ones;
- Stimulating self-directed learning and collaborative learning (among school/university, companies and other stakeholders).

### 3. Rethinking the competence profile. The teacher's roles

The expansion of the World Wide Web in the mid-1990s brought together geographically dispersed teachers. They have begun to use the Internet in order to develop informal networks of common professional interests. Through these informal networks, through the involvement of teachers in organizations and through their participation in educational conferences, the feeling of belonging to a community of innovators in educational practice was created.

Moving to another type of professional expertise approach, the set of practices proposed by M. Riel and H. J. Becker brings to the fore the coordinates of the knowledge society (Riel and Becker, 2008, p. 399):

- Learning from One's Own Teaching: Maintaining a disposition to improve their teaching, and in particular, developing innovative "adaptive" pedagogical expertise.
- Collaborating and Sharing Responsibility for Student Success: Promoting and employing a public rather than a private practice of teaching; encouraging and accepting collective responsibility for student learning across their school site.
- Participating in Geographically Diverse Communities of Practice: Engaging actively in regional and national teacher professional organizations and networks and actively seeking out and using ideas, information, and expertise beyond the practitioner community.
- Making Personal Contributions to the Teaching Profession: Communicating their learning to peers through conference presentations, university teaching, and publishing.

As a construct that describes the complex of knowledge, skills and attitudes considered necessary for a person to teach, the competence profile exploits the practices correlated with the educational policies from different countries of the world. We can notice that "the need to define and develop reference frameworks of teacher competences is highlighted by the increasing focus of comprehensive policies and reforms, crossnationally, on education improvement and quality, underpinned by a perspective that sees teacher competences as developing incrementally throughout a continuum from initial teacher education to career-long professional development" (European Commission, 2013, p. 23).

Teachers need *knowledge* from different fields (the curricular area that the educational discipline they teach is part of; the didactics of the curricular thematic discipline, psychology and pedagogy; general culture knowledge). To these a number of skills are added (skills for facilitating students' learning; curricular design skills; socio-psycho-pedagogical research skills; conflict and crisis management

skills; collaboration, communication and relationship skills; management and leadership skills). *Attitudes* are influenced by the socio-emotional abilities and the conception about the place of the teaching profession in society. The important aspects are the following: the desire to cultivate partnership; the spirit of collaboration; the openness to innovation; the rational risk-taking; the capitalization and speculation of opportunities; the development of a proactive attitude; the fairness, honesty and dignity.

The roles of the teachers change: they are asked to teach in increasingly multicultural classes, to integrate children with special needs, to use modern technology (in the context of society digitization), to develop the partnership with the other community actors and to be social entrepreneurs. If teachers do not understand the specifics of the knowledge society, they cannot prepare children and young people for the new type of society. The new society is based on the globalization of knowledge, an aspect that requires the teacher certain skills and new roles.

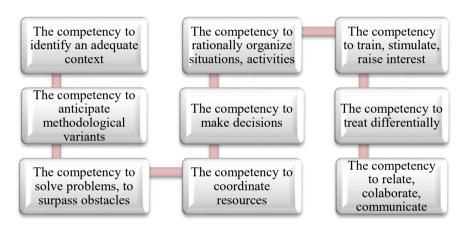


Figure no 1. Competencies specific to the knowledge society

To sustain new challenges and respond to the demands of today's society, teachers need to adapt and innovate continuously. L. Paquay and M. C. Wagner appreciate that "teachers' competences can be outlined in six broad paradigms, which should be seen as integrated, complementary aspects of the profession: the teacher as a reflective agent; the teacher as a knowledgeable expert; the teacher as a skilful expert; the teacher as a classroom actor; the teacher as a social agent; the teacher as a lifelong learner" (European Commission, 2013, p. 13).

### 4. Elements of pedagogical research

*The place* of our research is the University of Craiova, and *the period* of its development is the first semester of the academic year 2019-2020.

The purpose is to gather information about how young people are related to the place school occupies in the knowledge society and about the competencies and roles of the teachers in this new context.

The objectives we have proposed are the following:

- to answer some questions generated by the challenges encountered in the knowledge society;
- to identify the dominant aspects that make the proficiency profile of the teacher:
  - to specify the main roles that the teacher plays in the knowledge society;
- to centralize and interpret the students' answers in relation to the aspects analyzed in theory;
- to draw conclusions regarding the place the teacher occupies in today's society.

The research sample is represented by the students of the University of Craiova, from the Faculty of Sciences (62 students) and from the Faculty of Letters (36 students), enrolled in the Psycho-pedagogical Module (Bachelor's degree – 2 nd year).

**Faculty** Specialization / Departament Sciences Chemistry **Physics** Informatics Mathematics 21 26 11 English-English-English-Translation and French-Letters German Italian French Spanish interpretation 14 5 7 4 6

Table no 1. The specialization of the questioned students

The age of the questioned subjects is between 19 and 49 years.

Table no 2. The distribution of the questioned students by age

Under 20	20-29	30-39	40-49	Over 50
8	80	5	5	-

The tool used to gather the data needed for the research is the questionnaire. The structure of the questionnaire comprises six items referring to the expectations that young people have from the current society and to the competencies and roles of the teacher in the knowledge society.

The questionnaire proposed by us consists of the following items:

- 1. What are your expectations from today's society?
- 2. Do you consider that school is going through a crisis nowadays?
  - a) No
  - b) Yes
- 3. Is the teacher an important actor in the knowledge society?
  - a) Yes
  - b) No

- 4. If you answered yes, argue the answer.
- 5. What is the most important role that a pre-university teacher must play?
  - a) Facilitator of knowledge
  - b) Advisor
  - c) Cultural animator
  - d) Classroom manager
  - e) Transmitter of knowledge
  - f) Other role (specify role) .....
- 6. Order on a scale from 1 to 10 the following types of teacher competencies (1 not important 10 very important):
  - a) The competency to identify a context suitable for learning
  - b) The competency to rationally organize situations, activities
  - c) The competency to train, stimulate, arouse interest
  - d) The competency to anticipate methodological variants
  - e) The competency to make decisions
  - f) The competency to treat differentially
  - g) The competency to coordinate resources
  - h) The competency to relate, collaborate, communicate
  - i) The competency to solve problems, to surpass obstacles
  - *j)* The competency to evaluate rhythmically and objectively
- 7. What kind of curricular content should be emphasized in school? (circle one of the answers)
  - a) Technological education
  - b) Intellectual education
  - c) Aesthetic education
  - d) Intercultural education
  - e) Moral education
  - f) Digital education
  - g) Physical education
  - h) Entrepreneurial education

#### 5. Results

We present below the answers given by the students to the items of the applied questionnaire.

In Item 1, regarding the expectations the students have from the current society, we grouped the given answers in several dominant categories/ dimensions: economic, psychological, cultural, pedagogical, technological. Since the responses specific to the psychological dimension are very nuanced, we considered it necessary to divide them into several subcategories, of which the dominant ones can be grouped into communicative and characteristic ones, the second one having significant ethical accents.

The answers are distributed as follows:

- the character dimension (people should care about other people, respect each other, be better, more altruistic and tolerant, more responsible and correct, have the courage to express ideas, opinions and in action): 31 students (31.63%)
- the economic dimension (to have jobs and to reduce unemployment, to offer more professional opportunities): 21 students (21.43%);
- the communication dimension (people should communicate more, they should do it more honestly, more efficiently, more openly, through several channels and means): 15 students (15.31%);
- the pedagogical dimension (optimal conditions for the cognitive, emotional and social development of the members of the society should created, people should change their mentality): 14 students (14.29%);
- the cultural dimension (to recognize the importance of cultural institutions and to value art more): 5 students (5.10%);
- the technological dimension (society should be a robotized and digitized one): 4 students (4.08%).

Of the 8 students whose answers do not fall into the above-mentioned categories, 6 students (6.12%) stated that they have too few expectations or that they have no expectations from the current society, and 2 of the students (2.04%) did not respond to this item, respectively their answer was uncertain, vague, inconclusive.

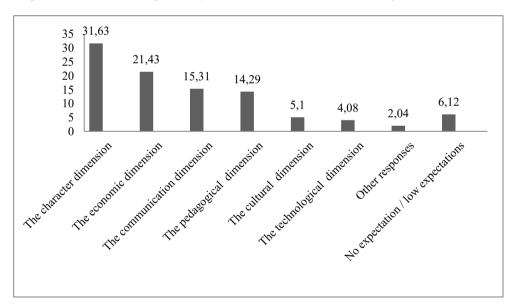


Figure no 2. Dimensions related to the students' expectations in relation to today's society

When asked if school is going through a crisis today, 83 students (84.69%) answered affirmatively. However, they consider that the teacher is an important actor in the knowledge society: 93 students (94.90) answered yes to item 3, the percentage

of those who do not recognize the importance of the teacher as a social actor being very small (5.10%).

The arguments that support the importance attached to the teacher include: he/she stores and transmits knowledge from different fields (of science, art and technology), is a source of information (21); guides, educates (19); trains, teaches (17); he/she is seen as a positive example or model (15); he/she has expertise in the subject/ discipline of education that he/she teaches (8). 4 students did not fill in this item (item 4), and the other 14 students considered that the teacher: shapes (minds, characters), can give advice or can do educational therapy, builds the foundation of the students' personality, motivates, stimulates, encourages, behaves as a parent, he/she is a kind of spiritual guide, leader and even influencer.

The students referred to the roles played by the teacher as follows:

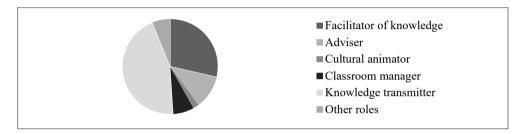


Figure no 3. The roles of the teacher

In item 6, we were interested in the competencies of the teacher, competencies that the students appreciate as important.

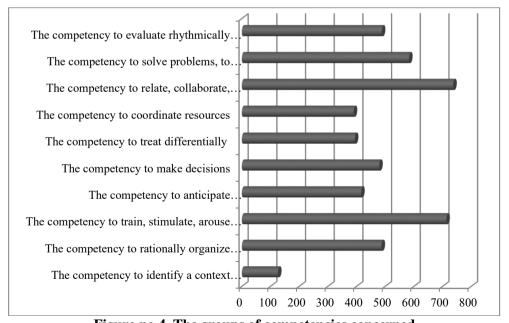


Figure no 4. The groups of competencies concerned

For each type of competency, a maximum of 10 points (10 points x 98 students = 980 points) and a minimum of 1 point (1 point x 98 students = 98 points) could be awarded. The total points awarded for each competency gives us a clearer picture of the options of the questioned students.

The last item concerns the way students relate to the curricular contents that should be emphasized in school. Thus, the students made the following choices: technological education -15, intellectual education -29, aesthetic education -4, intercultural education -9, moral education -18, digital education -8, physical education -3 and entrepreneurial education -12.

#### 6. Discussions

In item 1, we find that the first position in the students' expectations is the character dimension. Going beyond the age of innocence, but still in the age of great impetus and building the foundations of social relationships, most of the questioned students want social relationships based on authenticity and consider morals one of the most important aspects of human existence. Many have mentioned kindness, respect, altruism, tolerance, trust – aspects related to the need of living on the basis of humanistic principles and values, which give meaning to personal and social existence. At 10 percent distance is the economic dimension, considered important for the well-being of the members of society. We observe that the students are interested in getting involved in the labor market, finding employment opportunities, engaging in various socio-professional activities.

Nearly 10% of the students are skeptical of what society can offer them. Some of those who fall into this category have little or no expectations, and others do not expect anything positive. This aspect has drawn our attention because it could be a sign of the individual's lack of trust in society or it could express the lack of meaning these young people feel.

The fact that most students believe that school is going through a crisis today (of process, product, system, of its fundamentals, etc.) is an alarm signal that the important social actors should no longer ignore. Generated, among other things, by the mismatch among the needs, necessities, expectations of the educated and the educational offer, the crisis can be overcome by adapting school to the specifics of the knowledge society. The students admit the importance of the teacher in the current society which proves a deep understanding of his/ her mission in social relations. In this regard, they bring a number of arguments, among which the first places, as frequency of answers, are occupied by the instructive-educational function that the teachers exercise in their professional activity.

It can be seen that quite a large number of students (44, ie 44.90%) consider as important the role of transmitter of knowledge that the teacher must have. The role of facilitator of knowledge and that of adviser occupy the following places. The students also added other roles that they considered important: spiritual parent, designer of the teaching act, trainer of young minds, coordinator (of information and students), friend, leader. The role of influencer (that comes from communication

platforms), which seems closer to what young people want from the teacher, is specific to the knowledge society.

Regarding the teacher's competencies, high scores were registered for the following types of competencies: the competency to relate, collaborate, communicate (737), the competency to train, stimulate, arouse interest (713 points) and the competency to solve problems, surpass obstacles (583 points). This brings to attention the transversal competencies, considered the competencies of the 21st century. The lower scores obtained for the competency of identifying a context suitable for learning (126 points) and the competency of coordinating resources (390 points) do not mean that they are not important, but, in our opinion, they are specific to classical pedagogy. In the 21st century school, in which the teacher becomes a partner of the student in learning and the computer has revolutionized the way of teaching, other are the competencies that should be emphasized.

According to the opinions of the questioned subjects, intellectual and moral education are important. These are general contents of education, but we also believe that in the case of the contents a change, achieved by implementing the particular contents of education in the school curricula, would be necessary. The change according to the demands of the 21st century could be achieved if the efforts of the teachers were channeled more towards digital education, intercultural education and entrepreneurial education.

#### 7. Conclusions

The knowledge society relies on three important pillars: economy, education and research. The globalization process coincides with a fundamental transition to the information society — a new global information-based community. The organization of societies is evolving and it is increasingly based on information and access to information, technology and the ability of the human being to innovate.

Modern societies are involved in a complex process of transformation. In developed societies, emphasis is placed on the scientific search for truth and the economic maximization of profits. Universities are transformed into enterprises competing for capital accumulation and enterprises into knowledge producers seeking new discoveries that can be transformed into patents and profitable goods. As opposed to industrial capitalism, knowledge capitalism considers knowledge the main source of value. In this context, the teacher has the task of encouraging innovation, stimulating creativity, creating contexts favorable to change (eg ideas, paradigms, methods, style, approach, implementation) and knowledge.

Knowledge societies need new types of competencies. Knowledge is not static, it evolves and it is permanently enriching. Education cannot be reduced to the transmission or acquisition of a set of definite knowledge. Learning to learn is a necessary ability that education must provide. The ability to evolve, to adapt is essential in knowledge societies; education must take it into account. Knowledge societies are lifelong learning societies, and education must prepare to lifelong learning.

#### REFERENCES

- 1. Bell, D. (1987). The Post-industrial society: A conceptual schema. *Evolution of an information Society*. A.E. Cawkell (Ed.). London: Aslib.
- 2. Coombs, Ph. H. (1968). *La crise mondiale de l'education: Analises de systèmes*. Paris: Presses Universitaires de France.
- 3. Drăgănescu, M. (2007). Societatea constiinței. Bucharest: ICIA.
- 4. Drucker, P. F. (2001). *The Next Society*. Retrieved from https://enviableworkplace.com/wp-content/uploads/2010/04/The-Next-Society-by-Peter-Drucker.pdf. [online, 06.11.2019].
- 5. European Commission (2013). Supporting teacher competence development for better learning outcomes. Retrieved from https://ec.europa.eu/assets/eac/education/experts-groups/2011-2013/teacher/teachercomp en.pdf. [online, 08.02.2020].
- 6. Hargreaves, A. (2003). *Teaching in the Knowledge Society: education in the age of insecurity*. England: Open University Press.
- 7. Jessop, B. (2017). Varieties of academic capitalism and entrepreneurial universities. *Higher Education*, 73(6), pp. 853-870.
- 8. Kasvio, A. (2001). The Emergence of 'Information Society' as a Major Social Scientific Research Programme. *Informational societies. Understanding the Third Industrial Revolution*. Retrieved from https://trepo.tuni.fi/bitstream/handle/10024/65316/informational\_societies\_2001.pdf?sequence=1&isAll owed=y. [online, 08.04.2020].
- 9. Machlup, F. (1962). *The production and distribution of knowledge in the United States*. Retrieved from https://www.mises.at/static/literatur/Buch/machlup-production-and-distribution-of-knowledge-in-the-us.pdf. [online, 18.03.2020].
- 10.OECD (1996). The knowledge-based economy. Paris: OECD.
- 11. Pantzar, E. (2001). European Perspectives on Lifelong Learning Environments in the Information Society. *Informational societies. Understanding the Third Industrial Revolution*. Retrieved from https://trepo.tuni.fi/bitstream/handle/10024/65316/informational\_societies\_2001.pdf?sequence=1&isAll owed=y. [online, 30.03.2020].
- 12. Radu, N. (1995). *Psihologia vârstelor. Adolescența. Schiță de psihologie istorică*. Bucharest: Fundația România de Mâine.
- 13. Riel, M., Becker, H. J. (2008). Characteristics of teacher leaders for information and communication technology. *International Handbook of Information Technology in Primary and Secondary Education*, Vol. 20, pp. 397-420.
- 14.Toffler, A. (1980). *The Third Wave*. Retrieved from https://archive.org/deta-ils/TheThirdWave-Toffler/page/n5/mode/2up[online, 12.02.2020].
- 15.Toffler, A. (1970). *Future Shock*. Retrieved from https://cdn.preterhum-an.net/texts/literature/general/Alvin%20Toffler%20-%20Future%20Shock.pdf. [online, 14.03.2020].
- 16. UNESCO (2005). *Towards Knowledge Societies*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000141843. [online, 30.03.2020].