DIGITALNI PROSTORI

– IZAZOVI I OČEKIVANJA

DIGITAL SPACES

– CHALLENGES AND EXPECTATIONS

Priredila/Edited by
Ljiljana Bulatović

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SADRŽAJ/CONTENTS

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The Impact And Implementation Of Digital Media On Children's Upbringing And Education

Abstract: The paper deals with the influence of digital environment-digital media, in particular television and the Internet as the most influential mass media, on children through different cultural, social, educational and behavioral aspects. It analyzes the changes that information revolution and digital mass media brought to the society in terms of changes in patterns of behavior, new ways of creating personal identity through the patterns imposed by television and the Internet. The paper also represents the main educational and behavioral aspects of television and the Internet, especially e-learning; the implications and aspects of using smart mobile phone, and the concept of m-learning. In addition authors analyzed the advantages and risks mentioned returns, and they give their overview and proposals for developing e-learning and m-learning as concepts.

Keywords: Internet, television, pedagogical, educational, behavior, identity, e-learning, m-learning

1 Introduction

"During the twentieth century, the media have experienced tremendous growth and have become one of the most powerful forces of modern society. One of the first consequences of the media spreading is the transmission of a particular culture as a total of ways of life, value orientations, lifestyle, view of the world, and etc." [Perić, Krasulja, Radojević, 2011: 11] "The plentitude of information is used by the media to depict our present on an invisible time canvas on a daily

basis. That media image of an individual, but also the wider social reality, is framed precisely by the amount of information and the range of our knowledge." [Brigs, Kobli, 2005: 112]

The new millennium is a milestone in the development of various areas of society and civilization, whilst digital media may play the greatest role. Regarding the visual culture of mass media, their performances determine the conception of the world, a sense of personal identity and gender, style and way of life. [Perić, 2008] But for the sphere of consumption, leisure and lifestyle, the mass media are the main carriers of mass culture, while their representation and consistency are nowadays among the most effective agents of transferring the same. "However, the image that the media form does not have to coincide completely with the reality. Sometimes this deviation is even enormous, so that the media image and reality differ in essence." [Perić, 2008: 169] The majority of renowned media theoreticians share the very same perspective – from Baudrillard and our philosopher and theoretician Šušnjić to Fransis Balle and others. [Baudrillard, 1991; Šušnjić, 1990; Balle, 1997]

Sociologists and media theoreticians generally agree that the media, and especially the electro-digital one, headed by the television and the Internet, influence the opinions of people and that they are extremely important for forming the system of values and attitudes, with children being the particularly sensitive category. "Everything that surrounds them and occupies their time affects the development and formation of personality. The influence of the media and the close environment saturated with visual and audio-visual messages regarding the education of youth, has been marked by the sociologists of education by the phrase parallel school, while psychologists and pedagogues refer to it as the parallel curriculum". [Zindović-Vukadinović, 2000: 119] This is particularly emphasized since the children are in the development stage of their lives when they adopt the norms and principles, form their opinions and attitudes about something, and quite often they are not able to be critical (enough) when it comes to certain issues in their environment. At the same time it is also implied that families and educational institutions need to be aware of their role in the triangle which they form together with the media. Namely, the media can have both positive and negative impact on different areas of children's development. Whether the

negative effects will occur, depends on numerous factors and the way the media are used.

Nowadays, almost every child is exposed, to a greater or smaller extent, to the influence of the media, particularly digital ones, on a daily basis within the digital space that surrounds them. Children are mainly exposed to the influence of electronic media in the first years of their lives, and the further impact of media on children generally increases. The media, especially the Internet and television, as well as smart phones, are all around them – in their homes, at school, on the street, in the car, on the traffic stations and airports, cafés, and getting used to the media happens quickly and insensibly.

In developed and moderately developed countries (such as Serbia) a great deal less children spend the dominant part of their free time outside, playing with peers, while an increasing number of children spends hours with their mobile phones, Internet and television, i.e., in the so-called virtual world, with contents and programs that are not usually adapted to their age and needs. Thus, the influence of television depends not only on the program's content, but also from the formal features of television such as high animation, exaggerated musical sections, visual and auditory special effects. All of these features are helpful when it comes to attracting and retaining the children's attention, and similarly it also applies to the Internet with its interactive audio-visual facilities and portals as well as social networks which are based on video content (among which the YouTube is undoubtedly the most popular on a global level).

Thus, television and the Internet have a great role in the lives of young people. Owing to them, a variety of different information is obtained, different cultures can be met, and developments in other countries can be directly monitored, and so on. Education and the media, as the main social forces, are here associated because it can be observed that the means of mass media, and especially the Internet, are more and more being used in education. On the other hand, the media also affect the education of children, both through the use of the educational system and through media content. It can be said that their greatest impact is present in the field of informal and non-formal education, but it is increasingly intended to take advantage of their positive impacts in the sphere of formal education as well. Informal education refers to knowledge from experience, which is obtained in

everyday life – that is what we learn without a clear and conscious intention to adopt certain knowledge. [Pavićević, Petrović, 2015]

2 The contents of television and the Internet and their impact on education and upbringing

In the follow-up of this paper we will try to present how certain mass-digital media can be used for educational purposes, as well as the achievements of their influence. We will analyze two dominant means: television and the Internet. Besides the similarities caused by audio-visual content, each of these means uses a specific way to pass and present information and makes certain educational effects on society and children.

Television and the Internet provide important and valuable information, school, educate, can promote healthy lifestyles and etc. Among all of mass media, the two influence the formation of taste to the greatest extent and are by far the quickest way of placing certain information for the younger generations. The placement information that affirm children, promote their results, talents and accomplishments is particularly important, because in this way every child is encouraged to be better and more successful in order to be spoken about. Furthermore, the influence of the Internet and television is undeniable, both in regard to education and cultural enrichment. In this sense, paradoxically it is claimed that today it is easier than ever to reach premium state of the art, but there are less and less of its consumers, especially among young generations. It is also undisputed that children mostly consume media in a way that has no educational character, but simply entertaining one, and that this use of media as such leaves them less time for learning.

Even though the Internet has emphasized positive effects on society, it has caused concerns regarding privacy, pornography, Internet crime and the virtual community. [Greenfield & Yan, 2006] Its easy accessibility implies greater risks and dangers for the youth opposed to other forms of media. [Louge, 2006] Children are offered a lot of different contents through the Internet and television, and while the content on the Internet is largely uncensored, on television there are plenty of "reality" programs whose participants can become a pattern of behavior. Crime and violence, sex, glamor, intrigue and etc., are the

contents which are dominant in these medium and which have a very negative influence on the personality formation (especially of the young). [Perić, Krasulja, Radojević, 2011] In this regard, we can point out the legal obligation of TV stations broadcast in Serbia, to stand out the years, i.e., the age, before and during the broadcast, for which showing certain contents is inadequate, which is not of great benefit when programs labelled with 12, 14 or 16 are shown in the afternoon or early in the evening. Often cases of mimicking scenes seen on television or the Internet can be noticed, and children easily co-opt negative patterns that these media largely provide, while having no full awareness of its importance and the possible consequences.

Hereby we disclaim that watching television cannot be characterized as purely harmful because there are many good quality educational programs and channels (the best examples being the National Geographic and Animal Planet). Also, children as well as adults almost unconsciously learn foreign languages by watching to television programs. Contents that attract the attention of children by image, although in a foreign language, and the fact that the environment at a given age intensely affects the acquisition of knowledge, enable children to accept foreign languages quickly. Likewise, the Internet and social networks are good channels for the presentation of literary, artistic and other works and achievements of children, for announcing various events and gatherings, encouraging creativity and so on. In this way children develop different technical and social skills that are important for their socialization with peers and surrounding. However, the media influence their maturation, the adoption of behavioral patterns, creating a self-image, developing social identity. Experimenting with identity through social networks is a characteristic of children and adolescents and it can have profound negative consequences. A personal virtual profile that children and young people make on social networks is not usually the real self-presentation, but children's fantasy about a person wishing to be, or become, and creating the illusion of authenticity is usually very stressful for children and adolescents, since the created profile is highly important for their social life. [Turkle, 2011] The problem lies in the messages that children (and all media consumers) are daily exposed to, and those are related to the expiration of material values, as well as the use of social power, status, appearance, sexual or risky behavior (consumption of drugs, alcohol, cigarettes, etc.)

as a potential way to achieve self-actualization and gain attention, which can cause great damage for children's sensitive personality. By watching television and accompanying content of the Internet, children learn information that may be inappropriate and inaccurate, which is a major problem when considering the formerly: the children have not yet been formed as a person and they have not got developed critical thinking. Children cannot often distinguish between the fantasy shown on television and reality, because they are able to form their own parallel world and / or too high expectations of themselves, and this can significantly affect their view of the community and environment, family and interpersonal relationships. Furthermore, they are under the influence of thousands of commercials that they either actively or passively watch every year, while many of which can refer to alcoholic beverages, fast food, soft drinks and toys.

There are fewer and fewer contents which are educational by character, that involve the children themselves and where they compete with their knowledge, the contents in which children create a program and tackle those topics that are interesting for them. Children, cultural and educational programs lose their percentages in the total media content as opposed to entertainment contents. And it has been proved that children who watch educational shows read better and have more developed language skills than children who watch only cartoons and programs for adults. [Source: www.roditeljportal.com/clanak/stampa/uticaj-tv-na-deciji-mozak.pdf]

Psychologists also point out the influence of the media on juvenile delinquency. In order to increase their viewership and attendance, television and the Internet sites cannot refrain from publishing stories on crimes among minors and generally those contents that are full of misdeed, crime and blood, although they are aware of the fact that the amount of negative information can have a negative influence on development of juvenile delinquency. The problem is that role models are no longer the brave and the moral, but the rich, singers, successful athletes and people in the entertainment industry. The virtues of new role models are not fearlessness, intelligence and determination, but the richness, beauty and glamor. The line between good and bad has been relativized in this way and children are to a great deal put in a position to interpret the media language and characters on their own. Even in a later, more mature age, many people do not see the problem

in which they find themselves and the sobering does not occur. Quite the opposite, advocating the attitude by which these role models are something to be pursued is continued, as well as the idea that on this way to "glory "everything is allowed as a means.

Researchers at the Institute of Psychology, University of Belgrade, examined the role models of young people opposed to the people from public life within the project "Everyday Life of Youth in Serbia". [Source: Školarac, Svakodnevnica mladih u Srbiji, http://www.skolarac.net/index.php?option=com_k2&view=item&id=505:projekat-%E2%80%9Esvakodnevnica-mladih-u-srbiji%E2%80%9D&Itemid=22] slightly less than half of the respondents have said that they have role models in public life. These are usually musicians, actors, athletes, TV presenters and people who often appear in electronic media. The conducted research showed that the role models of respondents are primarily TV presenters of their favorite shows or their glamorous guests. The reasons for this are mainly their private lives, looks, fashion style and not their personality, attitudes or system of value. In all of this we come to the problem of appearance and beauty. Fashion houses, media and celebrities create and promote models of beauty, while only one dimension of beauty is observed, and it is the outside one. The impression is being created that the men and women from magazine covers are desirable, that all should dress as they do and etc. The consequence of this development is that those who do not fit into this (programmed) model can be considered less valuable. In addition, inner beauty and spiritual values are increasingly becoming the subject of ridicule and they are often very little or not at all valued, which can result in a number of psychological problems, due to the fact that children who are not popular in their society (whether it is a pre-school or school age) feel unfit and discarded, incapable and so on. This can significantly affect the child's self-concept, self-esteem and relationships with peers.

The well-known study Alliance for childhood Fool's Gold [Cordes, 2000] states a wide range of potential risks and development hindering factors that digital technology may have on preschool children, including health risks such as body deformities, eye problems, obesity and the electromagnetic radiation; the lack of motivation and self-control, emotional alienation and social isolation, the lack of creativity, impoverished language and poor concentration. But for these, the

consequences can be noticed in the fields that are not so obvious. To illustrate, these can account for creating a self-image, formation of sexual identity and relationship to sexuality.

Castells believes that virtual reality produced by the mass media (primarily television and the Internet, AC) is no longer artificial, but real and speaks of "real virtuality". He explained this term in his famous book, *The rise of the network society*, as "a system in which the reality is fully immersed in the virtual environment, in a world where everything is possible, in which phenomena are not only impressions on the screen through which experience is communicated, but they become the experience instead".[Castells, 2009: 404]

3 Internet as a means of education and e-learning

With the emergence of the Internet new possibilities for communication have been provided, as well as a new tool for education. Children of different ages are everyday users of the Internet, and thus it is necessary to ensure that the facilities they access are in favor of different educational needs, with the necessary condition to be interesting enough for children. Content which is available on the Internet accounts for various fields of arts, culture, science and etc., and therefore it can be used in different ways for educational purposes. Many libraries have made their own contents available online so that the users can complement their knowledge by using these contents.

There are more and more programs and platforms which provide an opportunity for children and young people to acquire adequate knowledge via the Internet as well as to facilitate the exchange of information between students and teachers. The programs which are present in our surrounding are: Moodle, online programs and courses for studying at a growing number of universities, colleges and training centers, as well as numerous online platforms that provide the possibilities for language learning and development of other skills.

Due to the rapid development of information technology and more dynamic needs of society, in terms of mobility and lifelong learning, e-learning is often emerging as a form of learning via the Internet. E-learning basically implies learning via the Internet with the help of multimedia units and a great deal of interaction that a student trainee experiences during lectures. [Palloff, Pratt, 1999]

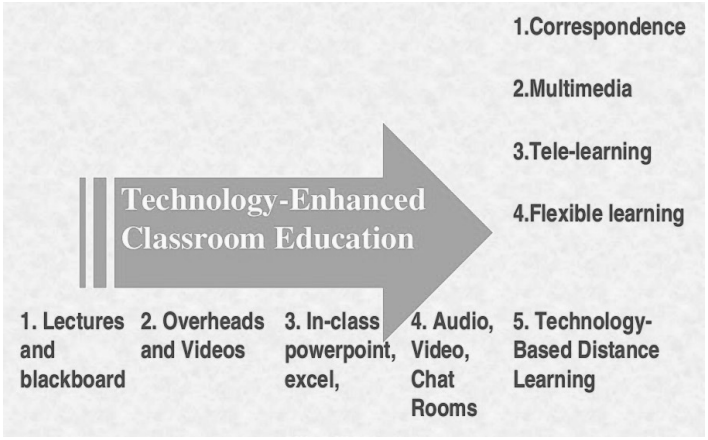

Fig. 1 Towards Technology Based Distance Learning [Kakani, 2008]

This learning model was made possible because "the web" has got a huge amount of data, as well as the ability to share them. E-learning is only one of numerous concepts, which have occurred in the last ten years, with the prefix "e", and which stands for performing specific activities with the help of the Internet and information technology. Furthermore, e-learning is an educational process or a complement to the classic vision of education with the help of computers, the Internet and various multimedia and interactive elements. Thus, e-learning includes the enrichment of traditional teaching, which means that within the context of education, as well as interaction regarding students-content-teacher relation, digital technology has also been included as an essential factor in the process of knowledge transfer, which is another direction of spreading the digital space which surrounds us.

Owing to its flexibility, this model of learning is becoming increasingly popular because it offers a student broad opportunities for independent work, engagement and progress according to individual needs, abilities and interests. A multitude of ideas and the possibility for their rapid exchange improves the quality significantly, while the interest in the use of new learning process has appeared. Modern pedagogy implies intensifying the development of technology that can be used for the purposes of e-learning and it was rapidly adopted by developing a multitude of theoretical and practical models. The exam-

ple which follows provides e-learning in drama section for preschoolers called Method of the physical action, which is based on famous book *The method* of the world's largest theater theorist, by Konstantin Stanislavski. [Nikolaou, Koutsouba, 2011]

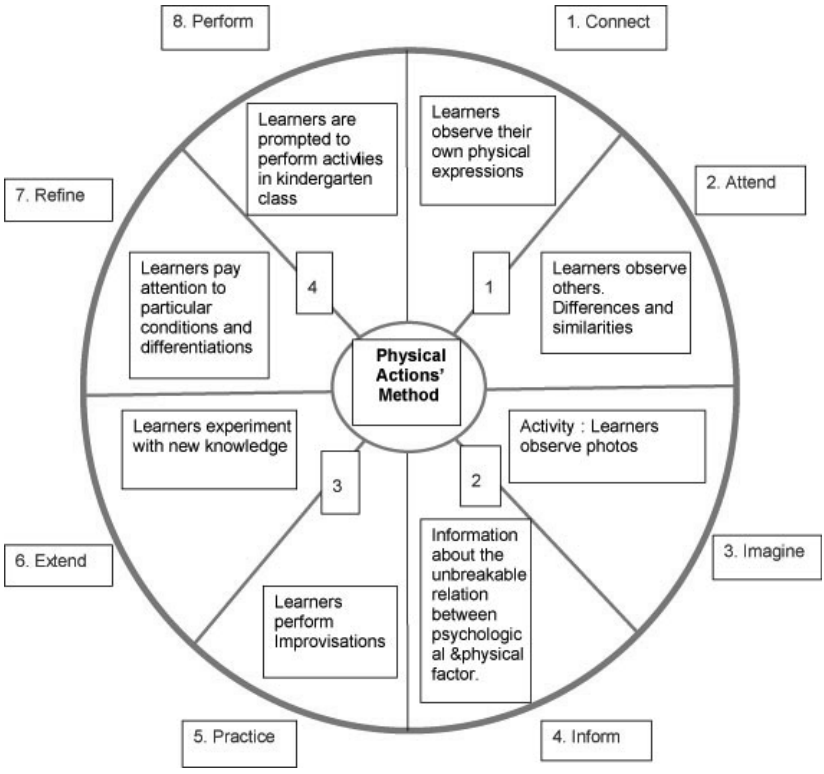

Fig. 2 Physical Actions' Method

Today there is a need or a desire to improve the quality and availability of various educational programs, where learning viewed as a process that can last throughout entire life.

The core characteristics of e-learning and its pedagogical aspects are:

- The flexibility of time and place for attending lectures. While traditional education implies a place where classes are performed and knowledge is transferred, today that is no longer necessary. Therefore, not all participants in the educational process have to be present in the same place and at the same time. Hence, there

are several types of lectures given on time and place: at the same time and same place (classical classrooms with multimedia presentations), at the same time but different places (videoconferencing), different times and the same place (electronic forums and tests), different times and different places (e-mail, network forums, video conferencing, etc.).

- Global knowledge that is reflected through the approach to teaching materials of different educational systems and countries, as well as the access to digital databases, libraries, cultural and other centers.
- The interaction in communication: student – student; student – teacher; students – teacher. In order to make e-learning successful, it has to provide multiple ways of communication. For that purpose, different forms of discussion forums, e-mail, audio communication and various forms of simulations and animation are being used. This kind of communication is often more comprehensive than communication in traditional instruction. This form of teaching often allows asking questions freely, without the (excessive) fear of the teachers' authority.
- Individual approach to students. This element implies high level of orientation to the participants, insisting on the development of thinking and acquiring new skills. Therefore, the pace and dynamics on the highest level of e-learning can be customized to each student individually and external distractions are reduced to a minimum. There is no hindering factor as in the case of classical groups and classes where members of the group mostly make progress at different pace when the acquisition of knowledge is concerned.
- E-learning enables continuous learning, which is the concept of lifelong learning. This concept is a global trend that has no tendency to change, but for the fact that it will certainly intensify. Due to its concept of approaching a greater extent of materials than the one implied by traditional instruction, vocational training or retraining is much easier within e-learning. Also, this type of learning encourages students to be more independent regarding research than traditional instruction.

However, e-learning has its drawbacks, of which we will stress three most important for the education of children:

- The lack of live contact between students and the teacher. Due to the lack of live contact with a teacher the educational aspect of teacher's work in the classroom (which is of great importance) is missing and of the students may experience loneliness and alienation that can be a disincentive to the motivation to learn.
- There are certain areas that cannot be (well enough or to no extent) studied only electronically-for example, certain fields of art that significantly rely on traditional artistic disciplines, as well as a significant number of natural mathematical and technical areas that require practical and laboratory teaching segments.
- When it comes to technically more demanding programs, all students should have appropriate technology on their disposal, such as a computer with an appropriate version of a Web browser, advanced versions of the programs to display multimedia files, fast Internet connection and etc. The technology which is being used for a course can be very demanding (for example, regarding videoconferencing), and thus it could prevent those participants who do not have it (to the needed extent) to attend the course.

Leading organizations and institutions in the world that deal with e-learning are trying to focus on the development and precise defining of standards in e-learning. The basic starting point is the need for knowledge management. Therefore, the development of technology and standards will play an important role in the further development of e-learning, whose main direction can be seen in the formation of the platform (or such improvement of the existing ones) that will allow even easier access to educational contents and their implementation, but also facilitate easier exchange of teaching materials and communication between platform for e-learning. E-learning as such is present and imminent future which will eventually include a growing number of children and young people.

4 Mobile devices and m-learning

By the end of the last century the Internet and mobile phone have brought global change in the way and the speed of communication. The use of mobile devices to support learning is a new concept in educational circles. However, the use of PDAs (Personal Digital

Assistant) has been present in the classroom for several years. Increased interest in mobile devices and their use for teaching and research can be attributed to a number of factors: rapid expansion and advancement of wireless broadband networks, exceptional growth in of power and capacity of each next generation of mobile and PDA devices, but also the fact that these appliances are deeply embedded into daily life.

The study of one Internet company, which included 2,200 mothers of children aged two to five, namely from the United States, Canada, Japan, Australia, New Zealand and some European countries, has provided interesting but also disturbing results, although one cannot regard these as being too surprising. Almost 19% of these children know how to use the applications on smart phones, while only 9% of them can tie shoelaces, and only 20% can swim. Thus, tested children cope better with computer games and managing smartphones than independently tying shoelaces or entering the pool without any swimming aids. [Source: http://www.vesti.rs/Zivot/Sta-sve-ne-znaju-savremeni-klinci.html]

The design of educational applications for mobile phones and PDA devices has led to the fact that they are increasingly being used among children of all ages and at all levels of education. Due to this, the term m-learning-mobile learning originated. Teachers and administrators use these devices and applications to record class attendance, send students teaching material, homework, exams and a great deal of information related to school and extracurricular activities. Mobile learning connects formal practice (e.g. class attendance, participation in workshops and etc.) with the informal or so-called situational learning (e.g. while the student rides the bus, subway or train or while queuing for healthy, control). Mobile devices are used as translators, encyclopedias and digital libraries. It is important to note that this model does not necessarily imply Internet connection in order to learn because downloaded materials or information can be used in so-called off-line mode.

During the implementation of e-learning experiences were obtained which must be taken into account regarding initiatives for mobile learning. The different types of learning require appropriate strategies, tools and resources, but the technology itself cannot guarantee better learning because it depends on the student and his desire

to learn. This technology is used to bring learning closer to a student by making it more interesting than the traditional forms of learning. The programs of effective mobile learning will require new skills, digital communications, new pedagogies and new practice. [Kljakić, 2007]

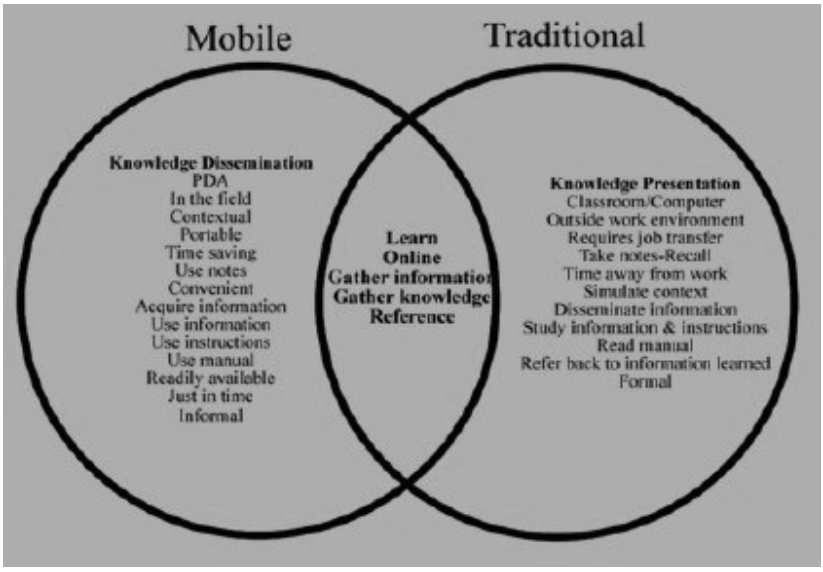

Fig. 3 Mobile and Traditional Learning-Differences and Matches [Vučetić, Odadžić, Vučetić, 2011]

One of the main advantages of m-learning enabling students to format the learning according to their needs in terms of active or passive learning, and determining the level of interaction (e.g. learning with a classically written materials by taking notes, interactive simulations, and discussions with other students via e-mail, teleconferences, forums, etc.), with more or less multimedia – graphics, animation, sound and so on. What is important is that students can download educational programs via the Internet and store them on their mobile devices-hence use them when it suits them.

M-learning is highly applied when it comes to learning foreign languages. Given the huge market demand (institutes and foreign languages schools and etc.), this type of learning is becoming more widely available in developed countries. In Japan, for example, stu-

dents can contact via cell phone tele-service of m-learning and hear a short lesson in English or Japanese language. The Ectaco Company in the USA offers linguistic games for mobile phones, as well as software for dictionaries and books with certain phrases in order to improve the language skills of the users. The company has released seven generations of dictionaries so far, as well as solutions for learning languages and translation applications for forty-five languages, including Serbian. [Source: http://www.ectaco.com/company/mediabg/] Furthermore, the Canadian company Go Test Go has developed software to test the voices of the English language. [Vučetić, 2008]

In the last decade, the extension of the most popular and biggest platform for distance learning Moodle, known as the MLE-Moodle was made. The upgrade enables learning vocabulary, responding to different interactive types of tests, possible learning in off-line and online mode, as well as many other opportunities to interact (instant messaging with other students, forums, and access to a variety of audio and video recordings and etc.).

On the other hand, an important lack of m-learning lies in the way it is used, which is mostly spontaneously organized, and thus this kind of learning profile usually takes place in a shorter period of time and with frequent interruptions. An example of such learning with frequent interruptions has already been mentioned, and it is waiting for a bus at the bus station (the student starts learning, but then the transport arrives and the learning is interrupted, then one can continue to learn, but only until the next break-getting out of the bus, conversation with someone in transport and etc.). Furthermore, interruptions are caused by one inescapable, but very important factor. This is the basic function of mobile phones and the way they are used-the use them to a great extent for different forms of communication (in addition to traditional calls and messages there are extremely widespread services such as Viber, WhatsApp, and the social networks Facebook, Instagram, YouTube and etc.), and plenty of notice and information by which all of these overload their customers and this interferes with the work because it requires a kind of self-control which is not peculiar to most young people. This is also related to a growing concern of the public (especially professional one) about possible harmful effects of electromagnetic radiation that the mobile users are exposed to, with children being the most vulner-

able since they are in the stage of physical development. [http://www.ehhi.org/cellFINAL.pdf]

For the above mentioned reason, a specific didactical preparation of materials for m-learning, which is significantly different from the preparation of traditional teaching materials, as well as those for e-learning, is needed. The full implementation of e-learning contents for mobile devices, but for the basis technical similarities, is unmanageable if a good quality learning material is required, although the general tendency is to prepare the materials for e-learning in the smallest possible teaching units – knowledge particles. M-learning can be ideal for upgrading the vocabulary and learning short texts about specific topics – knowledge particles (for example, information about an artist and his most significant works), as well as shorter courses of theoretical or informative character, while it is unsuitable for the courses of practical knowledge and skills.

(Digital) learning environment can be complemented and improved by different knowledge tests, checks (pre) knowledge of the main educational contents, and the intensification of interaction and cooperation with the teacher and other students carried out with the help of mobile devices. In order to enable all of this to function properly, learning material has to be designed so that the learning process can be stopped at any time and started again regardless the point (i.e. the time) the student has stopped, and thus the materials have to be divided into sufficiently small and independent units that can occasionally be easily adopted.

Further development of m-learning has to continue to deal with issues affecting the creation, delivery, interoperability and resource discovery of mobile learning so that m-learning keeps up the peace with technology development and stays the consisting part of world education. The key demands include [Mustafić, 2010]:

- The contents reuse
- Mutual changeability
- Availability

Those standards should provide answers to the following questions [Mustafić, 2010]:

- How to merge and connect contents from multiple sources?

- How to create contents which can be easily and simply reused combined and separated from each other?
- How to avoid dependence on one manufacturer and one type of technology?
- How to evaluate investment risk and application of this method of learning?

By described methods-steps in the standardization of m-learning, collecting the contents in accordance with the needs of the end user will be enabled. With the development of digital media and IT technology, m-learning will certainly become more popular than it is now. However, m-learning should primarily meet and provide two-way communication between teachers and students, because otherwise it loses its sense due to the impossibility of simultaneous communication.

5 Media literacy

Within the rapid expansion of digital mass media, a solid time period has passed until the awareness of the public about the impact problem, both positive and negative, of the media on young people has sufficiently formed and certain measures to protect them have been taken. Certainly, the media literacy is one of the best ways to prevent misuse of the mass media and to improve the efficiency of their strengths in order of educate and up bring youth and the youngest. To make someone media literacy would mean to enable one to understand and use popular as well as educational and scientific contents, to be able to express his or her ideas in the form of media, to be able to communicate through channels of mass media in order to acquire knowledge and notify his or her own attitudes. [Zindović, Vukadinović, 1997].

"The concept of media literacy has changed over time, but the main idea remained the same and it is based on the fundamental international documents that guarantee the rights of children." "The need for the implementation of media education was first pointed out by UNESCO in 1982 in the Declaration on Media Education and it provided guidance for states how to introduce it into all levels of education." [Matović, 2011: 54] However, it should be noted that it is necessary to make the old media literate, in order to convey their knowl-

edge and experience through the media to the young and thus affect the level and methods of the way they use the media.

Media and information literacy involves quality functioning in the (digital) environment and it should be closely related to the formation of critical thinking. Acquiring media and information literacy is an active process that requires familiarization with various media and learning about information from multiple sources, not just passively receiving and reproducing the knowledge and facts.

It is necessary to be media literate in order to use the global information network, while on the other hand the networks provide an opportunity to gain media literacy. Interactive learning is a module of media education which will become important in the future of media literacy. It will be able to provide basic literacy (handling devices and reading information), as well as to offer some explanations regarding the impact of media on behavior and provide instructions on how to use the media in teaching and education process. Still, self-educating through the media cannot replace media literacy with experts in this field. [Zindović, Vukadinović, 1997]

Children in the primary education should be taught within existing teaching disciplines, while in the older grades it would be beneficial to move to more structured program that introduces media functioning into notion. This will enable better integration with their (digital) environment and a greater degree of adaptation to rapid and major changes that informational revolution is perpetually imposing.

5 Conclusion

Since the beginning of the new millennium, digital (r) evolution has created new generations, the generations whose life is considerably different from the previous ones from the very start. These generations are distinguished by knowledge and widespread use of media, digital technology and information. One third of their time is spent in front of television, computer, or by using the Internet, mobile phones and etc. it is quite natural to them to receive much more data than previous generations, to learn what they choose by themselves, to communicate simultaneously in a number of ways. [Veen, Wraking, 2006] “Children are part of the digital society of today. Digital tools

are part of their family environment and the world they live in, immediate and wider context of their growing up, regardless of whether they use these tools by themselves or are merely observers and witnesses of how others use them." [Pavlović Breneselović, 2012: 2]

The practice of pre-school and school education cannot ignore the above mentioned facts. The ubiquity of the media in homes, kindergartens, schools and the very environment can have a positive impact on the way children learn about environment that they live in and enrich their experience. Children, who come from such backgrounds, should be better informed, capable to manage more easily in the world, communicate easily with the environment, and mature faster both emotionally and intellectually. Unfortunately, the presence of the Internet and television in the home is not either the guarantee of faster and better development of intellectual as well as other capacities of the child, nor the guarantee for being better informed. The media, led by television and the Internet have a positive impact on children and youth, primarily with the rational help of adults from their surroundings, especially parents, educators and teachers. Media educate, but also affect the school so that it changes itself in terms of overcoming the traditional forms of teaching. But for the conventional teaching methods, the contemporary work in the kindergarten or school requires digital, mobile and interactive media.

The development of mass media caused changes in both culture and education. The children's environment, which is important for their socialization and learning, has been changed by the global cultural symbols propagated by mass media. The media have a powerful influence on the attitudes and behavior of children, especially if they are committed users and if the social environment promotes and supports these values and patterns of behavior. The impact of mass-media digital can even be equalized to the influence of educational institutions. The mass media, those who create the digital space (primarily Internet, television and mobile-interactive media) are sometimes seen as more important educational institution than the school itself, because they go beyond the scope of the audience, time and interest that they devote to the audience, as well as in regard to the diversity of the content they offer.

Unfortunately, the media have compromised the educational role of the family and the school, while television and the Internet play a

leading role. "Social institutions and economic conditions dictate family life, while the way of family life affects how children use the media. On the other hand, in times of crisis, the school is more oriented towards the acquisition of knowledge rather than education, and a great amount of the educational impact is left to the media, i.e. in a parallel school." [Bojić, 2008]

Digital space that surrounds us is not just a question of using digital media in direct work with children. It is equally important to address the issue of strengthening information and communication dimension of a whole system, educating the educators and teachers in this field, determining clear legal frameworks, including the protection of children from abuse and risks and etc. Narrowing the digital space would not result in to elimination of the potential risks and negative effects of the media and new technologies. On the contrary, if the program and practice were used to ignore the digital reality, the risks would be much higher; the positive potentials would remain unused. [Pavlović Breneselović 2012] Furthermore, the fact that the society is based on knowledge and at the same time regarded as the society of lifelong learning, implies that education in general should be viewed in a broader context, i.e., through different educational policy, methods and techniques, with e-learning and m-learning being those that stand out today. [Blagojević Vasiljević, Terzić Marković, Perić, 2014] We believe that with children in primary education should educated within existing teaching disciplines and subjects, while in the higher grades it is suggested to migrate to a more structured program that introduces the notion of media functioning. Since children should be educated for various occupations, among which there are those of the future being greatly present in terms of scope and incidence-occupations that are emerging or do not exist yet, it is crucial that children are "equipped" with knowledge and skills that are widely applicable. It is necessary to acquire great knowledge during their education process, which could be used for active participation in the open labor market in a multilingual society of the open borders. [Vasiljević Blagojević, Terzić Marković, Perić, 2014] Among these skills the knowledge concerning the use of information technology, network and digital interactive media is increasingly noticed.

Education for the media, i.e. the media literacy is a prerequisite for critical reading and media use. It is necessary to be media literate in

order to use the media and global information networks, while on the other hand the media and networks provide the opportunity to gain media literacy. Interactive learning for interactive media is a model of media education that will be significant if not decisive in the future for expansion and deepening of media literacy. In addition to providing basic literacy (handling devices and media, and reading the information), this concept should offer instructions on how to use the media in teaching and educational process. Media literacy involves analysis, discussion, construction of messages and their resolution, and this requires teachers' competence. Furthermore, after leaving such a system one should make progress, learn new skills and acquire new knowledge. [Vasiljević Blagojević, Terzić Marković, Perić, 2014] The government primarily has the responsibility for this by conducting certain educational and cultural policy which, among other things, increases the level of digital literacy of all involved participants in the analysis of this study: the school, parents and children, as well as the society in its broadest sense. Finally, all relevant documents of educational policies in the world emphasize the importance of the development of media and technological literacy.

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UTICAJ I PRIMENA DIGITALNIH MEDIJA NA VASPITANJE I OBRAZOVANJE DECE

Apstrakt: Rad se bavi uticajem digitalnog okruženja, konkretno digitalnih medija, a najuže gledano televizije i Interneta, kao najuticajnijih masovnih medija, na decu kroz kulturološke, sociološke, obrazovne i vaspitne aspekte. Analiziraju se promene koju su informatička revolucija i digitalni masovni mediji doneli društvu u smislu promena obrazaca ponašanja, novih načina stvaranja ličnog identiteta kroz obrasce koje nameću televizija i Internet. Predstavljaju se glavni vaspitni i obrazovni aspekti televizije i Interneta, naročito e-učenje. U radu se analiziraju i posledice i aspekti korišćenja pametnih mobilnih telefona,

te i concept učenja uz njihovu pomoć, m-učenje. Pored analiziranih prednosti i opasnosti koje spomenuti donose, dati su i viđenje i predlozi razvoja e-učenja i m-učenja kao koncepata.

Ključne reči: Internet, televizija, pedagoški, obrazovni, ponašanje, identitet, e-učenje, m-učenje