

EDITORIAL

The first volume of the quarterly scientific journal “Education – Technology – Computer Science” 2018 consists of six subject chapters.

The first chapter, entitled *The Problems of Technical Education*, opens with a research paper on educating children on their cultural heritage (on the example of the technical premises in the Podhale region) referred to as ‘the little homeland’ which is a basis for the awakening their regional identity.

The subsequent papers deal with the subject of, among others, vocational education of the occupations which are time-consuming, require high financial outlays for educational processes and highly qualified high school teachers as well as university lecturers; testing methods of the speech synthesizer from the perspective of their use in the portable device; conditions for the formation of the acid smog with the indication of the range of technical and urban solutions eradicating acid smog and eliminating negative effects on health.

This chapter concludes with the research paper on the possibility of artificial neuron networks (SSN) application in the process of selection of protective decorative coatings as an exemplary model for engineers’ training.

The second chapter, *The Problems of Computer Science and Information Education*, consists of a series of research papers on the standard of speech in the electronic communication – popular among the youth text messages, social networks, various applications and electronic mail have been taken into account in this study. The most frequent mistakes in the electronic communication have also been presented in the research papers. Moreover, this chapter outlines: a comprehensive review of research on the significance of shaping a culture of safety in the information overload environment assuming that its essential element is the culture of information; cyberspace, which knows no boundaries, thus existing in this world requires special skills: like at sea which is a symbol of infinity, and suppressing the element is the art, and the skill of sailing leading to answer the question: how to survive unharmed, and not to be grounded?; tendency which is the characteristics of a contemporary man who tries to seek the answers to questions of the meaning of art by finding the way to the simple understanding of every-day life experiences (i.e., *white emotion theory* philosophical and art trend) and the need for methodological approach change, which will enable a more efficient use of the interactive whiteboard in education (in a traditional approach, the IWB is only an enhancement device in the classroom).

The last research paper in this chapter examines the essence of the acquisition of mathematical competence, which for many students is not an easy task: therefore teachers will use modern teaching methods more frequently which are likely to support the process of teaching mathematics.

The third chapter, *The Problems of Vocational Education*, begins with the research paper on the educational system in Poland and follow-up discussions as well as the questions that need to be addressed which elements of education system do not keep up with the demands of today's employers – certainly, the system can be left alone trusting that it will reform towards the real needs of the employment market, but it seems to be an irrational measure.

The following papers present the result of research findings concerning: detailed competency analysis, obligations and responsibilities of the kindergarten principal with special reference to the principal duties which result from the pedagogical supervision, institution and the creation of conditions suitable for children with special education needs, preparation of new places for children in kindergarten; firefighters vocational training, it has been shown that provided vocational training, in the area of tactical and technical subjects, enables students to acquire knowledge and skills which are key elements in achieving competence to serve in the State Fire Department.

The third part concludes with a research paper on the preparation of prospective engineers in the area of advanced systematic thinking and skills to solve environmental problems quickly with the need to improve educational technology at the higher education level.

The fourth chapter, entitled *The Problems of Formal and Non-formal Education* consists of several research papers in the area of selected problems of inclusive education. The first paper presents a theoretical justification of the inclusive education, arguing its significance with the offered help to a child, hence the empathic sensitivity of the person in the situation which enhances their development.

The following research papers examine the problems, among others, concerning: stress among students and teachers, they need support and understanding – referring to the literature on the subject, and the results of empirical research; proposal of a new tool to carry out tests of the youth readiness and integration with disabled peers in school; possibilities to use a contemporary tool in the process of ADHD students diagnosis – a MOXO test, which measures a person's functioning in an accurate way, taking account of variables such as: attention, response time, impulsiveness and hyperactivity.

This chapter concludes with a paper on the proposition to use information and communication technology when working with intellectually disabled children and teenagers at the low and intermediate level.

The fifth chapter, entitled *The Problems of Preschool Education*, draws on the issues concerning early childhood education assessment, the aim of which is to help children in their development, to acquire adequate self-assessment skills, to be able to use their full potential and be aware of their strengths and build on them in life.

In the following part, we look into the search of such solutions giving children and youth access to education for their development – one of the solutions is the Maria Montessori method which is a child-centered educational approach; it assures monitoring and enhancing of the children and youth development, it benefits from the analytical capacity that are offered by IT systems collecting data on the each of the educational stages; enabling to solve a problem concerning possibilities and circumstances to achieve a *flow* condition by a student in the educational process and to address the question whether an autotelic experience has a didactic value?

The last research paper in this chapter presents an issue of national identity of Polish children, victims of deportation to the USSR territory, following the aggression of the USSR against Poland on the 17th September, 1939.

The sixth chapter, entitled *The Problems of Higher Education Institution Didactics* begins with a research paper on the influence and implications of regulations resulting from the introduction of the *National Qualification Framework*, its impact on various aspects of Higher Education Institution functioning in the process of distance learning, and related to it: creating of the content of online courses, conducting e-learning platform classes and managing a process of e-learning platform.

The following research papers discuss: results of the analysis research on the effectiveness of the interpersonal training, the objective of which was to enhance students' competence in the area of synergistic problem solving, awareness of personal speech acts, the ability of listening to another person, the reading and expression of emotions, establishing and maintaining of contacts between people, cooperating in the group, and clear expression of thoughts; topic suggestions for the "Information Technology" class conducted at the higher education institution level, based on the educational IT competence model entitled: *Seven Pillars of IT Competence*.

We encourage our readers to contribute their critical texts in response to the subjects covered in this volume.