Copyright © 2021 by Academic Publishing House Researcher s.r.o.



Published in the Slovak Republic Media Education (Mediaobrazovanie) Has been issued since 2005 ISSN 1994-4160 E-ISSN 2729-8132 2021, 17(2): 323-332

DOI: 10.13187/me.2021.2.323

www.ejournal53.com



Theoretical Model of Media Competence's Development of Teachers-to-be in the Process of the Analysis of Manipulative Media Influences

Anastasia Levitskaya a, *, Alexander Fedorov b

^a Taganrog Institute of Management and Economics, Russian Federation

b Rostov State University of Economics, Russian Federation

Abstract

This article emphasizes that media manipulations are spread not only by the manipulators themselves, who initiate and create (with specific agenda) one or another (partially) false media text, but also by ordinary audiences who uncritically perceive these media messages as true. This is a natural consequence of the modern capabilities of the mass media ("yellow press", "yellow" TV programs, Internet sites), when once created, false information is replicated over and over again bypassing any critical comments and analysis.

Based on the analysis of a number of scientific sources, the article's authors developed and presented not only the theoretical model of the development of media competence of students of pedagogical universities in the process of analyzing media manipulative influences, but also the theoretical models of effective media educational activities of (future) teachers, contributing to the development of media competence of the audience in the process of analyzing media's manipulative influences, as well as media educational activities that contribute to the development of media competence of the audience in the process of analyzing the reliability of media texts.

Keywords: media competence, students, teachers, media and information literacy, media education, media manipulations, models.

1. Introduction

Media manipulations are multiplied not only by the manipulators per se, those who initiate and create (with specific objectives) some (partially) false media texts, but also by ordinary audiences, who uncritically perceive these media messages as true. This is a natural consequence of the existing capabilities of the mass media ("yellow press", "yellow" TV programs, Internet sites), when once created false information is replicated without any critical comments and analysis. It has been noted before that the spread of false media information resembles a viral epidemic, when in many cases filters and information verification practices have disappeared (Pérez Tornero et al., 2018: 222; Martens et al., 2018).

We agree that "living in what Marshall McLuhan coined the global village, it is not enough to merely understand media, students need to be empowered to critically negotiate meanings, engage with the problems of misrepresentations and underrepresentations, and produce their own alternative media. Addressing issues of inequality and injustice in media representations can be a powerful starting place for problem-posing transformative education. Critical media literacy offers the tools and framework to help students become subjects in the process of deconstructing

E-mail addresses; a.levitskaya@tmei.ru (A. Levitskaya), 1954alex@mail.ru (A. Fedorov)

^{*} Corresponding author

injustices, expressing their own voices, and struggling to create a better society" (Kellner, Share, 2005; 382).

Therefore it is necessary today to develop a theoretical model of the audience's media competence development focused on the analysis of manipulative media's influences.

2. Materials and methods

Materials of our research are academic books and articles, as well as online media education institutions' resources on media manipulation, on media and information literacy education. Methodology is based on theoretical framework on the relationship, interdependence and integrity of the phenomena of reality, the unity of the historical and the logical in cognition, the theory of the dialogue of cultures. The following methods are used: data collection, analysis of the academic literature, theoretical analysis and synthesis; generalization and classification.

3. Discussion

On the one hand, the current actualization of the phenomenon of media manipulation and fake news is rooted in a synthesized crisis: globalization of journalism, the deterioration of the public sphere and the pandemic. On the other hand, "we have seen how reducing the matter of fake news to a simple contrast between truth and falsehoods-fact checking-is very limited. It does not consider the discursive hybridization, which is characteristic of the present, nor the complexity of discourses in the context in which news and other journalistic discourse are developed. Only a global vision of the phenomenon will allow us to have a comprehensive understanding. ... What seems to mark the near future in the field of fake news will be a group exercise by political media and educational institutions to develop what we have called news literacy. We are thus facing a new period in the study of the media and the politics of mediatization. If the emphasis had been previously put on information rights and expression, media literacy has begun to be heard as a new civil right. On the other hand, beyond understanding journalism as an institutionalized practice, which only corresponds to journalists, in light of the fake news phenomenon only a strong alliance between citizens and journalists can lay the foundations for an authentic renewal of journalism" (Pérez Tornero et al., 2018: 230-232).

In 2017 R.K. Nielsen and L. Graves analyzed data from eight focus groups and interviewed online news users from the United States, Great Britain, Spain and Finland in order to find out the opinions of the audience about media manipulations and fake information. Their findings reveal that the audience does not always see the difference between fake and objective news, although it does often blame bad journalism, deceitful politicians, propaganda, as well as some types of advertising. Fake news is perceived by this audience as a mix of media and politics. However, "findings suggest that, from an audience perspective, fake news is only in part about fabricated news reports narrowly defined, and much more about a wider discontent with the information landscape — including news media and politicians as well as platform companies. Tackling false news narrowly speaking is important, but it will not address the broader issue that people feel much of the information they come across, especially online, consists of poor journalism, political propaganda, and misleading forms of advertising and sponsored content" (Nielsen, Graves, 2017: 1).

Media literacy education is able to facilitate the fight against media manipulations whilst developing media competence and information literacy of the audience. Certainly, a modern citizen "demands additional skills, political knowledge and actions. In other words, today's society should have a deep understanding on how politics work, such as hate spin politics. Thus, we will not easily to be manipulated by political actors and we can be wiser in responding to these phenomenon" (Salma, 2019: 334).

We believe that media education can be integrated in almost all academic subjects (native language, literature, social studies, history, geography, etc.). While in many countries around the world it has already been integrated into basic school subjects, in some countries there is also partnerships between media educators and the media industry, literacy organizations, NGOs and other stakeholders at the level of resource production and specific events (McDougall et al, 2018: 8).

Media education has been proven to reduce children's vulnerability to misinformation. At the same time, the development of analytical competencies is a key component of a successful educational process, "there are many current educational initiatives that improve students' capacity to detect disinformation and protect themselves against its influence. Evidence shows that students who reported high levels of media literacy learning opportunities were more likely to

identify misinformation, which lends credence to the impact of media literacy programmes. Educational programmes across Europe's schools to combat conspiratorial thinking are beginning to involve professional journalists. Journalists can help teach students how to check the authenticity of information and to understand how advertisers and others use the students' personal information to influence them" (McDougall et al, 2018: 72).

4. Results

Thus, based on the analysis of a number of scientific concepts (Albright, 2017; Aldwairi, Alwahedi, 2018; Baake et al., 1999; Bertin et al., 2018; Bharali, Goswami, 2018; Blumeke, 2000; Bowker, 1991; Bradshaw, Howard, 2018; Buckingham, 2003; 2015; Conroy et al., 2015; De Abreu, 2019; Dentith, 2017; Fletcher, 2018; Gálik, 2019; 2020; Gahirwal et al., 2018; Goering, Thomas, 2018; Hobbs, 2010; 2017; Jolls, Wilson, 2014; Kačinová, 2018; Martens et al., 2018; Marwick, 2018; Marwick, Lewis, 2017; McDougall et al, 2018; Nielsen, Graves, 2017; Petranová et al., 2017; Pérez Tornero et al., 2018; Potter, 2019; Potter, McDougall, 2017; Ruchansky et al., 2017; Rushkoff, 1994; Sadiku et al., 2018; Salma, 2019; Silverblatt, 2001; Tambini, 2017; Usov, 1989; Vargo, 2018; Waldrop, 2017; Wilson, 2019; Wilson, 2019; Worsnop, 2004; Zhou et al., 2019) we can express the theoretical model of the media competence's development for students of education colleges and departments as follows:

Definitions of basic concepts and essential features

The media competence of a person is a set of criteria/features (motivational, contact, informational, perceptual, evaluative, practical and operational, creative) to choose, use, analyze, evaluate, transmit and create media texts, analyze complex processes of media functioning in society.

Professional media competence of a teacher is a set of skills (motivational, informational, technological, practical and operational, creative) to carry out media educational activities in classes with students of different ages.

Conceptual framework: the synthesis of cultural, sociocultural and practical theories of media education.

Aim: development of media competence of students of education colleges and departments in the process of analyzing media manipulation effects.

Objectives: development of the following skills of the audience: historical and theoretical; perceptual and creative; practical and creative; analytical.

Organizational forms: the development of future school teachers' media competence in the process of analyzing media manipulation effects in the framework of a media education course.

Methods: according to the sources of acquired knowledge - verbal, visual, practical; by the level of cognitive activity: explanatory and illustrative; problematic, research.

The main sections of the content of the media education program: 1) the place and role of media and media education in the modern world, types and genres, language of media; 2) basic terms, theories, key concepts, directions, models of media education; 3) media competence – as a result of media education; 4) analysis of the functioning of media in society and media texts of different types and genres (content analysis, structural analysis, plot/narrative analysis, analysis of stereotypes, analysis of cultural mythology, character analysis, iconographic analysis, semiotic analysis, ideological and philosophical analysis, ethical analysis, aesthetic analysis, hermeneutic analysis of the cultural context, etc.); 5) typology of media's manipulation effects; 6) the main directions of the analysis of media manipulation effects.

Fields of application: teacher training universities, colleges, departments; professional growth training courses for teachers.

The theoretical model of the media competence's development of student teachers in the process of analyzing media manipulative influences as follows (Figure 1):

- 1) diagnostic (ascertaining) component: definition of the levels of development of the audience's media competence with an emphasis on the ability to analyze media manipulations; questioning, testing, analysis of the audience's creative work, observation;
- 2) content-target component: theoretical component (a unit for history and theory of media culture, for the development of media educational motivation) and practical component (units of creative and analytical activities based on media material);

3) *efficiency component* (a unit of final questionnaires, testing and creative works of the audience and a unit of the final identification of the levels of development of the audience's media competence with an emphasis on the ability to analyze media manipulations).

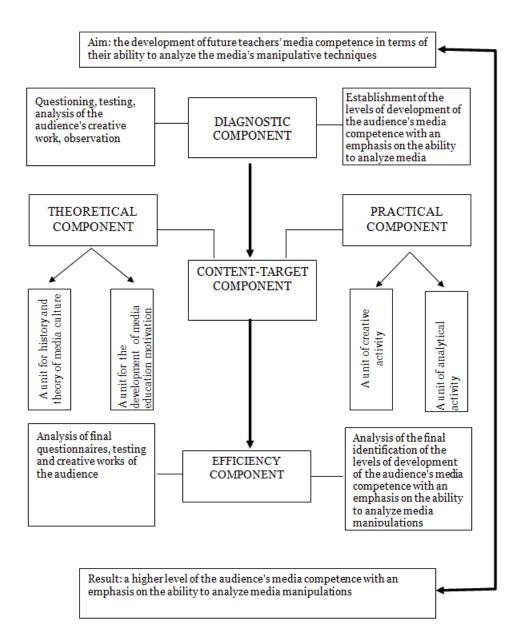


Fig. 1. The model of the media competencies' development of teacher training colleges' students in terms of the manipulative media influences' analysis

The need for diagnostic and efficiency's components of the model is justified by the fact that, both at the beginning and at the end of the implementation of the main structural units, it is important for the teacher to be aware of the levels of development of the media competence of a given audience with an emphasis on the analysis of media manipulative influences.

For the full-fledged practical implementation of this model, the following criteria (features) of the media competence of the audience are particularly necessary:

- *motivational* (motives of contact with media and media texts: genre, thematic, emotional, epistemological, hedonistic, psychological, moral, intellectual, aesthetic, therapeutic, etc.);
 - contact (frequency of communication / contact with media and media texts);
- informational (knowledge of terminology, theory and history of media culture, the process of mass communication):
 - perceptual (ability to perceive media texts);

- *interpretive*/evaluative (the ability to analyze the process of media functioning in society and media texts of different types and genres);
- practical/operational (the ability to choose certain media and media texts, create/distribute your own media texts, skills of self-education in the media sphere);
- *creative* (the presence of creativity in various aspects of activities (perceptual, play, artistic, research, etc.) related to media).

We believe that this model corresponds to those developed by Yu.N. Usov indicators of optimality (the development of systematic knowledge about media culture, the ability to analyze media texts; taking into account the dialectical unity of education, development, upbringing; the possibility of expanding the communication of the audience; orientation towards personal development) (Usov, 1989: 32).

As for the theoretical model of the efficient media education activity of (future) teachers, focused on the media competence's development in the process of manipulative techniques' analysis, it is presented as follows (Figure 2):

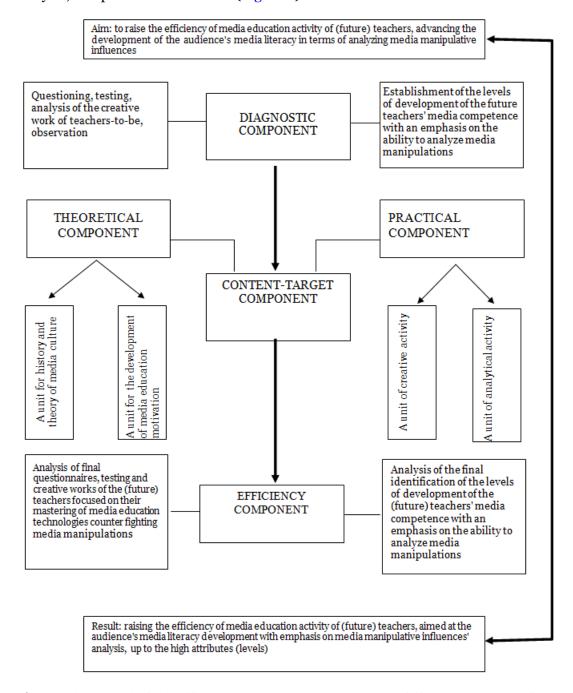


Fig. 2. The model of the efficient media education activity of (future) teachers, focused on the media competence's development in the process of media's manipulative techniques' analysis

- 1) diagnostic (ascertaining) component: ascertaining the levels of effectiveness of media educational activities of (future) teachers, contributing to the development of media competence of the audience in the process of analyzing media manipulations; questioning, testing, analysis of creative works of (future) teachers, observation;
- 2) content-targeted component: theoretical component (the unit for studying the history and theory of media culture, for developing media educational motivation and technology for conducting classes from classrooms) and practical component (units of creative and analytical activities based on media material, with an emphasis on the analysis of media manipulative influences);
- 3) an efficiency component (a unit of final control testing of (future) teachers, analysis of the results of their performance of creative tasks on media material, with an emphasis on mastery of media educational antimapulation technologies; a unit of final statement of the effectiveness levels of media educational activities of (future) teachers, contributing to the development of media competence of the audience in analysis of media manipulations.

For a full-fledged practical implementation of this model (Figure 2), the following criteria (markers) of the effectiveness of media educational activities of (future) teachers are necessary, contributing to the development of media competence of the audience in the process of analyzing media manipulative influences:

- motivational (motives of the media educational activities of (future) teachers, contributing to the development of media competence of the audience in the process of analyzing media manipulative influences: emotional, epistemological, moral, legal, etc.); striving to improve their knowledge and skills in the field of media and media education and resisting media manipulative influences);
- contact (the frequency of contacts of (future) teachers with audiences in the process of media educational activities, contributing to the development of media competence of the audience in the process of analyzing media manipulative influences);
- informational (awareness, theoretical and pedagogical knowledge of (future) teachers in the field of media, media education, typology and essence of media manipulations);
- technological (technological skills of (future) teachers in the field of media educational activities, contributing to the development of media competence of the audience in the process of analyzing media manipulative influences);
- evaluative (proficiency of (future) teachers in the methods of assessing the knowledge and skills of the audience in the field of media education and analysis of media manipulative influences);
- practical and operational (the quality of practical media educational activities of (future) teachers, contributing to the development of media competence of the audience in the process of analyzing media manipulative influences);
- creative (the level of creativity of (future) teachers in media educational activities, contributing to the development of media competence of the audience in the process of analyzing media manipulative influences).

Further on, drawing on a number of scientific studies (Albright, 2017; Aldwairi, Alwahedi, 2018; Bertin et al., 2018; Bharali, Goswami, 2018; Bradshaw, Howard, 2018; Conroy et al., 2015; Dentith, 2017; Fletcher et al., 2018; Gahirwal et al., 2018; Goering, Thomas, 2018; Martens et al., 2018; McDougall et al, 2018; Marwick, 2018; Marwick, Lewis, 2017; Nielsen, Graves, 2017; Pérez Tornero et al., 2018; Ruchansky et al., 2017; Sadiku et al., 2018; Salma, 2019; Tambini, 2017; Vargo, 2018; Waldrop, 2017; Wilson, 2019; Zhou et al., 2019), we have elaborated the theoretical model of media education activity, facilitating the development of the audience's media literacy in the process of the analysis of media texts' credibility (Figure 3).

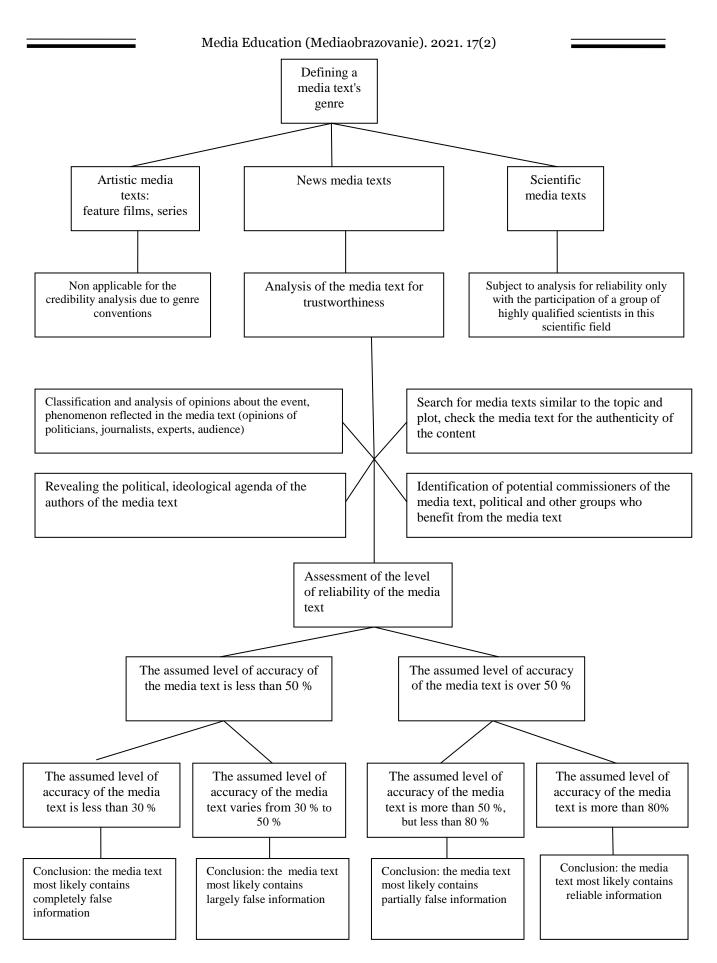


Fig. 3. Model of media education activity, facilitating the development of the audience's media literacy in the process of the analysis of media texts' credibility

While implementing the above model it is useful to rely on the technology of resisting media manipulations and fakes, based on asking and seeking answers to such challenging questions as:

"What is the source of the information? Can the source be verified? Is it reliable? Who owns the media platform or information source?

What is the main message? What facts are presented to support the main message? Is any information missing? What is the purpose of conveying this message? Who will gain if people accept the message? Who will lose?

From whose perspective is the message presented? Does the message appeal to logic or emotion? To what effect?

Who is quoted or given air time? How often? What names and titles are used and to whom do they apply? Can you verify these? Are there any incomplete quotations or comments taken out of context? Are all claims or conclusions supported by the facts presented?

What words or images are used to describe or illustrate both sides of an issue? Look for the use of emotionally laden or vague terminology. What effect could emotional elements have on the message of the story and on audiences?

Where is the information or story presented? How has it been distributed or shared? If it is a news report, where is the report located in relation to the rest of the news presented? How much time or space has the story been given?

What is the context for the story? Is information about the context shared? What is the impact of the presence or absence of any context for the story?

Does the platform or website allow for sharing different points of view? How do you know? What values and priorities for the site are conveyed as a result?

Could you base an important decision on the information you have received? Explain why or why not with specific reasons to support your opinion.

How do you determine whether or not to share or block information you receive? What are the factors you or others might consider?

What is the difference between sharing information as an act of "transmission" by making a conscious decision to pass on information, and sharing information as an act of "ritual" by sharing regularly as a habit? What are the possible effects of each kind of sharing?

Does the platform you are using provide any "incentives" for passing on information? How do you know this? What is the purpose of incentives? How might you decide to respond and why?

How can you exercise your individual and collective influence to challenge examples of fake news?" (Wilson, 2019: 12).

5. Conclusion

Thus, the article presents not only the theoretical model of the development of media competence of students of pedagogical universities in the process of analyzing media manipulative influences, but also theoretical models of efficient media educational activity of (future) teachers, contributing to the development of media competence of the audience in the process of analyzing media manipulative influences; and also media educational activities, facilitating the development of media competence of the audience in the process of analyzing the media texts' trustworthiness.

6. Acknowledgements

The reported study was funded by Russian Foundation for Basic Research (RFBR) according to the research project N° 20-013-00001 "Media education of pedagogical profile students as a tool to resist media manipulation".

References

Albright, 2017 – Albright, J. (2017). Welcome to the era of fake news. Media and Communication. 5(2): 87-89. doi: 10.17645/mac.v5i2.977

Aldwairi, Alwahedi, 2018 – Aldwairi, M., Alwahedi, A. (2018). Detecting fake news in social media networks. *Procedia Computer Science*. 141: 215-222.

Baake et al., 1999 – Baake, D., Kornblum, S., Lauffer, J., Mikos, L., Thiele, G. (eds.) (1999). Hanbuch Mediaen: Medienkompetenz. Modelle und Projecte. Bonn: Budeszentrale für Politishe Bilding, 308 p.

Bertin et al., 2018 – Bertin, B., Aguiar, L., Gomez-Herrera. E., Mueller-Langer, F. (2018). The Digital transformation of news media and the rise of disinformation and fake news. Seville: European Commission, Joint Research Centre, 56 p.

Bharali, Goswami, 2018 – Bharali, B., Goswami, A.L. (2018). Fake news: credibility, cultivation syndrome and the new age media. *Media Watch*. 9(1): 118-130. DOI: 10.15655/mw/2018/v9i1/49277

Blumeke, 2000 – Blumeke, S. (2000). Mediaenpadagogiche Kompetenz. Munchen: KoPad-Verlag, 400 p.

Bradshaw, Howard, 2018 – *Bradshaw, S., Howard, P.N.* (2018). Challenging truth and trust: A Global inventory of organized social media manipulation. Oxford: University of Oxford, 25 p.

Buckingham, 2003 – Buckingham, D. (2003). Media education: literacy, learning and contemporary culture. Cambridge, UK: Polity Press, 219 p.

Buckingham, 2015 – Buckingham, D. (2015). Do We Really Need Media Education 2.0? Teaching Media in the Age of Participatory Culture. In: Lin, T.B., Chen, V., Chai, C. (eds.) New Media and Learning in the 21st Century. Education Innovation Series. Singapore: Springer.

Conroy et al., 2015 – Conroy, N.J., Rubin, V.L., Chen, Y. (2015). Automatic deception detection: methods for finding fake news. ASIST 2015. St. Louis, USA.

De Abreu, 2019 – *De Abreu, B.S.* (Ed.) (2019). Teaching media literacy. Chicago: ALA Neal-Schuman, 235 p.

Dentith, 2017 – Dentith, M.R.X. (2017). The Problem of Fake News. Public Reason. 8(1-2): 65-79.

Fletcher et al., 2018 – Fletcher, R., Cornia, A., Graves, L., Nielsen, R.K. (2018). Measuring the reach of "fake news" and online disinformation in Europe. Oxford: University of Oxford: 1-10.

Gahirwal et al., 2018 – Gahirwal, M., Moghe, S., Kulkarni, T., Khakhar, D., Bhatia, J. (2018). Fake News Detection. International Journal of Advance Research, Ideas and Innovations in Technology. 4(1): 817-819.

Gálik, 2019 – Gálik, S. (2019). On human identity in cyberspace of digital media. *EJTS European Journal of Transformation Studies*. 7(2): 33-44.

Gálik, 2020 – Gálik, S. (2020). Philosophical Reflection of the Influence of Digital Media on Current Education. *Media Education*. 60(1): 100-106. doi: 10.13187/me.2020.1.100

Goering, Thomas, 2018 – Goering, C.Z., Thomas, P.L. (eds.) (2018). Critical media literacy and fake news in post-truth America. Leiden: Brill Sense.

Hobbs, 2010 – *Hobbs, R.* (2010). Digital and Media Literacy: A Plan of Action. Washington: The Aspen Institute.

Hobbs, 2017 – Hobbs, R. (2017). Teaching and learning in a post-truth world. *Educational Leadership*. 75(3). 26-31. [Electronic resource]. URL: http://www.ascd.org/publications/educational_leadership/nov17/vol75/num03/Teaching_and_Learning_in_a_Post-Truth_World.aspx

Jolls, Wilson, 2014 – *Jolls, T., Wilson, C.* (2014). The core concepts: fundamental to media literacy yesterday, today and tomorrow. *Journal of Media Literacy Education*. 6(2): 68-77.

Kačinová, 2018 – Kačinová, V. (2018). Media competence as a cross-curricular competence. *Communication Today.* 9(1): 38-57.

Kellner, Share, 2005 – Kellner, D., Share, J. (2005). Toward Critical Media Literacy: Core concepts, debates, organizations, and policy. Discourse: studies in the cultural politics of education. 26(3): 369-386.

Martens et al., 2018 – Martens, B., Aguiar, L., Gomez-Herrera, E., Mueller-Langer, F. (2018). The Digital transformation of news media and the rise of disinformation and fake news. Seville: Seville: European Commission, Joint Research Centre.

Marwick, 2018 – Marwick, A.E. (2018). Why do people share fake news? a sociotechnical model of media effects. *Georgetown law technology review*. 2(2): 474-512.

Marwick, Lewis, 2017 – Marwick. A., Lewis, R. (2017). Media manipulation and disinformation online. New York: Data & Society Research Institute, 104 p.

McDougall et al, 2018 – McDougall, J., Zezulkova, M., van Driel, B., Sternadel, D. (2018). Teaching media literacy in Europe: evidence of effective school practices in primary and secondary education, NESET II report. Luxembourg: Publications Office of the European Union. DOI: 10.2766/613204.

Nielsen, Graves, 2017 – *Nielsen, R.K., Graves, L.* (2017). "News you don't believe": Audience perspectives on fake news. *Factsheet*. Oct.

Pérez Tornero et al., 2018 – Pérez Tornero, J.M., Tayie, S.S., Tejedor, S., Pulido, C. (2018). How to confront fake news through news literacy? State of the art. Doxa.comunicación, 26: 211-235.

Petranová et al., 2017 – Petranová, D., Hossová, M., Velický, P. (2017). Current development trends of media literacy in European Union countries. Communication Today. 8(1): 52-65.

Potter, 2019 – Potter, W.J. (2019). Media Literacy. Thousand Oaks – London: Sage Publication.

Potter, McDougall, 2017 – Potter, J., McDougall, J. (2017). Digital media, education and culture: theorising third space literacy. London: Palgrave MacMillan.

Ruchansky et al., 2017 – Ruchansky, N., Seo, S., Liu, Y. (2017). CSI: A Hybrid Deep Model for Fake News Detection. CIKM'17. DOI: 10.1145/3132847.3132877

Rushkoff, 1994 – Rushkoff, D. (1994). Media Virus! New York: Ballantine Books.

Sadiku et al., 2018 – Sadiku, M.N.O., Eze, T.P., Musa, S.M. (2018). Fake news and misinformation. International Journal of Advances in Scientific Research and Engineering. 4(5): 187-190. DOI: dx.doi.org/10.31695/IJASRE.2018.32728

Salma, 2019 – Salma, A.N. (2019). Defining digital literacy in the age of computational propaganda and hate spin politics. The 10th IGSSCI (International Graduate Students and Scholars' Conference in Indonesia) New media and the changing social landscape of contemporary societies: How are new media reshaping the whole aspects of life of contemporary societies? KnE Social Sciences: 323-338. doi: 10.18502/kss.v3i20.4945

Silverblatt, 2001 – Silverblatt, A. (2001). Media Literacy. Westport, Connecticut – London: Praeger, 449 p.

Tambini, 2017 – *Tambini, D.* (2017). Fake news: public policy responses. Media policy brief 20. London: Media Policy Project, London School of Economics and Political Science, 16 p.

Usov, 1989 – *Usov*, *Y.N.* (1989). Kinoobrazovanie kak sredstvo esteticheskogo vospitaniya i khudozhestvennogo razvitiya shkol'nikov [Film education as a means of aesthetic education and artistic development of schoolchildren]. Ph.D. Dis. Moscow. [in Russian]

Vargo, 2018 – *Vargo*, *C.J.* (2018). The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016. *New Media & Society*. 20(5): 2028-2049. DOI: 10.1177/1461444817712086

Waldrop, 2017 – *Waldrop, M.M.* (2017). The genuine problem of fake news. *PNAS*. 114(48): 12631-12634. DOI: 10.1073/pnas.1719005114

Wilson, 2019 – Wilson, C. (2019). Media and Information Literacy: Challenges and Opportunities for the World of Education. Ottawa: The Canadian Commission for UNESCO's IdeaLab.

Worsnop, 2004 – Worsnop, C.M. (2004). Media literacy through critical thinking. Washington State Office of Superintendent of Public Instruction and NW Center for Excellence in Media Literacy, 60 p.

Zhou et al., 2019 – Zhou, X., Zafarani, R., Shu, K., Liu, H. (2019). Fake news: fundamental theories, detection strategies and challenges. WSDM '19, February 11–15, 2019. Melbourne, VIC, Australia. DOI: https://doi.org/10.1145/3289600.3291382