



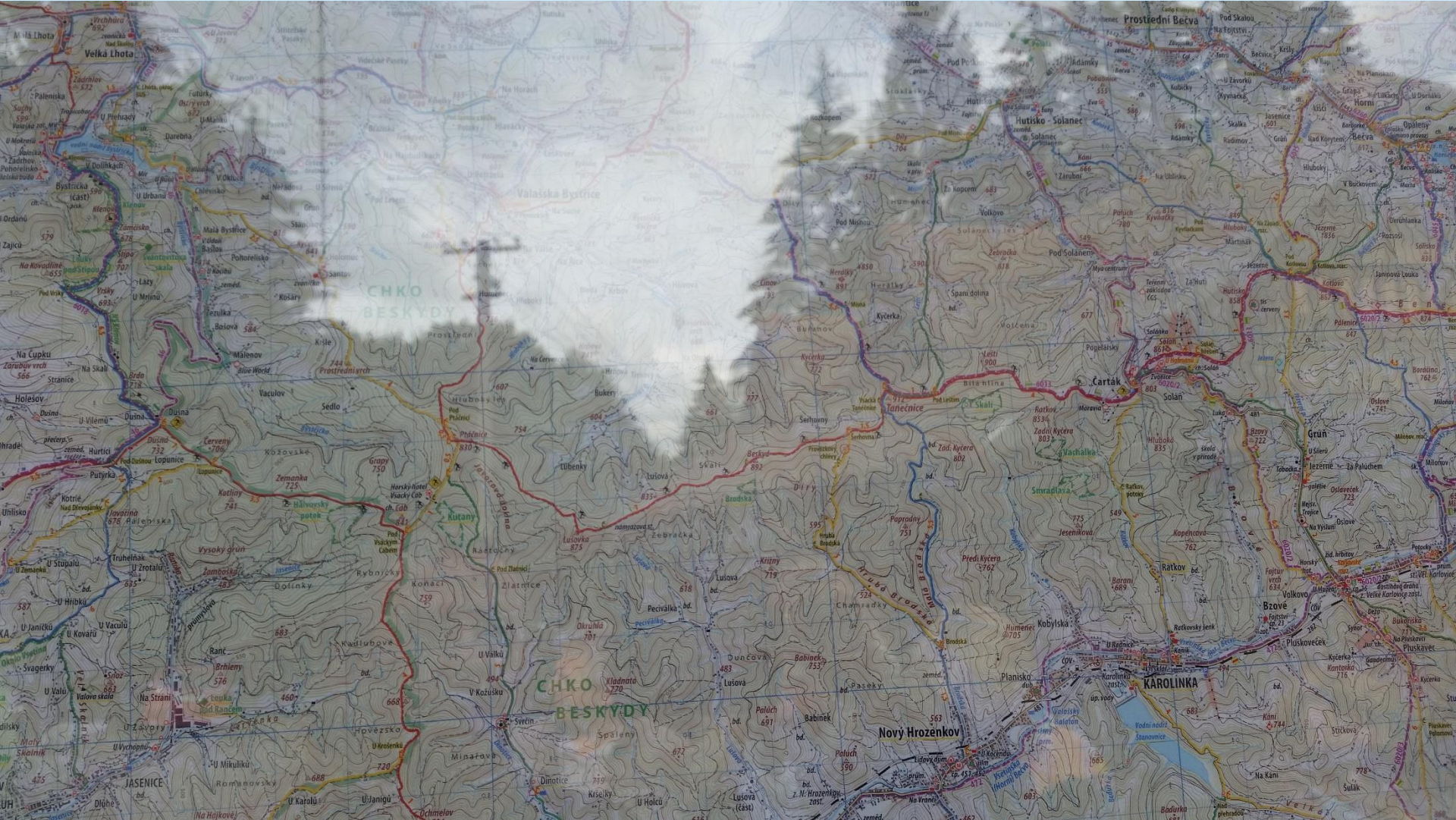
□ NETWORK LEARNING COMMUNITY OF STUDENTS - KNOWLEDGE-SHARING OPPORTUNITIES FOR PROFESSIONAL DEVELOPMENT

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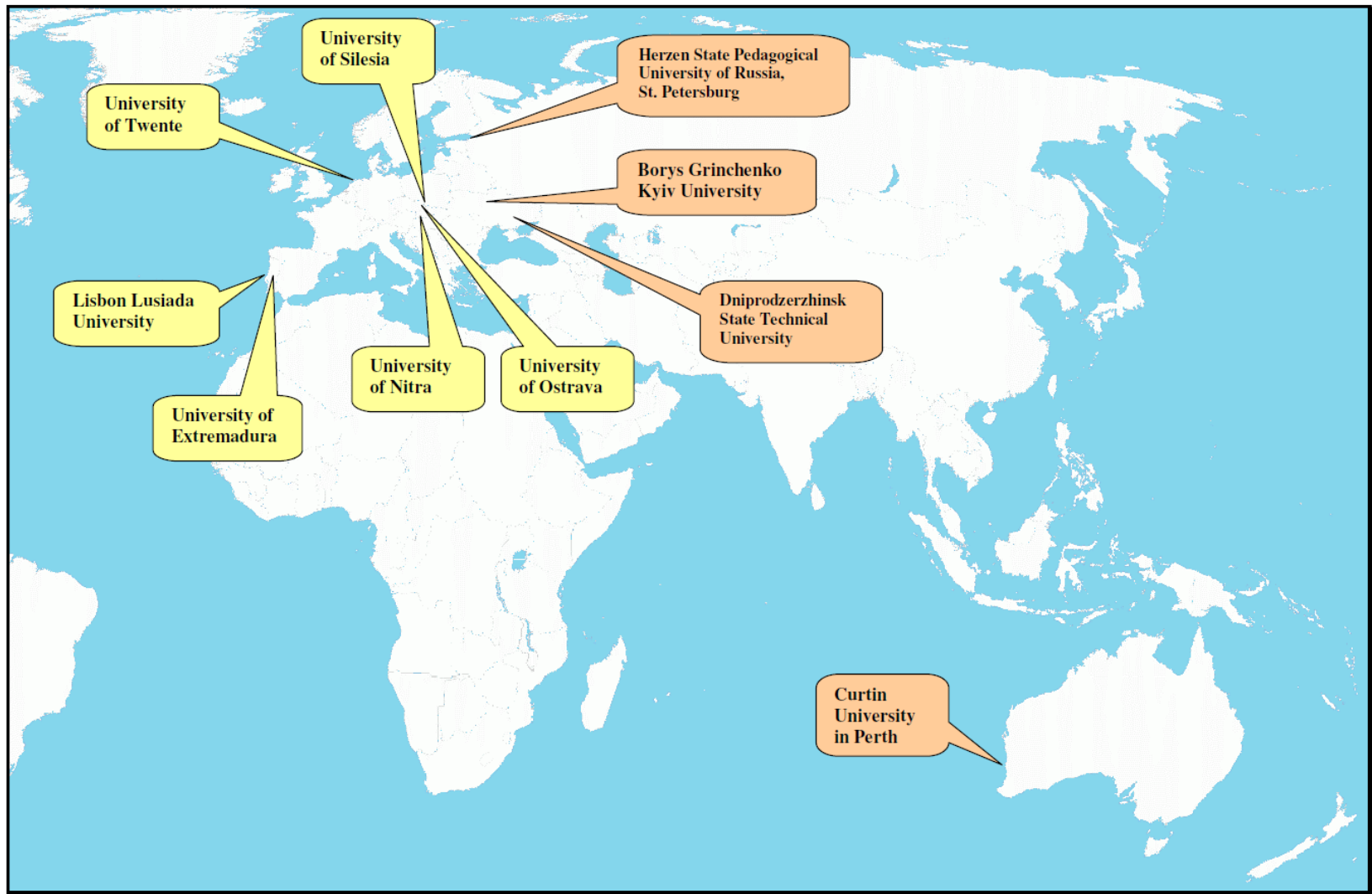
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www.irnet.us.edu.pl



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



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 612536

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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

Project financed by the European Commission under the 7th Framework Programme, within the Marie Curie Actions

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Project consortium

Participant number	Participant name	Short name	Country
<i>Beneficiary 1</i> (coordinator)	University of Silesia in Katowice	US	Poland
<i>Beneficiary 2</i>	University of Twente	UT	The Netherlands
<i>Beneficiary 3</i>	University of Extremadura	UEX	Spain
<i>Beneficiary 4</i>	Constantine the Philosopher University in Nitra	UKF	Slovakia
<i>Beneficiary 5</i>	Lisbon Lusíada University	LU	Portugal
<i>Beneficiary 6</i>	University of Ostrava	OU	Czech Republic
Partner 1	Curtin University in Perth	CU	Australia
Partner 2	Borys Grinchenko Kyiv University	BGKU	Ukraine
Partner 3	Dniprodzerzhinsk State Technical University	DSTU	Ukraine
Partner 4	Herzen State Pedagogical University of Russia, St.Petersburg	HSPU	Russian Federation

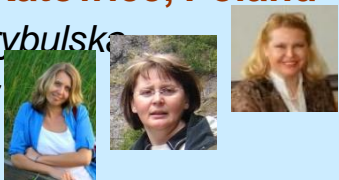
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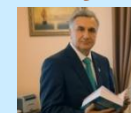
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Project details



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

Project financed by the European Commission
under the 7th Framework Programme, within the Marie Curie
Actions **International Research Staff Exchange Scheme**
(IRSES)
Grant Agreement

No: PIRSES-GA-2013-612536

Duration of the project:

48 months

1/01/2014 – 31/12/2017

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



PROJECT CONSORTIUM

- University of Silesia in Katowice, Poland
- University of Twente, The Netherlands
- University of Extremadura, Spain
- Constantine the Philosopher University in Nitra, Slovak Republic
- Lisbon Lusíada University, Portugal
- University of Ostrava, Czech Republic
- Borys Grinchenko Kyiv University, Ukraine
- Dniprodzerzhinsk State Technical University, Ukraine
- Herzen State Pedagogical University of Russia, St. Petersburg, Russia
- Curtin University in Perth, Australia

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Project financed by the European Commission under the 7th Framework Programme within the Marie Curie Actions International Research Staff Exchange Scheme under grant agreement No 612536

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



Project details and objectives

The project aims to set up a joint research & exchange programme dedicated to **development of new tools for advanced pedagogical science** in the field of ICT instruments, distance learning and intercultural competences in the EU (Poland, Czech Republic, Netherlands, Slovakia, Spain, Portugal) and third countries (Ukraine, Russia, Australia).

The goals of the project

To evaluate teaching competences and to suggest effective strategies of implementing new innovative tools in the educational activity in the context of globalization of education.

- to explore the indicators of educational effectiveness in the European Union and third countries involved into the project;
- to evaluate the teachers' competences in usage of innovative forms of education (ICT tools, e-learning);
- to evaluate the effectiveness of the existing models designed to provide e-learning and to enhance intercultural awareness;
- to suggest effective strategies and present new methodologies of implementing innovative ICT tools in the educational activity;
- to promote a scientific discussion about the integrity of the systems of education in the context of the globalization of education.

The project objective is also the transfer of knowledge and the strengthening of the collaboration between the institutions of higher education involved into the project through mutual secondments of researchers.

Consortium

University of Silesia in Katowice, Poland
University Twente, The Netherlands
University of Extremadura, Spain
Constantine the Philosopher University in Nitra, Slovak Republic
Lisbon Lusíada University, Portugal
University of Ostrava, Czech Republic
Borys Grinchenko Kyiv University, Ukraine
Dniprodzerzhinsk State Technical University, Ukraine
Herzen State Pedagogical University of Russia, St. Petersburg, Russia
Curtin University in Perth, Australia

DURATION

01/01/2014 – 31/12/2017
(48 months)

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Project financed by the European Commission under the 7th Framework Programme within the Marie Curie Actions International Research Staff Exchange Scheme under grant agreement No 612536



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



Project has received funding from the European Union`s 7th Framework Programme, within the Marie Curie Actions International Research Staff Exchange Scheme under grant agreement no PIRSES-GA-2013-612536

Participants:



- University of Silesia in Katowice (Poland)



- University of Ostrava (Czech Republic)



- University of Twente (Netherlands)



- Curtin University in Perth (Australia)



- University of Extremadura (Spain)



- Borys Grinchenko Kyiv University (Ukraine)



- Constantine the Philosopher University in Nitra (Slovakia)



- Dniprodzerzhinsk State Technical University (Ukraine)



- Lisbon Lusíada University (Portugal)



- Herzen State Pedagogical University of Russia (Russia)












Duration of the project:
48 months 01/01/2014 - 31/12/2017

Project objectives

The project aims to:

1. **Set up a thematic multidisciplinary joint exchange programme** dedicated to development of new tools for advanced pedagogical science in the field of ICT instruments, distance learning and intercultural competences in **EU, Australia, Ukraine and Russia**.
2. **Strengthen collaboration** between the **EU** and **third country institutions** through **mutual secondments of researchers**.

The main detail objectives of the project are as follows:

- To **evaluate teaching competences** and to **suggest effective strategies** of implementing new tools in educational activity;
- To **explore indicators of educational effectiveness**;
- To analyze teaching competences in the application of innovative forms of education and to suggest effective strategies of implementing innovative ICT tools;
- To **analyze and evaluate social, economic, legal and ethical conditions**, as well as **methodologies and models of e-learning techniques**;
- To evaluate the effectiveness of the existing models/methodologies designed to provide e-learning and to enhance intercultural awareness;
- To evaluate and present new models/methodologies for effective remote collaborative work and to improve ICT in the science of education;
- To **transfer knowledge** with a view to generate strategic impacts;
- To promote scientific discussion about the integrity of systems of education and work, focusing on competence issues in the context of globalization of higher education.

WPs details

WP N°	Work package title	Beneficiary/partner	Start month	End month
1	Project and Consortium Management	US	1	48
2	Analyses of legal, ethical, human, technical and social factors of ICT and e-learning development and the intercultural competences in every partner country	US/UT/UEX/UKF/LU/OU/ CU/BGKU/DSTU/HSPU	1	8
3	Analyses and evaluation of the level of ICT, e-learning and intercultural development in every partner country	US/UT/UEX/UKF/LU/OU/ CU/BGKU/DSTU/HSPU	9	16
4	Selecting and testing new IT tools	US/UT/UEX/UKF/LU/OU/ CU/BGKU/DSTU/HSPU	17	24
5	Pilot methodology development	US/UT/UEX/UKF/LU/OU/ CU/BGKU/DSTU/HSPU	25	32
6	Implementation of methodology	US/UT/UEX/UKF/LU/OU/ CU/BGKU/DSTU/HSPU	33	40
7	Dissemination of project results	US/UT/UEX/UKF/LU/OU/ CU/BGKU/DSTU/HSPU	41	48

Analyses and evaluation of the ICT level, e-learning and intercultural competences development in every participating countries

□ Objectives

- **To analyze methodological background** and main approaches of conducting international investigations on ICT, e-learning and intercultural competences in order to work out a system of measuring instruments appropriate for the research at the international level.
- **To analyse and evaluate the level** of ICT, e-learning and intercultural developments in every participating country applying the system of measuring instruments approved
- **To compare the results** obtained and to draw the conclusion about barriers in ICT, e-learning and intercultural competences, taking into consideration descriptions of the national specifics of law, human, social, ethical and technological factors of their

Description of work

On terms of mutual research and under the supervision of the US (Poland), partners from UT (Netherlands), UEx (Spain), UKF (Slovak Republic), CU (Australia), BGKU (Ukraine), DSTU (Ukraine), HSPU (Russia), OU (Czech Republic), LU (Portugal) will be engaged in a critical review of the existing methodological literature, learning of the experiences in cross-cultural evaluation at the international level, study of the measuring instruments.

Task 3.1: The main task of WP is to elaborate a system of instruments which will be appropriate for application in every country participating in the project, and will allow 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. Investigation embraces domestic and foreign experience in the field of distance learning and the use of remote forms of education and IT technologies in preparing contemporary specialists, in particular future teachers. It includes identification and theoretical justification of the basic principles, forms, methods of effective use of ICT and remote forms of teaching in the educational process in higher education institutions.

Task 3.2: 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 to discriminate factors influencing ICT and e-learning competences and intercultural awareness. Instruments supposed to be implemented are interviews of students, teachers and administrations of the institutions, observation over the learning

WP3 Description of work

Months
9-16

Task 3.3: The number of participants in the research will be stated according to the demand to obtain objective and profound information of ICT development, e-learning and intercultural competence in every participating country. The data are going to be analyzed by the statistical methods proving their significance, reliability and objectivity.

Task 3.4: Researchers will be expected to take part in events, such as conferences, workshops and roundtables, particularly ones that deal with their topic(s) of research: *ICTE-2014 at OU (Czech Republic) (presence and remote participation, separately financing, for example, statutory research, Erasmus, University, Departments funds).*

Task 3.5: Conference *Education of children and youth in culturally diverse environments 2014 at the US (Poland)*, Conference *Theoretical and Practical Aspects of Distance Learning 2014 (Subtitle: E-learning and Intercultural Developments in Different Countries) and Workshop at the US (Poland)*;

Task 3.6: Meeting in **Australia** (in presence and remote form),

Task 3.7: Workshop and e-round table debate in LU (**Portugal**),

Task 3.8: Meeting and workshop in UT (**Netherlands**),

WP3 Deliverables



- D 3.1. Month: 9** - 4 scientific papers, published in the *ICTE 2014 Conference proceeding*
- D 3.2. Month: 11** - Discussion and e-round table debate *Analyses and Evaluation of the ICT and Elearning and intercultural competences in Australia, Czech Republic, Netherlands, Poland, Portugal Russia, Slovak Republic, Spain and Ukraine during presence meeting and on-line videoconference*, conducted by CU.
- D 3.3. Month: 10** - Monograph *Education of children and youth in culturally diverse environments*
- D 3.4. Month: 11** - Scientific working paper on *Contrastive Analyses and Evaluation of the ICT and e-learning and intercultural competences in Australia, Czech Republic, Netherlands, Poland, Portugal, Russia, Slovak Republic, Spain and Ukraine setting out the methodology of the investigation, description of the procedures, data and their analysis, conclusion on the state of the ICT and e-learning competences and intercultural awareness, suggestions on the factors which contribute to the higher/lower level of the examined competences and possible solutions to improve the situation at the national level.*
- D 3.5. Month: 12** - Monograph *E-learning and Intercultural Developments in Different Countries*
- D 3.6. Month: 16** - Scientific paper titled *New Educational Strategies in Contemporary Digital Environment, prepared for publish in Scientific International Journal IJCEELL (published during 3 months after sending to the Journal)*
- D 3.7. Month: 16** - 2 Scientific papers, prepared to publish in Scientific International Journal IJWBC (published during 3 month after sending to the Journal)

Work coordination: HSPU (Russia)

WP3 Staff exchanges



1. To Beneficiary 1 US (Poland) 1 October 2014 – 31 October 2014

ER18 Morze, ER19 Ogneviuk from Partner 2 BGKU to Beneficiary 1 US

ER20 Sekret, ER21 Sadovoy, ER22 Korobochka from Partner 3 DSTU to Beneficiary 1 US

ER26 Noskova, ER27 Pavlova, ER28 Yakovleva from Partner 4 HSPU to Beneficiary 1 US

ER 16 Tomayess Issa, ER17 Theodora Issa from Partner 1 CU to Beneficiary 1 US2 for participate, in particular in the conference *Education of children and youth in culturally diverse environments 2014, Conference Theoretical and Practical Aspects of Distance Learning 2014 (E-learning and Intercultural Developments in Different Countries) and Workshop (US, Poland)*; involved in Tasks 3.1-3.3, 3.5 (M2, milestone), deliverables D 3.3, D 3.5, D 3.7.

2. To Partner 1 CU (Australia) 1 November 2014 – 30 November 2014

ER2 Ogrodzka-Mazur, ER1 Smyrnova-Trybulska, ER3 Gajdzica from Beneficiary 1 US to Partner 1 CU

ER4 Kommers from Beneficiary 2 UT to Partner 1 CU

ER7 Reis, ER10 Alonso from Beneficiary 3 UEx

ER24 *Kapounova*, ER25 Malach from Beneficiary 6 OU to Partner 1 CU involved in Tasks 3.1-3.3, 3.6 (M2, milestone) for deliverables D 3.2, 3.4, D 3.7.

3. To Beneficiary 5 LU (Portugal) 1 January 2015 – 31 January 2015

3. ER18 Morze, ER19 Ogneviuk from Partner 2 BGKU to Beneficiary 5 LU

ER20 Sekret, ER21 Sadovoy, ER22 Korobochka from Partner 3 DSTU to Beneficiary 5 LU

ER26 Noskova, ER27 Pavlova, ER28 Yakovleva from Partner 4 HSPU to Beneficiary 5 LU

involved in Tasks 3.1-3.3, 3.7 (M2, milestone) for deliverables D 3.2, D 3.4, D 3.7.

4. To Beneficiary 2 UT (The Netherlands) 1 March 2015 – 31 March 2015

ER18 Morze, ER19 Ogneviuk from Partner 2 BGKU to Beneficiary 2 UT

ER20 Sekret, ER21 Sadovoy, ER22 Korobochka from Partner 3 DSTU to Beneficiary 2 UT

ER26 Noskova, ER27 Pavlova, ER28 Yakovleva from Partner 4 HSPU to Beneficiary 2 UT

for participate in the meeting and workshop, Tasks 3.1-3.3, 3.7 (M2, milestone), for deliverables D 3.7.

5. To Partner 4 HSPU (Russia) 1 April 2015 – 30 April 2015

ER2 Ogrodzka-Mazur, ER1 Smyrnova-Trybulska, ER3 Gajdzica from Beneficiary 1 US to Partner 4 HSPU,

ER 8 Gutiérrez, ER9 Yuste from Beneficiary 3 Uex to Partner 4 HSPU,

ER12 Capay, ER13 Tomanova, E14 Drlik, E15 Kapusta from Beneficiary 4 UKF to Partner 4 HSPU

ER23 Pinto from Beneficiary 5 LU to Partner 4 HSPU

ER24 *Kapounova*, ER25 Malach from Beneficiary 6 OU to Partner 4 HSPU for participate, in particular, in the International Scientific Conference *New educational strategies in contemporary digital environment (HSPU, Russia)*, **Task 3.1-3.3, 3.9 (M2, milestone), deliverables D 3.6.**

WP3 Research Methodology

System of indicators for e-learning development and ICT competences

The main results (effects) of e-learning and *ICT* in education:

The results (effects) of e-learning and *ICT* in education are manifested in:

- - Improvement the **quality** of educational services;
- - Formation and development of **competencies** of the knowledge society;
- - Increase of the **competitiveness** of an institution in the world scientific and educational space.
- **Expansion of space-time coordinates** (increase of scientific and educational process comfort, focus on lifelong learning goals);
- **Personalization** of educational activities, individual request in e-learning;
- **Formation** of new scientific and educational relations, cooperation, intercultural **competence**;

WP3 Research Methodology

System of indicators for e-learning development and ICT competences C.D.

- **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;
- **Enhancing self-organizational effects** that support sustainable development of the educational environment of the university and its participants

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 competences 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 discipline, e-course);
- **meso** (solution of scientific and educational problems in the corporate environment of the university (interdisciplinary communication, cooperation, exchange of experience)
- **macro level** (achieving scientific and educational objectives by

Methodology of WP3 research c.d.

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

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

E-learning and ICT competences can be **indicated by**:

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

Aspects of activities in e-learning environment

Teachers, academic teachers:

- Acquisition of information tools and understanding ICT role in education;
- Teaching + pedagogical activities;
- Scientific work;
- Personal development, self-training

□ **Students:**

- Acquisition of information tools and understanding ICT role in education
- Learning activities
- Self-development, self-realization, research, scientific activities
- Social and cultural activities

E-learning strategy and coordination

- Acquisition of information tools, understanding ICT role
- Teaching, upbringing activities
- Scientific work
- Personal development, selftraining

- Understanding role of ICT in education. Using tools ability
- Learning strategies
- Personal development, creative, scientific activities
- Social and cultural activities



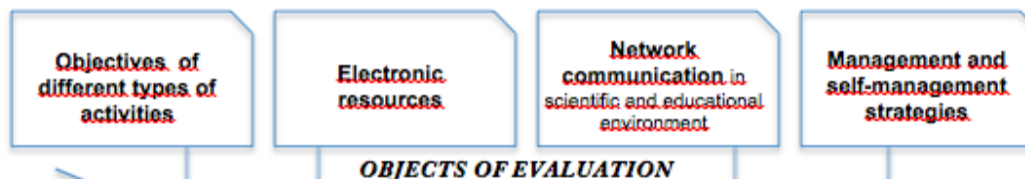
Administration



Teachers



Students

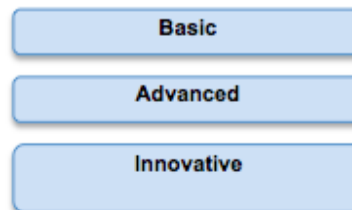


OBJECTS OF EVALUATION

PARTICIPANTS

E-learning and ICT competences

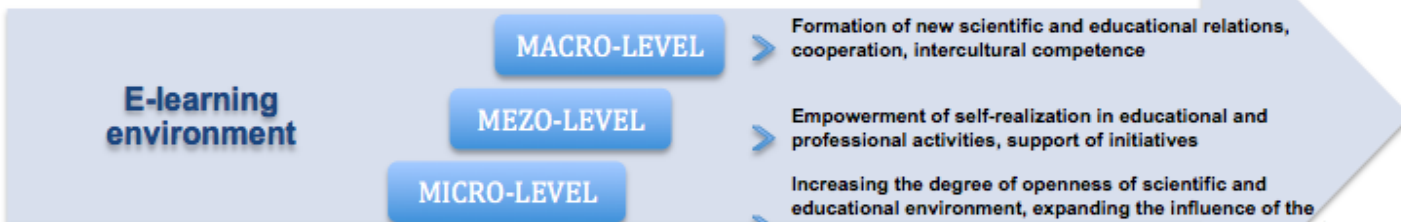
LEVELS



OBJECTIVES

- Increase of scientific and educational process comfort, focus on lifelong learning goals
- Personalization of educational activities, individual request

Improving the quality of educational services, comfort of educational environment



Formation and development of competencies of the knowledge society

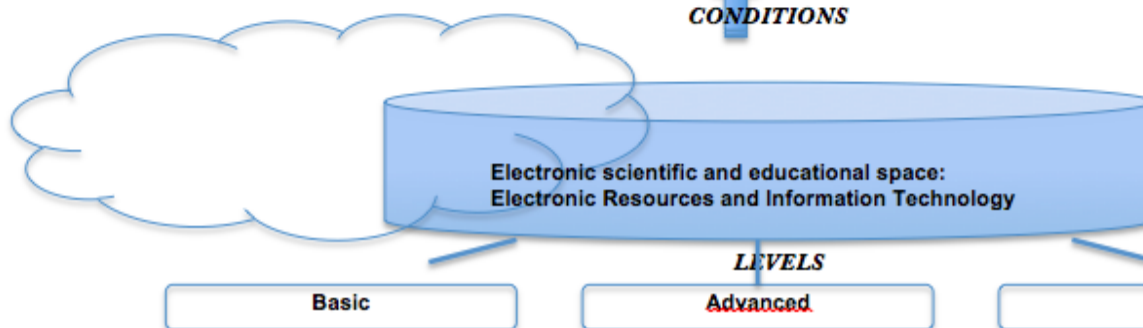
Growth of competitiveness of the institution in the international scientific and educational space

External indicators

Internal indicators

- Formation of new scientific and educational relations, cooperation, intercultural competence
- Empowerment of self-realization in educational and professional activities, support of initiatives
- Increasing the degree of openness 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
- Enhancing self-organizational effects that support sustainable development of the educational environment of the university and its subjects

CONDITIONS



LEVELS

Basic

Advanced

Innovative

A network learning community

A network learning community can act as the basis of pedagogical design of e-learning environment.

Today, academic teachers consider an e-learning environment as not only a system of information conditions, providing educational process, but also as a means for learning and self-development, as well as an object of modelling, design and implementation (Noskova, 2007).

A network learning community

For the pedagogical design of e-learning environment with specific characteristics, a prospective basis is the idea of a network community.

Network communities are studied in different sciences.

The development of network and online communities are today, perhaps, one of the leading factors affecting the socialization of young people.

The criteria for the effectiveness

- of interactions in a network learning community can be used as follows:

- the number of active participants

- functional orientation of communication (informational, methodical, consulting, expertise, and project-oriented);

- availability of a community knowledge base;

- information on internal and external community events and interaction with other communities in related areas.

collaboration and cooperation as the basis for a network learning community engagement

Collaboration and cooperation are important components of interaction within a network learning community.

Communication resources are a special types of electronic educational resources.

Work Package 3 of the IRNet project.

Some results

- In order to identify possible ways to improve educational interactions in a network learning community, the survey data, obtained in the framework of **Work Package 3 of the IRNet project** (<http://www.irnet.us.edu.pl>) was analysed.
- Among the **aims of the survey** was to
 - determine students' attitude to collaboration,
 - cooperation,
 - knowledge sharing and
 - virtual interactions within a university e-learning environment.
- The data can not only form the basis of determining the readiness of students to networking, but can also help to **identify ways to improve a university electronic environment.**

Research methods and tools

- An electronic environment of a modern university should create opportunities for the development of the 21st century competencies, for the implementation of a lifelong learning strategy.
- The study conducted by participants of IRNet project from different partners universities, in particular by:
 - Herzen State Pedagogical University of Russia, St. Petersburg (HSPU),
 - The University of Silesia in Katowice (US), Poland and
 - Constantine the Philosopher University in Nitra (UKF), Slovakia.
- Each university provided at least **100 respondents** – students of all stages education (bachelor degree students and master degree students). Survey was elaborated in **Google Doc** and **Lime Survey**

Main objectives of the research

It is important to mention that the WP3 of the IRNet project was dedicated to the analysis and evaluation of the ICT level, e-learning and intercultural developments in every participating countries and to the elaboration of the conceptual framework for a joint research project based on lasting collaboration with the project participants.

It was assumed that participants of e-learning environment (academic teachers, students, administration) are involved in activities with following results:

- increase of scientific and educational process comfort, focus on lifelong learning goals;
- personalization of educational activities, individual request of e-learning;

Main objectives of the research c.d.

- formation of new scientific and educational relations, cooperation, intercultural competence;
- 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;
- enhancing self-organizational effects that support sustainable development of the educational environment of the university and its participants.

Consequently, all the listed objectives, on the one hand, should be accepted by the e-learning environment participants, and, on the other hand, be visible in this environment through the interactions of these participants.

Among **main outcomes** could be marked:

- formation of new scientific and educational relations, cooperation, intercultural competence;
- empowerment of self-realization in educational and professional activities, support of initiatives;
- enhancing self-organizational effects that support sustainable development of the educational environment of the university and its participants.

E-learning environment: IT tools, students' competences and learning benefits.

Student's competencies in E-learning environment



Students

- Understanding role of ICT in education. Using tools ability
- Learning strategies
- Personal development, creative, scientific activities
- Social and cultural activities

E-learning tools advantages

- > Scientific and educational process comfort, focus on lifelong learning
- > Personalization of educational activities, individual request
- > Formation of new scientific and educational relations, cooperation, intercultural competence
- > Empowerment of self-realization in educational and professional activities, support of initiatives
- > Openness of scientific and educational environment, expanding the influence of the university to external cultural environment
- > Enhancing self-organizational effects that support sustainable development of the educational environment of the university and

Learning environment benefits

Improving the quality of educational services, comfort of educational environment

Formation and development of competencies of the knowledge society

Growth of competitiveness of the institution in the international scientific and educational space

The first group of questions

- was focused on students' attitude
 - to scientific and educational relations,
 - cooperation and
 - their understanding the role of ICT in maintaining these activities.
- The sample questions and answers are given in Table 1.

Table 1.1. Results students answers on question: Evaluate the need for cooperation in solving educational problems (group work and teamwork, etc.) (multiple choice question)

	HSPU	US (Single choice question)	UKF
These objectives are not set by the teachers	12.9%	16%	17.4 %
Teachers offer tasks that require cooperation for successful solving	50%	33%	50.6%
I strive to cooperate and ask teachers to offer such tasks	21%	18%	21.5%
Such competences are needed to be successful in life	46%	22%	60.9%
Without such competences it is impossible to be successful in business, for example, when creating start-ups	12.1%	11%	13.5%

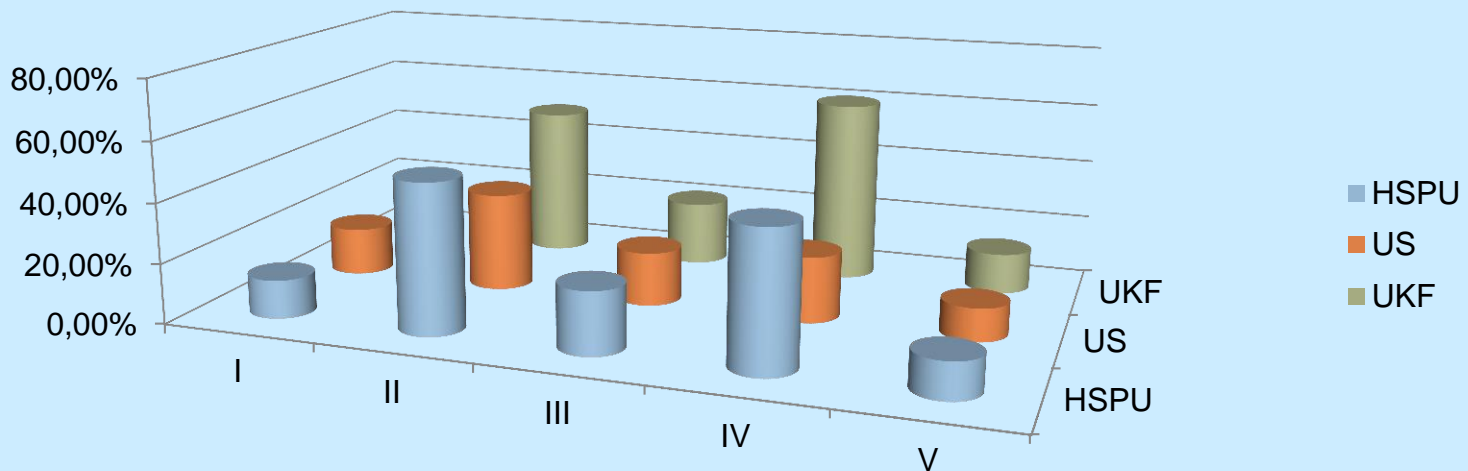


Table 1.2. Results students answers on question: Do you use social services, such as social networks, for collaboration and teamwork? (Single choice question)

	HSPU	US	UKF
No, I prefer face-to-face contact (I)	10,5%	41%	10,6%
No, teachers do not give tasks, oriented at mediated interaction (II)	7,3%	12%	59,4%
Yes, it is a fast, convenient and modern way (III)	76,6%	42%	89,4%
Yes, teachers give tasks when such cooperation is necessary (IV)	5,6%	5%	40,6%

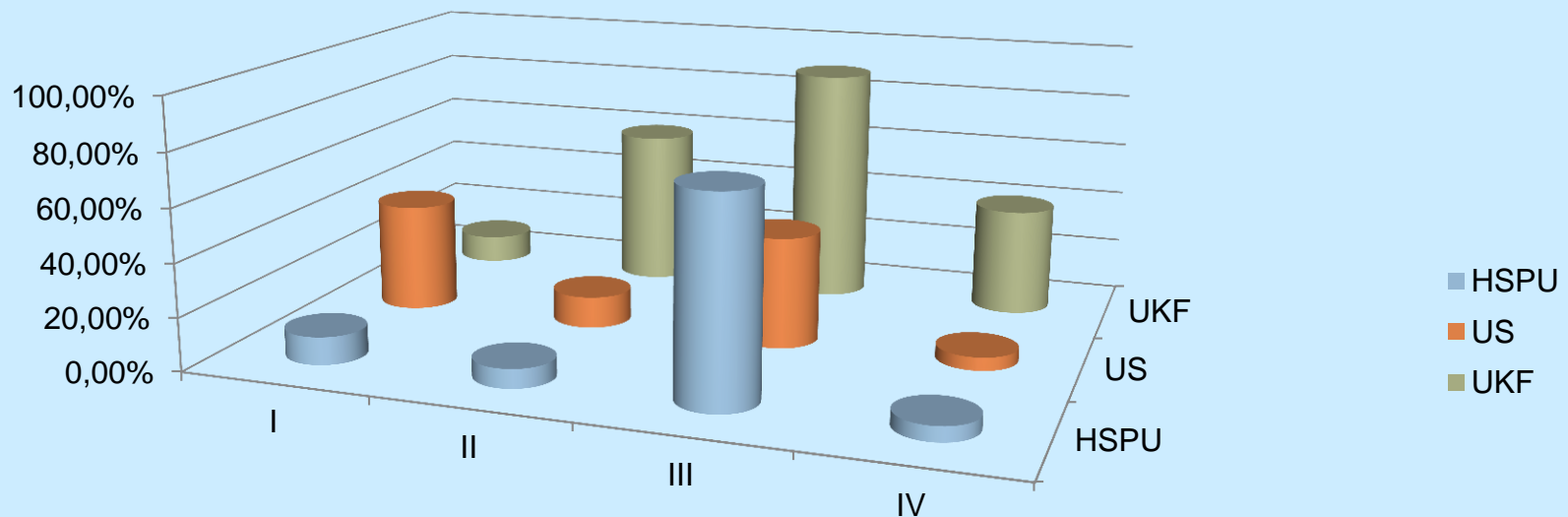
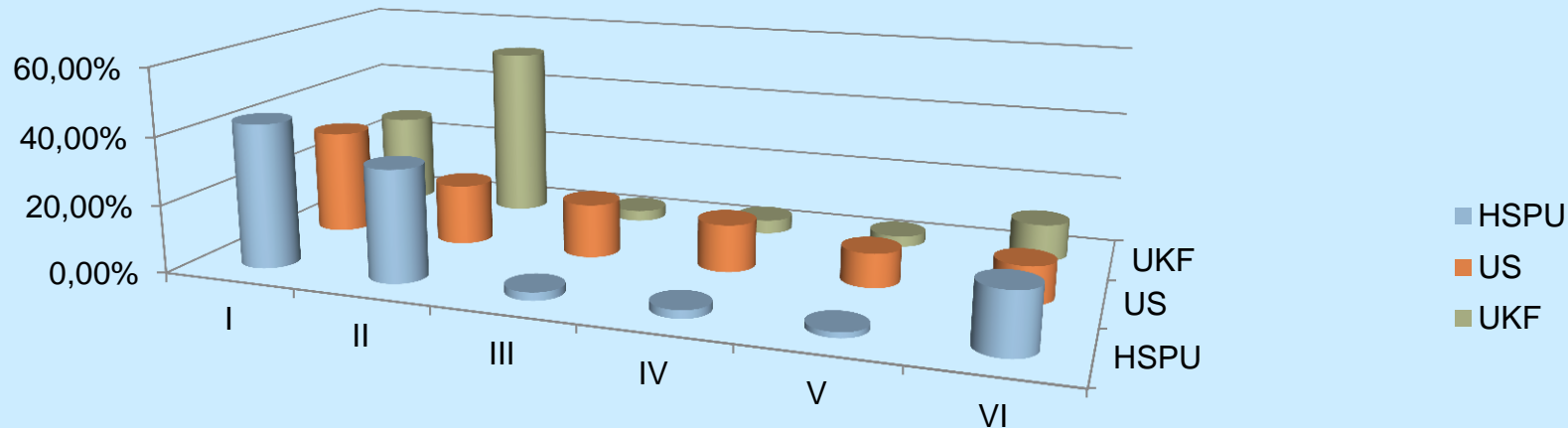


Table 1.3. Results students answers on question: *Specify the main reason for your participation in virtual communities of students (scientific, artistic, sports ones, etc.) in social networks or other Internet services (Single choice question)*

	HSPU	US	UKF
Getting additional cultural knowledge (learning about events, broadening outlook, adopting cultural experience)	42,7%	31%	27,1%
Helping with studies (sharing knowledge, asking for help)	33,1%	18%	51,5%
Finding new friends	2,4%	16%	3,2%
Demonstrating own personal experience, knowledge, achievements	2,4%	14%	4,1%
Organizing own events	1,6%	10%	3,2%
I do not participate in such communities	17,7%	11%	10,9%



Analizing and interpretation of students survey results (1st group of questions) from HSPU

- The analysis of data obtained at HSPU shows that students understand that cooperation and collaboration competences are needed to be successful in life.
- They also note that teachers set tasks that require cooperation for successful solving, so they have all the opportunities to develop appropriate skills.
- Most of the students use social services for cooperation and teamwork, because it is a fast, convenient and modern way of cooperation.
- The main reasons for participation in virtual communities are getting additional cultural knowledge and sharing knowledge, asking for help.
- However, students are not active in producing own content within network learning communities (creating own events and demonstrating own personal experience, knowledge, and achievements).
- It means that although young people are generally active in network communities, they do not entirely transfer their everyday skills and activities from the “entertainment” sphere to the educational, learning and professional sphere

Analizing and interpretation of students survey results (1st group of questions) from US

- The analysis of data obtained at US, the Faculty of Ethnology of Education, similarly shows that students understand that cooperation and collaboration competences are needed to be successful in life.
- Simultaneously young people are generally not only active in network communities for using new information, they do transfer their everyday skills and activities from “entertainment” sphere to the educational, learning and professional sphere.
- For example, on the 3rd question near **24%** students check variants “Demonstrating own personal experience, knowledge, achievements” and ‘Organizing own events’ and **16%** - ‘Finding new friends’. Of course maybe it is yet not enough, but relatively it is not a bad result.

Analizing and interpretation of students survey results (1st group of questions) from UKF

- Responses of students at UKF are close to responses at HSPU. Students agree that group and teamwork competencies are needed to be successful in life, but just a half of students say that teachers offer and require this form of work.
- Most of UKF students use social networks (almost 90%) but just 40% of teachers offer this type of communication. We are surprised that almost half of students say that social networks help them with studies.
- We think that students use social networks mainly for knowledge sharing and communication in their study group without the participation of the teacher. Similar to HSPU, students do not create content demonstrating own personal experience, knowledge, and achievements but they think that creating this kind of content can be beneficial when searching

The second group of questions

- The *second group* of questions was focused on the empowerment of self-realization in educational and professional activities, support of initiatives.
- The sample questions and answers are given in Table 2.

Table 2.1. Results students answers on question: *Choose the reasons motivating you to demonstrate in the university electronic environment the results of your academic, artistic, sporting activities (on the university web site, in social networks, etc.)* (Multiple choice question)

	HSPU	US (single choice question)	UKF
Opportunity to present myself and my achievements to others (I)	44,4%	26%	18,5%
Opportunity to be noticed by a potential employer (II)	0%	18%	40,6%
Prerequisite of studying a particular discipline (III)	29%	8%	2,4%
General interest (IV)	41,9%	19%	19,1%
Own status upgrade (V)	0%	4%	2,4%
Opportunity to make new friends (VI)	32,3%	7%	1,8%
I do not want to show myself and my achievements to others, because I have nothing to show (VII)	12,9%	3%	5,3%
I do not want to show myself and my achievements to others, because I am not interested in it (VIII)	28,2%	15%	10%

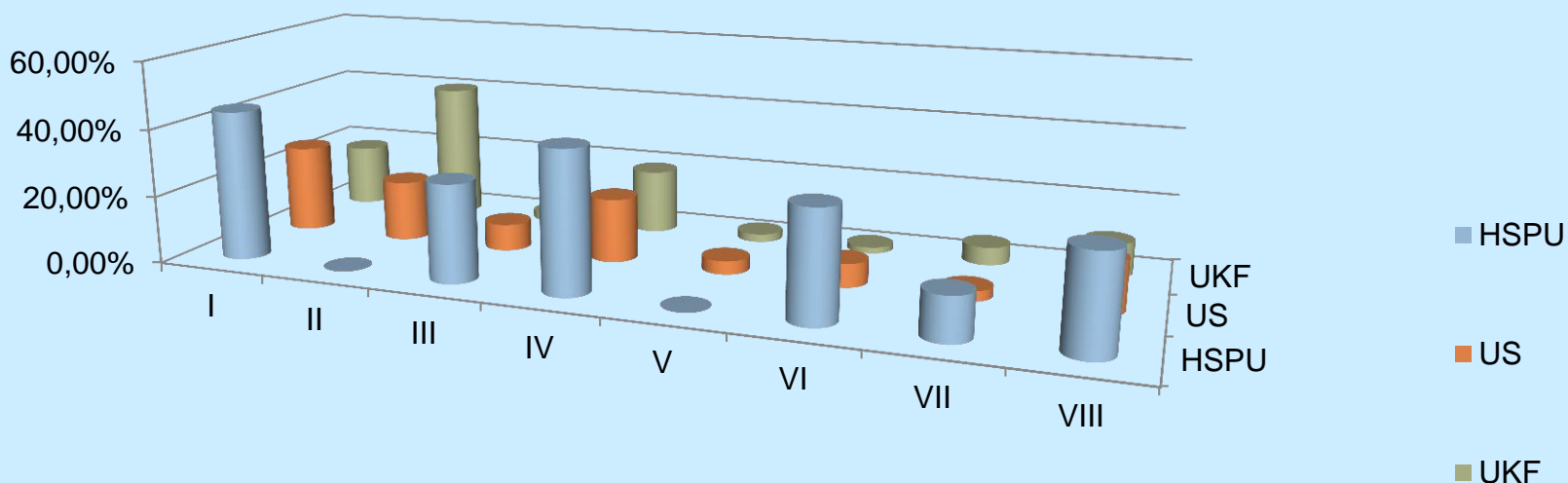
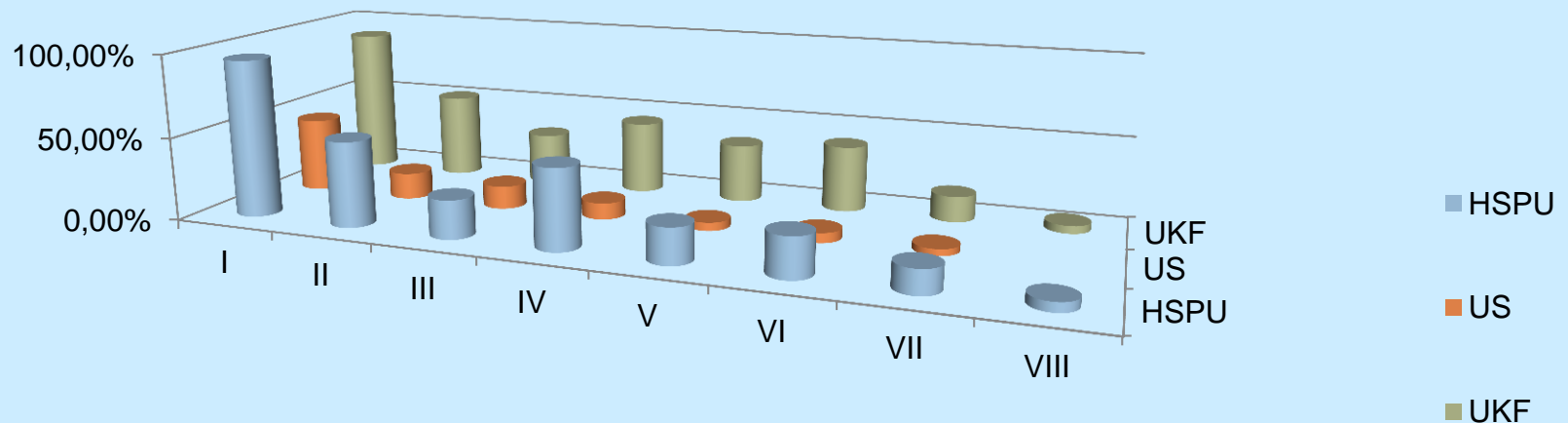


Table 2.2. Results students answers on question: Choose which informational resources you use most often when doing assignments, doing research, preparing reports, etc. (Multiple choice question)

	HSPU	US (single choice question)	UKF
Search engines (<i>Google, Yandex, etc.</i>) - Search by keywords	95,2%	45%	90%
Printed publications (<i>books, journals, guidelines, etc.</i>)	51,6%	16%	51,5%
Electronic scientific databases from your university library subscription (<i>databases of electronic journals, full-text electronic resources, etc.</i>)	23,4%	14%	31,2%
Digital libraries in the Internet	48,4%	10%	44,1%
Open storages of electronic educational resources (institutional repository, WIKI)	21,8%	5%	35,3%
Video channels (YouTube)	24,2%	6%	40%
File sharing, torrents	14,5%	4%	15,6%
Webinars, podcasts	5,6%		4,7%



Analizing and interpretation of students survey results (2nd group of questions) from HSPU

- The results obtained at HSPU show that the **most popular reasons motivating students to demonstrate** in the university electronic environment the results of their activities are an opportunity to present own achievements to others, an opportunity to make new friends, general interest and a prerequisite of studying a particular discipline.
- **Some of the students are not interested in demonstrating their own activities.** However, this **contradicts** the contemporary tendency of large involvement of students in social services where they demonstrate themselves.
- The fact means that in the particular electronic environment students are not motivated or do not have the awareness of the goals and values and tools for demonstrating their achievements.
- The most used informational resources for completing assignments; research and preparing reports are search engines, printed publications and digital libraries.
- **Some of the students use electronic scientific databases from the**

Analizing and interpretation of students survey results (2nd group of questions) from US

- The US students' answers on the single choice questions and generally their declaration of approach to the empowerment of self-realization in educational and professional activities, support of initiatives are similarly relatively high but not a well-organized, coordinated and consciously structured and targeted.
- At the same time, nearly **18%** students on the 1st questions choose 'Opportunity to be noticed by a potential employer'. Probably this is a result of good activities of the Office of Careers University of Silesia in the area of students training and a lot of action concerning personal promotion of young people, in particular by Internet for finding a potential employer and increasing of competitiveness.

Analizing and interpretation of students survey results (2nd group of questions) from UKF

- Students at UKF also do not want to share their activities although they use **social networks like a usual part of their life.**
- However, there are some students (**40%**) **that understand** that sharing the portfolio of their own work can help them to find a job after they finish studies.
- Some students use social networks, as it is a prerequisite for studying a particular discipline. This percentage is too low, and these results confirm the low attitude of teachers to requiring and using this way of communication with students.
- Similar to HSPU students, almost all students at UKF use common search engines to find relevant information to prepare their assignments and research. They do not focus just on information on the net, but half of students also use printed publication maybe as the more trusted source. The results show that the services of the University Library (access to scientific full-text databases, electronic resources, etc.) are well used at UKF.

The third group of questions

- The *third group* of questions was focused on the **educational activities strategies** that students prefer and their understanding the role of ICT in time and education activities management. The example is given in Table 3.

Table 3.1. Results students answers on question: Select an educational activities strategy that you prefer (Single choice question)

	HSPU	US	UKF
I prefer that teachers monitor (remind, set deadlines, etc.) my work and its results.	37,1%	28%	52,6%
I study independently and systematically, regularly perform tasks, plan my own time	58,9%	67%	40,9%
I take the example of classmates – I follow the way they learn	4%	5%	6,5%

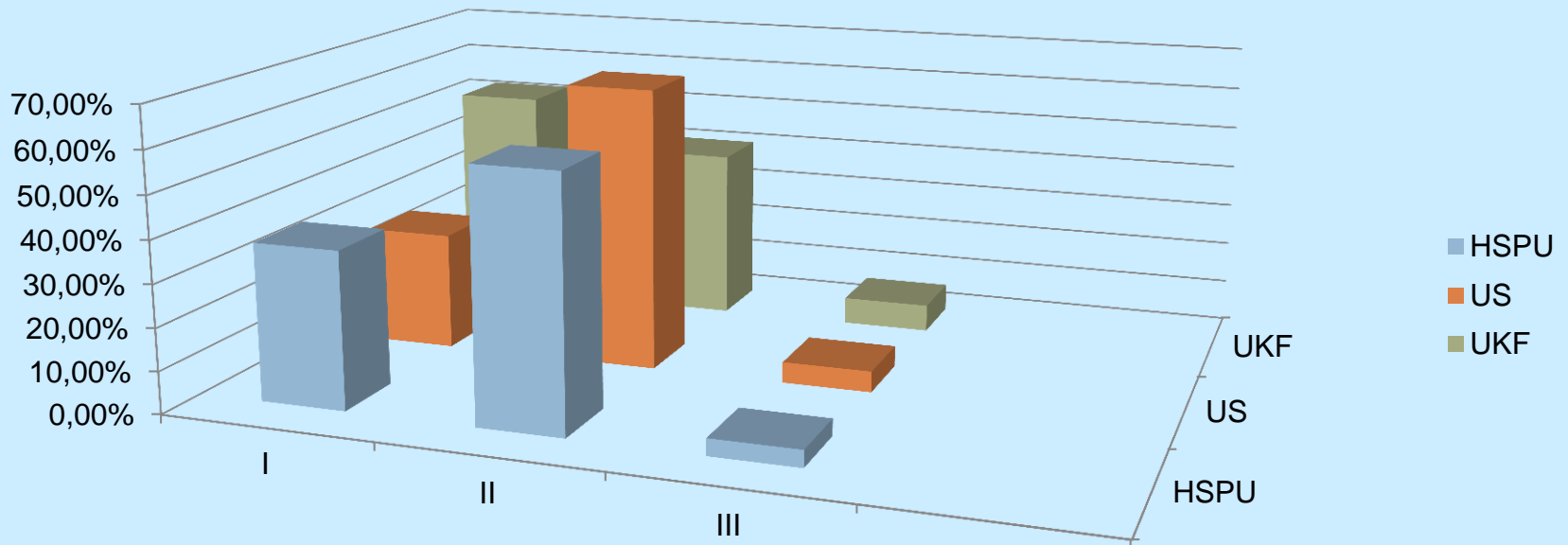
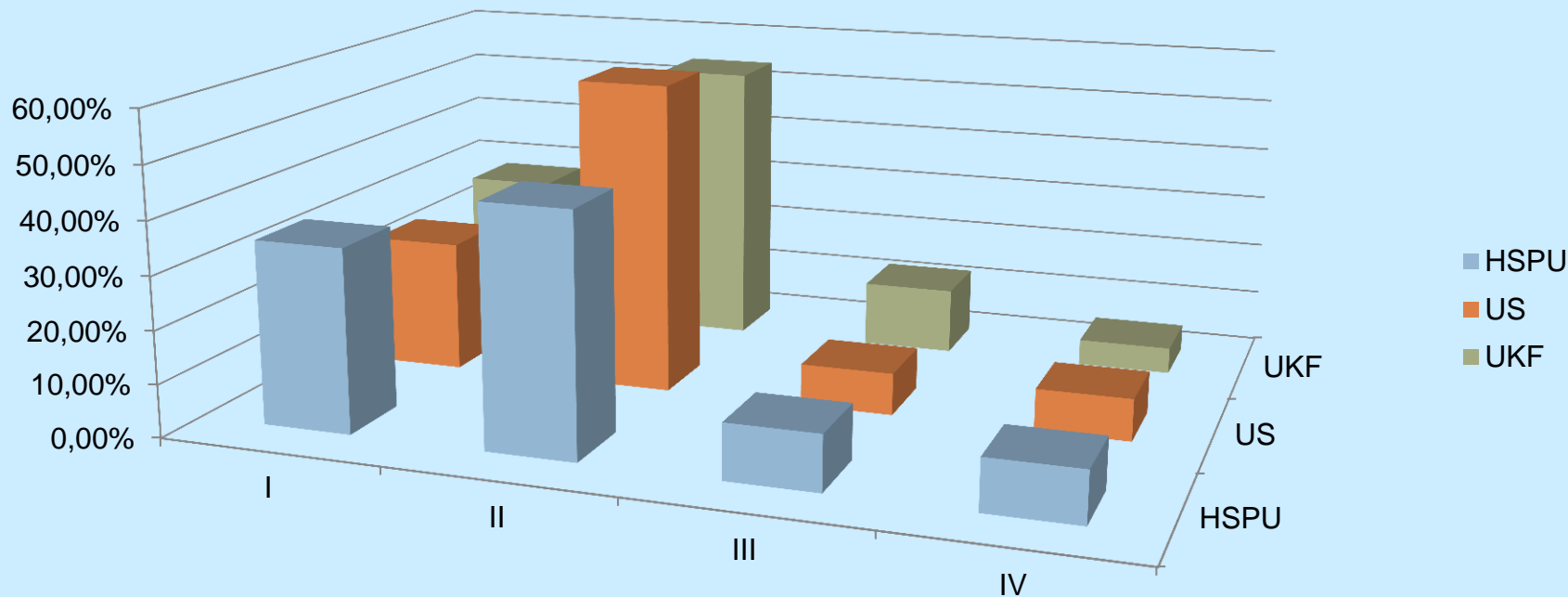


Table 3.2. Results students answers on question: *Will the information technology instruments (electronic diaries, organizers, calendars, reminders, etc.) help you in the planning your own educational and extracurricular activities? (Single choice question)*

	HSPU	US	UKF
No, they will not make a significant effect	34,7%	25%	28,2%
Yes, they will help greatly in organizing	45,2%	59%	54,1%
My learning activities are already coordinated by teachers and administration	10,5%	8%	12,6%
I already use these instruments, but I find them hard to understand it	9,7%	8%	5%



Analizing and interpretation of students survey results (3rd group of questions) from HSPU

- The aspect of education strategies is very interesting, especially in the context of lifelong learning.
- The results obtained at HSPU show that almost a half of the students study independently and systematically, regularly perform tasks, and plan their time.
- However, they still prefer that teachers monitor their work and results. In connection with this idea the use of IT instruments for managing time and different types of activities are very important for students.
- This is one of the tasks of the Information Technology course, which students have during their first year in the university.

Analizing and interpretation of students survey results (3rd group of questions) from US

- At US we received generally similar results regarding the aspect of education strategies in opinion of students, which is very interesting, especially in the context of lifelong learning.
- **Simultaneously** most students - 2/3 (67%) prefer 'Study independently and systematically, regularly perform tasks, plan my own time'.
- On the question 'Will the information technology instruments (electronic diaries, organizers, calendars, reminders, etc.) help you in the planning your own educational and extracurricular activities? (Single choice question)' – 59% of young respondents answers were 'Yes, they will help greatly in organizing'.
- It is possible that one of the reasons for such approach and opinion also is the introduction of an **Information Technology course**, which students have during their first year in the

Analyzing and interpretation of students survey results (3rd group of questions) from UKF

- In contrast, students at UKF do not work so independently and individually.
- More than half of students need a teacher to control the process of study. Only 40% of students can work systematically and plan their own time.
- There is no such course as at the HPSU or the US at the UKF during the first year at the university. It is common that students tend to keep the study system the used at high school. It is interesting that almost 55% of students say that calendars and reminders help them to the plan educational and extracurricular activities but in fact, they do not plan and work systematically.
- Maybe they use those tools just to keep deadlines set by teachers.

Summary of students survey

- The questions help to see the level of students' understanding of the opportunities and role of self-guided work, which has become very important for lifelong learning.
- In addition, we see the use of ICT in learning and in self-development, self-realization, research, scientific activities. It is obvious that students possess partly the motivation and skills for collaboration and cooperation.
- However, they still need to see and realize all the possible opportunities of cooperation in the university e-learning environment.

Conclusions

- The results obtained in this study allow us to formulate the following **conclusions**:
- Students, in general, demand the **ability** to be a member of a community, a common information space in the process of education.
- However, **not all network communication opportunities are used in a modern university electronic environment**, especially when we **focus on educational cooperation**.
- This is an indicator of the need to improve these aspects.

Conclusions c.d.

- An information environment of a network learning community largely should be integrated into an information and communication environment of a university.
- The proposed variant of communication resources of a network learning community adequately meets the needs of students, interacting during their studies, research activities, master thesis, and personal professional development.
- The results can be used in the construction of educational environments for both bachelor and master training programs.

Conclusions c.d.

The main priorities for the network learning communities, accompanying training are as follows:

- Developing skills of independent cognitive and scientific activities, developing creative abilities,
- Amplifying professional self-development skills;
- Developing the abilities to set goals, plan activities and to choose the way to achieve results;
- Providing opportunities for individualization and time saving in terms of the community resources use;
- Developing the abilities to analyse own activity, to manifest oneself as active and evolving personality.

**Thank you very much
for your attention!**

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