INTRODUCTION

Heraclitus of Ephesus, in the V century BC, said: "You cannot step twice into the same stream". This saying continues to be relevant up until the present day. New times and knowledge society that is coming into existence requires its citizens to acquire new skills which differ from those which were important in the past. According to Hegel, the essence of reality and truth is contradiction. It is synonymous with the concept of change, becoming, the eternal memory of an infinite task. Proposition, negation, synthesis - this is real life of reality and truth. Thus the spirit grows, and so does the individual, so does Nature. Reality and truth are a constantly occurring synthesis of eternal contradictions. The contradiction between new challenges and requirements of the knowledge society, and the insufficient competence level possessed by contemporary workers and people in general make it necessary to formulate new criteria and standards applicable to citizens of the knowledge society (www.wikipedia.org). Dialectical processes of development of reality and of our cognition, the laws of dialectics: law of the transition from quantity into quality and conversely, the law of the unity of opposites, law of the negation of the negation, quite confirm and justify the need for such changes.

In the well-known document, adopted in 2006 by the European Parliament (Recommendation 2006/962/EC of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning [Official Journal L 394 of 30.12.2006])) eight key competences are defined that are needed by every person for self-realization and personal development, for being an active citizen and for achieving full social integration and employment. Competences are defined as a combination of knowledge, skills and attitudes appropriate to the situation. Because they should be acquired by everyone, this recommendation proposes a reference tool for European Union (EU) countries to ensure that these key competences are fully integrated into their strategies and infrastructures, particularly in the context of lifelong learning. They provide added value for the labour market, social cohesion and active citizenship by offering flexibility and adaptability, satisfaction and motivation. The following key competencies have been established:

  1) Communication in the mother tongue;
  2) Communication in foreign languages;

3) Mathematical competence and basic competences in science and technology;

4) Digital competence;

5) Learning to learn;

6) Social and civic competences;

7) Sense of initiative and entrepreneurship; and

8) Cultural awareness and expression. (Recommendation 2006/962/EC of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning [Official Journal L 394 of 30.12.2006]))

The acquisition of key competences fits in with the principles of equality and access for all. This reference framework also applies in particular to disadvantaged groups whose educational potential requires support. The transversal nature of key competences makes them essential. They provide added value for employment, social cohesion or young people (European Youth Pact), which explains the importance of lifelong learning in terms of adapting to change and integration.

At the same time e-learning, which today is no longer considered as a fashionable modern trend, but as an effective, modern form, method, technology of teaching and learning proves its utility not only in tertiary education but also at lower levels of education – in secondary and basic schools.

Simultaneously there are still a lot of questions that have not been answered yet. The papers of the authors included in the monograph try to do it. Among the aspects and problems raised in the materials of monograph one can enumerate the following issues:

- Key competencies and distance learning and their place in Czech, Poland and Slovak government and educational documents;

- Distance learning, key competencies and Lifelong Learning;

- Teachers' and learners' competences in distance learning and computer science;

- Use of e-learning in improving the level of the students' key competences;

- Pedagogical – didactic aspects of e-learning and their use in the development of the key competences;

- Distance learning of humanities; distance learning of science and mathematics;

- E-learning for the disabled; the use of virtual classes for people with limited abilities and special needs;

- Psychological, social, ethical, cultural and legal aspects of distance learning;

- Methods, forms and techniques in distance learning;

- Teacher-student and student-student relationships in distance learning;

- M-learning - real state and development prospects;

- Multimedia means and tools in distance learning; technology and methodology of video-tutorial design;

- Others

The monograph includes the best pieces of work, prepared and presented by the authors from six European countries during the scientific conference entitled "*Theoretical and Practical Aspects of Distance Learning",* subtitled*: "Use of E-learning in the Developing of the Key Competences",* which was held on 10-11.10.2011 at the Faculty of Ethnology and Sciences of Education in Cieszyn, University of Silesia in Katowice, Poland.

The speakers were from Constantine the Philosopher University in Nitra (Slovak Republic), Matej Bel University Banská Bystrica (Slovak Republic), University of Ostrava (Czech Republic), Silesian University in Opava (Czech Republic), University of Silesia in Katowice (Poland), Warsaw University (Poland), University of Ss. Cyril and Methodius, Trnava (Slovak Republic), University of Žilina (Slovak Republic), Gdansk University of Technology (Poland), Church Pedagogical Institute in Graz (Austria), University of Defence in Brno (Czech Republic), Maria Curie-Skłodowska University in Lublin (Poland), Higher School of Ecology and Management in Warsaw (Poland), Kazimierz Wielki University in Bydgoszcz (Poland), Zrinyi Miklós University of Defence (Hungary), Cracow Pedagogical University (Poland), Jesuit University of Philosophy and Education "Ignatianum" in Cracow (Poland), Warsaw School of Social Sciences and Humanities (Poland), Higher School of Occupational Safety in Katowice (Poland), AGH University of Science and Technology (Poland).

Among the authors are well-known scientists, young researchers, academic lecturers with many-years' training and experience in the field of e-learning,

PhD students, the creators of distance courses, multimedia teaching materials, web-sites and educational sites.

I am convinced that the monograph will be an interesting and valuable publication, describing the theoretical, methodological and practical issues in the field of using e-learning in developing key competences, giving proposals of solution of some important problems and showing the road to further work in this direction, allowing to exchange experiences of scholars from various universities of many European countries.

Publishing this monograph is a good example of expansion and strengthening of international cooperation. I am very grateful for valuable remarks and suggestions which raised the quality of the publication. Here I especially want to thank Prof. Maciej M. Sysło – a reviewer of this monograph, Prof. Robert Mrózek for an editorial correction, MA Andrzej Szczurek for help in the edition of this publication. Also I say 'thank you' to the authors for the preparation and permission to publish their articles. All readers I wish a pleasant reading time.

Thank you.

Eugenia Smyrnova-Trybulska