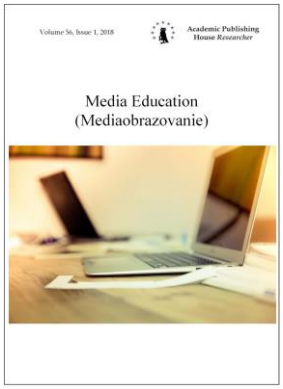
Copyright © 2018 by Academic Publishing House Researcher s.r.o.

Published in the Slovak Republic
Media Education (Mediaobrazovanie)
Has been issued since 2005
ISSN 1994-4160
E-ISSN 1994-4195
2018, 58(4): 22-28

DOI: 10.13187/me.2018.4.22
www.ejournal53.com



Interactive Technologies of Forming the Students' Media Competence: Opportunities and Limitations of Their Use in Contemporary Educational Practice

Elena Frolova [a, *], Tatyana Ryabova [a], Olga Rogach [a]

[a] Russian State Social University, Russian Federation

Abstract

Special attention of researchers from developed countries is paid to the inclusion of new media technologies of teaching in the traditional educational process. For the purpose of critical comprehension of prospects of use of interactive technologies in traditional educational environments, their advantages and shortcomings before traditional methods of training, the research was conducted by the authors. The main focus of the study was on the study of the possibilities and limitations of the use of interactive technologies for the formation of media competence of students. The materials of the author's research include case-studies that were offered to students to perform within the discipline "Research in the system of public administration" (34 students were trained). The results of the survey were supplemented and concretized with the data, obtained during the focus group discussion.

In the course of the study, the authors found out that in contrast to traditional teaching methods that stimulate "learning for evaluation", interactive technologies activate the internal need of the student in "learning for self-development". The authors highlighted the following advantages of interactive methods: the development of skills for segmentation of media space and a critical approach to the selection of media texts for further analysis; the use of a multidimensional approach to the selection of information channels, the volume of information array and units of analysis of media texts. The study found out that the redundancy of information on the Internet and the dominance of traditional tasks forms the consumer of media information. In the absence of real practice of formation of media competence, the use of interactive teaching methods can be limited only to the selection of text by students.

Keywords: media space, media text, media education, interactive technologies, education

1. Introduction

The modern media space has changed significantly as a result of globalization, wide spread of technologies and new consumer habits in the use of information resources (Förster, Rohn, 2015). Global trends in the transformation of social interactions, modernization of the basics of social and cultural exchange and accumulation of communication channels in interactive, shift the discourse of research attention to the issues of media education (Cheung, 2005; Küter-Luks, Heuvelman, Peters, 2011; Frolova et al., 2017).

Media education is the most important and promising direction of training, the purpose of which is to develop sustainable skills of work in the media space: selection, critical perception,

* Corresponding author
E-mail addresses: tani-87@inbox.ru (T.M. Ryabova)

multidimensional analysis, generalization and evaluation of incoming information (Chu et al., 2014). Studies show that media education not only contributes to the personal and professional development of the student, but also increases the social participation and interactivity of students (Fedorov, 2015); provides the formation of experienced media consumers (Coleman, 2003). This phenomenon is manifested in the consolidation of the students' ability to use the acquired knowledge in their everyday life, thus transferring the formal content of media education to the informal environment (social media, interactive interaction, etc.) (Reid, Norris, 2016).

Analysis of the processes of implementation of media education in developed countries suggests the need for a pedagogical transition to the expansion of educational opportunities of students by transferring the interaction of a teacher and a student into the virtual environment as a new form of learning space (Gutiérrez-Martín, Torrego-González, 2018; Cheun, 2009). However, according to some scientists, there is a split in the theory and practice of media education (Rowe, 2014), which produces a predominance of traditional learning environment, the dominance of authoritarian school culture over interactive one (Rantala, 2009). It is seen not monosemantic students' perception of media technologies in teaching disciplines of the higher school (Zhu et al., 2009).

The traditional educational environments are based on static content and, consequently, less adaptive, where as the education system should provide personalization of learning content (Benhamdi et al., 2017). The data obtained in a number of studies suggest that the adoption of transmedia literacy practice as an object of intensive educational work can be successful only if it is combined with a high motivational orientation of the student (McDougall, Potter, 2015; Wilmore, Willison, 2015).

In many ways, the implementation of media education's objectives depends on the personal and active commitment of the teachers (Volcic, Erjavec, 2006); creative approach to solving educational challenges (Vraga, Tully, 2015); communication skills of a teacher (Bliss, 2015). A high school teacher, using videos, movies, websites, popular music, newspapers and magazines in the classroom, or involving students in the creation of media products using video cameras or computers, provide sustained interest of students in the subject, develops internal motivation of the student (Hobbs, 2004).

2. Materials and methods

The author's research is an attempt of critical comprehension of the prospects of using interactive technologies in traditional educational environments, their advantages and disadvantages over traditional teaching methods.

In view of the high relevance of the issues raised, the authors aim to explore the possibilities and limitations of the use of interactive technologies for the formation of media competence of students. The materials of the author's research include case-studies that were offered to students to perform within the discipline "Research in the system of public administration" (34 students were trained).

In particular, in the classroom students were asked to perform a number of educational tasks that involve independent search, processing and critical analysis of information.

To perform *Task 1. "Preparation of a comprehensive assessment of domestic tourism in Russia based on the analysis of media texts"* (hereinafter, Task 1) students needed:

1. To choose from 3 to 5 modern movies.
2. To describe the characteristics of the Russian tourism industry in the following areas: tourist infrastructure; tourist potential (cultural and historical heritage, natural potential, cultural and entertainment industry); tourist image, the perception of tourists.
3. For confirmation of descriptive characteristics to give quotes from the movie.
4. To assess the specificity of the reflection of domestic tourism in the media text (negative/neutral/ positive).
5. To analyze fragments of media content that illustrate the collective image of Russian territories in terms of tourism development.
6. To prepare an analytical conclusion.

To complete *Task 2. "Drawing up a collective image of the Russian school based on the analysis of media texts"* (hereinafter, Task 2) students needed:

1. To choose from 3 to 5 modern movies.

2. To describe: a collective image of a teacher; a collective image of a student; characteristics of the modern school.

3. For confirmation of descriptive characteristics to give quotes from the movie.

4. To assess the specificity of the reflection of the modern education system in the media text (negative/neutral/ positive).

5. To analyze fragments of media content, that illustrate the collective image of a teacher, a student and characteristics of the modern school.

6. To justify their findings and conclusions.

To perform *Task 3. "Preparation of a comprehensive assessment of the problems of state and municipal management"* (hereinafter, Task 3), the students were offered a list of topics and it was necessary:

1. To select the problem of research on one of the proposed topics of public administration.

2. To carry out an expert assessment of the specifics and mechanisms of solving the selected problem through the following steps:

2.1 to define criteria for selection of experts: practical experience, publications, frequency of references to expert's opinion (e.g. on the platform elibrary.ru: https://elibrary.ru/defaultx.asp).

2.2 to establish a list of competent (in the relevant spheres) experts

2.3 to select the materials that characterize experts opinions on the problem and approaches to its solution. The source is statements in the media, publications in scientific issues (for example, elibrary.ru: https://cyberleninka.ru/ etc.). Be sure to link to the source at the bottom of the page.

3. To summarize expert opinions, to provide general and specific suggestions. To draw a conclusion, to justify your own point of view.

To perform these tasks, the students were asked to divide into groups of up to 6 people, which allowed to introduce a competitive component, provided the development of communication skills of group interaction and skills of group discussions.

The results of students ' case-studies were evaluated after training using a multiple-choice questionnaire. The results of the survey were supplemented and concretized with the data, obtained during the focus-group discussion.

3. Discussion

Special attention of researchers in developed countries is paid to the inclusion of new media technologies of teaching in the traditional educational process (Benhamdi et al., 2017), the study of factors that influence online performance and academic performance of students (Zhu et al., 2009).

Three types of interaction between a professor and students are characteristic for universities: passive learning methods, active learning methods and interactive learning methods (Norin et al., 2018). The advantages of interactive methods over other educational technologies are in the possibility for students to work in small groups, the use of business or role-playing games, brainstorming sessions (Frolova et al., 2017), allowing students to memorize learning material better (Hora, Anderson, 2012). In addition, interactive technologies used for educational purposes, have the possible advantage of increasing students ' satisfaction with the learning process (Courtier et al., 2016); strengthening the pace of their cognitive development, new social skills training (Schaffner, 1984).

Despite the fact that discussions and constructive criticism in the environment of students contribute to a better understanding of the material, the students do not consider the recommendations and suggestions of fellow students as helpful; attempts of domination of the opinions of more active students are possible (Pelfrey, Bubolz, 2014). Interactive technologies have an ambiguous assessment among students. One of the main obstacles, apparently, is that the foundational beliefs of students regarding technology, teaching and learning can be counterproductive for ideas of educational initiatives (Weurlander et al., 2017). In some cases, there is a critical attitude of students to participance in interactive and research projects, which is more often characteristic of closed, passive students with a low level of self-organization and self-control (Aguado, 2009).

Despite some ambiguity in the use of interactive technologies for the development of media competence of students, the priority is their perception of learning technologies that ensure the global competitiveness of students, as innovative ones (Lewthwaite, Nind, 2016); development of

creative abilities of the individual, necessary for his further self-education and professional growth; development of skills of self-transfer of knowledge and skills in a new situation, self-combination of a new, alternative approach to finding solutions to the problem from the known ways (Gray et al., 2015).

4. Results

Effective work with the media space is a key component of the students' activity in the management profile of training. In the educational environment for students burdened with information overload, the most pressing issue is how to build the educational process, so that graduates have the necessary skills to work with information, skills of assessment and solving management problems.

The results of the study illustrated the advantages of using interactive methods in teaching. The students noted: "increased interest", "deeper immersion in the learning task", "development of new skills". Among the positive aspects of the use of interactive methods was noted "better assimilation of information", "higher level of integration of theoretical knowledge and practical skills", "activation of scientific and cognitive activity". For the vast majority of students, the implementation of the proposed tasks allowed to form a comprehensive vision of the problems of state and municipal administration, to develop an interdisciplinary approach to solving educational problems. Working with media texts, students turned to the knowledge, gained in the frame of other academic disciplines, actualized previously acquired skills and abilities.

The results showed that interactive methods of forming media competence of students develop analytical skills in the analysis of media texts, contribute to the consolidation of sustainable motivation for further study of the course. It was found out that unlike traditional teaching methods, that stimulate "learning for evaluation", interactive technologies activate the internal need of the student in "learning for self-development".

According to the results of the study, a quantitative assessment of the effectiveness of the use of interactive technologies for the formation of students' media competence was obtained (Table 1).

Table 1. Students' assessment of the effectiveness of the use of interactive technologies for the formation of media competence (in points, where 2-fully contributes to the formation of skill / competence, 0-lack of result), pers

Skill / competence	*0*	*1*	*2*
selection of information sources (segmentation of media space, critical approach to the selection of media texts for analysis)	-	5	29
search for information on a given problem (the use of a multidimensional approach to the choice of information channels, the volume of information array, units of analysis of media texts)	-	16	18
analytical skills (flexibility and critical thinking)	3	15	16
systematization and primary data processing (systematization and structuring of information data)	3	16	15
skills of design of research results	8	14	12
skills of presentation of research results	6	15	13
the ability to lead a discussion, to defend one's opinion reasonably	9	20	5
the ability to use theoretical knowledge in practice	7	17	10

The students, when assessing the advantages of using the interactive teaching methods, particularly noted the development of such skills as: segmentation of media space and critical approach to the selection of media texts for analysis; the use of a multidimensional approach to the selection of information channels, the volume of information array and units of analysis of media texts. Such skills as flexibility and critical thinking, systematization and structuring of information data are highly appreciated.

It is fair to note that the formation of media competence of students has an ambivalent character, on the one hand, provides non-linearity of thinking, while on the other hand, causes confusion in the preparation of the task. The widespread introduction of tests in the educational

process (preparation of the report, essay) formed the students' focus on finding a single source of information, the lack of need for a creative approach to solving educational problems. The departure from the traditional practice caused some difficulties in working in the modern media space with some of the trainees.

Many students noted the complexity of fulfilling the tasks, most of them did not start their implementation immediately, almost a third of students completed the task not at the first attempt (it took a multiple revision of media texts, a return to the already analyzed array of information to clarify and/or correct errors). While working in a group, some students were not included in the group discussion, which illustrates the high level of differentiation in the development of both professional and communicative competencies. Some students noted the unfairness of the assessment of assignments, which is more typical for students with a low level of development of skills in design and presentation of the results of research activities.

A more detailed analysis of the tasks, performed by the students, showed that Task 1 and Task 2 did not cause difficulties directly in the selection of films, the choice of statements for citation. At the same time, the implementation of the Task item on the description of the characteristics of the Russian tourism industry in the proposed areas of analysis caused significant difficulties. There is a replication of other people's, already published critical statements on the film, while students did not carry out a logical relationship of these statements with the points of the task and the quotes of the film, which they wrote out. Students demonstrated a pattern of thinking. The redundancy of information on the Internet reduces the level of motivation to form and produce their own ideas.

The established habit of the student to work with tasks in which there is only one solution (test, essay, report) has formed a consumer of media product that does not have critical thinking and skills in the media space.

When performing Task 3, it did not cause difficulties in the selection of materials and quotations for scientific publications. While the comparative analysis of expert opinions, the allocation of general and specific proposals was associated with a number of difficulties for students:

- lack of ready-made information on the Internet
- lack of comparative analysis skills and practice
- as analytical conclusions, students were able to identify only one expert opinion, which correlated with their personal position.

Also, students complained about the complexity of tasks, lack of time to perform these tasks, the high level of complexity of tasks and the lack of similar completed tasks on the Internet.

During the study it was found out that students expected more active participation of the teacher in the work with students, his performing the role of assistant and consultant. The unfettered expectations of the students caused some decrease in the educational effect of the case-tasks.

5. Conclusion

Actualization of the need for the formation of media competence of students, development of skills in the modern media space allows us to talk about a number of advantages of interactive learning technologies over traditional ones. The results of the study highlighted the following advantages of interactive methods: the development of segmentation of media space and a critical approach to the selection of media texts for further analysis; the use of a multidimensional approach to the selection of information channels, the volume of information array and units of analysis of media texts. In addition, it is noted the formation of sustainable interest of students to further study of the course, increasing satisfaction from the quality of assignments, the development of motivational attitudes. Many students recognize the importance of the formation of these skills for further professional activities and for the organization of their daily lives.

The disadvantages of using interactive technologies in the formation of media competence were the complexity of the tasks, the inability to assess fairly their implementation. However, the results of the study highlighted a certain pattern: the higher the involvement of students in the performance of the educational task and the better they have developed the skills of presentation of their research results, the less dissatisfaction and criticism is caused by interactive teaching methods. This circumstance makes it possible to assume in the future positive "shifts" from

traditional learning technologies in the direction of interactive ones, where the development of relevant competencies and the educational environment in general, will level the discontent and complexity of students.

The redundancy of information on the Internet and the dominance of traditional tasks form the consumer of media information. In the absence of real practice of formation of media competence, the use of interactive teaching methods can be limited only to the selection of text by students. Under these conditions, the teacher should form clear evaluation criteria, require the student to develop skills not only in the consumption of media information, but also in its analysis.

As some recommendations to facilitate the work of students with media texts, we can offer a deep methodological study of tasks, taking into account such factors as: the goals and objectives of the discipline, the level of training of students, time parameters, the complexity and effectiveness of the educational task. Particular attention should be paid to the tools: the algorithm of the task, the system of evaluation of individual and group indicators, methods of activating the discussion. It can be assumed that for students with a weak level of training and motivation, it is a need to strengthen the active role of the teacher. For such groups, the functions of the teacher can be expanded in terms of overcoming the detachment and involvement of students in the work. However, it is necessary to avoid the dominant role of a teacher, "imposing" his views on the solution of the problem situation. The position of a teacher as a conductor of ideas, of the formation of conditions for self-organization of groups, is more effective.

References

Aguado, 2009 – *Aguado, N.A.* (2009). Teaching Research Methods: Learning by Doing, *Journal of Public Affairs Education*, 15:2: 251-260. DOI: 10.1080/15236803.2009.12001557

Benhamdi et al., 2017 – *Benhamdi, S., Babouri, A., Chiky, R.* (2017). Personalized recommender system for e-Learning environment. *Education and Information Technologies*. 22 (4): 1455–1477. DOI: https://doi.org/10.1007/s10639-016-9504-y

Bliss, 2015 – *Bliss, K.* (2015). Social Media in the Classroom. Pedagogy in Health Promotion, 1 (4): 186-193.

Cheung, 2005 – *Cheung, C. K.* (2005). The relevance of media education in primary schools in Hong Kong in the age of new media: a case study. *Educational Studies*. 31(4): 361-374. DOI: https://doi.org/10.1080/03055690500237033

Cheung, 2009 – *Cheung, C.K.* (2009). Media Education Across Four Asian Societies: Issues and Themes. *International Review of Education*. 55 (1): 39–58.

Chu et al., 2014 – *Chu, S.K.W., Lau, W.W.F., Chu, D.S.C., Lee, C.W.Y., Chan, L.L.H.* (2014). Media awareness among Hong Kong primary students. *Journal of Librarianship and Information Science*, 48 (1): 90-104.

Coltman,2003 – *Coleman, R.M.* (2003). Bringing Diversity and Activism to Media Education through African American-Centered Pedagogical Cases. The Mediation of Ebonics and the NAACP Television Networks Boycott. *Television & New Media,* 4 (4): pp. 411-438.

Courtier et al., 2016 – *Courtier, J., Webb, E.M., Phelps, A.S. et al.* (2016). Assessing the learning potential of an interactive digital game versus an interactive-style didactic lecture: the continued importance of didactic teaching in medical student education. *Pediatric Radiology*, 46 (13): 1787–1796. DOI: https://doi.org/10.1007/s00247-016-3692-x

Fedorov, 2015 – *Fedorov, A.V.* (2015). Media Education: history and theory. Moscow: ICO "Information for all", 450 p.

Förster, Rohn, 2015 – *Förster, K., Rohn, U.* (2015). Media Management Education. Key Themes, Pedagogies, and Challenges. *Journalism & Mass Communication Educator*, 70 (4): 367-381.

Frolova et al., 2017 – *Frolova E.V., Ryabova T.M., Rogach O.V. (2018*). Electronic educational environment as the tool of manager student media competence development. *Media education,* 1: 68-76.

Frolova et al., 2017 – *Frolova, E.V., Ryabova, T.M., Rogach, O. V.* (2017). Media Competence of teachers of higher school: assessment of skills and technologies of development. *Media education,* 4: 37-46.

Gray et al., 2015 – *Gray, C., Turner, R., Sutton, C., Petersen, C., Stevens, S., Swain, J., Esmond, B., Schofield, C., Thackeray, D.* (2015). Research methods teaching in vocational

environments: developing critical engagement with knowledge? *Journal of Vocational Education & Training*, 67(3): 274-293. DOI: 10.1080/13636820.2015.1050443

Gutiérrez-Martín, Torrego-González, 2018 – *Gutiérrez-Martín, A., Torrego-González, A.* (2018). The Twitter games: media education, popular culture and multiscreen viewing in virtual concourses. *Information, Communication & Society*. 21 (3): 434-447. DOI: https://doi.org/10.1080/1369118X.2017.1284881

Hobbs, 2004 – *Hobbs, R.* (2004). A Review of School-Based Initiatives in Media Literacy Education. *American Behavioral Scientist*, 48 (1): 42-59.

Hora, Anderson, 2012 – *Hora, M.T., Anderson, C.* (2012). Perceived norms for interactive teaching and their relationship to instructional decision-making: a mixed methods study. *Higher Education*, 64 (4): 573–592. DOI: https://doi.org/10.1007/s10734-012-9513-8

Küter-Luks et al., 2011 – *Küter-Luks, T., Heuvelman, A., Peters, O.* (2011). Making Dutch pupils media conscious: preadolescents' self-assessment of possible media risks and the need for media education. *Learning, Media and Technology,* 36 (3): 295-313.

Lewthwaite, Nind, 2016 – *Lewthwaite, S., Nind, M. (2016)*. Teaching Research Methods in the Social Sciences: Expert Perspectives on Pedagogy and Practice. *British Journal of Educational Studies*, 64(4): 413-430. DOI: 10.1080/00071005.2016.1197882

McDougall, Potter, 2015 – *McDougall, J., Potter, J. (2015)*. Curating media learning: Towards a porous expertise. *E-Learning and Digital Media,* 12 (2): 199-211.

Norin et al., 2018 – *Norin, V.A., Norina, N.V., Pukharenko, Y.V. (2018)*. Interactive methods of teaching at Russian engineering universities. *Education and Information Technologies*, 23 (6): 2801–2820. DOI: https://doi.org/10.1007/s10639-018-9742-2

Pelfrey, Bubolz, 2014 – *Pelfrey Jr., W.V., Bubolz, B.F.* (2014). Hybridizing Socrates: A Hybrid Approach to Teaching Graduate Research Methods. *Journal of Criminal Justice Education,* 25:1, 34-53. DOI: 10.1080/10511253.2013.798422

Rantala, 2009 – Rantala, L. (2009). In search of third spaces in media education: an ethnographic study from fifth graders' media workshop. *Pedagogy, Culture & Society,* 17 (3): 385-399. DOI: http://dx.doi.org/10.1080/14681360903194392

Reid, Norris, 2016 – *Reid, G., Norris, S.P.* (2016). Scientific media education in the classroom and beyond: a research agenda for the next decade. *Cultural Studies of Science Education,* 11 (1): 147–166. DOI: https://doi.org/10.1007/s11422-015-9709-1

Rowe, 2014 – *Rowe, D.* (2014). Contemporary media education: ideas for overcoming the perils of popularity and the theory-practice split. *Journal of Media Practice,* 5(1): 43-58.

Schaffner, 1984 – *Schaffner, P.E.* (1984). An interactive gaming package for teaching and research in interdependent choice. *Behavior Research Methods, Instruments, & Computers,* 16 (2): 162–164. DOI: https://doi.org/10.3758/BF03202380

Volcic, Erjavec, 2006 – *Volcic, Z., Erjavec, K.* (2006). Becoming Media Literate? Media Education in Slovenia after Ten Years. *Journalism & Mass Communication Educator*, 61 (3): 284-296.

Vraga, Tully, 2015 – *Vraga, E.K., Tully, M.* (2015). Effectiveness of a Non-Classroom News Media Literacy Intervention Among Different Undergraduate Populations. *Journalism & Mass Communication Educator*, 71 (4): 440-452.

Weurlander et al., 2017 – *Weurlander, M., Cronhjort, M. Filipsson, L.* (2017). Engineering students' experiences of interactive teaching in calculus. *Higher Education Research & Development*, 36(4): 852-865. DOI: 10.1080/07294360.2016.1238880

Wilmore, Willison, 2016 – *Wilmore, M., Willison, J.* (2016). Graduates' Attitudes to Research Skill Development in Undergraduate Media Education. *Asia Pacific Media Educator*, 26 (1): 113-128.

Zhu et al, 2009 – *Zhu, C., Valcke, M., Schellens, T. et al.* (2009). Chinese students' perceptions of a collaborative e-learning environment and factors affecting their performance: implementing a Flemish e-learning course in a Chinese educational context. *Asia Pacific Education Review,* 10 (2): 225–235. DOI: https://doi.org/10.1007/s12564-009-9021-4