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**Report on the Implementation of WP3 “Analyses  
and Evaluation of the ICT Level, E-learning and  
Intercultural Development in Every Participating  
Country” in the Framework of the IRNet Project**

## Abstract

This article, prepared by an international team of authors – researchers from different scientific areas, connected with ICT, e-learning, pedagogy, and other related disciplines – focuses on the objectives and some results of the IRNet international project. In particular, this article describes the research tools, methods and some procedures of the WP3 “Analyses and Evaluation of the ICT Level, E-learning and Intercultural Development in Every Participating Country”: Objectives, Tasks, Deliverables, and implementation of research trips. Except that, the article presents more important events, such as (video)conferences, seminars, workshops, an e-round table debate; among these events are ICTE2014, DLCC2014, “New Educational Strategies in Modern Information Space,” “High-tech information educational environment,” during which some more important results of the project research were presented. The list of publications includes 32 papers and a manuscript with WP3 results. Researchers from Poland, Russia, Ukraine, the Netherlands, Spain, Slovakia, Portugal, Czech Republic and Australia analysed the results of WP3 in the context of the next stages and Work packages of IRNet project – International Research Network.

**K e y w o r d s:** International Research Network IRNet, ICT, E-learning, Competencies

## Introduction

The IRNet project aims to set up a thematic multidisciplinary joint exchange programme dedicated to research and development of new tools for advanced pedagogical science in the field of ICT instruments, distance learning and intercultural competencies in the EU (Poland, the Netherlands, Spain, Portugal, Slovakia, Czech Republic) and Third Countries (Australia, Russia, Ukraine). The programme will strengthen existing collaboration and establish new scientific contacts through mutual conducted research and secondments of the researchers. The main objectives of the project are: (a) to exchange expertise and knowledge in the field of the innovative technologies of education between EU and Third Countries, and suggest effective strategies of implementing new tools in their profession; and (b) to analyse and evaluate social, economic and legal conditions, as well as methodologies and e-learning technologies being developed in the European and Third Countries involved.

One of the IRNet project 1–7 Work Packages is WP3: “Analyses and Evaluation of the ICT Level, E-learning and Intercultural Development in Every Participating Country” (9–16 months), which has been successfully implemented by the IRNet consortium.

Among more important WP3 Objectives we enlist:

- the analysis of the methodological background and main approaches to conducting international investigations on ICT, e-learning and intercultural competencies in order to work out a system of measuring instruments appropriate for the research at the international level;
- the analysis and evaluation of the level of ICT, e-learning and intercultural developments in every participating country applying the system of measuring instruments approved; and
- the comparison of the results obtained and drawing conclusions about barriers in ICT, e-learning and intercultural competencies, taking into consideration descriptions of the national specifics of law, human, social, ethical and technological factors of their implementation drawn at the previous WP.

## General Progress of the Project

### WP3 Tasks

Work Package 3 tasks include several tasks, which are compatible with WP3 objectives.

**Task 3.1:** Elaboration of the conception of a system of instruments which will make it possible to obtain reliable and comparable data about ICT development, e-learning, teachers’ and students’ practices and attitudes towards ICT in their learning and professional life as well as their intercultural awareness.

**Task 3.2:** The comparison of the data obtained with the information elicited and generalized at the previous stage about the legal, ethical, human, technological and social factors that will help discriminate the factors influencing ICT and e-learning competencies and intercultural awareness.

**Task 3.3:** The choice of the number of respondents and participants in the research according to the demand to obtain objective and profound information about ICT development, e-learning and intercultural competence in every participating country. The analysis of the data by the statistical methods proving their significance, reliability and objectivity.

**Task 3.4:** Participation in events, such as conferences, workshops and roundtables, in particular ICTE-2014 at the University of Ostrava (Czech Republic).

**Task 3.5:** Organisation of a conference “Education of children and youth in culturally diverse environments 2014,” a conference “Theoretical and Practical

Aspects of Distance Learning 2014: E-learning and Intercultural Developments in Different Countries,” and a Workshop at the University of Silesia (Poland).

**Task 3.6:** Conducting a meeting in Australia (in presence and remote form).

During the period the following deliverables were achieved for WP3:

**D 3.1:** Scientific papers in the ICTE 2014 Conference proceedings were published.

**D 3.2:** A discussion and an e-round table debate “Analyses and Evaluation of the ICT and e-learning and intercultural competencies in Australia, Czech Republic, Netherlands, Poland, Portugal, Russia, Slovak Republic, Spain and Ukraine” were conducted by CU.

**D 3.4:** A scientific working paper “Contrastive Analyses and Evaluation of the ICT, e-learning and intercultural competencies in Australia, Czech Republic, Netherlands, Poland, Portugal, Russia, Slovak Republic, Spain and Ukraine” was published.

**D 3.5:** A monograph “E-Learning and intercultural developments in different countries” was published.

A deviation from the deliverables plan:

**D 3.3:** (Month: 10) A monograph “Education of children and youth in culturally diverse environments” is currently in preparation and will be published in 2016.

### **Secondment of the Borys Grinchenko Kyiv University (BGKU), Dniprodzerzhinsk State Technical University (DSTU), Herzen State Pedagogical University of Russia, St. Petersburg (HSPU) to University of Silesia (US) (October 2014)**

The transfer of knowledge activities during this secondment was focused on the e-learning environment in US. The participants from DSTU, BGKU and HSPU analyzed e-courses, studied their structure and design features, as well as basic principles, forms and methods of the effective use of ICT and e-learning. The researchers discussed the issues concerning the elaboration of instruments that would be able to provide reliable and comparable data on the development of ICT and e-learning, as well as educational activities of teachers and students, the ratio of ICT in learning and intercultural relations. Models of master’s and teacher’s ICT competencies and instruments for evaluating the level of their formation were proposed.

Workshops:

1. A workshop “Implementation of the e-learning at the Faculty of Philology, University of Silesia” (7/10/2014).
2. A workshop “How to use digital sources” in Scientific Information Centre and Academic Library (7/10/2014).
3. A workshop “Digital tools used in the research on nanotechnology and bioinformatics” (23/10/2014).

4. An international scientific conference “Theoretical and Practical Aspects of Distance Learning: E-learning and Intercultural Competences Development in Different Countries,” US, Poland (13–14/10/2014).
5. A workshop “Digital Humanities – IT Tools in Higher Education” (14/10/2014).
6. A seminar “Education of children and youth in culturally diverse environments 2014” (16/10/2014).
7. A workshop “Development of distance learning courses supported by the Distance Learning Center” (23/10/2014).

### **Secondment of the University of Silesia (US), the University of Ostrava (OU) to Curtin University (CU) (October–November 2014)**

The transfer of knowledge activities during this secondment was focused on the analysis of the methodological background and the main approaches of conducting the international investigations on ICT, e-learning and intercultural competencies in order to work out a system of measuring instruments appropriate for the research at the international level.

Workshops:

1. A workshop and a round table debate “Analyses and evaluation of ICT, e-learning and intercultural competencies in Australia, Czech Republic, the Netherlands, Poland, Portugal, Russia, Slovak Republic, Spain and Ukraine” (26/11/2014), and an on-line videoconference conducted by CU, Australia.
2. A visit to Curtin University’s Hub for Immersive Visualisation and eResearch (HVE), a workshop “Western Australian visualisation, virtualisation and simulation” (11/11/2014).

### **Secondment of DSTU, BGKU, HSPU to Lisbon Lusíada University (LU) (January–February 2015)**

The transfer of knowledge activities during this secondment was focused on several aspects: elaborating the methodology of collaborative research within the current work package; analyzing the e-learning policy and environment in LU; preparing several workshops and virtual seminars, aiming at working out the methodology and preparing research instruments.

Workshops:

1. A virtual seminar “Use of ICT and e-Learning tools in academic environment,” Lusíada University (29/01/2015). Seminar was broadcast on the Internet, recorded in Adobe Connect Room.
2. A project workshop “E-Learning technologies in Lusíada University” (02/02/2015).
3. A project workshop “Dissemination of project materials: broadcasting and web-publishing” (02/02/2015). Main activities and events during the workshop were as follows: a master class of Professor Reis “Producing multimedia presen-

tations”, recommendations on recording video and audio for e-learning and other educational purposes; recording a multimedia presentation with the help of Professor A. Reis; analyzing mistakes and improving results.

4. An e-workshop “How to improve your didactic videos” (06.02.2015). All members of the IRNet project participated in presence and in remote environment. The e-workshop was conducted by Professor Reis. The participants produced versions of multimedia presentation with narration and contributed to a video recorded for the workshop. The result of the first stage was a normal narrated presentation ([http://youtu.be/0ZBk97F\\_3qo](http://youtu.be/0ZBk97F_3qo)). At the second stage the same presentation was improved with the use of multimedia (<http://youtu.be/90-98516IHA>). As a result of the third stage, a presentation was demonstrated during the workshop using complementary narration techniques, nonverbal techniques and some multimedia improvements. During the workshop all participants discussed the aspects of improving multimedia presentations, video recording for educational purposes and shared opinions on future collaborative MOOCs. It was decided that the materials produced during the workshop will be used in the further elaboration of a MOOC.
5. A workshop, conducted by a scientific consultant of WP3 Professor Tatiana Noskova (HSPU), entitled “Levels of e-learning and educational environment of higher educational institution” (19/01/2015).
6. A workshop, conducted by Professor N. Morze (BGKU), devoted to the measurement of professors’ ICT-competencies (22/01/2015).

### **WP3 Research Methodology**

During the secondment to LU, the general methodology of WP3 was completely elaborated, discussed and reviewed. The main objective of WP3 was connected with defining the system of indicators for e-learning development and ICT competencies. The overview of the methodology is presented in Figure 1.

Firstly, *the main effects (benefits) of e-learning and ICT in education* need to be described, in particular:

- improvement of the quality of educational services,
- formation and development of competencies of the knowledge society, and
- increase of the competitiveness of an institution in the global scientific and educational space.

It was assumed that the *effects (benefits) of e-learning and ICT in education are manifested in:*

- expansion of space-time coordinates (increase of scientific and educational process comfort, focus on lifelong learning goals);
- personalization of educational activities, individual expectation in e-learning;
- formation of new scientific and educational relations, cooperation, intercultural competencies;
- empowerment of self-realization in educational and professional activities, support of initiatives;

- increase of the openness degree of scientific and educational environment, expanding the influence of the university to external cultural environment; positioning of the actors in the research and education community; and
- enhancement of self-organizational effects that support sustainable development of the educational environment of the university and its participants.

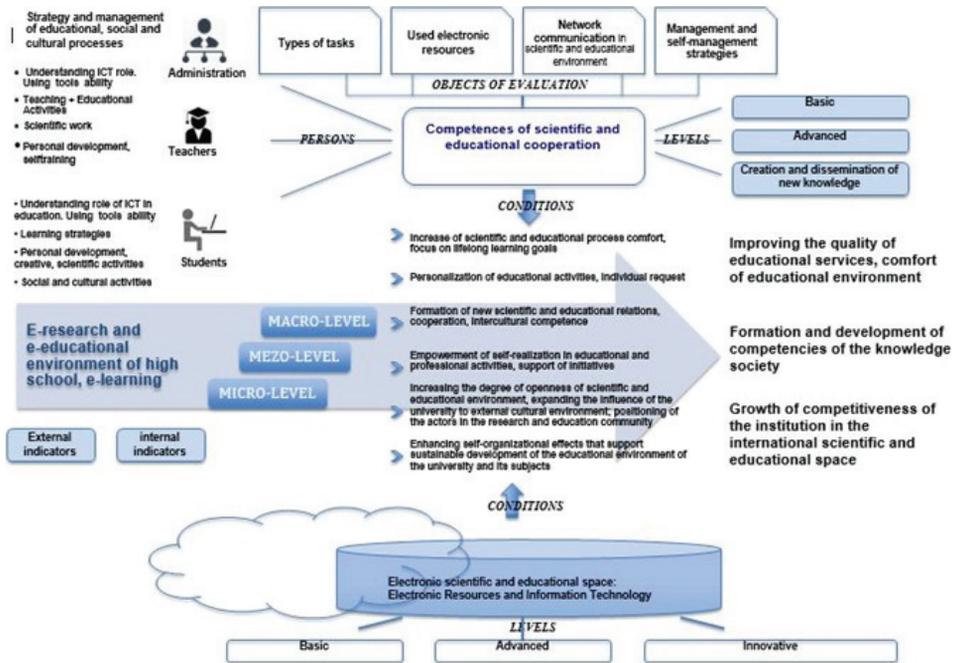


Figure 1. Scheme of WP3 Methodology.

Source: Own elaboration.

Manifestation of qualitative results of e-learning and ICT in education depends on a system of conditions:

- degree of e-learning environment development (*electronic space* – electronic resources and information technology; *interactions* while solving scientific and educational problems);
- level of competencies for major e-learning environment participants (faculty members, students, staff responsible for e-learning management).
- E-learning environment of high school is considered at three levels:
- *micro level* (achieving educational objectives at the level of a discipline, an e-course),
- *meso level* (solving scientific and educational problems in the corporate environment of the university; interdisciplinary communication, cooperation, exchange of experience), and

- *macro level* (achieving scientific and educational objectives by integrating the external scientific and educational environment).

E-learning and ICT competencies are considered at three levels: basic level, advanced level, and innovative level.

Various activities in e-learning environment participants both *form* and *manifest* their *competence*, meeting the long-term requirements of training a specialist for the knowledge society.

E-learning and ICT competencies can be indicated by:

- objectives of different types of activities;
- electronic scientific and educational resources;
- network communication in the scientific and educational environment; and
- management strategies of scientific and educational activities in the information environment of the university.

#### **What are the aspects of activities in e-learning environment?**

For academic teachers these aspects of activities are as follows:

- acquisition of information tools and understanding the role of ICT in education;
- teaching + upbringing activities;
- scientific work; and
- personal development, self-training.

For students these aspects of activities are as follows:

- acquisition of information tools and understanding the role of ICT in education;
- learning activities;
- self-development, self-realization, research, scientific activities; and
- social and cultural activities.

#### **Hypothesis of the WP3 study**

E-learning development and ICT contribute to:

- the quality of educational services,
- the development of knowledge society competencies, and
- the increase of the competitiveness of an institution in the global scientific and educational space.

The participants of the e-learning environment (academic teachers, students, administration) are involved in activities with the following objectives:

- the increase of comfort in scientific and educational process, the focus on lifelong learning goals;
- the personalization of educational activities, individual request of e-learning;
- the formation of new scientific and educational relations, cooperation, inter-cultural competence;
- the empowerment of self-realization in educational and professional activities, the support of initiatives;
- the increase of the openness degree of scientific and educational environment, expanding the influence of the university to the external cultural environment; positioning of the actors in the research and education community; and

- the enhancement of self-organizational effects that support sustainable development of the educational environment of the university and its participants. To achieve these the following conditions must be complied:
- An electronic space at no less than the advanced level should be created in an educational institution.
- A constant improvement of e-learning and ICT competencies should be performed; the preferred level of competencies is advanced.
- Changing requirements – determining competitiveness of an institution in the global scientific and educational space – is considered at every level of e-learning environment.

#### **Indicators for e-learning environment and e-learning competencies**

Sections of indicators are as follows:

1. indicators of university electronic scientific and educational environment (internal, external),
2. indicators of e-learning development level,
3. indicators of student's competencies, and
4. indicators of teacher's competencies.

#### **Research Instruments**

Two questionnaires were elaborated – for academic teachers and for students. Both questionnaires are to determine how students and academic teachers use the effects (benefits) of e-learning and ICT in education, that is – how these effects (benefits) are reflected in different aspects of their activities (see the methodology above). The questionnaire for students consists of 13 questions and the one for academic teachers consists of 18 questions. Questionnaires were translated to all languages of the project participants and Google Drive technologies were used to automate data collection and analysis. First results of the survey were presented on ICTE and DLCC conferences.

#### **Secondment of DSTU, BGKU, HSPU to the University of Twente (UT) (March–April 2015)**

The transfer of knowledge activities during this secondment was focused on collecting data with the use of elaborated questionnaires and analysing the e-learning environment of UT.

Workshops:

1. A project seminar and a workshops “Brainstorming WP3 Methodology,” “Social Media as a Contemporary Educational Instrument” (25/03/2015). The workshops included group work and round table debates, presentations of own research directions, results and planned activities, a discussion on extracurricular activities of students in different countries, taking into account intercultural aspects, as well as planning collaborative publications and project dissemination activities.

2. A workshop “Future Social Media as a Catalyst in Learning Communities” (30/03/2015). The inaugural lecture was given by Professor Piet Kommers. A follow-up was a workshop, during which contemporary trends in education – combination of learning, playing and working – were discussed. Group works elaborated WP3 research framework, discussed research instruments and shared ideas about education focused on practical aspects, professionalization, start-ups and private business.
3. A workshop “How to implement the values for an educational reform” (01/04/2015). It focused on creating mind maps in mixed groups for finding ways of solving problems of their educational institutions.
4. Round table debates and a seminar “Modern approach to using ITC in education” (02/04/2015). Professor Piet Kommers shared ideas about modern approaches to using ITC in education and to motivating students to learning themselves, and gave examples of his students’ projects.
5. A workshop “Social media” (03/04/2015). Menno Both was an invited keynote speaker. During the workshop, the experience of using social media in marketing was shared. The participants engaged in group work; they worked with the materials, made a psychological profile of a target auditorium of social media representative, as well as shared ideas about the role of social media in education.
6. A project workshop “Presenting own research results” (07/04/2015). The workshop was aimed at discussion. The invited participant was dr Ardion Beldad.
7. A workshop with Wilbert Pontenagel, a representative of the Open Innovation and Industry Connection Department of Kennispark Foundation, who shared a scheme of cooperation between the university and business as a two-way process: the university develops know-how, entrepreneurial spirit and new companies, and the business looks for inspiration and shared infrastructure and scientific resource in the university (14/04/2015).

**Secondment of the University of Silesia (US), the University of Ostrava (OU), Lisbon Lusíada University (LU), the Constantine the Philosopher University in Nitra (UKF), the University of Extremadura (UEX), the University of Twente (UT) to the Herzen State Pedagogical University of Russia, St.Petersburg (HSPU) (April–May 2015)**

During the secondment to HSPU, the study concentrated on the main documents on international cooperation, including international agreements of the Herzen State Pedagogical University, the Russian legislation concerning the development of a knowledge society (from aid to e-learning as a means of building competencies) and the role played by higher education institutions.

An analysis of the education system in Russia was made through the study of legal and official university and faculty documents.

Numerous discussions were conducted during various project seminars, meetings, round table debates concerning elaborating a system of instruments which would be appropriate for application in every country participating in the project, and would make it possible to obtain reliable and comparable data about ICT development, e-learning, teachers' and students' practices and attitudes towards ICT in their learning and professional life as well as their intercultural awareness. A final version of the questionnaire for students was prepared (Polish, English and Russian version) and questionnaires for academic teachers were improved. Besides, an on-line version of the surveys was improved with support of LimeSurvey system at the University of Silesia and made available at URL addresses:

<https://el2.us.edu.pl/ankiety/index.php/843461/lang-pl>

<https://el2.us.edu.pl/ankiety/index.php/843461/lang-en>

<https://el2.us.edu.pl/ankiety/index.php/754473/lang-pl>

<https://el2.us.edu.pl/ankiety/index.php/754473/lang-en>

Additionally, a survey among students and teachers of the University of Silesia was initiated on-line after an invitation sent via e-mail and distributed by means of the Forum within a distance learning course available on the faculty distance learning platform (<http://el.us.edu.pl/weinoe>).

Workshops:

1. A project meeting and a seminar (05/05/2015). A workshop "Propriety LMS system for e-learning," conducted by Pavel Aksutin, chair of informational and communicational technologies, assisted by Doctor Karpova Natalia, chair of informational and communicational technologies, was held in the computer classroom with participation of the students during their testing.
2. A workshop "Use of IT tools for learners with special needs", conducted by Vice-Dean dr Olga Vylykh (29/04/2015) with the participation of the Dean of the Faculty of Special Pedagogy HSPU Professor Alexander P. Antropov, Vice-Dean of this Faculty and project researchers.
3. A workshop "Contemporary equipment and IT tools in Physics research" (22/04/2015), conducted by best specialist of the Faculty of Physics HSPU with participating Professor Y.I. Anisimova and Vice-Dean Professor Y.A. Grochovatski and project researchers.

### **Dissemination of Results (conferences, publications)**

From the very beginning of the project the partnership used various dissemination tools to better exploit and improve the project objectives, results and the transfer of knowledge. National and international conferences as well as publications constituted an important opportunity to share the project initial results and achievements with experts in the field. However, it must be emphasized that means are not fully exhaustive: the dissemination of the results obtained in the frame of the project work was the subject of many other activities, meetings, workshops and presentations during visits in the host organizations.

## I. Conferences

The partnership of the network has organized and hosted four important conferences being in line with the project objectives. All of these events were attended not only by the network researchers, but also by external participants.

1. International Scientific Conference *Theoretical and Practical Aspects of Distance Learning: E-learning and Intercultural Development in Different Countries*, organized by US in Cieszyn, Poland (13<sup>th</sup>–14<sup>th</sup> October 2014).

The conference was dedicated to the following issues discussed during conference sessions: legal, ethical, human, technical and social factors of ICT and e-learning development in different countries; efficient use of e-learning in improving the level of students' key competencies, intercultural aspects of higher education and the process of globalisation, e-learning methodology, effectiveness and quality of e-learning in various areas of science and education, information and educational environment of blended learning, e-learning as an innovative method and technique in the different systems of education; new role and possibilities of using e-learning for lifelong learning (LLL), teachers' and learners' competencies in distance learning and computer science, pedagogical and methodical aspects of cloud computing, successful use of e-learning in the training of professionals in the knowledge society, educational strategies to enhance learners' motivation in e-learning.

2. International Internet Conference *New Educational Strategies in Modern Information Space*, organized by HSPU, Russia (17<sup>th</sup>–28<sup>th</sup> November and 5<sup>th</sup> December 2014).

The conference was held in an interactive section of the website: <http://fit-herzen-conf.ru>). The outcome of the discussion was summarized during the round table held on 5<sup>th</sup> December, 2014. The main topics of the conference were: electronic resources, network communication and communication field of virtual learning environment strategy of teaching activities in high-tech information environment, technical and technological aspects of the high-tech information environment.

3. International Conference ICTE 2014 *Information and Communication Technology in Education*, organized by OU, Czech Republic, in Rožnov pod Radhoštěm (8<sup>th</sup>–11<sup>th</sup> September 2014)

The conference was intended for all those interested in effective use of information and communication technologies in education. It was a meeting place of experts and a venue for exchanging experiences with employing ICT in the following areas: integrating ICT into education, the e-learning phenomenon, software and hardware used in education, personalized learning, 21<sup>st</sup> Century Educational Technologies. Under the auspices of the conference a pre-symposium on mobile technologies in education was held at the OU in Ostrava (8<sup>th</sup> September 2014).

4. The international scientific-practical conference *High-tech Information Educational Environment*, which was held on 12<sup>th</sup>–13<sup>th</sup> May 2015, at the Herzen State Pedagogical University of Russia. The Conference Committee Chairman was V. Laptev – the Vice-Rector for Scientific Research Programs, Herzen State Pedagogical University of Russia. High-tech information educational environment is a perspective educational environment, in which information and communication processes are deployed in both traditional and virtual (electronic) formats, causing qualitative changes in the scientific, educational, social and cultural problems. The Conference Scope (conference sections):
- innovation in terms of informatization of educational activities,
  - IT in scientific research, and
  - socio-cultural effects of informatization.

## II. Publications

32 papers were published (4 prepared for printing) by members of the network; about 30% of those papers involve researchers from at least two different participating organizations (EU and third countries). All publications are the outcomes of networked research and results of an active exchange programme.

1. 6 articles have been submitted to Special Issues of *International Journal of Continuing Engineering Education and Life-long Learning (IJCEELL)*, devoted to the IRNet Project:
  - 1) Kommers, P., Smyrnova-Trybulska, E., Morze, N., Issa, Tomayess, & Issa, Theodora: “Conceptual aspects: Analyses of the legal, ethical, human, technical, social factors of the development of ICT, e-learning and intercultural development in different countries setting out the previous new theoretical model and preliminary findings.”
  - 2) Noskova, T., Yakovleva, O., Pavlova, T., & Smyrnova-Trybulska, E.: “Students in the information environment: A study of educational and extra-curricular activities.”
  - 3) Noskova, T., Pavlova, T., Yakovleva, O., & Morze, N.: “Quality features of university information environment in its external indicators.”
  - 4) Yalova, K., Zavgrodnii, V., Romaniukha, M., & Sorokina, L.: “Challenges and prospects in development of e-learning system for IT-students.”
  - 5) Ogrodzka-Mazur, E., & Gajdzica, A.: “New professionalism of the teacher and education towards interculturalism.”
  - 6) Smyrnova-Trybulska, E., Noskova, T., Yakovleva, O., Pavlova, T., & Morze, N.: “New Educational Strategies in Contemporary Digital Environment” (D.3.6.)
2. Publications in ICTE-2014 (*Information and Communication Technology in Education*) Conference Proceedings, ed. Jana Kapounova, Katerina Kostolan-yova, University of Ostrava, Rožnov pod Radhoštěm, 2014, ISBN 978-80-7464-561-7:

- 1) Smyrnova-Trybulska, E., Ogrodzka-Mazur, E., Gajdzica, A., Noskova, T., Pavlova, T., Yakovleva, O., Morze, N., Kommers, P., & Sekret, I.: "Research Instrument to Study Students' Beliefs about eLearning, ICT, and Intercultural Development in Their Educational Environment in the Framework of the IRNet Project."
- 2) Morze, N., Spivak, S., & Smyrnova-Trybulska, E.: "Personalized Educational Environment – As One of the Trends of Modern Education."
- 3) Malach, A., & Malach, J.: "Reflection of programmed learning in pedagogical literature and professional community opportunities."
- 4) Huk, T.: "Use of Google tools in school. Limitations and opportunities."
3. Papers published in the monograph *E-learning and Intercultural Competences Development in Different Countries*, ed. Eugenia Smyrnova-Trybulska, University of Silesia, Katowice – Cieszyn, Studio-Noa, 2014, ISBN 978-83-60071-76-2:
  - 1) Kommers, P., Smyrnova-Trybulska, E., Morze, N., Noskova, T., Pavlova, T., Yakovleva, O., Cubo, S.D., Pinto, P., Malach, J., Drlik, M., Issa, Tomayess, & Issa, Theodora: "Contrastive analyses and evaluation of the ICT and e-learning competencies in Australia, Czech Republic, the Netherlands, Poland, Portugal, Russia, Slovakia, Spain and Ukraine."
  - 2) Issa, Tomayess, & Issa, Theodora: "Is web development process teaching and training essential for small online businesses in Western Australia?"
  - 3) Morze, N., & Veselovska, O.: "Analysis of information society development in Ukraine."
  - 4) Korobochka, O., Sorokina, L., Romaniukha, M., Yalova, K., Zavgorodnyi, V., Nakaznyi, M., & Kuzmenko, N.: "Intercultural aspects of higher education in the Dnieprodzhierzynsk State Technical University, Ukraine."
  - 5) Morze, N., & Spivak, S.: "Informal learning as an integral part of e-learning environment of the modern education."
  - 6) Smyrnova-Trybulska, E.: "Some results of research conducted at the University of Silesia in the framework of the International Research Network IRNet."
  - 7) Noskova, T., Pavlova, T., Yakovleva, O., Morze, N., & Drlik, M.: "Information environment of the blended learning: aspects of teaching and quality."
  - 8) Gutiérrez Esteban, P., & Peart, M.T.: "Introducing self-organized learning environments in higher education as a tool for Lifelong Learning."
  - 9) Morze, N., & Kuzminska, O.: "Scientific component of Masters of ICT competence in modern university."
4. 1 article published in the Scientific Journal *Informatics and Information Technology in Educational Institutions*, 5(53), 2014:
  - 1) Morze, N., & Veselovska, O.: "IRNet project: a new step to innovation pedagogy in ICT, e-learning and intercultural competencies."

5. 2 articles published in the Scientific Journal *The New Educational Review*, 38, 2014, ISBN 978-83-8019-051-1:
  - 1) Noskova, T., Pavlova, T., Yakovleva, O., & Sharova, N.: “Communicative competence development for future teachers.”
  - 2) Arias-Masa, J., Alonso-Díaz, L., Cubo-Delgado, S., Gutiérrez-Esteban, P., & Yuste-Tosina, R.: “Assessment of the use of synchronous virtual classrooms in higher education.”
6. 1 article published in the Scientific Journal *The New Educational Review*, 40(2), 2015, ISBN 978-83-8019-051-1:
  - 1) Morze, N., Spivak, S., & Smyrnova-Trybulska, E.: “Designing a Modern Cloud-Oriented Virtual Personalized Educational Environment.”
7. 1 article published in the *International Journal of Web-Based Communities*, 11(1), doi: 10.1504/IJWBC.2015.067085, available at <http://www.inderscience.com/info/inarticletoc.php?jcode=ijwbc&year=2015&vol=11&issue=1>:
  - 1) Morze, N., Varchenko, L., Smyrnova-Trybulska, E.: “Ways of formation of effective students’ collaboration skills based upon the usage of WBT.”
8. 1 article published in the Scientific Journal *RELATEC Revista Latinoamericana de Tecnología Educativa*, 14(1), 2015, available at <http://relatec.unex.es/article/view/1855/1199>:
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## Project Management

### Overview of the Activities Carried out by the Partnership; Identification of Problems Encountered and Corrective Action Taken

The main objective of this period was to assure a successful start of the network. As the first activity, the kick-off meeting was held on 30<sup>th</sup> October 2013 (before the start of the project), organised by the Coordinator (US) via videoconference (Adobe Connect support). During this meeting the goals of the project and the objectives of each work package were pointed out, the plan of secondments was discussed and the rules of participating in the IRSES project were reminded.

Monthly Steering Committee meetings were held via videoconferences, and the minutes and action lists circulated to all partners. On 12<sup>th</sup> October 2014 a Management Board meeting was held at US, Cieszyn with the participation of all partners representatives (BGKU, DSTU, HSPU) and beneficiaries (US, UKF, OU). The representatives of UT, CU, LU, UEx participated in the meeting in a remote mode.

The pre-financing, with the exception of a percentage of 4% that was retained by the Coordinator for management purposes, as decided in the Partnership Agreement, was distributed by US among beneficiaries of the project.

In February 2014, the website of IRNet including the most important information about the project was launched at [www.irnet.us.edu.pl](http://www.irnet.us.edu.pl). The website featuring branched structure, personification and interactive services such as forum was created by the Coordinator (US). The website is regularly updated with new content and constitutes an access point for all project documentation, meeting minutes; moreover, it contains a photo gallery providing the participants with the opportunity to demonstrate their secondments and research activities. It also has a forum and a secure area for circulation of papers etc. between project participants. The logo of the network was designed.

In the period concerned (9–16 month IRNet Project, WP3), 42 secondments were realized: 24 secondments (involving 13 researchers) from the third countries to the UE countries organizations and 18 secondments (involving 13 researchers) from the UE countries to the third countries organizations.

33 papers were published by the members of the network and 4 important conferences were organized. The researchers also took part in numerous training events, such as workshops, seminars and roundtables.

## Conclusions

In this paper the authors presented the objectives of the international project *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*, as well as WP 3: Analyses and Evaluation of the ICT Level, E-learning and Intercultural Development in Every Participating Country: Objectives, Tasks, Deliverables (coordinators of the WP3: Professor Tatiana Noskova and the Herzen State Pedagogical University of Russia, St. Petersburg (HSPU, Russian Federation)). The international team of researchers from the University of Silesia in Katowice (US, Poland, Beneficiary 1 (Coordinator)), the University of Twente (UT, The Netherlands), the University of Extremadura (UEX, Spain), the Constantine the Philosopher University in Nitra (UKF, Slovakia), Lisbon Lusíada University (LU, Portugal), the University of Ostrava (OU, Czech Republic), Curtin University in Perth (CU, Australia), the Borys Grinchenko Kyiv University (BGKU, Ukraine), Dniprodzerzhinsk State Technical University (DSTU, Ukraine), and the Herzen State Pedagogical University of Russia, St. Petersburg (HSPU, Russian Federation) continue the study and research according the Project Documentation and the project scheduler; in near future, they will publish subsequent papers and manuscripts in the conference proceeding as well as in the scientific journal and the monograph.

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### **Raport z wdrożenia pakietu roboczego WP3 „Analizy i ocena poziomu ICT (TIK), e-learningu i rozwoju interkulturowego w każdym uczestniczącym kraju” w ramach projektu IRNet**

#### Streszczenie

Niniejszy artykuł, opracowany przez międzynarodowy zespół autorów – badaczy z różnych dziedzin nauki związanych z dziedziną ICT (TIK), e-learningu, pedagogiki i innych powiązanych dziedzin, skupia się na celach i wybranych, kluczowych wynikach międzynarodowego projektu IRNet. W szczególności artykuł ten opisuje narzędzia, metody i procedury badawcze pakietu roboczego WP3 „Analizy i ocena poziomu ICT (TIK), e-learningu i rozwoju interkulturowego w każdym uczestniczącym kraju”: cele, zadania, wyniki i realizację wyjazdów badawczych. Poza tym opisano w nim ważniejsze zdarzenia, takie jak: (wideo)konferencje, seminaria, warsztaty, internetowe debaty przy okrągłym stole, w tym ICTE2014, DLCC2014, „New Educational Strategies in Modern Information Space” (Nowe strategie edukacyjne w nowoczesnej przestrzeni informacyjnej) i „High-tech information educational environment” (Zaawansowane technicznie informacyjne środowisko edukacyjne), podczas których zaprezentowano ważne dla tego etapu wyniki badań prowadzonych w ramach projektu. Lista publikacji, będących pokłosiem badań, obejmuje 32 opracowania i manuskrypt zawierający opis wyników pakietu roboczego WK3. Badacze z Polski, Rosji, Ukrainy,

Holandii, Hiszpanii, Słowacji, Portugalii, Czech i Australii przeprowadzili analizę wyników pakietu roboczego WP3 w kontekście następných etapów i pakietów roboczych projektu IRNet – międzynarodowej sieci badawczej.

Słowa kluczowe: międzynarodowa sieć badawcza IRNet, ICT (TIK), e-learning, kompetencje

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### **Отчет о ходе реализации рп 3 «Анализ и оценка уровня икт, электронного обучения и межкультурного развития в каждой участвующей стране» в рамках проекта IRNet**

#### **Аннотация**

В данной статье, подготовленной международной группой авторов – исследователей из разных научных областей, связанных с ИКТ, электронным обучением, педагогикой и другими смежными дисциплинами, основное внимание уделяется целям и некоторым результатам международного проекта IRNet. В частности, в этой статье описываются инструменты исследования, методы и некоторые процедуры в Рабочем Пакете 3 (РП3) «Анализ и оценки уровня ИКТ, электронного обучения и межкультурного развития в каждой из стран-участниц»: цели, задачи, ожидаемые результаты, выполнение научно-исследовательских поездок. Кроме того, что в этой статье представлены наиболее важные события, такие как (видео) конференции, семинары, электронный круглый стол, среди которых конференции ICTE2014, DLCC2014, «Новые образовательные стратегии в современном информационном пространстве», «Высокотехнологичная информационная образовательная среда», на которых были представлены некоторые наиболее важные результаты исследований проекта. Список публикаций включает 32 статьи и рукописи с результатами РП 3. Исследователи из Польши, России, Украины, Нидерландов, Испании, Словакии, Португалии, Чехии и Австралии, проанализировали результаты РП3 в контексте последующих этапов и пакетов работы проекта IRNet – Международной научно-исследовательской сети.

Ключевые слова: международная исследовательская сеть IRNet, ИКТ, электронное обучение, компетенции

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**Informe de la aplicación del wp3 “Análisis y evaluación del nivel de TIC, e-learning y desarrollo intercultural en cada país participante” en el marco del proyecto de IRNet**

R e s u m e n

Este artículo, llevado a cabo por un equipo internacional de autores, investigadores de diferentes áreas científicas, vinculados con ICT, e-learning, pedagogía, y otras disciplinas relacionadas, se centra en los objetivos y algunos resultados del proyecto internacional IRNet. En particular, este artículo describe las herramientas de búsqueda, métodos y algunos procedimientos del WP3 “Análisis y Evaluación del nivel TIC, E-Learning y desarrollo intercultural de cada país participante”: Objetivos, tareas, metas y cumplimientos de viajes de investigación. Exceptuando que en el artículo presentado, las actividades más importantes tales como (video)conferencias, seminarios, talleres, mesas redondas de debate, entre las cuales ICTE2014, DLCC2014, “nuevas estrategias educativas en el espacio moderno de la información” y “High-tech del contexto de la información educativa”, fueron presentados más resultados del proyecto de investigación. La lista de publicaciones incluyen 32 documentos y un manuscrito con resultados WP3. Investigadores de Polonia, Rusia, Ucrania, Países Bajos, España, Eslovaquia, Portugal, República Checa y Australia, analizaron resultados de WP3 en el contexto de siguientes etapas y los paquetes de Work del proyecto de IRNet, la Red de Investigación Internacional.

**P a l a b r a s c l a v e:** Red de investigación internacional IRNet, TIC, E-learning, competencias