

# **E-learning**

Vol. 10

**E-learning and Smart Learning  
Environment for the Preparation  
of New Generation Specialists**





University of Silesia in Katowice,  
Faculty of Ethnology and Sciences  
of Education in Cieszyn

# **E-learning**

Vol. 10

## **E-learning and Smart Learning Environment for the Preparation of New Generation Specialists**

Monograph

Scientific Editor

Eugenia Smyrnova-Trybulska

Katowice - Cieszyn 2018





## Introduction

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## Introduction



## INTRODUCTION

The theme of the conference is: *“E-learning and Smart Learning Environment for the Preparation of New Generation Specialists”*.

The eco society, the knowledge society, the digital society are transforming into an intelligent society. It is built on “smart” work, which is done by “intelligent” government and business representatives, based on “intelligent” infrastructure and “intelligent” citizens, playing a key role in creating culture. In addition, the priority is the development of such industries as smart transport, smart health, smart energy, smart food, etc., which will eventually lead to the creation of a smart world. SMARTs will play a special role in the preparation of new-generation specialists, in which e-learning and personalized learning will have priority positions. In an intelligent society, technologies, previously based on information and knowledge, are transformed into technologies based on interaction, cooperation, exchange of experiences – smart technologies. Citizens, new generation specialists, turn their activities into “intelligent” and implement innovative changes in management strategies. This means that society needs more creative and open thinking persons, so that human dignity, based on flexibility and originality, is a priority. The most important issue is the training of staff with creative, creative potential, able to work and think in the new world. (Smyrnova-Trybulska 2018).

The monograph *“E-learning and Smart Learning Environment for the Preparation of New Generation Specialists”* includes articles based on the best papers prepared and presented by authors from nine European countries and from more than twenty universities during the scientific conference entitled “Theoretical and Practical Aspects of Distance Learning”, subtitled: *“E-learning and Smart Learning Environment for the Preparation of New Generation Specialists”*, which was held on 15-16 October 2018, organized by the Faculty of Ethnology and Sciences of Education in Cieszyn, University of Silesia in Katowice, Poland.

The speakers from University of Extremadura (Spain), Linnaeus University in Kalmar (Sweden), the Comenius University in Bratislava (Slovakia), Plovdiv University “Paisii Hilendarski” (Bulgaria), Lisbon Lusitana University (Portugal), Kirchlische Pedagogische Hochschule, Vienna (Austria), Borys Grinchenko Kyiv University (Ukraine), Gdańsk Technical University (Poland), Herzen State Pedagogical University of Russia, St. Petersburg (Russia), Peoples’ Friendship University of Russia (RUDN University), (Russia), Jagiellonian University (Poland), Warsaw University (Poland), Silesian University in Opava (Czech Republic), Jesuit University of Philosophy and Education "Ignatianum", Cracow, Poland, Slovak University of Agriculture in Nitra (Slovakia), University of Silesia in Katowice (Poland), University of Defence in Brno (Czech Republic), Kostiantyn Ushynsky South Ukrainian National Pedagogical University (Ukraine), Rzeszów University of Technology (Poland), Maria Curie-Skłodowska University in Lublin

(Poland), Lublin University of Technology (Poland), Mykhailo Drahomanov National Pedagogical University, Kyiv, (Ukraine), Kazimierz Wielki University in Bydgoszcz (Poland), Taras Shevchenko National University "Chernihiv Collegium" (Ukraine), University of Ostrava (Czech Republic), Cracow Pedagogical University (Poland), University of Social Sciences and Humanities in Warsaw (Poland), Dniprovsk State Technical University (Ukraine), Poznań University of Medical Sciences (Poland), Warsaw University of Technology, (Poland), Higher School of Education of the Polytechnic Institute of Santarem (Portugal), Adam Mickiewicz University in Poznań, (Poland), University of Social Sciences and Humanities in Warsaw (Poland), Ternopil University (Ukraine), Federal Research Center "Computer Science and Control" of the Russian Academy of Sciences, (Russia), State Higher Vocational School in Krosno, (Poland) and other educational institutions delivered lectures providing insights into interesting studies, presented their recent research results and discussed about their further scientific work.

The authors include experts, well-known scholars, young researchers, highly trained academic lecturers with long experience in the field of e-learning, PhD students, distance course developers, authors of multimedia teaching materials, designers of websites 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 the use of e-learning for societal needs, offering proposals of solutions to certain important problems and showing the road to further work in this field, allowing for exchange of experiences of scholars from various universities from many European countries and other countries of the world.

This book includes a sequence of responses to numerous questions that have not been answered yet. The papers of the authors included in the monograph are an attempt at providing such answers. The aspects and problems discussed in the materials include the following:

### **1 E-environment and Cyberspace E-environment of the University**

- SMARTer Education – Preparing a New Generation of E-learning Specialists
- Smart-Universities
- Smart Technology in education
- E-learning in a sustainable society
- Internet of things

### **2. Effective development of teachers' skills in the area of ICT and e-learning**

- Computer training for prospective and practicing teachers in the area ICT and e-learning
- Teachers' and learners' competences in distance learning and computer science

- Distance Learning and Lifelong Learning
- Self-learning based on Internet technology

### **3. E-learning and Intercultural Competences Development in Different Countries**

- Legal, social, human, scientific, technical aspects of distance learning and e-learning in different countries
- Psychological and ethical aspects of distance learning and e-learning in different countries
- Collaborative learning in e-learning

### **4 E-learning Methodology – Implementation and Evaluation**

- European and national standards of e-learning quality evaluation
- Evaluation of synchronous and asynchronous teaching and learning, methodology and good examples
- MOOCs – methodology of design, conducting, implementation and evaluation
- Contemporary trends in world education – globalization, internationalization, mobility

### **5 ICT Tools – Effective Use in Education**

- Selected Web 2.0 and Web 3.0 technology
- LMS, CMS, VSCR, SSA, CSA
- Cloud computing environment, social media
- Multimedia resources and didactic materials, Video-tutorial design

### **6 Theoretical, Methodological Aspects of Distance Learning**

- Successful examples of e-learning
- Distance learning in humanities and science
- Quality of teaching, training programs and assessment
- E-learning for the disabled

### **7 E-learning in the Development of Key Competences**

- Key competences in the knowledge society
- Use of e-learning in improving the level of students' key competences

### **8. Alternative Methods, Forms and Techniques in Distance Learning**

- Simulations, models in distance learning
- Networking
- Distance learning systems
- M-learning

Publishing this monograph is a good example of expanding and strengthening international cooperation. I am very grateful for valuable remarks and suggestions which contributed to the quality of the publication. Here I especially want to thank Ryszard Kalamarz and Andrzej Szczurek for their assistance in editing this publication. Also, I would like to say 'thank you' to the authors for the preparation and permission to publish their articles. I wish all readers a pleasant read. Thank you.

Eugenia Smyrnova-Trybulska

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