



# New Trends and Issues Proceedings on Humanities and Social Sciences



Issue 5 (2016) 55-63

Selected paper of 4th Cyprus International Conference on Educational Research (CYICER-2015) March 19 – 21, 2015, Girne American University in Kyrenia, CYPRUS

## Media in Schools: Work Experience of Teachers as a Determinant of the Utilization of Media Resources

**Zorica Stanisavljevic Petrovic<sup>a</sup>**, Faculty of Philosophy, University of Nis, Cirila i Metodija 2, 18000 Nis, Serbia

**Tatjana Vulic<sup>b</sup>**, Faculty of Philosophy, University of Nis, Cirila i Metodija 2, 18000 Nis, Serbia

**Dragana Pavlovic<sup>c\*</sup>**, Faculty of Philosophy, University of Nis, Cirila i Metodija 2, 18000 Nis, Serbia

### Suggested Citation:

Stanisavljevic-Petrovic, Z., Vulic, T. & Pavlovic, D. (2016). Media in Schools: Work Experience of Teachers as a Determinant of the Utilization of Media Resources. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 05, pp 55-63. Available from: [www.prosoc.eu](http://www.prosoc.eu)

Selection and peer review under responsibility of Assoc. Prof. Dr. Cigdem Hursen, Near East University  
©2016 SciencePark Research, Organization & Counseling. All rights reserved.

---

### Abstract

The use of media, as a precondition for the development and modernisation of a school environment in all its segments is significantly conditioned by the attitudes of teachers, their media competencies and their personal attitudes towards the media resources which can be used for educational purposes. The main aim of the research is to examine the use of media in a school environment depending on teachers' years of experience. The results of the research show that there are statistically significant differences in the attitudes of teachers towards the type of media, the frequency of use, the ICT competencies of teachers and years of service in education. On the basis of the obtained data we recommend a systemic approach to the problem of a professional development of already employed teachers, especially of those with more years of work experience, and all for the purposes of raising the level of ICT competencies.

Keywords: School; Teachers, The media; Work experience

---

\* ADDRESS FOR CORRESPONDENCE: **Dragana Pavlovic**, University of Nis, Faculty of Philosophy, Cirila i Metodija 2, 18000 Nis, Serbia

E-mail address: [dragana.pavlovic@filfak.ni.ac.rs](mailto:dragana.pavlovic@filfak.ni.ac.rs) / Tel.: +381 18 514 313

## 1. Introduction

In the development of modern society, the media plays increasingly significant role in creating the preconditions for quality changes in all social subsystems, including the system of education. A rapid and intensive development of information and communication technologies has rendered an immense amount of information easily available, which is the information that can be used in education in the most diversified ways. Modern day education, under the influence of new media technologies, experiences fundamental changes in the centuries established traditional modes. In a short time, media innovations in the field of education have occupied an important place in the development and modernisation of school systems in the world, fundamentally changing schools and transforming their organisation and methods of work, as well as the roles and positions of the main actors: students and teachers (Halverson, & Smith, 2010; Bender, & Waller, 2011; Kapur, 2011). However, the expansion of new media, as well as the introduction of information brought to education by means of a modern technology caused numerous problems, because the traditional system of education simply was not ready for these changes. Inadequately equipped schools, especially when it comes to new media such as the Internet, is only one of the many issues reflected in the school practice. The second, from our standpoint a much more serious issue, deals with the insufficient preparedness of teachers for the use of modern media resources, i.e. the insufficiently developed ICT competences of teachers, which is very often the reason for resistance and negative attitudes towards the use of new media in education.

## 2. Theoretical Framework

It is generally considered that the media have long since found their application in schools, because they contribute to the improvements in the teaching and learning processes. Media resources are most frequently used as auxiliary tools in the teaching process, since they are generally used as an addition to other forms and manners of work. In the beginning, only visual (print media and film) or auditory tools (radio, records, tapes, cassettes) were used. The next period of development brought a combination of these tools, thus leading to the primacy of the media which simultaneously provided one with both image and sound. With the advent of television, the attitude towards the media in education has significantly changed, because this medium offers the transmission of educational contents through a simultaneous operation of image and sound. During the previous century, television was dominant for many years in relation to all other media resources applied in the teaching process. Accordingly, the media which had been used before television, such as the radio, cassette players, tape recorders, etc. became marginalised. The importance of television with regard to the process of acquiring new information and visualising teaching contents, as well as with regard to its suitability for being applied in a school context, made this medium favourite among teachers (Lazic, 2013). The great value of television as one of the most frequently used media over a long period of time is reflected in the power of its influence over young people regarding the issues of acquiring new notions, developing interests, and forming the system of values (Maric-Jurisin & Markovic, 2011; Popovic Citic, 2012). Television, especially those programmes dedicated to school children, offer significant educational possibilities and incentives for the formation and development of the young (Stojkovic, 2012).

The advent of ICT, especially multimedia technologies, brought significant changes to the process of education, which resulted in a fundamental transformation of the traditional profiles of educational institutions, as well as of their manner of work and organisation of the teaching process. (Dwyer, Ringstaff & Sandholtz, 1991; Latchem, Williamson, & Henderson-Lancett, 1993; Riehm & Wingert, 1996; Norton & Wiburg, 2003; Claudia, 2014; Fojtika, 2014). The use of multimedia in the teaching process improves the quality of the teaching process and makes it more efficient. As a segment of new information technologies, multimedia is often used in education, so much so that multimedia is an

important feature of modern education. Like never before, new media, especially the Internet, plays an important role and occupy a significant position in modern education. Introducing Internet technologies to the process of education has fundamentally changed traditional forms and methods of work, rendering the Internet an integral part of a modern school context. (Stankovic, Stanisavljevic Petrovic, & Anđelkovic, 2012). The Internet in classrooms is not a matter of the future anymore, but a matter of the present moment, and most of all, a fundamental need of all main actors in the process of education: teachers and students. In that context, education in schools nowadays cannot be imagined without the use of the Internet (Collins, Hammond & Wellington, 1997; Bitter, & Pierson, 2002; Milankovic-Etkinson, Sedler, 2009). This media tools have indubitably become dominant in the process of education in comparison with traditional media, such as print media, the radio and television (Bubas, & Kermek, 2000). The cause of immense popularity of the Internet in schools are high potentials of this new medium in the process of learning, which is emphasised by a large number of authors (Heinich, Molenda, Russell & Smaldino, 2002; Mayer, 2007; Disca, 2014).

The use of the media in education, whether new or traditional, depends on various factors. Among them, one can point out general social factors, i.e. the development of the society, the level of computerisation and fitting out schools with the media. Likewise, there are also subjective factors which depend on the teachers' personalities, their perspectives on and attitudes towards the use of the media in schools. (Gaitanaru, 2014). An adequate utilisation of the media largely depends on media education of teachers' themselves, which is especially important regarding new media, i.e. regarding the use of Internet technologies. Accordingly, a large number of authors state that the frequency of use and the choice of the media depend on an adequate preparation of teachers to apply multimedia and use different computer strategies in education. (Kinzer, Sherwood & Bransford, 1991; Mandic, 2008; Stanisavljevic Petrovic, 2009; Ruzic Baf, Radetic-Pajic & Zarevski, 2013). The use of the media in education can be conditioned by personal traits of teachers, as well as by their years of experience. Teachers with more years of experience who were not educated in the use of new media (because there had been none in those days) have different attitudes towards the use of the media from their younger colleagues. Starting from this idea, the research which is to be presented here aimed to examine the differences among the teachers regarding the use of the media in view of their years of experience.

### **3. Research Methodology**

#### **3.1. Research Aims and Hypotheses**

The main aim of this research was to examine the use of the media in schools in view of teachers' years of experience. Thus, the research hypotheses have been defined in accordance with the aim. General hypothesis: There is a statistically significant difference in the attitudes of teachers regarding the use of the media in view of the years of experience. Specific hypotheses: (1) Teachers with more years of work experience prefer to use traditional media such as print media, the radio and television; (2) Teachers with fewer years of work experience apply new media in their work, especially the Internet; (3) It has been assumed that younger teachers with fewer years of work experience perceive the use of new media in schools as a teacher's duty, while teachers with more years of work experience dissent from this standpoint.

#### **3.2. Research Methods, Samples and Instruments**

In accordance with the aim of the research the author applied the descriptive method in this paper. The research sample is intentional and it is comprised of 225 teachers from the areas of Central and Southern Serbia. For the purposes of research, the item regarding teachers' work experience, as an independent variable, has been divided into three categories. The first category comprises 52 (23.1

percent) youngest teachers with up to 10 years of work experience, the second category comprises 80 (35.5 percent) teachers who have between 11 and 20 years of work experience, while the third category comprises the largest number of teachers, 93 (41.4 percent) of them, who have over 20 years of work experience in schools. The structure of the sample corresponds with the real situation in schools, because young teachers are least frequently encountered in schools due to general problem of unemployment.

The research applied the survey technique, and the main instrument was a questionnaire comprising 32 open and closed questions. The questionnaire was tailor-made for the purposes of this research and it possesses the necessary measuring features. The reliability of the instrument was confirmed by the Cronbach's Alpha coefficient of internal consistency the value of which was  $\alpha=0,915$ . This paper presents only those data relating to the correlation of the teachers' years of experience and the use of traditional and new media.

Statistical data processing of the empirical research has been done by means of the SPSS (ver, 20.0). statistical analysis software. By using the standard statistical apparatus, the author has calculated the frequencies, percentages, the  $\chi$  - square, the phi coefficient, the  $\phi$  coefficient, the contingency coefficient, the Cramer's coefficient, and the degree of freedom by applying logical and statistical form of reasoning.

### 3.3. Interpretation of the Results

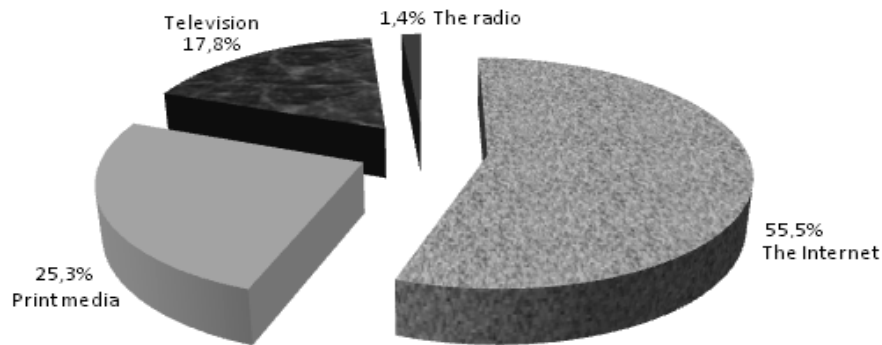
The results of the research are structured into three categories in accordance with the research hypotheses: teachers' attitudes towards the use of the media in schools, teachers' attitudes towards the type of the media (traditional or new) in view of the years of experience, the stance that the application of new media, especially the Internet, is a teacher's duty in present-day schools.

**Table 1. The use of the media in schools conditioned by the years of work experience**

		Should the media be used in the teaching process?		Total
		Yes	No	
Years of work experience	Up to 10 years	52 (23.1%)	0 (0%)	52 (23.1%)
	Between 11 and 20 years	77 (34.2%)	3 (1.4%)	80 (35.6%)
	Over 20 years	59 (26.2%)	34 (15.1%)	93 (41.3%)
Total		188 (83.6%)	37 (16.4%)	225 (100%)

The results of the research presented in Table 1 show that the greatest level of agreement with the use of the media in the process of education comes from the teachers with up to 10 years of work experience, because 52 (23.1 percent) respondents agreed with this statement, while with respect to teachers between 11 and 20 years of experience that number is 77 (34.2 percent). Regarding the teachers with over 20 years of work experience, 59 (26.2 percent) of them expressed agreement, i.e. a positive attitude towards the use of media. A negative attitude towards the use of the media in education is expressed by three (1.4 percent) teachers from the group with between 11 and 20 years of work experience, and 34 (15.1 percent) teachers from the category with over 20 years of work experience. Teachers with the shortest experience (the ones with up to 10 years) did not express a negative attitude towards the use of media. From the presented data one can infer that a satisfactory number of teachers from all categories express a positive attitude towards the use of the media in education. On the basis of the calculated chi-square of 24.954 with the limit values of 28.474 and

21.058 and a suitable degree of freedom of 2, at the level of significance 0,000, we can conclude that there is a statistically significant difference between the answers of the respondents in view of the years of work experience. ( $p < 0,05$ ). The value of the  $\phi$  coefficient of 0.438 shows a positive correlation, while the value of the Cramer’s coefficient of 0.438 and that of the contingency coefficient of 0,401 point to a weak connectivity and slight correlation.



**Figure 1: The media most frequently used by teachers**

The obtained results show that the largest number of responding teachers (55.5 percent) most frequently use the Internet in their work, half of this number of respondents use print media (25,3%), even fewer number of respondents use television (17.8 percent) and only three respondents use the radio (1.4 percent). The arithmetic means value is 3.34, and the standard deviation is 0.82. The results are more than expected, considering that the Internet technology has taken precedence over other information and communication media, taking into consideration that it combines their effects into one compatible unity.

The attitudes of teachers towards the type of media have been examined in view of the frequency of use of traditional media (print media, television, the radio) and new media, that is, the Internet.

**Table 2. The use of traditional and modern media in relation to teachers’ years of experience**

	Years of work experience	Type of media				Total
		The radio	TV	Print media	The Internet	
	Up to 10 years	0 (0%)	0 (0%)	0 (0%)	52 (23.1%)	52 (23.1%)
	Between 11 and 20 years	0 (0%)	7 (3.1%)	19 (8.4%)	54 (24%)	80 (35.6%)
	Over 20 years	3 (1.3%)	33 (14.7%)	38 (16.9%)	19 (8.4%)	93 (41.3%)
	Total	3 (1.3%)	40 (17.8%)	57 (25.3%)	125 (55.5%)	225 (100%)

The results of the research presented in Table 2 show that in the category of teachers with up to 10 years of work experience all teachers (23.1 percent) use exclusively the Internet as a new media tool in their work. It is interesting that in this category there are no respondents who use traditional media. Similarly, the respondents who have between 11 and 20 years of experience most frequently use the Internet, 54 (24 percent) of them. Print media is used by 19 (8.4 percent) of them, and television by 7

(3.1 percent), while there were no teachers interested in the radio programme. Unlike their younger colleagues, teachers with the longest experience, those with over 20 years of experience, most frequently use traditional media according to the results. Print media is used by 38 (16.9 percent) teachers from this category, television by 33 (14.7 percent), the Internet is used by 19 (8.4 percent) of them, and the radio programme is used by only 3 (1.3 percent) respondents. We conclude that all teachers in both categories up to 20 years of experience are oriented towards the application of new media, because they use the Internet at work, while the respondents who have over 20 years of experience are more inclined towards traditional media and still use the radio in their practice, which is not the case with the two previously mentioned categories of teachers. On the basis of the calculated chi-square of 56.170, with the limited values of 69.071 and 46.934, for the corresponding degree of freedom of 6, at the level of significance of 0,000, we can infer that there is a statistically significant difference between the answers of the respondents in view of their years of experience ( $p < 0.05$ ). The value of the  $\varphi = 0.657$  shows a positive correlation, and the value of the Cramer's coefficient of 0.465 and the contingency coefficient of 0.549 show a medium connectivity and slight correlation. On the basis of the data presented in Tables 1 and 2 one can infer that both first and second hypotheses have been confirmed, that is, that teachers with fewer years of experience prefer to use new media, while older teachers with more years of experience are more inclined towards traditional media.

The attitude of teachers towards the stance that the use of modern media is a teacher's duty in present-day schools.

**Table 3. The use of new media (the Internet) as a duty of all teachers in present-day schools**

		Do you believe that the use of new media (the Internet) is a duty of all teachers in present-day schools?		
		Yes	No	Total
Years of work experience	Up to 10 years	52 (23.1%)	0 (0%)	52 (23.1%)
	Between 11 and 20 years	57 (25.4%)	23 (10.2%)	80 (35.6%)
	Over 20 years	33 (14.7%)	60 (26.6%)	93 (41.3%)
Total		142 (63.2%)	83 (36.8%)	225 (100%)

The results presented in Table 3 show that the Internet is perceived as a duty of all teachers in present-day schools only by the teachers from the category up to 10 years of work experience, 52 (23.1 percent) of them. That the use of the Internet is a teacher's duty is considered by the respondents from the category between 11 and 20 years of experience, 57 (25.4 percent) of them, as well as by a certain number of teachers from the category over 20 years of work experience, 33 (14.7 percent) of them. In contrast, the attitude that the use of the Internet is not and cannot be a teacher's duty is expressed by 23 (10.2 percent) teachers from the category between 11 and 20 years of work experience and by 60 (26.6 percent) teachers from the category over 20 years of work experience. We infer that teachers with the longest experience are mostly against the stance that the use of new media, especially the Internet, should be perceived as a teacher's duty in present-day schools. This confirmation can be explained by the fact that the eldest teachers have difficulties adjusting to changes in their perennial work, that they are suspicious about innovations and unsure of their capacities and competences, as well as that they lack motivation bearing in mind that they reached the end of their careers. On the basis of the calculated chi-square of 37.080 with the limited values of 46.398 and 36.584 and for the corresponding degree of freedom of 2, at the level of significance of



0.000, it has been inferred that there is a statistically significant difference between the respondents' answers in view of the length of work experience ( $p < 0.05$ ). The value of the  $\phi = 0.534$  shows a positive correlation, and the values of the Cramer's coefficient of 0.534 and the contingency coefficient of 0,471 indicate a medium connectivity and slight correlation. The data presented in Table 3 have confirmed the third hypothesis of the research according to which younger teachers, with fewer years of experience, perceive the use of new media as a teacher's duty, while teachers with more years of experience have dissenting attitudes.

#### 4. Conclusion

The data obtained from the research confirm the general hypothesis that there is a statistically significant difference in the attitude of teachers regarding the use of the media in view of the years of experience. The largest number of teachers believe that the media are an integral part of the process of education, which indicates that they are aware of the importance and role of the media in present-day schools. More than half of the responding teachers from the category up to 10 years of work experience believe that the media are an inevitable part of school processes, whereby priority is given to new media, especially to Internet resources. It is characteristic that younger teachers give high priority to new media, while they almost never use traditional media in their work, which confirms the second hypothesis of the research. In the category of teachers who have between 11 and 20 years of work experience even larger number of respondents, 77 (34,2 percent) of them, perceive the media as a significant factor in the process of education. They prefer to use new media, but they also use traditional media. Aside from the Internet, as the most frequently used media, they also use television and print media, while radio programmes are considered outdated and are never used in their work with students. A significant number of teachers from this category, 57 (25,4%) of them, believe that the use of the Internet in one's teaching practice is a duty of all teachers, because they are aware of the great potential that new media offer to the process of education. On the other hand, teachers with over 20 years of work experience mostly express a positive attitude towards the utilisation of the media in schools, and yet they prefer to use traditional media in their work, while the use of the Internet as a modern media tool is chosen by 19 (8,4 percent) of them, which confirms the first hypothesis of the research. Teachers belonging to the category of up to 10 years of work experience perceive the use of Internet resources as a duty of all teachers in schools, which is also believed by half of the respondents from the second category. On the other hand, teachers with the longest experience mostly dissent, which confirms the third hypothesis as well. Although the results of the research are in accordance with the expectations, it is still worrisome to realise that present-day schools, in accordance with the largest number of employees (teachers with the longest experience), are still dominated by traditional media. The reasons for this are, without a doubt, poor ICT competences of elder teachers who are not trained in using new media resources, neither during their education nor later, during their teaching careers. In that context, it is necessary to take steps towards the development of ICT competencies of the teaching staff in schools, especially of those with more years of service.

#### Acknowledgements

This paper is a part of a scientific research within the interdisciplinary project No 179074 and 179008 which is financed by the Serbian Ministry of Education, Science and Technological Development

#### References

Bender, W. N. & Waller, L. (2011). *The teaching revolution: RTI, technology & differentiation transform teaching for the 21<sup>st</sup> century*. Thousand Oaks (California): Corwin, cop.

- Bitter, G. G. & Pierson, M. E. (2002). *Using Technology in the Classroom*. Boston: Allyn & Bacon
- Bubas, G. & Kermek, D. (2000). Komparativna procena Interneta u odnosu na tisak i televiziju. [Comparative evaluation of the Internet in relation to the press and television] *Medijska istrazivanja*, 6 (1), 109-123.
- Claudia, M. (2014). The Influence of Media on Formal and Informal Education, *Procedia - Social and Behavioral Sciences*, 143, 260 – 264. doi:10.1016/j.sbspro.2014.07.359
- Collins, J., Hammond, M. & Wellington, J. (1997). *Teaching and learning with multimedia*. London: Routledge.
- Disca, T. (2014). E-learning at primary school. *Let's build the future through learning innovation* 3, 133-137. doi:10.12753/2066-026X-14-160
- Dwyer, D. C., Ringstaff, C. & Sandholtz, J. H. (1991). Changes in teachers' beliefs and practices in technology rich classrooms. *Educational Technology*, 48(8), 45-52.
- Fojtika, R. (2014). Mobile Technologies Education, *Procedia - Social and Behavioral Sciences* 143, 342 – 346. doi:10.1016/j.sbspro.2014.07.417.
- Gaitanaru, A. (2014). Advantages and difficulties of implementation of new information technologies in education. *Let's build the future through learning innovation* 3, 205-209. doi:10.12753/2066-026X-14-172
- Halverson, R. & Smith, A. (2010). How New Technologies Have (and Not) Changed Teaching and Learning in Schools. *Journal of Computing in Teacher Education*, 26(2), 49-54.
- Heinich, R., Molenda, M., Russell, J.D. & Smaldino, S. (2002). *Instructional media and technologies for learning* (7th ed.). Columbus, OH: Merrill/Prentice Hall.
- Kapur, A. (2011). *Transforming Schools – Empowering Children*. New Delhi, Thousand Oaks, London: SAGE Publication.
- Kinzer, C. K., Sherwood, R. D. & Bransford, J. D. (1991). *Computer strategies for Education*. Columbus, Toronto, London, Sydney: Merrill Publishing company, A Bell & Howell Company.
- Latchem, C., Williamson, J. & Henderson-Lancett, L. (1993). *Interactive multimedia*. Practice and promise. London, Philadelphia: Kogan Page.
- Lazic, S. (2013). Televizijski obrazovni program u doivotnom učenju. [Education programmes on television and lifelong learning] *Pedagoska stvarnost*, 59(2), 290-304.
- Mandic, D. (2008). Nastavnik i multimedijalno učenje. [Teachers and multimedia learning] *Inovacije u nastavi*, 21(4), 59-68.
- Maric-Jurisin, S. & Markovic, B. (2011). *Uticao televizije na razvoj interesovanja kod mladih*. [The impact of television on the development of interest among the young] *Kultura*, (133), 401-412. doi:10.5937/kultura1133401M
- Mayer, R. E. (2007). *Multimedia Learning*. New York: Cambridge University Press.
- Milankovic-Etkinson, M. & Sedler, K. (2009). Primena web tehnologija u nastavi. [The application of the web technologies in the teaching process] *Info M*. 2(5), 39-47.
- Norton, P. & Wiburg, K. M. (2003). *Teaching with Technology*. Toronto: Thomson Wadsw.
- Popovic Citic, B. (2012). Pozitivni uticaji televizijskih sadržaja na emocionalno i socijalno ponasanje dece [Positive impact of television programmes on children's emotional and social behaviour]. *Specijalna edukacija i rehabilitacija*, 11 (1), 123-145.



Stanisavljevic-Petrovic, Z., Vulic, T. & Pavlovic, D. (2016). Media in Schools: Work Experience of Teachers as a Determinant of the Utilization of Media Resources. *New Trends and Issues Proceedings on Humanities and Social Sciences*. [Online]. 05, pp 55-63. Available from: [www.prosoc.eu](http://www.prosoc.eu)

Riehm, U. & Wingert, B. (1996). *Multimedia*. Mannheim: Myten, Chancen und Herausforderungen, Bollmann.

Ruzic Baf, M., Radetic-Pajic, M. & Zarevski, P. (2013). Future Teachers Attitudes about Certain aspects of Information and Communication Technologies. *Croatian Journal of Education*, 15(3), 149-175.

Stanisavljevic-Petrovic, Z. (2009). Uloga nastavnika i primena obrazovne tehnologije u skoli, [The role of teachers and the use of educational technology in schools] in *Tehnologija, informatika, obrazovanje za društvo učenja i znanja 5*, (ed. Danilovic M. i Popov,S) Novi Sad-Beograd: Fakultet tehničkih nauka, 247-261.

Stankovic, Z., Stanisavljevic Petrovic, Z. & Andelkovic, S. (2012). The potentials of the utilization of the information and communication technology in modern schooling. In V. Stofova (ed.), *Actual problems of modern education in 21 st century*, Komarno: Univerzita J. Selyeho – Komarno, 87-98.

Stojkovic, N. (2012). Televizija i njene vaspitno-obrazovne mogucnosti [Television and its educational possibilities] *Pedagoska stvarnost*, 58(2), 280-294.