# KNOWLEDGE SOCIETY AND DIGITAL MEDIA LITERACY: FOUNDATIONS FOR SOCIAL INCLUSION AND REALIZATION IN BULGARIAN CONTEXT

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*In Bulgaria there is serious research and regulatory deficits to justify the need for digital media literacy, which corresponds to modern education 3.0. as well as the challenges for different types of interpretations and creativity that, put constantly, innovate digital communication products in all spheres of society.*

*This article is aimed at: "mapping" significant theoretical efforts and applied practices in promoting various aspects of digital media literacy, as well as to explore its dimensions and projections in the society.*

*The analysis is based on several sociological surveys of the education process at South-West University (Bulgaria) revealed different aspects of the relationship between Bulgarian young people and ICT: positions, opinions, and attitudes; and their significance in education, as well as an understanding of high-qualified people.*

*The basic conclusion of the present article is that the adapting of students to the challenges of the digital society and new training practices requires the determining of more effective ways to attract, encourage and motivate students towards the utilization of quality theoretical and applied knowledge and skills in ICT.*

***Keywords**: Digital media literacy, Media competencies, Education 3.0.*

## INTRODUCTION

With the revolution in digital communication technologies at the start of the 21st century and their implications for a new type of involvement and advancement of people, appeared the need for a new type of literacy. This new literacy goes beyond previously existing practices of education 2.0, in which new information and communication technologies are tools supporting or complementary educational content. Today we talk about education 3.0., where new communication technology

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innovations are decisive for the inclusion and participation in the educational processes, this new education is characterized by permanency, variation and opportunities for social creativity (Frau-Meigs, 2016). Namely the decisive nature of digital technology for inclusion and participation of people in contemporary social processes give rise to the expansion of the framework of media literacy and articulation and a new type – digital media literacy.

The contemporary nature of the subject, as well as the importance of this new type of literacy in the modern knowledge society (European Commission, 1996; European Council, 2000) is both fundamental and unprecedented in nature, because not only does it connect the success of the knowledge society with this new type of media literacy, but it also transforms the process of obtaining knowledge from a relatively passive to a more active and interactive, as well as being a phenomenon which determines the current and future social developments. Digital media literacy and its permanent development is becoming a prerequisite for further digital improvements and development for people as well as of the knowledge society in a digital environment. Digital media literacy of teenagers and mature people is key to successfully tackling of the challenges that the digital revolution poses to the knowledge society and its projections in the social spheres.

The transition from education 2.0 to Education 3.0 (Frau-Meigs, 2016), in which media and communication innovations are increasingly becoming essential tools of education and socio-cultural processes are challenges with fundamental consequences for the prosperity of societies. In today's ubiquitous digital realia, knowledge society is faced with a new type of opportunities for participation of people with a new type of cooperation between them and opportunities to influence social innovations which are new in both nature and form.

The present article is focused on the following objectives related to digital media literacy:

– "To map" significant theoretical efforts and applied practices in promoting various aspects of the subject;

– To explore its dimensions and projections in society;

– To highlight its role in the transformation of the "knowledge society" from a "collaborative" to a "knowing society";

– To conceptualize its fundamental importance for the proper functioning of modern and future socio-cultural developments;

– To display in analytical aspect dimensions of digital media literacy, based on the results obtained from various sociological surveys (mainly at South-West University Bulgaria) in recent years.

The article develops the thesis that the stage of digital media literacy development in a society is a synthetic expression of the main knowledge resources of the social environment at both national and institutional levels.

Digital media literacy itself is examined as a concept which stands at the heart of modern knowledge society and its development is the result of a complex

interplay between the effects of the broader social environment and the new specifics of education.

The analysis focuses on the enhanced role of people and their digital literacy in the changing complexity of the various professional landscapes. People are not just passive consumers of different content/ products, but also creators, being actively involved in different types of social networks. They increasingly acquire knowledge and information from the new mass media – the Internet, social media, e-formations of different nature (e-press, e-magazines, e-learning), etc., along with the traditional educational and media channels. This diversity of sources of knowledge brings new information, opportunities and potential for innovation, but requires a high level critical approach to both thinking and verification of understanding how to manage space and personal data, as well as awareness as to how to make informed choices, how to rationalize algorithms on digital platforms that adapt the world to our tastes and so on.

## THEORETICAL FRAMEWORK

### Basic concepts

We will in turn examine both of our main terms – "knowledge society" and "digital literacy" – as they outline the theoretical framework within which come to the fore empirical manifestations of existing phenomena, as well as the complex web of their existence in the social space and the possible ways of expanding digital literacy in the contemporary realities of the knowledge society today.

#### *Knowledge society*

In world literature the term "knowledge society" was introduced by Daniel Bell, who defined it as a specific stage of modern society (Bell, 1973). Before him Robert Lane used a similar concept "knowledgeable society" (Lane, 1966), but most authors quoted Bell as the source. Godin and Kenuey, Bulen and Rob say that although the concept is emerging in the 60s, it became popular and necessary in the late 90s (Godin, 2006; Kenway et al., 2006).

In his work on the creation of the postindustrial society, Daniel Bell (Bell, 1973) describes it as a knowledge society. Introducing the three types of social formations – "pre-industrial", "Industrial" and "post-industrial" society. The eminent American sociologist analyzed in an original way the development of humanity historically and in the discourse of the future. He displayed specific and indicative differences between different types of societies. Pre-Industrial society is virtually exhausted its potential; in industrial society the emphasis is on industry and it's related phenomena: "labor market", "national market and international exchange", "money", "urbanization and strong migration processes".

On the other hand, in postindustrial society there is a sharply growing emphasis on knowledge, which begins to shift ownership as a social determinant.

Science enters across all walks of life. The emergence of new intellectual technologies aimed at solving the technological, economic and political problems of the future can be looked upon as an important factor. The acquisition of knowledge – theoretical knowledge and its codification – plays a key role in postindustrial societies. The main institutions are: universities, academic and research organizations, while the economic base is centered on the knowledge-intensive sectors of industry; basic resource is human capital.

Peter Drucker is another key figure, with a large contribution to the theorizing of "knowledge society". In his books and articles he examines how people are organized into business, government and civic organizations. Drucker was one of the founders of managerial theory and author of the term "knowledge worker", which he coins in his book of 1959 "The Landmarks of Tomorrow". The author justifies the work-based knowledge is increasingly important in the business world; in turn, the knowledge society has an important feature associated with the use of specialized knowledge to be productive and not an end in itself knowledge (Drucker, 1993).

Knowledge society means that every area of public life and personal development is based on the targeted application of knowledge. Furthermore, it suggests sustainability of individual and social space and time, which builds dynamic balance between people, their artificial creations and nature.

The concept of "knowledge society" gains popularity as part of the political discourse presented by the institutions of the European Union (EU) and influential international institutions such as the Organization for Economic Cooperation and Development (OECD) and the World Bank (WB). Knowledge is at the center of economic development policies and social growth. In this sense – investing in human capital through education and training, as well as investment in research and development began to be seen as a central factor for economic growth. This necessitates the need for the creation of policies in knowledge – creating sectors such as education and research (Kenway et al., 2006: 21).

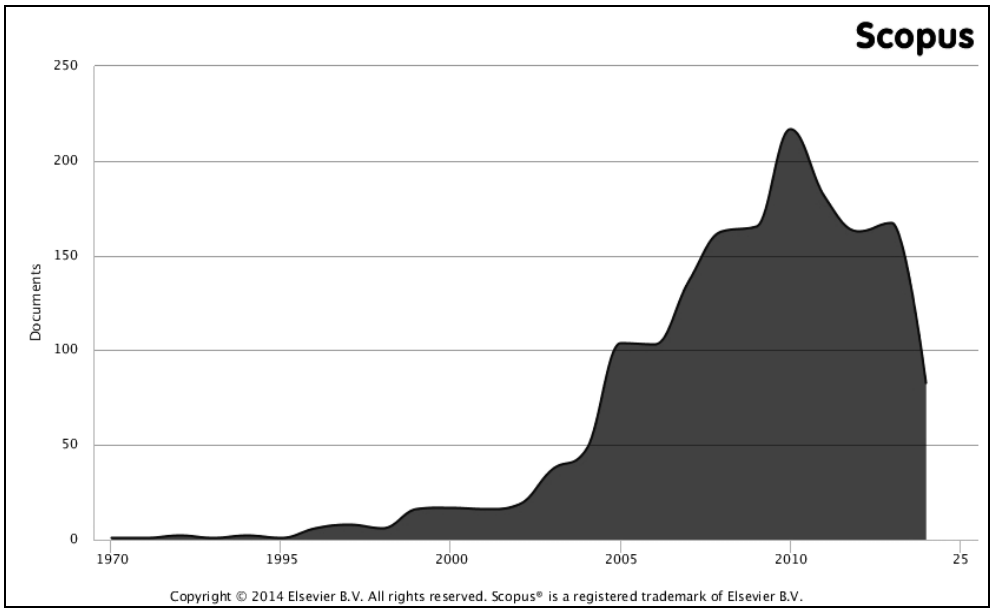
The first policy document which mentions "knowledge society" is the "European social policy – options for the Union". It speaks directly of the completion of the industrial era and of the revolution which changed the economic processes (European Commission, 1993: 30). The document uses three widely accepted by the scientific context: terms "postindustrial", "information" and "knowledge society" and thereby justifying the need for changes in the political context. Another document is "Living and working in the information society: people first", published in 1996. Although "information society" is used as a key term, the text talks about a "learning society" to emphasize the concept of lifelong learning and it describes "knowledge society" as a more developed and complete version information society. "The information society will also be a knowledge society in which lifelong learning – in school, at home, in the workplace – will be paramount" (European Commission, 1996). An important document (also from 1996) is the annual report on the activities of EU research and technological development.

In the document "knowledge society" is associated with: 1) The impact of new technologies on the organization of society. 2) Development of adequate policies with emphasis on scientific and educational policies. 3) The problem of social exclusion. All topics are dealt with in the discourse of employment, social cohesion and knowledge society (European Commission, 1996).

The latest policy documents of the European Commission in which the term "knowledge society" is central are the last two strategies for the development of the EU. The Lisbon Strategy (2000) sets ambitious goal to make the EU "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth and providing more and better jobs and social cohesion" (European Council, 2000). In "Europe 2020", one of the three main priorities is "smart growth and developing an economy based on knowledge and innovation" (European Council.2000). Under the influence of the political use after 2005 (*Figure 1*) the term "knowledge society" gained popularity in scientific analysis and is used very intensively in social studies and sociological literature.

*Figure 1*

**Knowledge society used as a keyword in titles, abstract or keywords**




*Source*: Cited following: Pavlova.

*Figure 1* shows bibliometric analysis of how after 2000 growing use of the term "knowledge society" in the titles, abstracts and keywords in publications indexed on Skopus. Increased use of the term "knowledge society" is an indicator of the impact of policy documents on the research topics and analysis in the social

sciences, as well as the fact that "knowledge society" as a scientific and political construct becomes significant topic.

Actually, the concept of "knowledge society" can be seen as an example of the symbiosis between social science and policy making, borrowings terminology, prioritizing and developing the theoretical argumentation and vision developed by the social sciences.

### *Digital media literacy*

Another important guideline in the present article is related to the term – "digital literacy".

Digital literacy, which as a concept has began to increasingly replace the term media literacy synthesizes in itself new resources resulting from the transition from analog to digital communication technologies and their penetration in the communications space. Digital literacy is actually new media literacy, as far as digitization is associated primarily with the media, with the change from analog to digital. Regardless of its digital character, however, and the subsequent on this basis interactivity, media have a strong tendency to endure not only did they not decrease, but rather expand and intensified their effects on power of all age groups and institutional formations.

In both cases, digital media literacy includes competencies that people should have for their social coping with communication technologies – not so much the technical aspects, but rather with their social applied aspects in the new digital environment. Media education, moreover, remains the framework within which all training activities across all levels are undertaken. Actually, despite the passing of over of decade and the ongoing conversation regarding the problem, there is still no officially adopted definition for "media education". We need to create a society where the participation across the digital environment is accessible to everyone, but we also need to ensure the relevance of educational policies in modern conditions. Even the European strategy for lifelong learning, which has listed key competences, did not define an explicit competence related to media literacy. It is limited to technical competence in the field of ICT.

The following eight key competences were defined to European countries (http://ec.europa.eu/education/policy/school/competences_en.htm), five of which are relevant to the problem without them being specially organized:

1) Communication in the mother tongue;
2) Communication in foreign languages;
3) Mathematical competence and basic competences in science and technology;
4) Digital competence;
5) Learning to learn;
6) Social and civic competences;
7) Sense of initiative and entrepreneurship;
8) Cultural awareness and expression.

Digital competence / ICT / is part of the wider discussion regarding media literacy, but is not limited to knowledge of digital technologies. They are often associated with digital information and technical competencies, but they are only one component of a much more extensive trajectory of media literacy. In both cases the content aspect of literacy plays an important role, its social relevance, which makes use of the new resources that digitalization has to offer. In the most important document related to digital dimensions of media literacy called "European approach to media literacy in the digital environment" (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, http://eur-lex.europa.eu/legal-content/BG/TXT/?uri=CELEX:52007DC0833) both traditional and new elements and concepts regarding media literacy in digital conditions were listed:

– Knowledge of all existing media – from newspapers to virtual communities; actively using media, including the use of interactive TV on Internet search engines or participation in virtual communities, more effectively exploit the potential of media for entertainment, access to culture, dialogue between different cultures, training and applications from everyday life, such as libraries digital audiovisual formats distributed over the Internet (podcasts);

– Critical attitude towards media in both terms of quality and of the accuracy of the content (e.g., ability to assess information, dealing with advertising on various media, using search engines intelligently);

– Using media creatively, as the evolution of media technologies and the increasing presence of the Internet as a distribution channel allow an ever larger number of Europeans to create and disseminate images, information and content;

– Understanding the economy of media and the difference between pluralism and media ownership;

– Knowledge of copyright issues, which is the essential "culture of legality", especially for the younger generation in its double capacity of consumers and producers of content.

All these dimensions help understanding media literacy in the digital environment, as the concept synthesizes in itself both traditional and new forms of media education. Digital media literacy is therefore an opportunity for both young and old to develop their knowledge and wide range of skills and competencies for critical thinking, communication and information management, to become reasonable citizens and consumers, artists in the modern digital reality. Therefore it is important and necessary, because it aims to educate thoughtful, engaged and informed citizens.

Digital media literacy or, digital literacy in short, requires more than obtaining factual knowledge of media, the goal, as previously mentioned is the acquiring of skills relating to the critical attitude related to mediated communications – both in print and digital, and the ability to both code and decode their meaning encoding.

(Livingstone 2004; Snyder, 1998). As stated by Sonja Livingston (2004) each components supports the others as part of a non-linear, dynamic process of learning: learning to create content helps people analyze what is professionally created by others; skills in analyzing and evaluating open the door to new uses for the Internet, expanding access, etc.

Digital media literacy is therefore positioned as a more relevant concept of media literacy, since it includes the skills and competencies required for effective use of new interactive media. It is therefore natural that in the latest research, the definition of digital media literacy is increasingly focusing on the need to shift from basic skills to the use of digital tools and information resources in order to build strategies for critical and effective use of these funds. The knowledge society is increasingly accompanied by new fundamental changes in materializing opportunities in human behavior – in various situations, time and space.

Digital media literacy has increasingly provided significant foundation required for the adequate functioning of modern society, which, thanks to digitization, developed in compressed space and time in a highly mobile environment thanks to the interchangeability of many tools and resources, as well as duty to the supersaturation of informational sources and ability to influence.

The knowledge society today is increasingly permeated by these processes and more digital media literacy becomes a condition for problem-solving and prosperity in the new realms of knowledge.

Modern media literacy is one of the factors for fundamental social transformations and effects in education 3.0 (Frau-Meigs, 2016), in which the foreground stand out:

– "Creativity and innovation";

– "Pedagogy for participation" and "co-design" joint problem solving;

– Interlinking of decision-makers and actors, including people from different age groups.

– Attracting potential of the creative economy in teaching and learning;

– Engagement of all ages to participate in online realities;

– Shared development of indicators and accountability mechanisms aimed at policies for the next generations;

– Providing tools and resources for e-learning, data analysis, for open online courses for large arrays [MOOCs];

– Data Management, including "big data" including contexts, combining opinion and facts, interpretation mechanisms and so on.

Digital media education is crucial to deal with the modern aspects, types and forms of education typical of Education 3.0. It is defined as an evolutionary moment in the knowledge society with fundamental reflections on all aspects of life. Its absence or limited availability led to exclusion or exposure to future economic and social risk. "If school systems fail to change their curricula and degree requirements for skills supply, they risk becoming irrelevant and digital education may begin to occur in areas that are not open, public and fair (Gauthier, 2015: 103–110).

Directing and managing digital literacy involves reviewing all existing aspects of education – from kindergarten to university, from student learning to teacher training, from some learning skills to other methods and training techniques, from formally organized to informal and open education and so on throughout people's life. Therefore media digital literacy, which is implanted in modern media education must build the foundations of curriculum. Obtaining digital media literacy is among the main tasks of education. Rapidly evolving information environment poses new challenges to teaching methods and practices to improve and adapt to it, to become the new media literacy in the main focus of educational activities across all levels. Educational institutions are traditionally called up to introduce children to the world of knowledge and experience. Today education faces a variety of digital media avalanche which is increasing in volume, but it also faces the challenge of an increasingly rapid aging of information, as well as with its different personal and social value and significance (Totseva, and Boykov, 2012).

## METHODS AND DATA

### METHODOLOGY

This article is based in empirical plan on several sociological surveys, used quantitative and qualitative methods, and covers the period 2003–2015 year.

– There is carried out the survey "Foreign students at SWU: training and motivation", in 2003 with team leader Dr. Maria Serafimova. The survey was included all foreign students at the university and has been studied 390 individuals. There was made a control group of 390 Bulgarian students (for comparison with foreign classmates), the sample is representative for Bulgarians in the university. The method used was a questionnaire. Topics under the questionnaire include various aspects of the learning process, students' preparation for classes, communication students – lecturers, the digital environment and facilities for learning, motivation and values that students share. The quantitative method allows to include students of different sex, nationality, with different interests, expectations, attitudes to training and education as a whole.

– The survey "Integration of social-psychological sciences in a globalized world" conducted in 2013 in South-West University (SWU) with team leader prof.Valentina Milenkova. There are used two methods: structured interviews and focus groups. The sample was unrepresentative included 290 students from various faculties of the university; the sample was made under eksperimental design sheme. The questionnaire included questions about the teaching methods, learning process, assessment methods and evaluation, digitization of education and digital culture to students. The other method used was a focus group. There were three focus groups carried out with students from Sociology, Psychology and Political

Science specialities of SWU. In the focus groups the discussion revealed on media literacy, forms of communication with teachers, based on digital processes.

– A survey "European Approach for public competency and participation in digital environment" was carried out in 2014 in SWU with team leader prof. Dobrinka Peicheva. The key topic was media education in Bulgarian context and its dimensions. This survey was a continuation of the International project "Media Education Policies in Europe" under the leadership of prof. Divina Frau Meygs, started in 2013; the purpose of the last one was to make Comparative Analysis of Media and Information Education Policies in Europe. There were included in the International project teams from 28 countries: Austria, Belgium, Bosna-Herzegovina, Bulgaria, Croatia, Cyprus, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuana, Niderlands, Poland, Portugal, Romania, Serbia, Slovakia, Spain, Sweden, Turkey, United Kindom The Bulgarian team included: prof. D. Peicheva – coordinator, prof. V. Milenkova, Ph.D. student V. Nikolova (http://ppemi.ens-cachan.fr/doku.php)

Each national study was aimed at identifying why media literacy seems currently stalled or having difficulties in reaching national scale and scope. Three major areas were considered that might yield answers: 1) **the policies** of the public sector (official documents, standard setting tools); 2) the **capacity-building resources** and **the actors** involved within the school system (training, materials, funding); 3) the role of **other actors** outside the school system (role of private sector, of civil society in informal/non-formal training) and their **own initiatives and learning events**.

For the purpose of this study, media education was defined broadly as encompassing broadcast media (press, radio and TV) and broadband media (internet, social networks). ANR TRANSLIT research suggested that computer literacy, though often less connected with the other literacies, needs to be evaluated as well, separately or in conjunction with the others. The basic research methods were: policy analisys, Curriculla analisys, study content analisys at schools and universities; In-depth interviews with actors inside and outside official education system.

– A survey "Cultural universals in academic environmet" was carried out in 2015 at SWU with students from Social study specialities: Sociology, Political Sciences, Psychology; team leader prof. Valentina Milenkova. Topic discussed in focus groups connected with: the values that students share, communication, media literacy, digitization, significance of media environment as element of university system.

## Positioning of media education to obtain the competence to participate in the digital environment

In our country the obtaining of knowledge regarding digital media literacy is concentrated mainly in universities. In secondary and primary schools issues of media literacy are found in more or less formalized or sporadic activities of teachers initiated by their participation in international or national programs and projects.

The different forms and varieties of media training in our country are mainly positioned:

1. *Within university frameworks* – in bachelor, master and doctoral programs at different faculties and departments; at scientific centers, research seminars, laboratories, etc.;

2. *Within the sphere of non-government organizations* , as the subject of their constant work in organizing lecture courses, international seminars, discussions, etc.;

3. *In mobile "ad hoc" formations* connected with international or national projects more or less related to media literacy. These mobile formations have initiatives connected with the realization of project aims and tasks, but have no policies for implementing and continuing these activities and initiatives afterwards.

Training activities by these three types of actors have been and will continue to be realized in all educational grades (kindergarten/primary school/junior high/ high school).

### *Within university frameworks*

Lecturers in accredited subjects connected with media education (journalism, public relations, media pedagogy, media impact etc.) are qualified in the respective profile. Their involvement with media education stems from their education and/or academic degree. Usually people dealing with media problems at universities and non-government organizations hold bachelor, master or PhD programming the field. For other lecturers – those working in areas outside media subjects, but with some relation to these – media education is also a part of their respective degree. Such are the lecturers on media topics teaching at departments of sociology, pedagogy, philosophy, cultural studies, library science, economics, etc.

Media disciplines taught or discussed in the different scientific educational units are predominantly connected with studies for the bachelor, master or PhD program and are primarily mandatory, not elective, specialized training courses. Usually the separate courses to media education contain 30 to 60 hours per year and represent predominantly mandatory disciplines.

The hours, types of programs, mandatory or elective characters of the disciplines related to media specialties or of separate courses related to media education are given in the *Table no. 1*.

The collected and presented by the authors data in *Table no. 1* give an instant photo of the situation in Bulgarian universities, but we do not claim to be quite precise as there is no uniform national methodology for designing curricula or for the inclusion of the respective indicators. The development of curricula in the field of media education is not connected with the regulations that are currently in force. More over the development is not coordinated between the various lecturers and specialists working in the field. The absence of official media education policies reflects on the initiation and curricula contents of media education.

*Table no. 1*

**Number of hours taught in field of media and communication at universities, 2014–2015[2]**

| University | Total hours | Compulsory | Optional | MA | BA |
|---|---|---|---|---|---|
| University of Library Studies and Information Technologies | 66 745 | 54 273 | 12 472 | 13 650 | 53 095 |
| Sofia University | 27 857 | 23 832 | 4 025 | 8 945 | 18 912 |
| New Bulgarian University | 25 710 | | 25 710 | 12 750 | 12 960 |
| Burgas Free University | 24 750 | 18 963 | 5 787 | 13 500 | 11 250 |
| Shumen University | 20 000 | 15 000 | 5 000 | 4 800 | 15 200 |
| South-West University | 6 840 | 5 381 | 1 459 | 2 380 | 4 460 |
| University of National and Welth Economy | 3 510 | 2 370 | 140 | 555 | 2 955 |
| American University in Bulgaria | 10 76 | 666 | 410 | – | 1 076 |
| Total | 178 412 | 121 533 | 55 879 | 59 580 | 118 832 |

The accredited curriculums existing at the different universities are predominantly mandatory both in master and bachelor programs. The curriculums and programs in place are the results of lecturers' initiatives and are consistent with accreditation requirements and specific features of the other disciplines at the respective university. Accreditation of universities, professional orientations and programs is carried out by the governmental National Evaluation and Accreditation Agency (NEAA)[3]. The absence of official media education policies including requirements for a set of competences in media education is compensated by various competence indicators applied by individual lecturers, indicators that correspond to the general requirements of NEAA. Standard instruments for expected results are connected with the acquirement of skills for interpretations, analyses, co-creativeness, independent presentations, etc. They are consistent with the specific characteristics of the different age groups and with the aspects of media literacy.

[2] Unfortunately, not all representatives of countries participating in the above-mentioned project of prof. Divina Frau Meygs ANR TRANSLIT of Sorbonne Nouvelle University managed to prepare such data, and it could not be created a picture of the situation in European countries. In the process of data collection in Bulgaria, however, and now there is a tendency of continuous growth of media and communication programs. New specialties in the field of media and communications are available in two Bulgarian Universities during the current 2016-2017: at Sofia University "Kliment Ohridski" – "Audiovisual communication and journalism" and at SWU "Neofit Rilski – "Journalism and Media". There is increasing the master's programs in most Bulgarian universities. The significance of the trend of growing interest in media and communication education is reinforced by the fact that both types of programming BA and MA have relatively the largest number of enrolled students to enrolled students in other specialities.

[3] NEAA – National Evaluation and Accreditation Agency in Bulgaria, http://www.neaa.government.bg/en.

The basic results are connected with the knowledge of, for example:

– theories on the formation of Internet era media competence in different age groups; these theories take into consideration age group and multicultural environment particularities.

– positive practices in the activities of the European Union for the construction of a European cultural identity and the realization of lifelong learning policies; the Bologna process for the construction of a uniform European higher education space;

– practices of application of multi-media for the needs of education;

– informing different age groups about currently important social problems of the democratic development of Bulgaria;

– variants of educating people so as to prepare them for active participation in social life;

– patterns of democratic citizenship and association. Key competencies have not been formally defined and included in media education.

Higher specialized media education in the form of bachelor's, master's and PhD programs as well as individual disciplines and specializations in the fields of media, journalism or public relations in Bulgaria are available in major public and private universities, such as Sofia University, University of National and World Economy, New Bulgarian University, Southwest University, American University in Bulgaria, and others.

Sofia University, the largest and most prestigious Bulgarian university, uniquely offers a specialized bachelor program in media pedagogy at its Faculty of Preschool Education. The designation is "Pedagogy of Mass and Art Communication".

This pedagogical bachelor program in media literacy has been very successful. Its workload is 2 205 hours and provides 240 credits; the duration of training is 8 semesters (4 years). Upon successful completion students receive a bachelor degree in Pedagogy of Mass and Art Communication. Students of this program can use their knowledge in various ways. One way is for students to demonstrate certain literacy products to kindergarten children – this enables students to check the children's responses and assessments. Some media products periodically prepared by the students include broadcasting, stream radio, children's magazine projects, documentary films, etc.

Some other media-related elements in universities involving research and training activities are centers, seminars, and associations. Some of the important ones are:

– The International Academic Seminar of Media and Education (SWU "N. Rilski");

– The Center for New Media and Digital Culture (SWU "N. Rilski");

– Southeast European Center for Semiotic Studies (NBU);

– Summer schools in various universities.

In the secondary education, media education is partially in teaching of foreign languages or Bulgarian language and literature in the higher grades. There are no specialized disciplines in this area. Some forms of specialization are available only

in the training of Bulgarian school students living outside the country – USA, Spain, Germany, etc. No official national data are available regarding the teaching of media literacy in schools. Sporadic data may be found related to project activities of participants involved in media literacy projects. (Sayanova, 2005)

### *Within the sphere of non-government organizations*

NGOs are also involved in activities related to media literacy. This refers to various foundations and associations, some of which have long years of experience in organizing training courses, lectures, international seminars, discussions, etc. The most popular NGOs whose work is related to media education, for which they engage specialists, are the following: Easy Communication Association; The Media Development Center; Foundation Media with a Human Face; The Southeast European Media Center; Bulgarian Gender Reserch Foundation; AMI Communications Bulgaria; Media Democracy Foundation, etc.

*The main areas of their activities can be summarized to*:

– training courses in language skills for media;

– education and training for media professionals and journalism students in Bulgaria;

– professional training for journalists and media managers from Southeast Europe;

– training courses in language skills for media;

– support for the development of the free media market;

– development and implementation of media projects in Bulgaria and abroad;

– research, consultancy and information services on media and for the media;

– publication of media-related books and training materials;

– media promoting events; conferences, round-tables, discussions.

No statistical data are available for Bulgaria regarding the number of events held and the hours allocated to this activity. Such a statistical account cannot be made due to the absence of systematic data in the public domain and the unwillingness of some organizations to share data.

### *Within mobile "ad hoc" education*

This forms a mixed nature. They include various categories of professionals – scientists, experts from NGOs, teachers, etc. Participation is usually along the lines of international and national projects; the groups are formed within the framework of the concrete projects and do not continue beyond the duration of the projects.

Unlike the other two forms, ad hoc participation is generally marked by insufficient long or short-term effectiveness of the implementation of activities (actually, this kind of inefficiency is also typical for other project performance in the humanities and social sciences). One example of ad hoc education is the project "Media Education in Schools: Opportunities and Challenges 2007–2009", conducted

in the city of Razlog under international Comenius School Partnership[4]. Another example is "On Air: European Project for Media Education"[5], launched in 2008, the Pestalozzi project, with respect to the participation of the Ministry of Education, which organized competitions for modular training seminars on media literacy and human rights during the period 2008–2010, etc.

Digital media literacy is a key competence for public participation in today's global world. The right to communicate and freedom of expression are among the most important achievements in democratic societies. The possibility for a critical understanding of media reality and the creation of such citizens is unthinkable without adequate and constant media education in new digital terms. There is a real need for special euro-regulations to include the issue in official procedures and its formalization.

## Policy documents

The interdependence between the knowledge society and digital media literacy officially emphasized after 2010, as part of the "Europe 2020" strategy, one of its three main priorities is "smart growth and developing an economy based on knowledge and innovation" (European Council 2000 ). This theme is carried over into specific documents reflecting the vision Europe 2030, with emphasis on the interaction between these two areas.

The first eEurope 2002 Action Plan was built around three major pillars: (1) investments in cheaper, faster and safer Internet access; (2) investments in people and skills and (3) to stimulate Internet uptake and use. Afterwards, the eEurope 2005 Action Plan has paid relatively less attention to digital inclusion while primarily focusing on thematic domains (that are related with Lisbon-goals): (1) e-government; (2) e-learning; (3) e-health and (4) e-business and e-commerce. (Verdegem, 2011).

In fact, one of the most important European documents binding knowledge society with digital literacy is the aforementioned document "European approach to media literacy in the digital environment" from 2007. The document not only defines the framework for media literacy both it also focuses on its influence for understanding the world and people's participation in democratic processes, it also puts an accent on consumer confidence in the ability of digital technologies, on the achievement of the objectives set for the European Union by the European Council in Lisbon in 2000 to build a competitive, involving large groups of people, knowledge economy, to encourage participation in public life, better public services and quality of life.

Since then, there has been a series of European documents, decisions, recommendations, programs, etc.

[4] Project "Media Education in Schools: Opportunities and Challenges 2007-2009", conducted in the city of Razlog under international Comenius School Partnerships http://pgtht-razlog.org/bg/european-projects/media- education.html.

[5] http://www.artsbg.net/ZAT%20projects/Pages/eng/OnAir.html.

The other important document "Programme 2010 Digital Agenda for Europe" known as Digital Europe ("Digital Agenda for Europe"), is one of the seven flagship initiatives of the European Strategy "Europe 2020". The document highlights the new opportunities and the contribution of information and communication technologies (ICT) for successful implementation of the Strategy. The series of papers focusing on competencies that people need to possess as the matrix for self-assessment group included indicators such as: opportunities for information processing; knowledge of the forms of communication; content creation; citizenship; security; problem solving and so on.

https://europass.cedefop.europa.eu/bg/resources/digital-competences.

https://europass.cedefop.europa.eu/sites/default/files/dc_-_bg.pdf.

In addition, we need to mention more recent European document. It is published in the European Internet forum 2014 report called: "The digital world in 2030. What place for Europe?" One of the visions displayed both as a central paradigm, namely the shift from "mass collaboration to knowledge society is: from "Mass Collaboraration" to "Kowing Society":

https://www.eifonline.org/DigitalWorld2030#

https://www.eifonline.org/DigitalWorld2030.

Digital literacy is not systematically subject to political documents in the Bulgarian context, which is a serious drawback and requires more focused attention and effort. An important document in this regard is the National Strategy for Research, which reflected that "education, research, technological development and innovation are the basis for achieving dynamic and sustainable economic growth" (p. 1). Digital literacy is based precisely on the fundamental implications, requirements and changes in the interaction between education, technology and innovation, the extent of these changes depends on the prosperity of societies and individuals. Adequate interaction between education, technology and innovation to technological development and innovation are the basis for achieving dynamic and sustainable economic growth" (p. 1). And guarantee the most important 'competitive advantage in the global economic competition".

The National Development Strategy research provides "formulate national science policy that creates and sets the prospects for achieving the tasks set by the Europe 2020 strategy. According to us it is important to initiate and stimulate a thorough process of modernization, of acquiring new knowledge and skills to be able to transform Bulgarian society from a" knowledge society" to a "knowing society" in the context of Europe 2030.

## RESULTS

The results from the surveys that we displayed in this article are focused on several important issues: 1) How to change over time (early 2000 until now) academic environment as conditions of access to computers and the Internet? 2) How ICTs

are part of the learning process? Does this process continue to evolve over time? 3) Does it change the attitude of students from SWU to study materials used in classes? 4) What skills include modern media literacy?

All this raises some important question: what is the computer security of the university environment?

We start with the results obtained by the sociological surveys „Foreign students at SWU: training and motivation"[6], carried out **in 2003** by the Sociology Department. The sample included 390 foreign and 390 Bulgarian students. The questionnaire followed different aspects of the relationship between Bulgarian young people and ICT: access to computers and Internet; the significance of computer technologies in education, their effectiveness, and role to create high-qualified people. With the questions used in the survey the students were asked to assess: 1) Specific conditions under which the study process is conducted; 2) The facilities which exist in the study environment at the university. 3) Students' access to textbooks and appropriate study materials.

## Access to Internet

The implementation of informational technologies is a key element in digital literacy and Education 3.0., that's why computer literacy is one of the basic skills for competency. The students are the most appropriate age group being mobile and able to respond to environmental changes, a part of which are computers. These changes are needed because computer literacy has become an important part of qualification requirements and is connected with successful professional realization. At the same time the access to Internet is a basic condition required to improve the quality of education and to sustain active communication – between students and professors (through e-mails, chats, blogs, face book etc.). One of the main reasons for fast growth of the importance of computers in educational communication is the fact that this is the cheapest and the most effective way to contact with students, colleagues, friends, and peers.

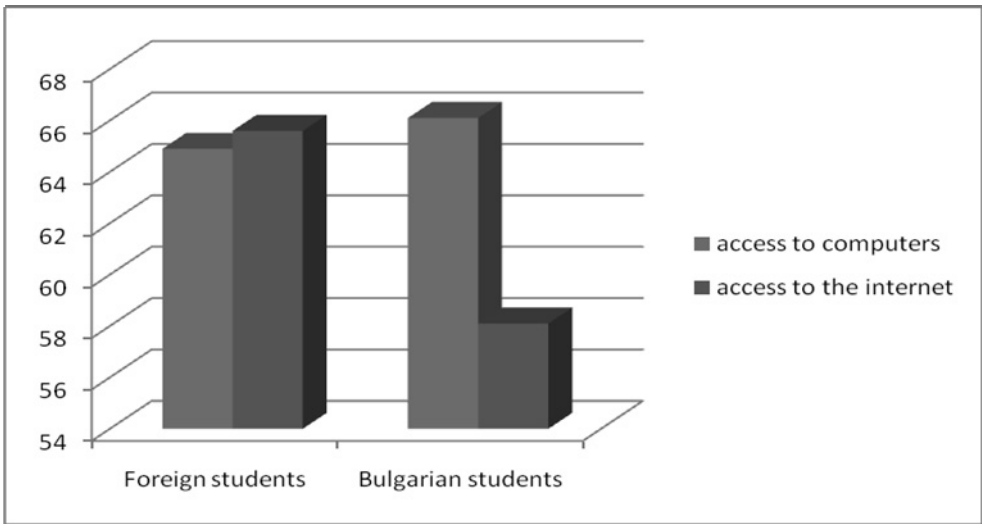
In the carried out in **2003** survey approximately 2/3 of all foreign students educated at SWU had access to computers (64.9%) and to Internet (65.6%)[7]. The situation with Bulgarian students is identical: 66.1% of all respondents had access to computers and 58.1% had access to Internet (*Figure 2*).

[6] South-West university (in Bulgaria) is a specific higher education state institution that guarantees training of students with different social background, ethnic profile, religion, and family milieu. The students at the university are predominantly from different South West and North West Bulgarian areas, but in addition there are some from neighbouring countries – Macedonia, Serbia, Greece and Turkey.

[7] It is noted that the proportion of foreign students who responded that they have access to computers and to Internet is almost identical. Most likely higher rate (0.7%) of those who said they have Internet access compared to those who said they have access to computers due to the understanding of the issue by some foreign students that access to computers means their personal possession.

*Figure 2*

**Access to computers and Internet, 2003**




The accumulation of respondents in two groups is indicative for the presence of available conditions for education as well as for the fact that the whole educational process can develop in accordance with the contemporary tendencies in modern higher education.

**Twelve years later in 2015**, the data about the access to Internet is quite different due to the increase the number of computers as a part of the university policy to create technological university environment and to guarantee full access to it. The university library, with the readings halls, computers halls, and laboratories become a part of the university life. This means that there is a constant access to computers and Internet for students. In addition, above 89% of all students have personal laptops. The access to computers and Internet for several years has become a necessary prerequisite for a quality study process. The basic concept in this aspect is: giving and discussing homework and essays, requiring additional students' deliverances, and supporting lecturer-student networks. An important part of the whole process of new forms of modern communication is that students familiarize themselves with Internet publications and materials. So, the interest of young people towards education is increasing because the sources of information are enhanced, and the real education process is being modernized.

Modern media literacy include the proficiency in the usage of digital technologies that enable students to work with computers, software applications and databases, these skills are the foundation of obtaining information and its understanding. An important aspect of education 3.0 is that students need to have the ability to search, collect and analyze; an ability to be able for critical and systematic use of the found information and use of Internet-based services. ICT in

their full use underlie the development of creativity and innovation as important part of Education 3.0 as well as the development of basic computer skills such as spreadsheets, databases, storage and information management, understanding of the opportunities and potential risks of the Internet and computer-mediated communication to work, cooperation network.

Education 3.0 means that the personal relations between professor and students are changed and they include particular new aspects, focused on the technology environment. That's why it is important to expand requirements for teaching qualification through including new methods in education. The education policy reforms are oriented towards guaranteeing flexible and new technology environment. In this direction it is important to note that the syllabuses of all taught courses at SWU are uploaded on the Internet. The lectures are taught through multimedia and new technology facilities. An important part of university communication is the electronic networks, lecturers' blogs, Internet forums and active contacts supported by the university in order to facilitate dialogue between the educational actors and to improve learning. The students can express their opinions for the study process and particular details of their experience as well as to discuss aspects of student preparation for seminars and exams. In the process of education the development of students writing skills is a key issue because it is the base for quality papers, essays, and all written assignments during the study process.

All these topics were the objectives of the survey carried out with students from SWU in 2015 (under the project "Cultural universals in an academic environment", as well as with the project in 2014 "European approach to public powers in the digital environment"). In the carried out focus groups the students have shared that they use computers and have access to Internet and these elements are normal aspects of their university training. The participants in the focus groups have stated that they communicate with lecturers by e-mails in order to ask questions and to receive recommendations for their assigned tasks, connected with the learning, as readings, delivering presentations, or other kind of students writing activities. According to students, the participation in classes' discussions, the using of computers and Internet is part of requirements of the knowledge and information based society that demands creating skills for lifelong learning and constantly improving individual qualification, knowledge and competencies. Because the system of education is based on the concept that all key processes in an organization are interrelated, and understanding these relationships is critical to obtaining the desired results ( Furst-Bowe, 2011: 5).

## Access to study materials

According to the results of the survey carried out in 2013, the share of students educating nowadays at SWU who have access to Internet and computers is 100%. That could explain why the students have no problems with readings and

providing the tasks assigned by lecturers. We can see a process of improvement to the computer settings in university when comparing the present data from **2013 survey** with those collected **in 2003**, when the results obtained note that 20.7% of all foreign respondents and 24.1% of Bulgarian students declared: "I don't find the readings under the course". This response shows that literature and educational materials that teachers recommend their students for training are lacking at the university library or a small number of books that can be used by all students. We must recognize that the training of the majority of students at Bulgarian universities in 2003 is through books and print journal and not on-line, which creates certain difficulties for the learning process. The students who say they didn't find the training materials and those that declare "I do not know" (i.e. they have no bearing on the question) actually form the set of "unprepared or uninterested (indifferent)" in the learning process and their aggregate share is 37% (for Bulgarian students) and 34.5% (for foreign students).

In fact, about 1/3 of the whole surveyed sample has declared **in 2003** that they can't find the need readings and study materials, or these students didn't prepare themselves for the seminars and classes. Actually difficulties in finding training materials are overcome by digitization, where one of the great advantages is the easy access to a variety of materials, literature data and information guaranteed by the online sharing. Free access to books, magazines, the existence of different forums and websites provide a variety of information on all topics that are discussed at different levels globally.

At the same time it is necessary to note that the advantages of Internet are not used efficiently enough in the educational university process and there is more potential that can be utilized in the university communication and networks in order to perfect teaching and learning methods, benefiting both sides of higher education society (students and lecturers).

The improvement of the conditions and study environment is connected with the access to computers and Internet and all this has influenced the level of higher education bringing it up to date with European requirements. Students note that they have access to Internet and computers, that the education is influenced by all elements of new informational technologies. Creating conditions appropriate to interactive education, an important part of which are technologies and all traits of effective pedagogy are connected with basic reforms and advanced aspects of European higher education space.

In this direction are the carried out three focus groups with students from Social studies specialties under the survey "Cultural universals in academic environment" in 2015. During the conducted focus groups various aspects of digital media literacy were discussed including:

– Computer literacy related to: the use of computer programs for word processing, for generating spreadsheets, presentations, photos, images, graphics; use of databases;

– Internet literacy related to: internet access, which search engines are used, what information is extracted, the using email, social networks, blogs and websites related to the preparation during various disciplines;

– Information literacy associated with: knowledge and use of separate library information resources on the Web;

– Independent thinking regarding: how to analyze, interpret and critically evaluate information; extraction ion of new knowledge; understanding of the ethical aspects of networking and the Internet;

It can be summarized that, in terms of *computer literacy*, university students are highly knowledgeable. In all subjects studied, the preparation of presentations using the resources of the various computer programs for the generation of tables, pictures and images is widely included; the students know and use computer tools for word processing and are able to create and format documents.

– *Internet literacy* is also high. Students daily access the Internet; use e-mail, participate in social networks, mainly Facebook, have profiles; read websites and blogs, in many cases, however, these activities are not related to training and academic preparation but are connected to personal pursuits and personal contacts, communicating with friends, entertainment, download movies and more.

– *Information literacy* of students is underdeveloped; mainly this refers to the knowing of the capabilities for the use of electronic publications – books, encyclopedias, magazines; but they are not always used. Students do not know the library information resources in the network, and do not know the electronic library of the University.

– *Independent and critical thinking* – this is the least developed part of literacy of students. A very minor part of respondents critically analyze what they read; they are nearly lacking in the ability to compare different sources; they find it difficult to summarize and digest what they have read; they do not think about the ethical aspect of things and copyright infringement on the Internet.

From all this we can conclude that computer and Internet literacy of students from SWU is very high, but at the same time, it does not find a serious enough space in the formation of independent thinking and both critical and analytical skills. Often students take for granted the information Internet sources without making additional inquiries; also, we can note as part of their behavior on the Internet, is that the way they conduct themselves stands out as one devoid of an ethical approach, which is rather disappointing, given their character and values. Moreover, it is not enough to have a high-level ICT environment, access to the Internet, it is important to reflect on how digital media literacy can be actively used in school work and how students can become more team oriented.

## DISCUSSION AND CONCLUSIONS

The adapting of students to the challenges of the digital society and new training practices necessitates the determining of more effective ways to attract,

encourage and motivate students towards the utilization of quality theoretical and applied knowledge and skills in ICT. Access to computers and the Internet, the opportunity to work with some basic computer programs and tools in no ways guarantees the acquisition of digital media competence amongst students. Especially when taking into account that many of the young people who study at the university, do not possess the necessary skills to use digital technology due to the fragmented and superficial use of information. The need to foster the introduction and study of such subjects as "Digital Media Literacy", "Computer Literacy and Information Technology", "Ethical Aspects Of Digital Media Literacy" amongst others. The ability to access online tutorials, e-books and other forms of improving the digital competency of trainees through which the development of a wide range of skills for search, identification, critical assessment and use of information for more self creative and ethical behavior in the digital environment is evident.

Quality of education including university environment and lecturers' professionalism is connected with the modernization of higher education. In this context emerge the basic elements in the Strategy of the European Commission for supporting European higher education, connected with: improving information quality, enhancing attractiveness and competitiveness of universities, sustaining partnerships, enforcing the dialog and improving mechanisms for mobility. So, the opportunities for individuals are influenced by the specific institutional and structural settings, which have determined student's perception as supporting or discouraging a person's desire for learning.

Conceptualization of media and education, which are theorized here as equal in the socialization processes are among the most important factors for social inclusion and realization of people's conceptualization outlining the foundations of modern knowledge society in his statics and dynamics. Awareness of the digital media skills as a key factor in the full development of the knowledge society has not yet found adequacy among the cognitions of the authorized formal and nonformal social actors as well as their immediate educational practices. Digital media literacy includes mobilization of resources on a personal level, which does not always coincide with institutional values and requires a combination of successful institutional strategies and behavioral role models relating to persons of different social status.

Global issues of digitization and their reflections are fundamental highlights of the Fourth World revolution – the digital revolution (Klaus Schwab). Not accidentally, this issue was at the core of World Economic Forum in Davos during the month of January 2016. Digitalization corresponds to the expressed during the forum idea "to build understanding of how technology changes our lives by entering into economic, social, environmental and culture" https://money.bg/economics/za-kakvo-shte-govoryat-svetovnite-lideri-na-konferentsiyata-v-davos-tazi-godina.html.

In our country there are serious research, applied and regulatory deficits which justify the need for digital media literacy, which corresponds to modern education 3.0, as well as the challenges to opportunities for different types of

interpretations, forms of participation and creativity that put constantly innovate digital communication products in all spheres of society. There are deficits in the description of existing resources in our country, in the ongoing and necessary policies, existing and future practices in both the national and international comparative framework.

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***ONLINE SOURCES***
https://europass.cedefop.europa.eu/bg/resources/digital-competences
https://europass.cedefop.europa.eu/sites/default/files/dc_-_bg.pdf
https://www.eifonline.org/DigitalWorld2030# https://www.eifonline.org/DigitalWorld2030
www.translit.fr
https://money.bg/economics/za-kakvo-shte-govoryat-svetovnite-lideri-na-konferentsiyata-v-davos-tazi-godina.html
http://newtrend.bg/digitalkidz/zashho-digitalni-umeniya-tryabva-da-sa-osnoven-predmet-v-uchilishhe
http://ebox.nbu.bg/prob12/view_lesson.php?id=244
http://ukh.uni-sofia.bg/page.php?c=26&d=88
http://ec.europa.eu/education/policy/school/competences_en.htm

*În Bulgaria există o lipsă atât în domeniul cercetării, cât şi de reglementări pentru justificarea nevoii de cunoştinţe în vederea utilizării media digitale, cunoştinţe ce corespund educaţiei de tip modern 3.0, precum şi a provocărilor pentru diferite tipuri de interpretări şi de creativitate, care, folosite constant, promovează produsele comunicării digitale în toate sferele societăţii.*

*Acest articol intenţionează să cartografieze eforturile teoretice semnificative şi practicile aplicate pentru promovarea diferitelor aspecte ale cunoştinţelor în utilizarea media digitale, ca şi pentru explorarea dimensiunilor lor şi a proiecţiilor sale în societate.*

*Analiza este bazată pe câteva sondaje de tip sociologic ale procesului educativ la Universitatea South Wales (Bulgaria), care au relevat diferite aspecte ale relaţiei între tinerii bulgari şi ICT: poziţionări, opinii şi atitudini; semnificaţia lor în procesul de educaţie sau şi o înţelegere a oamenilor înalt-calificaţi.*

*Concluzia de bază a prezentului articol este că adaptarea studenţilor la provocările societăţii digitale şi noile practici de pregătire cer găsirea de moduri mai eficiente de a atrage, a încuraja şi a motiva studenţii către utilizarea de cunoştinţe teoretice şi aplicate de calitate în ICT.*

***Cuvinte-cheie****: cunoştinţe media digitale, competenţe media, educaţie 3.0.*

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