A Report from the International Scientific Conference

DLCC2018, 15–16 October 2018, Poland

The 10th edition of the International Scientific Conference DLCC2018: Theoretical and Practical Aspects of Distance Learning (www.dlcc.us.edu.pl) was held under the theme “E-learning and smart learning environment for preparing the specialists of new generation” and included reports from the IRNet project. The conference was held on 15–16 October 2018 in Wisła. It was organised by the Faculty of Ethnology and Educational Science at the University of Silesia in Cieszyn. The co-organisers were: the University of Ostrava (the Czech Republic); the Silesian University in Opava (the Czech Republic); the Constantine Philosopher University in Nitra (Slovakia); the Twente University (the Netherlands); the University of Extremadura (Spain); the Curtin University in Perth (Australia); the Borys Grinchenko Kiev University (Ukraine); the Herzen State Pedagogical University of Russia (Russia); the Dneprodzerzhinsk State Technical University (Ukraine); Ministry of Science and Higher Education, Poland; Polish Pedagogical Association, Branch in Cieszyn; Polish Scientific Association of Internet Education; IADIS – International Association for Development of the Information Society; and SEA – Polish Academic E-learning Association.

The conference tackled the following range of the topics:

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 of 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 – globalisation, internationalisation, mobility

5. ICT tools – effective use in education
• selected Web 2.0 and Web 3.0 technologies
• 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 programmes 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

The conference was the essential event to summarise the results of the four years of the project entitled IRNet – “International research network for study and development of new tools and methods for advanced pedagogical science in the field of ICT instruments, e-learning and intercultural competences” (www.irnet.us.edu.pl). The project has been realised in the framework of 7th Framework Programme, and financed by the European Commission and Polish Ministry of Science and Higher Education. Prof. Eugenia Smyrnova-Trybulska (Faculty of Ethnology and
Educational Science) is a coordinator of the international consortium that includes ten institutions from nine countries. The idea of the project is based on the needs originating from the contemporary reality. It is the period of dynamic process in globalisation when theory and practice of e-learning as well as knowledge on multiculturality acquire the significant sense. It is apparent that the implementation of new and innovative tools in the educational activity is the necessary condition in the development of knowledge-based society. These goals will not be reached effectively unless these innovative forms and methods in education and distance education are implemented actively at all stages of education.

Over sixty scientific scholars from Poland and abroad participated in the conference, including members and professionals of the IRNet project, among others from the University of Extremadura (Spain); Linnaeus University, Kalmar (Sweden); the Comenius University in Bratislava (Slovakia); Plovdiv University “Paisii Hilendarski” (Bulgaria); the Lusiada University (Portugal); Kirchlsiche Pedagogische Hochschule, Vienna (Austria); Borys Grinchenko Kyiv University (Ukraine); the Gdańsk University of Technology (Poland); the Herzen State Pedagogical University of Russia, St. Petersburg (Russia); Peoples’ Friendship University of Russia – RUDN University (Russia); the Jagiellonian University (Poland); the University of Warsaw (Poland); the Silesian University in Opava (the 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 (the 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 (the Czech Republic); Pedagogical University of Cracow (Poland); SWPS University of Social Sciences and Humanities, 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, Poznań (Poland); Ternopil University (Ukraine); Federal Research Centre “Computer Science and Control” of the Russian Academy of Sciences (Russia); State Higher Vocational School in Krosno (Poland); and many others.

The guests and conference members were welcomed by the Dean of Faculty of Ethnology and Educational Science prof. dr hab. Zenon Gajdzica on the first day of the conference.

The first day of the conference included two sessions: the plenary and thematic ones.
During the plenary session (Plenary Session 1, chair: Eugenia Smyrnova-Trybulska), the first lecture was presented by prof. Maria Potes Barbas (Portugal): “Training in Digital Literacy the Labour Market: E-learning for Young People with Disabilities.” She is a full professor at ESE-IPS – Polytechnic Institute of Santarém, and an invited associate professor at the Universidade Aberta (UAb), the Open University in Lisbon, Portugal. Prof. Maria Potes Barbas is a member of the Didactics and Technology in Education of Trainers Research Centre and a collaborative member of the Information and Society Department at FCT. The lecture demonstrated a good practice experience on how distance learning can be a beneficial learning aspect for young people with disabilities through the implementation of an innovative training course in digital literacy for the labour market.

The second lecture, entitled “Developing Smart-education in Conditions of Digitization,” was presented by prof. Nataliia Morze (Ukraine), Vice Rector on IT at the Borys Grinchenko Kyiv University, and Chief of Department of Computer Science. Prof. Morze is also a State expert of National ICT Programme in Education, Elaboration of the National System of In-Service Teacher Training and School Heads Training according to ICT, Elaboration of the Teachers Technological Standards on National Level, Senior Trainer of Word Intel programme Teach to the future, Trainer of Microsoft programme Cooperation learning. Among her achievements are: elaboration of distance learning courses for teachers and students, elaboration of State programme of computer science for professionals, high schools and universities, elaboration of conception of implementation of computer science in education of Ukraine. Professor Morze is a teachers’ trainer of computer science and author of more than 300 publications, articles, and monographs (70 books on e-learning, critical thinking, interactive methods, IT-teaching).

The third lecture, entitled “Get Smart Teachers through Digital Skills,” was presented by prof. Antonio dos Reis (Portugal), Xabier Basogain (Spain), Olga Yakovleva (Russia), Prof. Reis is the Graal Institute Director and scientific coordinator, teacher and consulting adviser in e-learning multimedia projects; coordinator of the research project “Teacher’s skills for the school of the future”; consulting advisor of the University for implementation of virtual classrooms; consulting advisor of WeZupport, Sweden, and for e-Campus global project; coordinator of postgraduate course “Pedagogic and didactic skills in e-learning and multimedia” (2008/09); teacher at Azores University (2007/08); Teacher trainer of teacher trainers in Portuguese Education Ministry; distance learning platform, Webmaster and multimedia coordinator in 2006 ISEG UTL (Technical University Lisbon); scientific coordinator of the pilot project “The school of the future – today”; key speaker and conference chair at Azores – Online Learning Conference and Workshop 2008/2009; education website coordinator at: www.thegraal.net; author of more than 500 videos of conferences and pedagogic contents, e-round tables and debates, YouTube channel: www.youtube.com/user/antonodreis; Moodle
platform administrator: http://thegraal.ccems.pt/. Olga V. Yakovleva, PhD, is an associate professor at the Herzen State Pedagogical University of Russia, St. Petersburg, employed at the Faculty of Information Technology. She is a teacher of the master’s programme Information Technologies in Education; a developer of the content and teaching methods of disciplines: communication of virtual learning environment, educational activities in e-learning; a conductor of teacher training courses for teachers in the use of information technology in education, and the teacher of the Intel – Teach to the Future. Xabier Basogain is a professor of the University of the Basque Country – Euskal Herriko Unibertsitatea. He is an engineer of telecommunication at the Polytechnic University of Madrid and a doctor engineer of telecommunication by the University of the Basque Country. He is a member of the Department of Engineering Systems and Automatics of the School of Engineering of Bilbao, Spain. He has taught courses in digital systems, microprocessors, digital control, modelling and simulation of discrete events, machine learning, and collaborative tools in education. His research activities include the areas of: a) soft computing and cognitive sciences to STEM, b) learning and teaching technologies applied to online education and inclusive education, and c) augmented and virtual reality with mobile technologies. His research group (http://ehu.es/gmm) is integrated into the consolidated research groups of the Basque university system (2010). He has an extensive number of publications in scientific, academic, and social forums. He is editor-in-chief and member of committees of scientific journals / congresses, and he collaborates in European projects and participates in the development of social and educational projects with institutions of Latin American countries.

The fourth lecture, entitled “Technology at Work: Remote Supervision of Teaching Practice at a Swedish University,” was given by Professor David Richardson (Sweden) from Linnaeus University, Kalmar Université, Sweden. He presented experiences with remote supervision of teaching practice students from Linnaeus University in Sweden.

During the thematic session (Session 2, 11:20–13:15, chairs: Magdalena Roszak and Iwona Mokwa-Tarnowska), seven lectures were presented:

• Mariusz Marczak, Jarosław Krajka (Poland): “Call Training in Resource-limited Circumstances: Student Teachers’ Perspectives”;
• Paloma Paniagua Martín, Sixto Cubo Delgado (Spain): “Big Data in Education. Attitudes of Teachers towards the Application of Big Data Techniques”;
• Nataliia Morze, Olena Kuzminska (Ukraine): “Students’ Digital Portfolio as a Tool for Defining Generic Competences”;
• Todorka Glushkova, Stanimir Stoyanov, Asya Stoyanova-Doycheva (Bulgaria): “Internet Of Things. Ecosystem Supporting E-learning”;
• Magdalena Roszak, Iwona Mokwa-Tarnowska, Barbara Kołodziejczak (Poland): “SMARTer Education – Preparing a New Generation of University and College Teachers”;

• Iwona Mokwa-Tarnowska, Barbara Kołodziejczak, Magdalena Roszak (Poland): “Online Collaborative Projects to Enhance Soft Skills.”

In the framework of the conference, social and cultural events traditionally took place. For example, during 10th edition the following events took place: the excursion (a tour to the castle in Wisła Residence of the President of the Republic of Poland at the springs of the Vistula river, and a walk along the crown of the Lake Czerniańskie dam at the junction of the Biała Wiselka and Czarna Wiselka rivers) and conference dinner in the Stok hotel restaurant.

On the second day of the conference, during plenary session, there were seven lectures. The first one, “The Use of Virtual Learning Environments in Improving Language and Communication Skills,” was given by prof. dr hab. Halina Widla from the University of Silesia in Katowice (Poland)

Prof. Nataliia Morze – on behalf of the team of authors: Nataliia Morze, Oleksandr Burov, Svitlana Spivak (Ukraine) – presented the lecture entitled “Methodology of Research into the Dynamics Formation of Professionally Important Cognitive and Personal Qualities of IT-specialties Students.”

Prof. Anna Ślósarz from the Pedagogical University in Cracow (Poland) presented the report on “The Smart Learning with a Talented and Poor Student.”

A team of authors from Poland, Barbara Kołodziejczak, Iwona Mokwa-Tarnowska, and Magdalena Roszak – experts in area e-learning, members of the Polish Society of E-learning – presented the lecture entitled “Directions of the Evolution of Higher Education.”

Slovakian researchers from Jan Comenius University in Bratislava, Jan Guncaga, Edita Partova, and Katarina Zilkova (Slovakia) presented the paper “Design of Educational Applets to Increase Children’s Abilities to Recognize Patterns.”

Spanish experts from the University of Extremadura, Peart Mark, Prudencia Gutiérrez-Esteban, and Sixto Cubo-Delgado conducted the lecture “Secondary Education Students’ Technology Use in Digital Environments.”

The last lecture, “Smarter University in a Smart Society – Some Trends,” was prepared by Eugenia Smyrnova-Trybulska from the University of Silesia in Katowice (Poland)

During three thematic sessions more than forty lectures were presented by scientists and researchers from Spain, Slovakia, the Czech Republic, Poland, Ukraine, Russia, Austria, and other countries.

One of the most important events during the conference was the round table debate in presence and in remote mode (moderators: Eugenia Smyrnova-Trybulska and Magdalena Roszak) with the participation of the well-known experts and researchers from different countries (Figures 1, 2):
Participants of the round table debate led by Eugenia Smyrnova-Trybulska from the University of Silesia in Katowice and Magdalena Roszak from the Poznań University of Medical Sciences (Poland), with the following professionals and experts from different countries: Prudencia Esteban (Spain), David Richardson (Sweden), Natalia Morze (Ukraine), Halina Widła (Poland), Jan Guncaga (Slovakia), Miroslav Hrubý (the Czech Republic), in remote mode Tomayess Issa (Australia), Olga Yakovleva (Russia). Photos by Andrzej Szczurek.

Figure 1, 2. Participants of the round table debate led by Eugenia Smyrnova-Trybulska from the University of Silesia in Katowice and Magdalena Roszak from the Poznań University of Medical Sciences (Poland), with the following professionals and experts from different countries: Prudencia Esteban (Spain), David Richardson (Sweden), Natalia Morze (Ukraine), Halina Widła (Poland), Jan Guncaga (Slovakia), Miroslav Hrubý (the Czech Republic), in remote mode Tomayess Issa (Australia), Olga Yakovleva (Russia). Photos by Andrzej Szczurek.
1. Prof. Maria Potes Barbas, STI, PT;
2. Prof. Nataliia Morze, BGKU, UA;
3. Prof. Halina Wiśla, UŚ, PL;
4. Prof. Tomayess Issa, CU, AU;
5. Prof. David Richardson, LU, SE;
6. Prof. Sixto Cubo, UEX, ES;
7. Prof. Jan Guncaga, University of Bratislava, SK;
8. Prof. Miroslav Hrubý, UDB, CZ;
9. Prof. Diana Bogdanova, RAN, RU – on-line (Institute of Informatics Problems, the Federal Research Centre “Computer Science and Control” of the Russian Academy of Sciences);
10. Prof. Todorka Glushkova, Plovdiv University “Paisii Hilendarski,” BG;
11. Prof. Antonio dos Reis, GI, PT – on-line;
12. Prof. Olga Yakovleva, HSPU, RU – on-line;
13. Prof. Xabier Basogain, BTU, ES – on-line.

Topics for discussion were the following:

- smart education – evolution,
- preparation of new generation specialists in and for digital world,
- internationalisation of education – trends,
- on-line courses assessment,
- ethical issues affecting the implementation of e-learning,
- e-learning in inclusive education.

A part of the conference programme and an important element of the conference was the workshop “Augmented Reality AR and Artificial Intelligence in Subject Lessons,” conducted by Dawid Staniek (Poland), PhD student of the University of Silesia in Katowice. The guests and conference attendants actively participated in discussion and interactive activities (Figures 3, 4, 5).
Figures 3, 4, 5. The workshop “Augmented Reality AR and Artificial Intelligence in Subject Lessons,” conducted by Dawid Staniek. Photos by Andrzej Szczurek.

The participants of the International Scientific Conference DLCC2018 contribute significantly to the research area concerning new technologies in
education and incorporation of current technological trends in teaching-learning methodologies. It is worth noting that the conference favours exchanging experiences, strengthening international cooperation, solving problems together, implementing innovative methodologies, and creating a global educational space. During the conference, numerous themes were discussed, including: further directions in international cooperation, new shared scientific and didactic projects, internationalisation development in the conditions of digitalisation and globalisation.

More information concerning conference can be found on the website www.dlcc.us.edu.pl.

Figures 6, 7. Participants of the DLCC2018 conference and the EU IRNet project. Photos by Andrzej Szczurek.
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