Modern Transmedia Products Architecture

Larisa Bykasova [a], [*], Natalia Vovchenko [a], Margarita Krewsoun [a]

[a] Rostov State University of Economics, Russian Federation

Abstract

The choice of the article theme is determined by the necessity for media education reflection as a well-formed, qualitatively new paradigm of the national education; identifying the architectonics of the educational subject establishment experience in the media space; defining the geometry of the modern media market; analysing the media education as a cultural transmission in a society that initiates the upbringing and training from the first steps and accompanies a person throughout own's life; as "a soft power" that increases the priority of Russian education in the global educational space. The modern media education in Russia is the most important platform for the cultural, economic, social, ethno-confessional personal development, that is why a strategic audit of basic pedagogical models, methodological principles, didactic methods, educational ideas which are developed with modern pedagogical science and practice, is required. The digital technologies are the ambitious mechanisms for creating a disciplinary matrix serving as the basis for the education, training and upbringing of person's new type that meets the request of a modern society. The application of the advanced technologies in teaching, reinforcing the subject receptive ability, actualizing the education practice-oriented nature, changing the individual epistemic potential, creates the mechanisms for diversification and modernization of the modern media education determining the degree of a mediateized product influence on the educational strategy implementation. The showed criteria allow us to estimate the measure of educational organizations responsibility for the results and quality of the media education subject; to evaluate media providing new tools for work; to expand the range of trainees education, taking into account the involvement of existing and new media practices; to reflect the state of modern information and communication support; to develop media competencies; to form consciousness in taking advantage of new media; to explore the current architecture of modern transmedia products.

Keywords: mediateized product, media discourse, media text, media message, subject (self) identification, feedback link, media literacy, cultural transmission, education competition.

1. Introduction

Only some career paths are as important as the media education when it is referred to the future of modern civilization. The media education is "a soft power" that increases the priority of Russian education in the global educational space; it is a human resource accumulation factor that has invaluable meaning in supporting for national safety; global competition of Russian education; maintenance and improvement the society infrastructure; development of modern educational design new standards; optimal life activities and ecosystem stability.

In the Message of the Russian Federation President V.V. Putin to the Federal Assembly from February 20th, 2019 it is stated that "today, our country and society need new knowledge. The content of education should also be changed" (President..., 2019).

The attention of the President and the Government of the Russian Federation to the education is explained by the fact that theeducation is a national treasure, a factor in the human resources accumulation. The media education is a cultural transmission in a society that initiates upbringing and training from the first steps of life and accompanies a person throughout life.

2. Materials and methods

The architecture of XXIth century media products is a complexly structured whole, uniting practical, utilitarian tasks and creative content. The most significant place in the architecture formation has a media environment possessing qualitative characteristics, resources, geometry, properties, etc.

The concept "media environment" is understood as the media culture space (Sharonov, 2008: 234), and the mediatization process is interpreted as the media environment development (Sokolova, 2008: 14). The media environment is a sphere that through the mass communications mediation, connects a person with the outside world, informs, entertains, promotes certain moral and aesthetic values, has an ideological or organizational impact on people's outlook and social behavior (Kirillova, 2006: 34).

By Y.V. Mochalova's definition, the media environment is an information-semiotic media context of a person's life activity (Mochalova, 2000: 21).

The reflection of the above mentioned facts allows us to formulate our own concept definition. The media environment is a social cultural phenomenon, constituing: multilayer subtract, rich in various information material; qualitative content: archetypes, meanings, symbols; intellectual substance, peculiar to its subjects (Andreeva et al., 2013: 12).

According to J. Habermas, the media environment has the following functions: communication, multimedia, instrumentality, interactivity, extensiveness (Habermas, 1988: 91).

The modern media environment: provides the opportunity to choose the education subject of preferred communication forms; contributes to the implementation of common didactic principles: accessibility, information scientific character, computerization and informatization of education; creates premises for the realizing special didactic principles: information and communicative principles (interactivity, network variety of feedbacks, dialogueness) (Bykasova, 2016: 130); the information and environmental principles (electronic resources renewability, hypertext structuredness) (Antipova et al., 2008: 58); ideological principles applied to interpret media texts in a certain direction, that leads to the polarization of the subjects' opinions (Eissa, 2014: 73).

The media environment contains different parts: both agreed and duplicating, competitive ones, which allows it to develop dynamically. The media environment development (Internet, new services, blogs, technologies, etc.) is mostly connected with the educational objects enlightenment on its impact ambivalence of the psychological and legal issues (hacking, cracker, Internet addiction, cybercrime, digital slavery, etc.).

3. Discussion

The media education spreads into all stages of education, forming end-to-end media competences in students; "penetrates" all levels of education, starting with preschool education. From stage to stage of education, the media competencies system can mutate, acquiring elements of interdisciplinarity, that helps the subject to create a real media product. To reveal the modern transmedia products architecture, we'll address to the issue of media competence mutation at various stages of education.

I. Considering the national education steps, we'll place children of preschool age at the first position. It is known that the ability to absorb information in a child's brain is much higher than in an adult's one, and brain's neuroplasticity is the strongest during the first five years of life. From this perspective, the team of scientists under the guidance of academic A.G. Asmolov has developed a new coordinate system oriented to pedagogical support and maintenance of 21st century information accelerations: using a computer, laptop, and TV screen in classes with children.

II. The next stage in the media competencies formation starts in the secondary school. The education in a modern school is the education subject activity in extremely uncertain conditions: the information exponential growth; expanding the range of interpersonal communication on the Internet; the constantly updated information block due to review of new media texts.

We'll consider the concepts introduced into the text of the article in more detail. The researcher M. Kazak believes that "the media coverage is the text mediation with the transmitting channel technical capabilities, the dependence of the text semiotic structure on the channel's format properties" (Kazak, 2010: 87). V. Savchuk writes: "The media coverage is an existential project of people longing to break through, to reach out and through the newspaper page, television and radio" (Savchuk, 2001: 25).

A. Fedorov gives the following media text definition: "A media text is a message (TV show, video clip, film, etc.), presented in any type and genre of media and intended for simultaneous visual and auditory perception of the audience" (Fedorov, 2010: 64).

V. Khorolsky writes: "A media text is a spontaneously arising and self-developing (synergistic) part of a social macrodiscourse, it is an independent and rather specific type of everyday life information and communication discourse" (Khorolsky, 2013: 76).

The concept "media literacy" has firmly entered the specialists' daily use in the sphere of media linguistics, political communication, citizens. The media education and the media literacy of children and youth, the problem of the degree of the broadcast media content reliability and objectivity determination is becoming more relevant today because of the large number of fake news, as well as consciousness manipulation, fact checking sharp reveal. The European and American media educators develop methods for teaching schoolchildren and students with mechanisms for protecting against redundant and potentially unreliable content, they try to implant in them the skills of media reports critical analysis, to teach them verifying independently the information accuracy provided by the journalist, the authenticity of photographic images, etc. (Adams, Hamm, 2001; Aufderheide, 1993; Bazalgette, 2008; Bryant, Thompson, 2002; Buckingham, 2004; Cappello et al., 2011; Goodman, 2003; Mackey, 2007; Meyer, 2005; Potter, 2008).

Recent publications of foreign scientists show increased interest in the problems of media education of children and youth. The active use of ICT by students, their effective training was studied by A. Twissell (Twissel, 2018). Youth participation in the online space, and digital technologies was considered by M. Hoff (Hoff, 2016). B. Gleason analyzes the possibilities of using the Internet, expanding the scope of research on media literacy (Gleason, Gillern, 2018). A role of ICT and its impact on the quality of education is analysed in the books D. Gibson, T. Broadley, J. Downie, P. Wallet (Gibson et al., 2018). Reflection of identification of the person and enrichment of experience of the subject of training in the process of media education is considered K. Davis, A. Ambrose, M. Orand (Davis et al., 2017).

In Russia, this media education direction began to be activated with the advent of many works (Danilova, 2009; Dobrosklonskaya, 2010; Dotsenko, 1997; Dzyaloshinsky, 2005, 2006; Emelin, 2016; Fateeva, 2007; Grachev, Melnik, 2007; Kara-Murza, 2015; Khazagerova, 2015, 2016; Melnik, 2007; Skovorodnikova, Kopnina, 2012, etc.).

In the works of the indicated scientists the attention is drawn to the media texts speed of transmission and the power of the impact on the people psyche. A special attention is paid to the protection of the childhood sacral landscape. The reality is that the scientific and technological progress generates not only the latest technologies and materials, but it also presents certain challenges for the education system. This challenge was the digitalization of the modern society, in which adults and children are involved. The advantages of the digitalization are indisputable, but its minuses are also obvious to teachers: the visual deterioration, the development of neuralgia various types, the occurrence of uncontrolled aggression from what is watched on the screen.

The native media educators turn to the media content analysis and the problem of the media texts manipulative potential. Under the manipulative potential A.A. Kazakov understands "the power of the possible impact on the audience, its suggestive charge" (Kazakov, 2018: 77). The manipulative power of various informational messages differs, and the teacher's primary task is to anticipate the media text influence on the education subject. It can be done through the media text preventive analysis and objective evaluation by the teacher, who is able to work out the appropriate recommendations for manipulation countering and to make the media text to be an assistant in the self-identification of the society members, the adaptation of the individual to society, the human harmonization. Without harmony, it is difficult for the subject to perceive the outside world in a complex way, to form oneself as a person of the 21st century.

The next important task of a teacher in forming the modern transmedia products architecture is to develop new media competencies in students which are expanded in secondary

school through the use of computer, laptop, TV screen, multimedia board, other gadgets and mass media. At this stage of education, the media competencies mutation shows itself, expressed in a large part of the subject's independence. This is discovered in the ability to work with a multimedia board in a classroom, in an independent search for electronic resources on the Internet for reports and abstracts, in forming the skills for making presentations on the results of work in a project and in a scientific experiment. At this stage of media education, a real product is created, and the personal qualities of the education subject are revealed, expressed in the degree of media competence formation. Individual trainees master not only multimedia (to describe one story, one channel and several forms are used) and crossmedia (the story of one story is broadcast through several channels), but also transmedia (one large-scale topic includes several stories, for which transmission various forms and numerous channels are used).

At the stage of a secondary school, a significant amount of data is accumulated, which serves as a powerful tool for transforming the learning process, rethinking of the approaches used in the media education and adapting the existing media experience for the school educational system efficiency improvement.

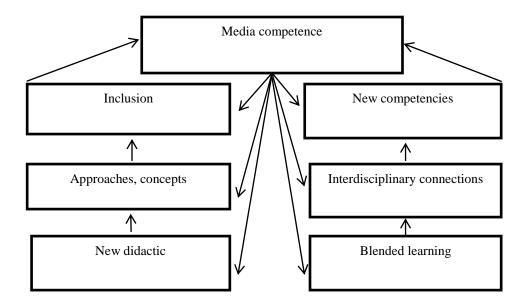The media competencies formation is presented schematically under the influence of various factors in Fig. 1.

Fig. 1. Factors affecting the media competence formation

This figure represents a set of factors influencing the media competencies formation and, at the same time, it demonstrates "reference points" that contribute to updating the media education content, which is necessary for the national school due to the resulting risks of pedagogical stability while creating a digital educational environment (DEE), the main principles of which are: availability, mobility, openness, practicability, sufficiency. After completing one module, the trainee proceeds to the next one, more technically complex in development of a media park and in terms of content reflection.

III. The modern paradigm "Education 3.0" is directed to a model postulating three vectors of its development: whom to teach, how to teach, for whom to teach. Today in the system of secondary special and higher education, students are trained to be able meet the time challenges:

1.	Disposition change child – adult. A modern child / teenager is often more informed and prepared for life in a digital society;

2.	Mixed education: intramural + e-learning. It's difficult to imagine the modern education without digitization;

3.	Individual trajectory of the educaion subject development;

4.	Development of network competence (the ability of an individual to exist in a digital environment);

5.	Expanding the digital competence – subject's responsibility for the online behavior;

6. Formation of network culture (freelancers, coaching);

7. Mastering media location skills.

The higher pedagogical education system at the bachelor degree course's level widens the knowledge boundaries, expands the possibilities for the subject further professionalization. In order to achieve the maximum synergistic effect in the higher education practice, the students' media competencies are increased; the digital didactics is introduced; program's audit is held; regional innovation platforms (RIP) are created; all media potential is used.

We interpret the media potential as a combination of existing and acquiring means (expanding the frames of social networks usage, implementing the artificial intelligence into the educational process), resources (expanding the scope of the mobile electronic education, additional virtual reality application) and reserves (using a new type of information presentation – distant; unsupervised machine learning, etc.), contributing to the subject's mastery of the education innovations, providing for its non-conflict existence in the digital community.

These higher school initiatives contribute to the transmedia products creation by the educational process subject. So, the students of the Taganrog Institute named after A.P. Chekhov implemented successfully the media project "Family passport", for which preparation the specific tools were used: Moho – a program for creating vector 2D-animation; Papagayo – a lipsink program (the technology that allows to synchronize the movement of the lips with the pronounced sounds); PAP – a program for drawing and editing images, digital animation tools (a set of time-lapse tools, automatic animation, development tools for animated characters), high-quality 3D animation, 4D animation software, video integration, special effects, etc. The project complexity was extremely high, but the multimedia project was implemented thanks to the educational media system existing at the institute.

The modern educational media system of the university is a combination of the communication traditional media. For the media system successful functioning, its stability and growth, the quantoriums' network is expanded; the customization of the program material is carried out; the cognitive flexibility is used; the subject emotional intelligence is developed; the cooperation is strengthened; the asynchronous interaction with students is implemented via the Internet; the partnerships are established with the other institutions. Without denying the positive role of the media, the Internet, all kinds of gadgets, we'll state that the mediatization without moral values leads to the national identity loss. The achievement of the desired goals is impossible without the formation of the personality culture, its spirituality; without further development of didactics and, taking into account the application of an individual approach to learning, without creating an artificial environment.

The following thing can be considered as project's achievement: students' usage of the specialized verbal means that form information as not completely reliable or hypothetical (Suzdaltseva, 2013: 40); raising the media culture level of project's participants; creolization of the educational languages; methods and forms of the media education organization; formation of the rational thinking elements by the project participants; emergence of the communicative discourse; vivid designation of the cultural priorities (Cappello et al., 2011: 67).

The environmental education will be presented most clearly at the level of higher pedagogical education. Master's programs in the field of "Pedagogical education" offer students the opportunity to advance their knowledge higher than at the university level, this is a chance to start specialization in one of the education subdisciplines.

As an example, we'll consider the Master's program "Educational Management", aimed at preparing the modern pedagogical education elite. The mission of this program is to prepare graduates for adaptation to global and internal problems and changes in the practice of education, since a modern teacher is an architect of transmedia products, and the media coverage is a characteristic of the new pedagogical elite.

This mission performance is assumed to be by means of increasing the graduates competitiveness by mastering new media competencies; supporting academic architecture characterizing with the respect for the educational process subject; training of graduates who are demanded with the labor market and the possibility of their continuous intellectual and professional development.

In practical terms, the mission of the Master program "Educational Management" is realized in a flexible educational program on an interdisciplinary basis; in the use of media technologies in the learning process; in the formation of the students relevant media competence; in the

development of the intellectual and general cultural level; in practice-oriented training of the future graduate in demanded of the modern labor market.

According to the results of 2019, the graduate of the master's program "Educational Management" joined the ranks of the competitive program winners "Leaders of Russia" from the Rostov region.

4. Results

To achieve the maximum synergetic effect, new elements are introduced into the modern transmedia architecture products with expanding the boundaries of new didactics (webinar); introduction of digital didactics; building of cultural, and media competencies of trainees; introduction of children and adolescents early professionalization through the media environment: softskills, worldskills, juniorskills, babyskills.

The created modern transmedia products architecture provides an appeal to the students' group. Today's University students will work with generation Z. This means that it is necessary: to create Mediapark for the subject preparation to non-conflict socialisation in a digital society; to form an artificial learning environment with multimedia content; to expand the range of social networks use in the classroom and after hours; to introduce an artificial intelligence in the educational process; to apply a new type of information flow-remote; to distribute the mobile e-education; to use an additional virtual reality; to apply the machine learning; to build up the capacity of information aggregator sites; to deploy a network form of interaction between educational subjects by attracting funds of libraries, art galleries and museums, etc.

Any modern transmedia products are created by man, and pedagogical technologies are ahead of all information technologies. In the formation of the architecture of the transmedia product increases the role of the teacher, who in modern school and in the process of media education plays a key role.

5. Conclusion

The modern transmedia products architecture is a complex formation: a structure rich in various resources which is mobile; borders are opened; the development is multi-vectored, managed; the content is integral, constantly updated.

1.   In forming the transmedia products architecture of the XXI century, the most important place is occupied by the media environment, that promotes moral and aesthetic values, providing for an ideological or organizational impact on the people's worldview and social behavior, protecting the sacral landscape from the media text manipulations;

2.   The role of the teacher in the modern transmedia products architecture is to counter the manipulative influence of the media texts and the development of new media competencies in students, which will help the education subject to develop independent thinking, to cultivate taste, to enhance culture, and to adapt to a society in a conflict-free manner, to resist the emerging cyber threats and cyberattacks. A modern teacher is an architect of transmedia products, and the media coverage is a characteristic of the new pedagogical elite;

3.   Through the media competencies all the education levels "are penetrated", starting with the preschool education. The "mutating" system of the media competences allows the education subject to recognize the patterns and to see the meaning between areas of knowledge, to develop algorithmic thinking in students, to turn the learning process into the decision-making process;

4.   The media competencies demonstrate "reference points" that contribute to the media education content updating, which is necessary for the national school due to the emerging risks of the pedagogical stability while creating the digital education;

5.   The media education is a cultural transmission in the society initiating upbringing and education from the first steps of life and accompanying a person throughout one's life. The media education, being a subconstruct of culture, influences the formation of the modern transmedia products unique architecture.

References

Andreeva et al., 2013 – *Andreeva, K.V., Bykasova, L.V.* (2013). Medium-oriented training in the modern university. *Modern problems of science and education*, 6. [Electronic resource]. URL: http: //www/science-education.ru/113-11421

Antipova, 2013 – *Antipova, A.N., Kvashnina, S.I., Novikova, S.O.* (2008). Assessment of test materials quality indicators in order to increase the effectiveness of knowledge control. *Modern problems of science and education,* 4: 57-59. [Electronic resource]. URL: http://www.science-education.ru/ru/article/view?id=992

Bazalgette, 2008 – *Bazalgette, C.* (2008). Transforming literacy. Empowerment through media education. Goteborg: Nordicom: 245-250.

Bryant, Thompson, 2002 – *Bryant, J., Thompson, S.* (2002). Fundamentals of media effects. New York: McGraw-Hill, 395 p.

Buckingham, 2004 – *Buckingham, D.* (2004). The Media literacy of children and young people. London: University of London, 70 p.

Bykasova, 2016 – *Bykasova, L.V.* (2016). Cognitive communication in the educational environment. *Bulletin of the Siberian Institute of business and information technology*, 2: 129-132.

Cappello et al., 2011 – *Cappello, G., Felini, D., Hobbs, R.* (2011). Reflections on global developments in media literacy education: bridging theory and practice. *Journal of Media Literacy Education,* 3 (2): 66–73.

Davis, 2017 – *Davis, K., Ambrose, A., Orand, M.* (2017). Identity and agency in school and afterschool settings: Investigating digital media's supporting role. *Digital Culture & Education,* 9 (1): 31–47.

Eissa, 2014 – *Eissa, M.M.* (2014). Polarized discourse in the news. *Procedia – Social and Behavioral Sciences,* 134: 70-91.

Emelin, 2016 – *Emelin, V.A.* (2016). Technology as a factor of identity transformation: development of Homo technologies. *National Psychological Journal,* 1 (21): 9–18. DOI: 10.11621/npj.2016.0102

Fateeva, 2007 – *Fateeva, I.A.* (2007). Media education: theoretical foundations and practice of realization. Chelyabinsk: Chelyabinsk State University, 270 p.

Fedorov, 2010 – *Fedorov, A.V.* (2010). Glossary of terms on media education, media pedagogy, media literacy, media competence. Taganrog: Taganrog State Peadagogical Institute.

Gibson et al., 2018 – *Gibson, D., Broadley, T., Downie, J., Wallet, P.* (2018). Evolving learning paradigms: re-setting baselines and collection methods of information and communication technology in education statistics. *Educational Technology & Society,* 21 (2): 62–73.

Gleason et al., 2018 – *Gleason, B., Gillern, S.* (2018). Digital citizenship with social media: participatory practices of teaching and learning in secondary education. *Educational Technology & Society*, 21 (1): 202.

Goodman, 2003 – *Goodman, S.* (2003). Teaching youth media: a critical guide to literacy, video production, and social change. New York: Teachers College Press, 130 p.

Habermas, 1988 – *Habermas, J.* (1988). Der philosophische Diskurs der Moderne: Zwoelf Vorlesungen. Frankfurt am Main: 91-92.

Hoff, 2016 – *Hoff, M.* (2016). "I don't conversate with those I don't know": The role of trust/distrust in online engagement, *Digital Culture & Education*, 8 (2): 94.

Kazak, 2010 – *Kazak, M.Y.* (2010). Media text as an open text type. *Stylistics Today and Tomorrow: Media Text in Pragmatic, Rhetorical, and Linguocultural Aspects. International Scientific Conference.* Moscow: Moscow State University: 87.

Kazakov, 2018 – *Kazakov, A.A.* (2018). Manipulative potential of a polarized political media text: a measurement option. *Moscow University Bulletin.* Ser 10, Journalism, 6: 75-93.

Khorolsky, 2013 – *Khorolsky, V.V.* (2013). Media coverage in media texts and the concept of a media module. *Bulletin of the Moscow University. Ser. 10, Journalism*, 4: 76.

Kirillova, 1992 – *Kirillova, N.B.* (1992). Screen art in the system of humanitarian training of specialists: study guide. Ekaterinburg, 92 p.

Kirillova, 2006 – *Kirillova, N.B.* (2006). Media culture: from modern to postmodern, 448 p.

Kuznetsov et al. 2018 – *Kuznetsov, N., Vovchenko, N., Samoilov, A. Bykasova, L.* (2018). Reflection modulations in the media. *Media Education,* 1: 39-45.

Meyer, 2005 – *Meyer, T.* (2005). Medieninduzierte Wissensformationen. *Medien und Kulturgeschichte.* Leipzig: 56-62.

Savchuk, 2001 – *Savchuk, V.* (2001). Conversion of Art. St. Petersburg: Petropolis: 25.

Sharonov, 2008 – *Sharonov, D.I.* (2008). On the mediaisation communicative sense. *Bulletin of the VSU*, 2: 234 p.

Sokolova, 2008 – *Sokolova, I.V.* (2008). Social informatics. Moscow: Perspective, 271 p.

Suzdaltseva, 2013 – *Suzdaltseva, V.N.* (2013). Verbal continuum "hypothetical / unreliability" in the mass information discourse. *Bulletin of the Moscow University*. Ser. 10: Journalism, 4: 37–44.

Twissell, 2018 – *Twissell, A.* (2018). Modelling and Simulating Electronics Knowledge: Conceptual Understandin and Learning through Active Agency. *Educational Technology & Society*, 21 (2): 111–123.