Pedagogical Monitoring of Media Resources: Directions, Objects, Criteria, Situations

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Abstract

Modern society is characterized by an increase in the volume of media resources available to children, which can have both positive and negative effects on socialization and the development of their personality. Media resources have a high pedagogical potential, but at the same time create strong competition for the teacher, and in case of unproductive use by children, the efforts of teachers are leveled. A problem arises: teachers do not fully utilize the pedagogical potential of media resources, do not select them purposefully, and students often use media resources unproductively.

The purpose of this article is to systematically present the range of possible media resources for pedagogical use, the main directions, criteria and situations of their pedagogical monitoring, which will allow teachers to use them more productively in solving problems of training and education. Based on the results of the article, the following conclusions are made: in the current situation, the teacher needs to use a wide range of media resources (social networks, websites and thematic Internet resources, electronic learning tools, open online courses and educational platforms, school media, entertainment media resources). To identify their pedagogical potential and its productive use, teachers need to carry out their pedagogical monitoring in three areas: monitor the pedagogical potential of media resources, the possibilities of their use in solving problems of training, education and development; monitor the effectiveness of the use of media resources by the teacher at the lesson and in extracurricular activities, of their impact on the results of training and education; monitor effectiveness of the use of media resources by students, including for self-education.

Keywords: media resources, pedagogical potential, pedagogical monitoring of media resources, criteria of pedagogical evaluation of media resources.

1. Introduction

Modern education is developing in the context of a continuous increase in the number and possibilities of media resources, which are gradually starting to compete with the teacher. One of the futuristic theories is the theory of replacement of teachers with robots and artificial intelligence in future.
a) digitalization of all spheres of life – there are more digitized data, the Internet is becoming more accessible, and digitalization technologies cover ever new areas of human activity;

b) automation and robotization – development of autonomous systems capable of complex physical and cognitive actions transform the role of human labor in all sectors of economy (Loshkareva, 2019).

Digital literacy – the ability to work in a digital environment, including AR and VR – will be just as essential for a person of the 21st century as the ability to write and read.

According to experts, in a few years, artificial intelligence in education will become a reality, completely replacing paper textbooks, “break” the traditional methodology, and replace the routine methods of a comprehensive school. The teacher will not know if the student or his smartphone completed the task. A machine can solve math tasks, write an essay or a composition. Artificial intelligence will be able to build an individual learning path for each student.

The answer to these trends is the strategy of informatization of education: the introduction of new information, digital and telecommunication technologies, the creation and development of electronic and distance learning, electronic educational environment, online courses.

Part of the “Education” National Project, the Federal project “Digital Educational Environment” is being implemented, within the framework of which it is planned to create a Center for Digital Transformation of Education, a federal information and service platform and a target model of digital educational environment; their introduction in educational organizations of general school and secondary vocational education, the creation of a network of digital education centers for children, and the wider use in schools of the functionality of open and accessible information resources (Passport..., 2018).

However, despite the declaration of Informatization of education in strategic documents, Russian schools have a number of problems associated with the introduction of digital and electronic educational environment and the use of pedagogical potential of media resources:

- Teachers use a limited range of media resources, while their range is expanding every day. So, few teachers use social networks, phone gadgets (for example, an electronic translator, electronic grammar checker, YouTube videos, etc.).
- There is a significant gap in the level of media resources used in school education and in the daily life of students: "outside school, children live in a modern information society, and in school – at the turn of the XX–XXI centuries (the level of web pages and e–mail). There is a delay of 15–20 years!" (Dolmatov, 2017).

Teachers in some cases do not see the pedagogical potential of a number of media resources (for example, groups in social networks as the platform design activity of pupils and formation of their culture of communication, modern films as a means of personal reflection by the student's knowledge of literature, history, social studies and other Humanities, as a means of humanization of teaching of natural–science disciplines (films about renowned physicists, chemists, mathematicians, about the humanitarian aspects of practical use of scientific discoveries for mankind etc.).

- Teachers do not precede the use of media resources by assessing their pedagogical potential, as there are no methods of such assessment.
- Teachers, as a rule, do not diagnose how their use of a particular media resource in the classroom affected the resolution of problems of training, education, development.
- Teachers do not monitor what media resources students use and how effectively they do it. Teachers do not teach students to evaluate and select media resources for self-education.

One of the ways to solve these problems can be the introduction of pedagogical monitoring of media resources in schools. The development of such criteria is the purpose of this article.

Objectives of the article:
- systematize media resources that can be used to solve the problems of education and upbringing;
- describe the types and criteria of pedagogical monitoring of these media resources;
- describe typical situations in which such monitoring can be carried out by participants of educational process: teachers, students, parents.

2. Materials and methods

To achieve the goal and solve the tasks the following methods were used:
- analysis of existing media resources and their use in education;
– comparative analysis of the problems of pedagogical research of media resources in Russia and abroad;
– classification of media resources and description of pedagogical potential of selected groups of media resources;
– design of criteria for assessing the pedagogical potential of media resources;
– modeling of typical situations of pedagogical monitoring of media resources.

The methods were implemented based on the following methodological grounds:
– theories of pedagogical use of media resources, their influence on education and socialization of personality (D. Baake, M. Dorofeeva, Yu. Egorova, A. Fedorov, Yu. Tyunnikov, V. Vozhikov, etc.);
– theories of education quality and its evaluation (V. Kalney, O. Lebedev, V. Panasyuk, M. Potashnik, N. Selezneva, S. Shishov, A. Subetto, etc.).

3. Discussion
In science, the debate is about the positive and negative impact of media resources on the development and socialization of individuals, about their “opportunities and threats” (Scannell, 2017). Thus, Marcus et al (Marcus et al., 2018) substantiated the pedagogical capacity of media resources (Tyunnikov et al., 2017). Thus, Marcus et al (Marcus et al., 2018) disclosed ways to use feature films in the teaching of history. D. Wong et al. (Wong et al., 2007) considered the new role of a teacher as a film maker and technology for its implementation. Zvarych et al. (Zvarych et al., 2019) showed that gamification can not only lead to gaming addiction, but also increase the educational motivation of students, as evidenced by studies conducted in universities in the USA and Ukraine. E. Camarero and D. Varona (Camarero, Varona, 2016) considered increased media literacy as a factor in positive social changes. At the same time, H. Baer (Baer, 2016) substantiated that digital activity has contributed to a return to feminism, to a body cult, and neoliberalism. Alcott et al. (Allcott et al., 2018) are concerned that misinformation on social networks is destroying communities and democratic institutions.

We agree with foreign scholars that it is necessary to comprehensively study the influence of media resources and the media environment on various personal characteristics of participants in the educational process and, based on the results, carefully select media resources to build a pedagogically effective media environment. Therefore, Kabha (Kabha, 2019) studied the influence of the media on the affective, cognitive and social characteristics of teachers and students, J. Stanyer and S. Mihelj (Stanyer, Mihelj, 2016) studied the influence of media training on the perception and use of time. It is also important not only to monitor and select media resources, but also to form the pedagogical culture of their production. Some steps in this direction have already been taken. Thus, E. Sørensen (Sørensen, 2016) explored the culture of developers that make computer games.

The analysis of Russian and foreign studies showed that the existing studies focus on the methods and procedures to use media in education. At the same time, for pedagogical effectiveness, not only practical application procedures are important, but also monitoring of media resources for the purpose of their selection and assessment of their pedagogical potential, and then the effectiveness of pedagogical use. However, a few studies on monitoring and evaluation of media resources reveal diagnostic procedures for students in the process of using media resources, assessing the impact of media resources on individual learning outcomes, but do not talk about monitoring of the pedagogical potential of media resources.

We believe that for the successful use of media resources as a friendly environment, helping teachers ensure pedagogical monitoring of media resources in three directions:
– monitoring of the pedagogical potential of media resources, the possibilities of their use in solving the problems of training and education, development;
– monitoring of the effectiveness of the use of media resources by teachers at the lesson and in extracurricular activities, their impact on the results of training and education;
– monitoring of the effectiveness of the use of media resources by students, including for self-education.

In this regard, in this article we attempted to classify objects, develop criteria and typical situations for such three-vector monitoring.
4. Results

The following media resources can be the objects of pedagogical monitoring:

– social networks: can be used to search for educational information, communicate with students from other educational institutions, representatives of various social groups in order to broaden their horizons (for example, communicate with native English speakers for the purpose of better learning; communicate with political scientists, sociologists, philosophers with the aim of a deeper understanding of social problems, etc.); as a platform for the implementation of training, educational, social, volunteer projects. For example, the project “Beloved Sochi”, in which schoolchildren create landscape design objects to increase the tourist attractiveness of their native city. In parallel, a group with the same name is created on Facebook, which hosts photos of created objects, video tours, voting for the most attractive object, etc. The implementation of the project for schoolchildren to participate in event volunteering is accompanied by their registration for the project, the organization of online training, forums for the exchange of experiences and impressions, etc;

– sites and thematic Internet resources: for example, thematic subject sites (a site for lovers of the Russian language, sites on history, psychology, etc.), Internet resources for choosing professions, a site for preparing for the Unified State Examination and Main State Examination, all-Russian career guidance projects on the Internet, the site Young Professionals (World skills Russia), library sites, digital libraries and electronic library systems, websites of periodicals, including electronics, personal sites of teachers, sites of schools and other educational institutions. Sites also serve as a source of information and a platform for exchange of opinions, broadening one's horizons, deepening knowledge, developing the ability to express one's point of view. The thematic sites for teachers allow students to better recognize their teachers as a person, which increases interest in studying the subjects taught by them;

– electronic teaching aids: educational computer programs (for example, career guidance online testing), computer and telephone gadgets and applications (for example, an electronic translator, means for detecting grammatical errors in speech, etc.), games, simulators, electronic textbooks, educational films and videos. They are used to practice certain skills and talents, master a subject, develop a personal attitude to educational information, for immersion in quasi-professional activity (early career guidance), etc.;

– open online courses and educational platforms: for example, "Teaching the Python language in Yandex–practice", open online courses for mastering instrumental professions, etc.;

– school media: an Internet newspaper, film studio, etc. Schoolchildren are involved not only in the use of these media resources, but also in the process of their creation. These resources develop artistic abilities, creativity, communicative competence, abilities for teamwork;

– entertainment media resources (for example, feature films, videos on a Youtube channel, etc.), which are used by teachers for educational purposes. For example, videos on a Youtube channel in English can be used to develop schoolchildren and students’ simultaneous translation skills.

In order to select these media resources by a teacher for solving training and educational tasks, or by students for their self-education we need to monitor them from a pedagogical point of view based on the following criteria (specified, taking into account the components of the pedagogical system according to N.V. Kuzmina):

Axiological:
What values are reflected in the policy of a media resource?
What values does the media resource promote? Do they correlate with the basic national values of the Russian society?
Does the media resource advocate for antivalues: cruelty, aggression, extremism and nationalisms, immorality, illegal behavior, smoking, alcohol, drugs, etc.?

Target:
What are the goals of this media resource?
What social/political group interests does the media resource express?
Are there didactic, educational, developmental goals?
Are the goals of the media resource related to the goals or objectives of education/training reflected in the Federal State Educational Standard and the educational program?
Is it possible with the help of this media resource to solve educational goals: to carry out the formation of knowledge, skills, competencies, universal educational actions?

Is it possible to use this media resource to solve educational goals: the formation of social knowledge, relations based on the basic national values of the Russian society, the experience of implementing these relations in the life of students?

Is it possible to direct the use of this media resource to the development of any qualities of the child’s personality (intellectual, moral, strong–willed, etc.), to stimulate some advancement in the child’s developmental program set by nature (focus on the zone of proximal development), i.e. solve developmental problems?

**Informative:**
- What information does the media resource have?
- Does this information correlate with the content of any subject / discipline and the content of educational work in an educational organization?
- Does this information correspond to the age of students?
- What values does this information express?
- What knowledge is this information based on: scientific, religious, mundane, mythological, artistic–figurative?
- In what form is this information presented: problematic (debatable) or reproductive (stated categorically, imposed, inspired)?

**Communicative:**
- What forms of communication does the media resource suggest (comments, forums, instant messenger (chat), users posting of their own information blocks, files or none of the above)?
- What communication style is used by the media resource?
- What vocabulary is used by the media resource? Are slang or obscene words used?
- Is there moderation of the media resource, is there a ban to use swear words?
- Are cultural norms and forms of communication and expression of one’s views respected by the media resource?
- If this is a site, is there a moderator, what functions does it perform and how effective is it?
- What types and forms of communication are used by the media resource (monologue, dialogue, group discussion, etc.)?
- Is the organization of pedagogical communication possible using this media resource?

**Technological:**
- What methods and technologies to influence users does this media resource use?
- Are manipulative methods of exposure used?
- Is it possible to use media as a means (field, content) for the implementation of any pedagogical method, process, technology?

**Management:**
- How is a media resource managed?
- Can participants in the educational process (teacher, students, parents) manage the media resource, its use?
- What are the ways to manage a media resource (create groups, communities, blacklist unwanted users, hide “harmful” information, etc.)?

**Personal:**
- How much does a media resource correspond to the interests, life and professional values and principles, and personality traits of a teacher?
- How convenient is it for a teacher to use it?
- How much does the media resource correspond to the interests and needs of students, their life experience, level of training?
- How easy is it for students to use the media resource?
- The need for pedagogical monitoring of media resources may arise in the following typical situations for solving specific problems:
  - monitoring of educational Internet resources for students with the goal of self–education, acquiring competencies through non–formal and informal education (choose an open online course, a training site or group to master a certain competency (for example, learn to dance salsa);
  - monitoring of social networks as a means (platform) of the organization of design and research activities of schoolchildren;
  - monitoring of the didactic capabilities of social networks and the YouTube channel;
– monitoring of the educational potential of videos on YouTube and feature films;
– monitoring of social networks and instant messengers as a means of communication among participants in educational relationships (cooperation with parents, placement of teaching materials, schedule of consultations, answers to questions, tasks for homework, independent work, etc.);
– monitoring of the sites of educational organizations as a way to increase methodological competence.

5. Conclusion
Based on the information of the article, the following conclusions are made:
In the current situation, teachers need to use a wide range of media resources: thematic sites, electronic textbooks and articles, training computer programs, computer games, videos, feature films, computer and telephone applications, gadgets and social networks. They can be classified according to the tasks of their creation and functioning into the following groups: social networks, websites and thematic Internet resources, electronic teaching aids, open online courses and educational platforms, school media, entertainment media resources.
To increase the effectiveness of the use of media resources, a teacher needs to carry out their pedagogical monitoring in three areas:
– monitoring of the pedagogical potential of media resources, the possibilities of their use in solving the problems of training and education, development;
– monitoring of the effectiveness of the use of media resources by a teacher at the lesson and in extracurricular activities, their impact on the results of training and education;
– monitoring of the effectiveness of the use of media resources by students, including for self–education.
Monitoring should be carried out according to the following criteria: axiological, target, substantive (informational), communicative, technological, managerial, personal.

6. Acknowledgement
This work was carried out as part of the state assignment of the Institute for Strategy of Education Development of the Russian Academy of Education.

References
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