

2. Lazareva, O. & Kovtun, O. (2017). *Developing soft skills at ESP classes in technical HEIs. Psychological and pedagogical problems of modern specialist formation*. Warsaw: ANAGRAM; Kharkiv: KRPOCH.

## DIGITALIZATION AS INEVITABLE VECTOR OF THE EDUCATIONAL SYSTEM DEVELOPMENT IN GERMANY

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The implantation of modern digital technologies requires a completely new rethinking of the functioning and vectors of the development of school education, because until now our ideas about education have been based on the norms and values of the twentieth century. In this way, teachers are continuing to prepare students for the tasks of the past, rather than for the new changing challenges of the present and future.

Digitization is fundamentally changing our existence at all levels – everyday life, professional level, educational grounding. Just one glance at the unrestrained development of artificial intelligence makes it clear what awaits us in the near future. It is estimated that in the next 20 years, more than fifty professions (logisticians, notaries, realtors, secretaries, analysts, etc.) will disappear, and more than 200 new ones will appear, of which we have no idea yet. Educators are already facing the challenge of defining educational goals for children who were born after 2015. In 2-3 years, the modern Digital Generation will be replaced by next-generation which is called Children of Smartphones, Google Babies, Generation Zen or Generation Alpha.

Industry 4.0 has had a significant impact on the educational environment, making blockchain technology, artificial intelligence, cloud technology, the Internet of Things, and gamification an integral part of the modern educational process.

In Germany, policy makers are increasingly focusing on digital skills every year. In 2017, 68% of reported Germans answered that they had at least basic digital skills (these results were equal to the results of the previous year's inquest), ranking Germany seventh among EU Member States (EU average of 57%) [1]. In the European Commission Report Volume 2 of the Education and Training Monitor 2018 (Germany) it is noted that the political attention to digitalisation, including infrastructure and skills, is high, with a newly established post of state minister for digitisation. For schools, the DigitalPakt Schule, announced in 2016, was endorsed by the new government. It stipulates that the federal government will invest EUR 5 billion in digital infrastructure in schools within the next 5 years. The federal states will in return provide necessary teacher training and curricula updates [2].

Various federal states initiatives are aimed at enhancing the sustainable professional development of teachers' digital skills, which surveyed teachers found to be inadequate according to a digital education survey. Both German teachers

and students evaluate media competency, including data protection and ethics, extremely important [2].

While media competence is a policy priority, shortcomings and big regional differences appear to exist with regard to news and the ability to analyse and contextualise them, which might compromise effective education on fake news at schools. The survey of a small sample which was conducted by the Technical University of Dresden [3] showed that usage of online and social media for news consumption is hardly present in curricula, and that news literacy forms a minimal part of initial teacher training, resulting in a lack of basic skills and knowledge on the subject.

We should understand that radical transformational processes in the field of education are taking place not only in Germany, but also in the leading countries of the world, as so as in Ukraine. In the Paris Communiqué [4], which was adopted on May 25, 2018 at a conference by the Ministers responsible for higher education on European continent, it is emphasized that, over the last 20 years, improving the quality of education and its relevance to social needs have been a cornerstone of both the Bologna process and other structural reforms in the field. In the future, in the opinion of the authors of the communiqué, it is important to focus on cooperation in the introduction of innovative teaching and learning practices, their support, stimulation and dissemination.

Student-centered learning and open education in the context of lifelong learning is considered in this paper as a kind of mainstream of contemporary academic policy. Particular attention is paid to digital and blended learning, as well as the digitalisation of the educational process as such. Indeed, nowadays, the innovative learning process essentially requires innovative means and methods of its implementation. It is unlikely that the traditional chalk and blackboard in our classes would be able to open a window to the world of the computerized and digital future for new generation.

### References:

1. *European Commission, Digital Economy and Society Index 2018, Country Report Germany.* (2018) Retrieved from [http://ec.europa.eu/information\\_society/newsroom/image/document/2018-20/dedesi2018-country-profile\\_eng\\_B43F6D80-F854-82CB-6BF70068ACC73D74\\_52214.pdf](http://ec.europa.eu/information_society/newsroom/image/document/2018-20/dedesi2018-country-profile_eng_B43F6D80-F854-82CB-6BF70068ACC73D74_52214.pdf)
2. *European Commission, Education and Training Monitor 2018 Germany.* (2018).
3. Retrieved from [https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2018-germany\\_en.pdf](https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2018-germany_en.pdf)
4. Hagen, Lutz, Renatus, Rebecca & Obermüller, Anna. (2017). *Nachrichtenkompetenz durch die Schule eine Untersuchung im Auftrag der Stiftervereinigung der Presse.* Retrieved from <https://tu-dresden.de/gsw/phil/ifk/ressourcen/dateien/news/2017/PK>
5. *EHEA Ministerial Conference. Paris Communiqué.* (2018). Retrieved from [http://www.ehea.info/media.ehea.info/file/2018\\_Paris/771/1/EHEAParis2018\\_Communique\\_final\\_952771.pdf](http://www.ehea.info/media.ehea.info/file/2018_Paris/771/1/EHEAParis2018_Communique_final_952771.pdf)