

European Proceedings of Social and Behavioural Sciences EpSBS

www.europeanproceedings.com

e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2021.05.82

ISCKMC 2020

International Scientific Congress «KNOWLEDGE, MAN AND CIVILIZATION»

COMPETENCIES AND ROLE OF THE TEACHER IN THE MODERN DIGITALIZED EDUCATION SYSTEM

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Abstract

This article is devoted to the issue of digital educational space. Innovations are being introduced into various human spheres, which forces people to develop and improve their knowledge, skills, competencies, master new types of activities. The education system should provide society with a confident transition to the digital era, focused on productivity growth, new works and human needs. The informatization of education has created a basis for the transition to a new level; digitalization is aimed at training specialists who will be in demand in the labor market, fluent in mobile and Internet technologies, and focused on continuous learning (advanced training) using e-learning technologies. Digital technologies are a tool and an environment that offers new opportunities: learning at any convenient time, continuous education, the ability to design individual educational routes. However, the digital environment forces teachers to have a different mentality, world views, approaches and forms of teaching. As a research task, the authors assesses the impact of the digital era on the teaching-learning system. This direction is also complemented by an analysis of the teacher's status, its significance in the pedagogical system. The authors reflect on competencies of a modern teacher. Much attention is paid to the importance of digital competences, the relationship between digital literacy and a critical thinking ability of students. The article summarizes characteristics of a modern teacher required to meet changes in the educational context.

2357-1330 © 2021 Published by European Publisher.

Keywords: Digitalization of education, informatization, digital technologies, teacher's role, teacher's competence

eISSN: 2357-1330

1. Introduction

A modern teacher is a person who has observed how the cybernetic world has replaced the analog world, a person who has experienced revolutionary changes in the field of music, politics, technology. However, the revolution is taking place in education, and the teacher is an active participant in it. As a result, the passive learning model, when the teacher explains a new material while standing in front of the students, was replaced by an active method, whose main goal is to create favorable conditions that encourage students to be independent, proactive and creative.

In the 21st century, in the era of cognitive abundance, our society poses new problems and challenges to the teacher. To solve them, the teacher needs to master new skills and acquire new knowledge in order to play his role in an ever-changing world.

Digitalization is an integral part of modern society, where habits and lifestyles have been transformed by the constant and irrepressible development of digital technologies. Technological tools and the virtual space have spawned new ways to communicate, work, inform, entertain, participate and live in a networked society (Castells, 2006). Until recently, digitalization was associated with the economy, medicine, science; there are discussions about the digitalization of education. Modern students cannot imagine their lives without electronic gadgets, Internet and online communication. All these digital technologies contribute to better presentation of information, but the role of an educator can change. In this regard, the adaptation of both content and teaching methods has become an urgent task in an ever-changing social context where young people acquire traits that were different from those of previous generations.

2. Problem Statement

To achieve the research goal, the following tasks were formulated:

- to study and analyze functions of a teacher in the context of digitalization of the modern educational process;
- to analyze competencies of a modern teacher necessary for a successful and effective educational process.

3. Research Questions

To expand theoretical understanding of the role of a teacher and teacher competencies in the modern digital educational space.

4. Purpose of the Study

The purpose of this study is to determine the role of a teacher and describe competencies of the modern teacher in the context of transformation of the education system and transition to the "digital school".

5. Research Methods

Surveys and a qualitative descriptive method were used to determine intensity of the use of digital media by teachers of the North Caucasus Federal University. About 1,000 respondents took part in the survey. Group interview methods were used as additional sources for the interpretation of data obtained. In addition, theoretical methods (analysis of psychological and pedagogical, methodological literature, Internet resources on the research topic) and empirical observation methods were used.

6. Findings

A generation of young interactive people (Bringué & Sádaba, 2009) are forced to grow and develop in an ever-evolving technological society, and have new learning and personal development needs. It is not enough for a teacher to be able to manage technologies. Teachers have to be competent in the field of digital technologies in order to meet educational needs of students. Hence, it becomes necessary to rethink the educational process, to adapt it to new conditions. How competent is a modern teacher in transferring knowledge to students who are digital carriers? How effective are the teaching methods used in the classroom?

Information (digital) technologies provide unprecedented opportunities. Computers, robots, artificial intelligence can facilitate the search for information, get rid of the routine work associated with memorizing it. However, new realities are fraught with a threat. There is a danger of dehumanization, devaluation of man as an absolute value. Problems arise during the socialization of individuals. There is no competitiveness, which plays a crucial role in the formation of personality, development of volitional qualities, initiative, leadership characteristics.

We can observe that digital technologies have influenced the way of teaching. According to the theory of Connectivism developed by George Siemens (Siemens, 2006), we will try to define the concept of learning inherent in the networked society.

Connectivism is a theory of learning in the digital age that analyzes how we learn in a networked digital society. It is based on connectivity, that is, on making connections. According to the author, connectivism is the integration of principles studied by the theories of chaos, networks, complexity and self-organization (Siemens, 2004). Thus, it is presented as a model reflecting a society in which learning is no longer an individual activity, but an ongoing process of building networks. Learning is the equivalent of opening the door to a new way of perceiving and learning, where our mind must adapt to the environment. Learning can be defined as a diverse process, which is ideally organized. Networked knowledge is based on co-creation, which implies changes in mentality and transition from simple consumers of content produced by other people to experts and amateur co-authors of knowledge.

For this reason, learning in the digital age has become a multifaceted and integrated process, and changing any individual element entails changing the global network. Likewise, this complexity and diversity in the web creates connected and specialized nodes, which means that we have partial knowledge of reality and live in continuous suspended certainty. Networked learning is continuous. Today our life not connected with the learning process does not stop, but proceeds in parallel, synchronously (Siemens, 2008).

It is impossible to deny that life has changed, people have changed, time has changed. We are on the verge of forming a new digital civilization, but the teaching profession has been in demand.

A social view of the role of a teacher creates a mental image of the teacher that accompanies us throughout our lives. This image is formed on the basis of ideas about a teacher standing in front of students in a large class, a teacher who is a professional who knows a lot, and whose role is to transfer knowledge and educate. The perception of the role of a teacher / educator is associated with certain functions. Each teacher must have communication skills necessary for successful activity, pedagogical knowledge (teaching methodology, teaching concepts), disciplinary knowledge (knowledge of the subject taught). The ability to organize the classroom space, personal qualities (ability to listen, patience, safety), as well as the style of communication with students (openness, respect, care) are important.

In the context of informatization and digitalization of education, the teacher needs to be able to use computer programs, iPad and smart panels. Outside the classroom, many educators learn to navigate the Internet, create class websites and send emails to parents.

In the classroom, the teacher is able to perform many functions: to control, assist, search for information, evaluate, organize, etc. Given the development of digital technologies and their introduction into the education system, the role of a teacher has also changed. The modern teacher is

- manager of social and emotional behavior of students;
- a mentor who contributes to learning and development of the individual;
- a motivator helping to use electronic resources.

These new roles are based on the idea of changing the unidirectional transfer of knowledge through the horizontal exchange of information. Today, the pedagogically oriented educational model as a transmitter of standardized knowledge to the mass of students (a model similar to that of the mass media) is useless.

The modern teacher must have a number of competencies. One of the most important competencies is responsibility. Teaching is inspired by the ethics of responsibility. We are responsible for the moral formation of personality; moral and ethical orientation of teacher's personality must be combined with justice, compassion and social commitment.

Education is an understanding of what is happening in the world, as well as development of judgments for understanding and evaluating events. Teaching is the art of making people more moral, more educated, and more literate. Nowadays, teaching is a risky profession that requires a lot of courage.

Preparation plays an important role. It is not enough to know the subject. We need to understand the content of learning in a holistic manner so that we are always ready to answer any question and help our students develop powerful cognitive maps of the subject being studied.

The 21st century teacher needs much more than a superficial or mechanical understanding of fundamental ideas of the discipline. In addition, he must penetrate into the deep structures of knowledge and their relationships, as well as into the methods of testing, evaluating and applying them. Flexible use of knowledge requires pedagogical skills.

The modern teacher must be responsible for his continuous learning. Teaching is a dynamic concept that is constantly evolving and expanding, which is why teachers are eternal learners (Loginova, 2015).

It is very important to properly organize the program, select the content and time required to master the discipline.

The development and use of appropriate materials contextualized with the social reality are required.

It is necessary to provide students with a relevant bibliography.

In an increasingly diverse and multicultural world, the teacher should be free from prejudice and treat all students equally. A very important skill is not to confuse his view of the world with students' ones; instead, he should openly discuss topics and allow students to make decisions on their own (Loginova, 2015). Introduce your students to the differences in cultures, languages, families, communities.

Discussion and collaboration in the classroom are required to stimulate students and introduce new teaching methods such as problem-based learning or flipped classrooms. You must be open to answer students' questions and cooperative. Discussion is valuable at any level of education as it requires attention, reinforces the understanding, communication skills and critical thinking of students.

Involve students in the learning process so that they develop their autonomy and become less dependent on the teacher. One should strive to create environments and experiences that encourage them to create their own knowledge through projects. It is important to encourage them to be curious and self-disciplined.

Encourage students to create creative and dynamic infographics and blogs, record and edit videos that they want to share through their social media, rather than end up in an archive of boring print assignments.

Teachers can find tools to help make classes amazing and memorable. For teachers of foreign languages, digital technologies and the Internet have opened up endless opportunities to study language, history and culture. For example, using Google Earth, you can organize an excursion in almost any city, see sights, describe routes. You can use an excellent opportunity to communicate with native speakers in an informal setting through the use of social networks and instant messengers. There are also platforms for digitizing classes: Google Classroom, Google Groups, Wiki or Moodle. Encourage students to upload their homework, share materials, and participate in discussions using these tools.

The experience of many educators has shown that active involvement of students in making decisions increases motivation and contributes to the effectiveness of the educational process.

The modern teacher has to be creative. Traditional methods are boring, teachers should new methods which are more dynamic and effective.

It is impossible to imagine a teacher who is critical, but not self-critical. He cannot contribute to the personal growth of students, colleagues, society as a whole.

An uncritical, thoughtless and unconscious teacher cannot claim to be a teacher, since he will be passive, reproducing and distributing the system.

There is nothing more annoying than an unfair or demotivating teacher.

The professional development of a teacher is of paramount importance for society as a whole: personality of the teacher, like his professional knowledge, is the value capital of society (Berdibekov et al., 2016). Today, teaching requires more than knowledge of the subject taught. Community commitment,

empathy and emotional intelligence are essential. The teacher of the 21st century has to display collegial work, creativity, use tools and opportunities offered by globalization and information technologies in the field of education. However, it is necessary to maintain an open attitude to the ideas of students, who also teach us.

7. Conclusion

According to the research, not all students manage to master curricula that include skills of a higher cognitive level, most students manage to acquire only basic competencies. Given the fact that new information and communication technologies (ICTs) cause profound sociocultural transformations that affect societies, governments, communities and personalities (UNESCO, 2006), an analysis of these technologies is required to understand changes in society. However, critical thinking is also required. An effective educational process is possible only through a combination of intellectual, didactic and technological components. The digital age offers opportunities that you can use if you are able to understand them, and pay for them, since they are not free. The use of technology in education makes it inevitable to have digital competencies.

As regular classes continue to transform into digital ones, educators are using multifaceted teaching methods. Enriched digital content and in-person learning come to the fore, along with collaborative and interactive learning methods. The integration of technology into the educational process has led to the emergence of many new trends. Some educators allow students to bring their tablets, while others allow students to use their smartphones to prepare for classes and find answers. Being a teacher in the digital age means being flexible and able to adapt to changes. The digital literacy will allow teachers to develop digital competencies in the younger generation and implement the strategy of the digital economy.

References

- Berdibekov, P. K., Holbaeva, G. A., & Tursunova, N. E. (2016). Development of the competence of a modern teacher. https://moluch.ru/archive/106/25067/
- Bringué, X., & Sádaba, C. (2009). The Interactive Generation in Spain: Children and Teenagers in the Face of the Screens. Ariel y Fundación Telefónica.
- Castells, M. (2006). Mobile Communication and Society: A Global Perspective. Cambridge.
- Loginova, A. V. (2015). Teacher skills in the 21st century as a condition and indicator of quality of the educational process. https://moluch.ru/archive/91/19393/
- Siemens, G. (2004). Conectivismo: Una teoría de aprendizaje para la era digital. https://pdfs.semanticscholar.org/05f1/adee187323d66beab226058b23a7416c3517.pdf
- Siemens, G. (2006). Knowing knowledge. https://archive.org/details/KnowingKnowledge/page/n7/mode/2up Siemens, G. (2008). *Learning and knowing in networks: Changing roles for educators and designers*. http://it.coe.uga.edu/itforum/Paper105/Siemens.pdf
- UNESCO (2006). La integración de las Technologías de la Información y la Comunicación en los Sistemas Educativos. https://unesdoc.unesco.org/ark:/48223/pf0000150785/PDF/150785spa.pdf.multi