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Editorial

"Commission Staff Working Document. Annex II. Results of the public consultation on the EU's modernisation agenda for higher education" presents "the key findings of the public consultation on the future of the EU's agenda for the modernisation of higher education systems. The results of the consultation underpin the specific initiatives related to higher education presented in the Skills Agenda and will inform the EU's future strategy for the modernisation of higher education. […] A second area where skills gaps are highlighted in the consultation responses encompasses the broad fields of Science Technology, Engineering and Maths (STEM), where many national authorities and stakeholders see a need to strengthen high-level skills provision. In particular, several contributions note a specific need for more ICT specialists and for students across the board to acquire better digital skills" (http://ec.europa.eu/social/main.jsp?catId=1223&langId=en&moreDocuments=yes, accessed 15 November 2016).

The present volume includes nine papers gathered in four chapters. Chapter I – "High-tech Electronic Learning Environment Design" – includes one article. In "E-learning Managers Training to Design High-tech Electronic Learning Environment," written by Nataliia Morze and Oksana Buinytska from Ukraine, the researchers stress that education today must adequately reflect the needs of the society and be available throughout life, as well as provide an equal access for all people at all levels. The real step in solving these problems is to create an information and educational e-environment, which includes open learning and open access to educational resources. To ensure the quality of the educational information environment, we still need the organisation and management of the educational process, the proper development of IT infrastructure, a learning management system, and educational content. Therefore, there is a need for training that could resolve these tasks. This will help upgrade the educational process to a modern level using the information and educational e-environment available 24×7×365.

Chapter II, "ICT Literacy Development," includes three papers. The first one, "The Research on Visual Literacy in Transliteracy as the Main Ability to Understand and Communicate in the 21st Century," written by Małgorzata Wieczorek-Tomaszewska from Poland, describes the cultural and technological context of visual literacy, having its roots in the evolutionary expansion of the culture of im-

age and the development of the information society, in the context of the concept of transliteracy. It presents the results of pilot studies that examined specific visual skills of Polish university students.

The second paper entitled "Teachers' Competencies and Their Impact on the Evaluation of Teaching," by Hanne-Lore Bobáková and Janusz Karpeta from the Czech Republic, describes the research on teachers' competencies with regard to two forms of learning: a full-time form of study and blended learning. The research aims at documenting the difference in the evaluation of partial competencies in full-time traditional education and in blended learning. This paper deals with the research on the competence assessment of the English teachers at the School of Business Administration in Karvina who teach students enrolled in both forms of classes. The introduction outlines the influence of political, social, and economic changes affecting education in the 21st century on competencies. Education is presented in a deeper context, in particular with regard to the meritocratic aspect. The paper also provides the list of the most important outcomes of the analysis of the conceptual nature of key competencies and its terminology scope. The aim of the research is the analysis of the data about teachers' competencies, which shows how competencies affect the assessment of the quality of teaching foreign languages. The following competencies were examined: readiness of teachers to teach, clarity of the interpretation, erudition, communicability and suitability for transmitting information, and flexibility of the individual approach to students and their inspiration.

The third paper entitled "Technological and Ethical Challenges of Translators Training in Ukraine and Issues of Modern ICT Development," prepared by Ukrainian researchers Mykola O. Nakaznyi and Olha Yu. Nesterova, explores the challenges of the Ukrainian system of translators training caused by modern technology advancement. The paper applies established ideas in practical approaches to the improvement of translators training system with respect to new technological requirements for the professionals. The relevant data were obtained by the analysis of questionnaire results. The problems of education of translators in Ukraine under the conditions of dramatic social and political changes are considered. The lack of training in the sphere of technology application for professional development is pointed out on the basis of the research results analysis. The research has also shown the contradictions between the needed level of technological skills of the students of the translation department and modern professional standards. The changes of certification standards for translators in terms of information literacy skills, ethics, and management as related to technological advancement are shown. The article discusses the results of the original survey involving high school graduates, students, and faculty staff. The recommendations proposed are based on the critical study of the peculiarities of the system of translators training in Ukraine.

Chapter III – "Methodological Aspects of E-learning" – contains two papers. The first paper entitled "Coherence Model of Instruction," written by Pavel Ka-

poun from the Czech Republic, deals with three main issues: the understanding of curriculum in context, the ability of contextualisation, and retention of knowledge in the long-term memory. The paper first presents some principles based on the coherence model of instruction, which aims to achieve coherence of knowledge of isolated facts through a network of semantic relationships. Then, the theoretical basis of the model is described, including spatial learning strategies, cooperative learning, and excursions in an authentic environment supported by mobile devices. The author designed a methodology of teaching according to the principles of the coherence model, and he developed a virtual guide through educational exhibitions. The virtual guide was tested with students of a primary school during an experimental lecture in the Ostrava Zoo. The evaluation of the coherence model and the virtual guide was carried out using three methods: observation of students' behaviour and learning during the experimental lecture, pedagogical experiment, and questionnaires. The results of the evaluation prove that the coherence model of instruction has a positive impact on understanding in context, the ability of contextualisation, and retention of the curriculum in the long-term memory.

The second paper in the chapter – "Words Mean. Words Look. Words Sell (Themselves)" by Małgorzata Bortliczek from Poland – focuses on three issues: dominance of the use of English loanwords over attempts to create their Polish equivalents (as a result, a product, a process, an event, or an artefact promoted by an English-speaking culture is adopted together with its name), a trend whereby words (and titles composed of words) become images (through the choice of font, non-standard use of lowercase and uppercase letters, inclusion of non-letter characters, e.g. parentheses), and ascribing to words present in micro-acts a promotional function, advertising the entire product – a text. The trends discussed in the article are not new, but it is their intensity level that is new.

In addition, in the last chapter, entitled "Reports," the reader can find reports from the following three conferences: *Theoretical and Practical Aspects of Distance Learning*, organised by University of Silesia in Katowice, the Faculty of Ethnology and Sciences of Education, held on 09–11 October 2016; *ICEduTech 2016* – the international scientific conference, held on 6–8 December 2016 at the Royal Melbourne Institute of Technology (RMIT), organised by the International Association for Development of the Information Society (a non-profit association) and RMIT; and the International Scientific-practical Conference *E-environment in the Open Pedagogical Education*, held at Herzen State Pedagogical University in Sankt Petersburg, Russia, in December 2016.

To conclude, it needs to be stressed that in "EUROPE2020 – a European strategy for smart, sustainable and inclusive growth" (http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf, accessed 10 November 2016), it is emphasised that smart growth means getting better results in the fields of:

- education (to encourage teaching, study, and qualifications),

- research / innovation (to create new products and services that would boost economic growth and employment, and would help solve social problems), and
- digital society (to use information and communication technologies).

The papers presented in this volume show results of different studies conducted by researchers from different countries. The findings are certainly useful for further successful implementation of the strategy to develop a smart, sustainable, and inclusive society of the 21st century.

Eugenia Smyrnova-Trybulska

1

High-tech Electronic Learning Environment Design

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Nataliia Morze, Oksana Buinytska
Ukraine

E-learning Managers Training to Design High-tech Electronic Learning Environment

Abstract

Education today must adequately reflect the needs of the society and be available throughout life, with an equal access for all people at all levels. The real step in solving these problems consists of creating an information and educational e-environment, using open learning, and providing an open access to educational resources. Organisation and management of the educational process, proper development of IT infrastructure, learning management system, and preparing and creating educational content are still necessary to ensure the quality of the educational information environment. Therefore, there is a need for training that could resolve expressed tasks to organise the educational process to a modern level using an information and educational e-environment available 24×7×365. For this purpose, in the system of e-learning of Borys Grinchenko Kyiv University, an electronic training course "Design and expertise of information and educational e-environment" (available online: http://e-learning.kubg.edu.ua/course/view.php?id=2741) was developed.

K e y w o r d s: e-learning manager, information and educational e-environment, the quality of the learning process, planning of information and educational e-environment, learning management system, blended learning

Introduction

At the beginning of the 21st century, the socio-cultural development of society defined fixing complex and contradictory trends in education: globalisation, demographic changes, and the emergence of new knowledge and competencies. These trends occur under the influence of the rapid development of information and communication technologies (ICT). It changes the business development, the labour market, and, in turn, higher education, which is to prepare graduates for the today conditions – graduates with new competencies, such as inherent teamwork, the ability to solve problems, the ability to innovate, practice-oriented knowledge, knowledge of related sciences and technologies, the ability to work with embedded systems, or high performance (Morze, Buinytska, & Varchenko-Trotsenko, 2016, pp. 9–18).

Higher education institutions should be able to provide educational services to people, allowing continuous study and acquisition of advanced professional knowledge; these institutions should build the educational trajectory which would more fully meet educational and professional abilities and needs of the student, regardless of his or her location (Morze, 2016, pp. 7–10).

For providing the educational services, institutions must create an open information and educational e-environment, which will be used in open learning: an innovative system of evaluation of scientific research, management, and implemented remote access to educational resources, an integral part of which is an e-learning system.

Ensuring the quality of the open information and educational e-environment, as well as the educational system, requires a special attention in such components and participants of e-learning as strategic management, infrastructure, educational process, teachers and students, and content. Thus, the task for the university is to train professionals able to manage the educational process with the use of an open information and educational e-environment, to understand the processes of the organisation and administration of the components of an information and educational e-environment, and to manage organisation of e-learning.

Training managers of e-learning will help fill high-quality content, and correctly and efficiently organise the management of educational activities of the institution on the basis of an information and educational e-environment.

Training Managers of E-learning

Basic Competencies of a Manager of E-learning

The field of education is updated with new information and communication technologies that are designed to contribute to its efficiency, but none of them are developed specifically for the implementation of educational goals. Therefore, an extremely large and difficult task lies ahead of the university – the adaptation of new technological tools for the needs of education and testing in an information and educational e-environment.

An information and educational e-environment of the institution at the present stage should include:

- personal computer devices – means of implementation of educational, scientific, and administrative activities of the institution;
- environment's support of collective and individual communications and collaboration;
- open educational resources – objects of education and interaction;
- centralised and decentralised training platforms; and
- means of information security and centralised filtering incompatible with the educational process content, etc.

Each of these components is constantly changing and improving. Therefore, the task of universities – to prepare professionals having professional competence – can also embrace:

- analysing market offers concerning available systems and technologies of development of an information and educational e-environment;
- testing, implementing, and evaluating IT technologies for an e-learning system;
- choosing the form and means of presentation of educational e-content;
- advising and verifying compliance solutions according to the requirements of an information and educational e-environment;
- developing instructions for the use of resources and content;
- organising the educational process using an information and educational e-environment, and evaluating its effectiveness;
- monitoring the use and satisfaction of participants in the educational process component of an information and educational e-environment; and
- managing the educational process using information resources of an information and educational e-environment to provide high-quality educational services 24×6×365.

Today's graduates should be inherent in combining educational, technical, and creative skills (Morze, Balyk, & Smyrnova-Trybulska, 2014, p. 127).

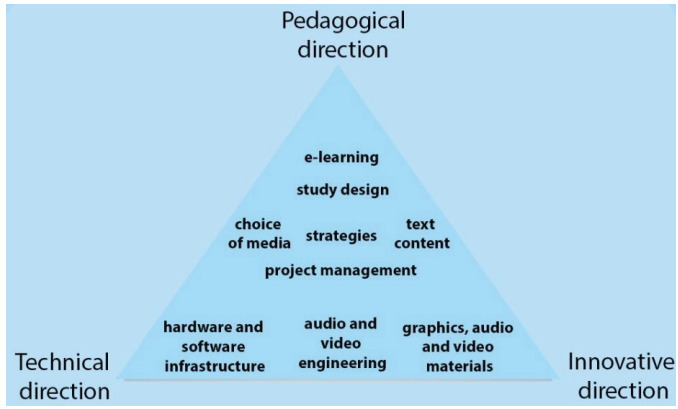

Figure 1. Job profile diagram of a modern graduate.

S o u r c e: own work.

In order to solve this problem, Borys Grinchenko Kyiv University introduced preparing graduates who besides a professional competence have additional special competencies, particularly in the development of IT infrastructure, design and development of an information and educational e-environment, and electronic and blended learning, which is the key component of information and educational e-environment of the university. This training is carried out when selecting students' further specialisation – "Management of e-learning," which makes it possible for students to acquire the necessary competencies of a manager of e-learning.

The main roles of a manager of e-learning are: organiser of e-learning, developer, and e-tutor (Morze, Balyk, & Smyrnova-Trybulska, 2014, p. 126) (see: Figure 2).

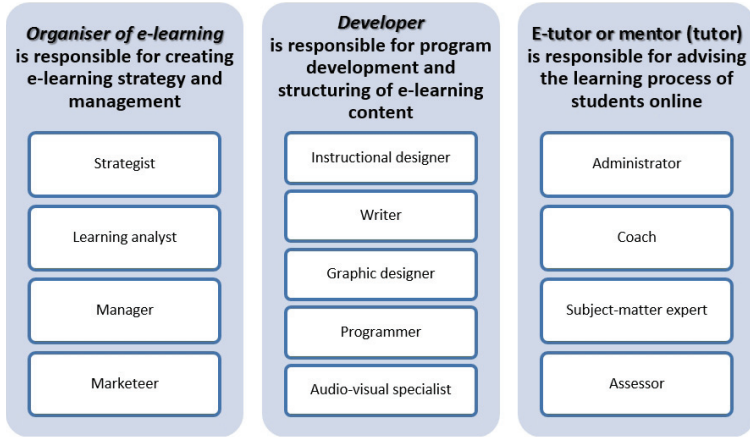

Figure 2. Roles of a manager of e-learning.

S o u r c e: own work.

Training Managers of E-learning

Training managers of e-learning is performed basing on a specially designed curriculum for two years at the master's studies. The training is designed to develop the professional competence of students in the design and management of e-learning for different age groups, preparing graduates for the implementation of the educational process in the information and educational e-environment using e-learning technologies.

Features of the training of managers of e-learning are as follows (Morze, Balyk, & Smyrnova-Trybulska, 2014, pp. 123–137):

- It is based on global approaches to training in the field of e-learning, and it allows giving graduates relevant documents (taking into account the experience of training these professionals in different countries, including Poland, Slovakia, Portugal, the Czech Republic, Russia, Spain).
- It involves the study of Internet services, gadgets, ways of learning management based on them, the organisation of formal, non-formal, and informal studies based on modern ICT, the introduction of steam, collective project activities, and protection of master's work as a start up.
- It ensures the implementation based on adaptive learning, forming soft skills, and training closer to the real "production" process.

During the training, students are invited to learn four key disciplines, each of which is a logical continuation of the previous one (See: Table 1).

Let us consider the content of new disciplines.

Table 1.
The recommended list of subjects in a curriculum for students of "Management of e-learning" specialisation

No.	Code	Name of Subject	Estimated number of credits / hours	Name of the semantic module	The form of the final control
				Disciplines	
1.	VDS. 1.01	Internet and applied information technology in education	8/240 (year 5, term 1)	New Information Technologies in Education; E-learning as an example of innovation in education; Electronic educational resources to support e-learning; Applied Information Technologies for the educational process; E-learning in the corporate sector.	exam

2.	VDS. 1.04	Managing the IT infrastructure of educational institutions	4/120 (year 5, terms 1–2)	Designing IT infrastructure; Programming software for educational institutions; ICT policy and IT infrastructure of educational institutions; The use of cloud technologies for building IT infrastructure of educational institutions.	test, exam
3.	VDS. 1.02	Innovative methods, technologies, and monitoring the quality of e-learning	6/180 (year 5, term 2, year 6, term 1)	Education policy in the field of ICT of educational institution; Educational technology and science communication; Fundamentals of educational design; Monitoring and evaluating the quality of e-learning; Non-formal education and training; Joint project.	test, exam
4.	VDS. 1.03	Design and examination of high-tech information and learning environment	6/180 (year 5, term 2, year 6, term 1)	The concept of electronic information and educational environment; Design of information and educational environment of the university; Design of IT infrastructure and components of information and educational environment; Design of management procedures and processes using of information and educational environment; Examination of information and educational environment of the university; Design of Quality Assessment System of information and educational environment of the university.	test, exam
				Practice	
5.	VP. 1.01	Production (specialisation)	4.5/135		test
				Certification	
6.	VA. 1.01	Qualifying examination with specialisation	1.5/45		exam

S o u r c e: own work.

Design and Expertise of Information and Educational E-environment of the University

Features of the "Design and Expertise of Information and Educational E-environment" Course

The purpose of this discipline is to provide the basic profile training in the specialty, the formation of theoretical knowledge and practical skills in designing an information and educational e-environment, and the implementation of expertise of its quality. The main objectives are:

- to reveal the purpose, objectives, and functions of an information and educational e-environment in higher education;
- to create competencies which are necessary for use in the classroom information and educational e-environment of the university in the future manager of e-learning;
- to acquaint students with the standards and requirements for the structure of an information and educational e-environment;
- to form knowledge and skills at the stages of design of an information and educational e-environment of the university and its quality evaluation;
- to teach a creative approach to solving problems of designing teaching components, to form the skills to analyse IT infrastructure design, research problems, and psychological and educational situations in the design of use, process, and procedures of information and educational e-environment management;
- to develop and deepen the understanding of the ways and prospects of an information and educational e-environment in the university;
- to develop the ability of and the need for constant self-education and self-improvement, seeking scientific research ways to improve the educational and information e-environment;
- to create favourable conditions for the pursuit of scientific research ways to improve their work.

Following the completion of the discipline, the student should know:

- the purpose, objectives, and functions of, and requirements for an information and educational e-environment, as well as its classification;
- stages and phases of design of an information and educational e-environment;
- standards for the design and execution of project documentation;
- a systematic approach to designing an information and educational e-environment;
- level of IT infrastructure design of an information and educational e-environment;
- procedures of management of an information and educational e-environment;
- the model of the use of an information and educational e-environment; and

- methods of evaluating the quality of an information and educational e-environment.

The student should be able to demonstrate the ability to:

- study domestic and international experience in design of an information and educational e-environment;
- analyse and document requirements of an information and educational e-environment;
- design data models and process models;
- use modern CASE-technology, maintain and evaluate the quality of an information and educational e-environment;
- master the latest methods, tools, design tools of an information and educational e-environment on their own;
- improve personal and professional levels.

The teaching card of discipline is presented in Table 2 (Glazunova & Buinytska, 2016, p. 11).

Table 2.
Teaching discipline card. "Design and expertise of information and educational e-environment"

Topic (name, points)	1. The concept of electronic learning environment (64 points)		2. Designing IT infrastructure and components of learning environment (64 points)		3. Design management procedures and processes used in learning environment (64 points)		4. Expertise of learning environment of the university. Quality Assessment of learning environment (64 points)	
Topics	1	2	3	4	5	6	7	8
Lectures (topics, points)	1. Appointments, tasks, functions, classification of information and educational e-environment (IEE). The structure of the IEE of the university. Cloud-oriented IEE of the university (1 point)		2. Stages of designing IEE of the university. Design development processes of IEE, IT infrastructure, components of e-collaboration and e-interaction of IEE of the university (1 point)		3. Design management procedures of IEE. Designing processes using IEE (1 point)		4. Performance measures of IEE. Criteria of expert evaluation of IEE. Factorial-criteria Quality Assessment Model of IEE. Tools of Evaluation of IEE. (1 point)	

Practical laboratory sessions (topics, points)	PW1. Appointments, tasks, functions, classification of IEE (11 points)	LW1. Structure of IEE of the university. Cloud-oriented IEE of the university (11 points)	PW2. Design development processes of IEE. Designing of IT infrastructure of IEE of the university (11 points)	LW2. Design components of e-collaboration and e-interaction of IEE of the university (11 points)	PW3. Design management procedures of IEE (11 points)	LW3. Designing processes using IEE (11 points)	PW4. Performance criteria of IEE. Classification criteria and requirements for them. Criteria of expert assessment of IEE (11 points)	LW4. Factorial-criteria evaluation model quality of IEE. Quality Assessment Tools of IEE (11 points)
Individual work	Individual work (5 points)		Individual work (5 points)		Individual work (5 points)		Individual work (5 points)	
Final control (type, points)	Exam (40 points)							

S o u r c e: own work (Glazunova & Buinytska, 2016, p. 1l).

Features of the "Design and Expertise of Information and Educational E-environment" Training Course

Teaching discipline for students of master's degree was carried out on the basis of 50/50 using blended learning technology, since the appropriate electronic learning course was developed in the information and educational e-environment of the university (developer: O. Buinytska; available at: http://e-learning.kubg.edu.ua/course/view.php?id=2741) (See: Figure 3).

Blended learning in a flipped model can "flip" the organisation of the learning process, rearranging its key components. Using an inverted model of blended learning, we can get (Morze, Buinytska, & Varchenko-Trotsenko, 2016):

- an introduction to learning outcomes, levels of assimilation of content, alignment of individual educational programmes and learning paths;
- self-study materials available for learning (online), which make it possible to study more complex material, and practical skills and competencies including group and project activities during classroom; and

- self-control of our own course advancement and adjustment of our own programme.

The feature of flipped study is familiar with the results of study course achievement goals that are specified in the criteria and levels of evaluation results. Then, the content of the main part (in modules, themes) is described, with presentation of electronic and classroom parts of the course, in each of which the criteria and levels of evaluation are also specified, displaying results for each completed task and capturing the module generally.

The essence of flipped study is that prior to the classes students independently study the material (lecture), located in an information and educational e-environment. Students come to the classroom lesson with some knowledge, which makes it possible for them to be prepared to accept more complex tasks. The teacher in the classroom lesson offers a higher level of task complexity, with the performance of which students have difficulty.

Consolidation of acquired knowledge is also organised in an information and educational e-environment in the form of homework. This may be of practical tasks using Internet resources, inter-assessment and self-assessment, or reflection during the course.

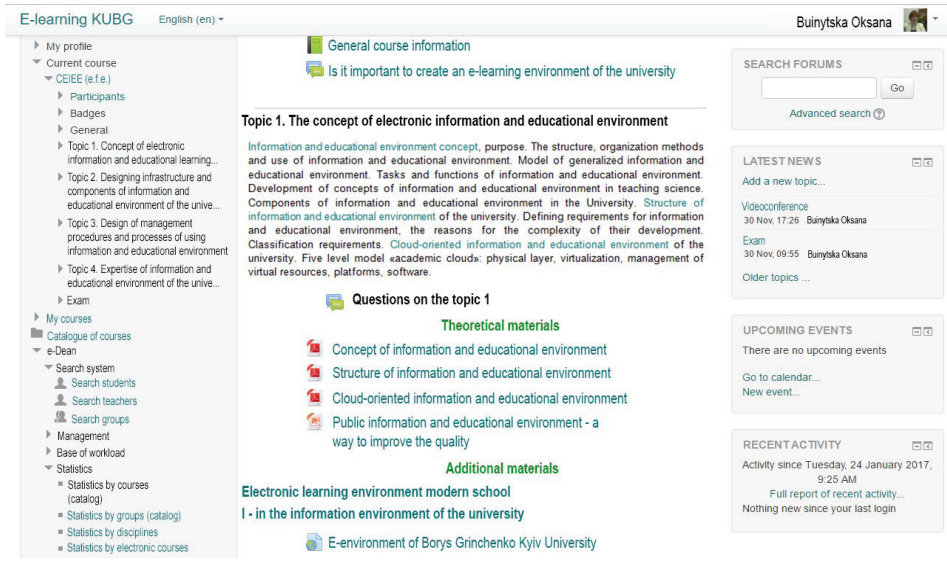

Figure 3. Electronic course "Design and assessment of information and educational e-environment"

S o u r c e: http://e-learning.kubg.edu.ua/.

In the study of topic 1, students explored the purpose, objectives, function, and classification of an information and educational e-environment. They were

acquainted with the model of an information and educational e-environment, designed on the example of the Borys Grinchenko Kyiv University, its structure and components. We determined the requirements for an information and educational e-environment, and the reasons for the complexity of its development.

Topic 2 was dedicated to the design phase of an information and educational e-environment of the university: defining goals and objectives, requirements analysis to ensure the quality of training IT professionals at universities, analysis of functional information and educational e-environment, building its structural-functional model, the choice of technology infrastructure, choices of software platforms, designing data structures, designing information management, designing management procedures, planning application information and educational e-environment. During the design of the manufacturing process of the information and educational e-environment, characteristics of processes that provide the functionality of the system were studied: preparation of an information and educational e-environment, selection and creation of electronic educational resources; methods and organisation of e-learning; training students and teachers to use an information and educational e-environment; quality assessment of an information and educational e-environment. The process of designing IT infrastructure included a study of physical and virtual management of virtual resources, platforms, and software. The study of the components of e-collaboration and e-interaction made it possible to design the components of educational-methodical guidance (system of e-learning, electronic repository of educational materials, base of masterworks, etc.), components of the scientific direction (institutional repository, electronic publications, electronic conferences), its requirements, and components for e-collaboration. Results of mastering the topic were presented in the form of mind maps with the results of a survey research design stage, certain manufacturing process of the information and educational e-environment, designed IT infrastructure, and the indication of the main ways designing of a simulated information and educational e-environment.

The study of topic 3 includes: 1) procedures of management of elements of the information and educational e-environment based on ISO 9001 (content procedures, form of the description, method of introduction at universities); 2) processes and stages of application of the information and educational e-environment (the use of e-resources and services that are hosted in the academic cloud of university, adapting resources to student's needs); and 3) methods of application of the information and educational e-environment for all participants in the educational process (students, teachers, administration, etc.).

Topic 4 was devoted to expert evaluation of an information and educational e-environment and efficiency criteria. Examination components of information and educational e-environment were carried out in sequence "meta–object–means–process–product." Instruments of quality evaluation of an information and educational e-environment, quality evaluation methods, and basic tools for

assessment, projected by supporting and developing an information and educational e-environment, were studied.

The result of mastering the discipline by students was the design of models of information and educational e-environment in schools where they were studying or working.

Design of Information and Educational E-environment of Educational Institutions

The design of the information and educational e-environment of the institution was the main task of the students during the manufacturing practice of specialisation. Bases of practice, which lasted for 3 weeks, were selected schools (grades 1–3) and preschool educational institutions of different levels of IT infrastructure.

Task 1

Monitoring the implementation of ICT in educational institutions:

- the analysis of educational policy on ICT; the interview with the head of the institution and his or her deputies;
- ICT-competence of teachers, educators of the institution; creation of a questionnaire; conducting surveys; the analysis of the survey;
- the analysis of the IT infrastructure of the institution (hardware, software, information, educational, scientific support).

Task 2

Choosing the task:

- developing a consultation blog;
- school site;
- Google Calendar for managers;
- Google group to display the main activities of the institution.

Task 3

Workshop (training):

- holding a workshop (training) for teachers (educators) of ICT use in education or performance at the teachers' meeting on the possibilities of online learning.

Task 4

Preparing guidelines for:

- design of information and educational e-environment of educational institutions,
- modernisation of IT infrastructure,
- formation of ICT-competence of teachers from educational institutions.

Task 5

Presentation of execution:

- presentation of practice on the Wiki Portal.

An example of performed tasks posted on the University Wiki portal is presented in Figure 4.

In addition to the publication of the created project, students presented their achievements in the practice protection, which are publicly placed on the Wiki portal of BGKU.

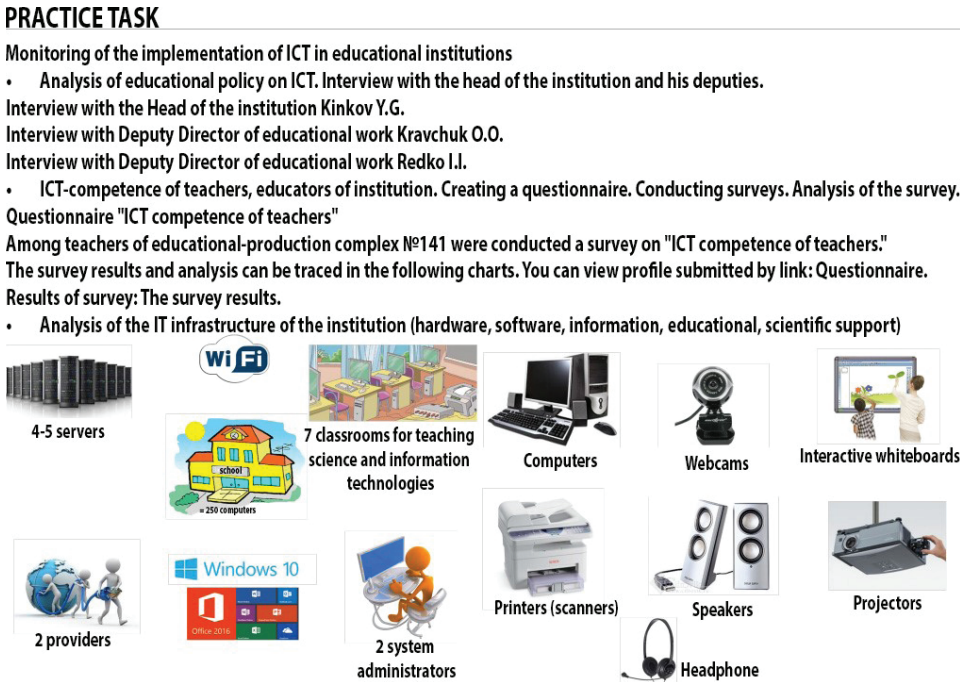

Figure 4. An example of practice assignment.

During the analysis of the feasibility of introducing such a specialisation, students were surveyed. 43 respondents took part in it (students of groups Dom-1-15-2.2z, POm-1-15-2.2z). 82% of master's students indicated that knowledge acquired during the study subjects is very useful and necessary nowadays, 18% – do not believe in expediency because they do not know how it may affect the administration of the institution to build a high-quality information and educational e-environment. Students within the survey were asked to assess their own level of competence acquisition as a result of studies of the specialisation on a 4-point scale, as presented in Figure 5.

53% of the students rated a maximum score acquired professional competence necessary to carry out educational activities; for administrative activity: 4 points – 31%, 3 points – 47%, 2 points – 22%; for the implementation of the project: 4 points – 40.6%, 3 points – 46.9%, 2 points – 12.5%; specific competencies: 4 points – 34.4%, 3 points – 43.8%, 2 points – 21.8%.

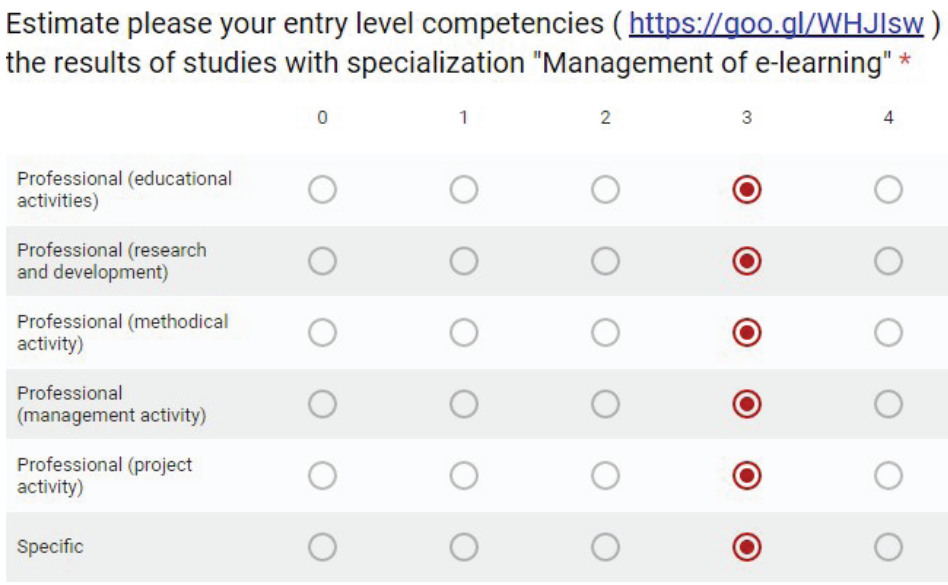

Figure 5. The view of the questionnaire.

The level of exposure (on a 4-point scale) of study subjects of specialisation in the formation of professional competencies for the survey is as follows:

- innovative methods, technology, and quality monitoring of e-learning: 4 – 78.1%;
- design and examination of information tech learning environment: 4 – 64.2%;
- Internet and application of IT in education: 4 – 78.1%;
- management of infrastructure of educational institutions: 4 – 65.6%.

Readiness to use ICT in professional activities is presented in Figure 6.

I do not see the need to use ICT in their work – 3.1%.
I understand the need to use ICT in their professional activities,
but the initiative on the use of exercise is not ready (1) – 18.8%.
Systematic use of ICT for learning,
dialogue and is ready to (a) use professional activities – 81.3%.
Ready to (a) improve the forms and methods of using ICT – 81.3%.
I speak at a high level and teach others – 21.9%.
Finished (a) to be a “change agent” for the use of ICT – 56.3%.
Not ready for effective use of ICT in school – 3.1%.
Other – 0%.

Figure 6. Readiness to use ICT in professional activities.

54% of the students see the necessity to introduce the basis of “Innovative methods, technology, and quality monitoring of e-learning,” “Design and examination of information tech learning environment,” “Internet and application of

IT in education," "Management of infrastructure of educational institutions" during the first courses of all specialties, as specialists today ought to have acquired ICT competencies.

Conclusion

To solve complex problems, current graduate students should master basic and specialised knowledge, the methodology of scientific research, and information and communication technology, in order to be able to use all the new and emerging science and practice, to adapt to market changes, to improve their skills, and to be ICT competent. UNESCO Guidelines emphasise that for the modern professional it is not enough to be technologically literate and be able to shape one's skills, including technological ones. Modern teachers should be able to help students use ICT to successfully cooperate, to solve arising problems, to develop 21st century skills, and to create and develop a high-quality information and educational e-environment.

The introduction of "Management of e-learning" specialisation makes it possible to prepare such qualified professionals who possess pedagogical, technological, and creative skills, as well as expertise, which will build right educational activities of the institution designed using the information and educational e-environment.

Acknowledgments

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References

Morze, N., Balyk, N., & Smyrnova-Trybulska, E. (2014). Анализ зарубежных и отечественных программ подготовки менеджеров e-learning. *Edukacja Humanistyczna*, *2*(31), 123–138. Accessed 15 February 2017. Retrieved from http://wshtwp.pl/eh-2014-2/.

Morze, N. (2016). Introduction. In N. Morze (Ed.), *Open educational e-environment of modern university. Collected scientific works* (2), E7–E10.

Morze, N. & Buinytska, O. (2015). Open e-environment – The key instrument of the education quality. *International Journal of Research in E-learning*, *1*(1), 27–46.

Morze, N., Buinytska, O., & Varchenko-Trotsenko, L. (2016). Створення сучасного електронного навчального курсу в системі MOODLE *:* навчальний посібник. Kamenets-Podolsky. PH: Buinytskyi O.A. Accessed 15 February 2017. Retrieved from http://elibrary.kubg.edu.ua/18684/.

Glazunova, O. & Buinytska, O. (2016). *Design and expertise of high-tech information learning environment: working program of discipline*. Kiev: BGKU.

Panchenko L. F. (2010). *Information and educational environment of the modern university: Monograph*. Luhansk: Luhansk Taras Shevchenko National University.

Smyrnova-Trybulska, E. (Ed). (2014). E-learning and intercultural competences development in different countries: monograph. Katowice/Cieszyn: Studio Noa.

Nataliia Morze, Oksana Buinytska

Szkolenie menedżerów e-learningu w zakresie projektowania najnowocześniejszego środowiska nauczania elektronicznego

S t r e s z c z e n i e

Kształcenie w dzisiejszych czasach musi odzwierciedlać potrzeby społeczeństwa – musi być dostępne przez całe życie, dla wszystkich i na wszystkich poziomach. Realnym krokiem w stronę nowoczesnego kształcenia jest stworzenie e-środowiska informacyjnego i edukacyjnego, korzystanie z otwartego nauczania i zapewnianie otwartego dostępu do źródeł edukacyjnych. Aby zapewnić jakość edukacyjnego środowiska informacyjnego, wciąż potrzebne są organizacja i zarządzanie procesem kształcenia, prawidłowe opracowywanie infrastruktury informatycznej, system zarządzania nauczaniem, przygotowywanie i tworzenie treści edukacyjnych. Dlatego też istnieje potrzeba organizowania szkoleń, które mogłyby pomóc zrealizować wyżej wymienione zadania. Szkolenia te miałyby na celu zorganizowanie procesu kształcenia w nowoczesnej formie, wykorzystującego dostępne e-środowisko informacyjne i edukacyjne 24×7×365.

S ł o w a k l u c z o w e: menedżer e-learningu, e-środowisko informacyjne i edukacyjne, jakość procesu nauczania, planowanie e-środowiska informacyjnego i edukacyjnego, system zarządzania nauczaniem, nauczanie hybrydowe (blended learning)

Nataliia Morze, Oksana Buinytska

Подготовка менеджеров электронного обучения к проектированию высокотехнологической электронной образовательной среды

А н н о т а ц и я

Образование сегодня должно адекватно отражать потребности общества и быть доступным на протяжении всей жизни, обеспечивать равный доступ для всех людей на всех уровнях.

Реальным шагом в решении этих проблем является создание информационно-образовательной электронной среды, использование открытого обучения и предоставление открытого доступа к образовательным ресурсам. Для обеспечения качества образовательной информационной среды по-прежнему необходима организация и управление учебно-воспитательным процессом, правильное развитие ИТ-инфраструктуры, системы управления обучением, подготовка и создание образовательного контента. Поэтому существует необходимость в подготовке кадров, которые могли бы решать перечисленные задачи по организации учебного процесса на современном уровне с использованием информационно-образовательной электронной среды доступной 24×7×365.

К л ю ч е в ы е с л о в а: менеджер электронного обучения, информационная и образовательная электронная среда, качество процесса обучения, планирование информационно-образовательной электронной среды, системы управления обучением, смешанное обучение

Nataliia Morze, Oksana Buinytska

Preparación de los gestores de e-learning para diseñar un entorno de aprendizaje de alta tecnología

R e s u m e n

Hoy en día la educación debe reflejar adecuadamente las necesidades de la sociedad y estar disponible a lo largo de toda la vida, proporcionando acceso igualitario a todas las personas de cualquier nivel social. Un paso decisivo en la solución de estos problemas es crear el e-ambiente educacional e informacional, el uso de aprendizaje abierto proporciona acceso abierto a los recursos educativos. Para garantizar la calidad del entorno de información educativa sigue siendo necesaria la organización y gestión del proceso educativo, el desarrollo adecuado de la infraestructura de TI, un sistema de gestión del aprendizaje, la preparación y creación de contenidos educativos. Por tanto, existe una necesidad de capacitación para poder resolver las tareas citadas con el objetivo de organizar el proceso educativo con el nivel adecuado utilizando un e-ambiente educacional e informacional disponible 24×7×365.

P a l a b r a s c l a v e: gestor de e-learning, información y e-entorno educacional, la calidad del proceso de aprendizaje, planificación de la información y e-entorno educacional, sistema de gestión de aprendizaje, aprendizaje semipresencial

II

ICT Literacy Development

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The Research on Visual Literacy in Transliteracy as the Main Ability to Understand and Communicate in the 21st Century

Abstract

This paper describes describes the cultural and technological context of visual literacy, resulting from the specificity of the evolutionarily expanding culture of image and the development of the information society, in the context of the concept of *transliteracy*. It presents the results of pilot studies of Polish university students for specific visual skills. Comparative material for research tasks of the prepared project "The legitimacy of visual literacy in the process of education" is a set of visual literacy (Visual Literacy Competency Standards for Higher Education, 2011) developed in academic and scientific environments in the USA (The Association of College and Research Libraries, ACRL).

K e y w o r d s: information literacy, visual literacy, visual culture, information culture, transliteracy, digital education

Introduction

Learning is one of the basic human tasks and challenges. In broad terms, the process of education is understood as learning, which is acquiring knowledge about the surrounding natural and physical environment, as well as the world of arts and culture. The information and skills which we acquire through experience

make it possible to build creative attitudes and to function better in the surrounding reality. Achieving necessary proficiencies during school education or through self-development, including honing talents and interests, enables one to develop one's individual personality and to use one's qualifications on the job market. One of the essential proficiencies which allow unimpeded motility in the technology dominated environment are informational competencies, which include visual competencies as well. In the age of dynamically expanding multimedia resources, the possession of visual knowledge and image manipulation capabilities in the process of education and communication seems necessary. Image as a medium brings great – although still not fully exploited – potential, which is worth utilising in educational practice.

Contemporary intercultural communication is an interdisciplinary and multi-faceted symbolical, social, and ideological discussion that takes place according to specific behaviours, norms, and customs. It takes place by the creations of a specific society, including art, technology, ideology, and education, which collectively create an arrangement between the sender and the receiver, based on either mutual understanding and acceptance or their denial. We discover the world not only with words and texts but also with images embedded in real life. The visual area makes for a specific plateau of communication, in which we can distinguish the iconic and symbolic zones, which are the foundation for the language layer of interpretation. It operates with its own language of images and visual representations with references to the extensive knowledge conditioned by education, socialisation, and upbringing.

In the modern world, omnipresent communication is entering various areas of life. We speak through images in politics, education, and in the mass and elite culture. Irrespective of the finesse conceptions of designers of visual campaigns and architects of information, visual images speak to us directly. The acceptance of the visual form of communication as a method supplementing the message or transforming into a form of message has a long lasting cultural tradition, and sets our senses to value the visual experiences. The scope and the quality of the messages using images determine their reception and condition the acceptance or rejection of the visual form of communication. They also specify the need for participating in such an interaction.

Symbolic goods, which are within the reach of the communication influences, are the result of the axiological and normative behaviour of specific communities. They are subject to quality assessment in the context of the development of the civilisation: *communication is cultural through its scope and polite through its quality* (Mikułowski Pomorski, 2012, p. 307).

Image in Cultural Communication

The existing symbolic world in cultural communication is an extensive area that makes communication possible. The means of communication may be physical goods interpreted in the context of meeting higher needs, including works of art, that provide the speaker with a plethora of meanings, definitions, interpretations, and messages through content, form, and medium. Coding and decoding information is no longer an issue. So difficult in regular interpersonal communication, it does not differentiate the common world of symbols and meanings.

Visual forms in paintings, sculptures, architecture, visual arts, conceptual arts, performance arts, and other messages that operate with image cause identity, stereotypes, prejudices, and otherness to become the source of knowledge, unravelling new meanings and interpretations, enriching culture through development, and creating new schemes for knowledge.

Visual Literacy

The transformation of the 21st century, which is becoming more visual rather than text based, is caused by the ubiquity of images and visual media that interfere in the life of a human being. New technologies allow one to use visual content freely as well as to create new forms of messages by everyone. Imagination is not only a supplement of information but it can be used in a creative way at the initial stage of formulating content. It can bolster interpretation skills so that people will be prepared beforehand to use and create visual content critically. Visual competencies allow for full participation in culture and visually focused community.

The transformation of a modern society and a clear domination of the visual under the influence of images and visual media make a significant impact on shaping the life of a human being. The ubiquity of visual information used in intercultural communication (education and science, social life, culture and arts, advertising, architecture) does not always go well with the quality of visual interpretations of cultural texts, and, many a time, wrongly decoded, it handicaps cognitive processes. Cultural and contextual references of visual information require knowledge coming from the cultural capital acquired through generations, including visual knowledge understood as modes of visually transmitted knowledge embedded in the education system. It allows for expanding interpretation skills of visual data, their critical and creative use, as well as acquiring new ones, simultaneously adjusting to the legal and ethical standards of their use.

Visual Communication in the Educational Process

The interpretation of the traditional image requires skill in the fields of iconology, semiotics, and symbolism – the entire spectrum of visual knowledge conditioned by cultural and cognitive competencies. The contemporary needs in the field of interpretation of images used for visual communication require research techniques which have their source in the traditional visual skills, as well as those typical for digital communication.

The definition provided by J. Debes describes visual literacy as skills that allow for reading and recording of images:

> Visual Literacy refers to a group of vision-competences a human being can develop by seeing, and at the same time, having and integrating other sensory experiences. The development of these competences is fundamental to normal human learning. When developed, they enable a visually literate person to discriminate and interpret the visible actions, objects, symbols, natural or man-made, that he encounters in his environment. Through the creative use of these competences, he is able to communicate with others. Through the appreciative use of these competences, he is able to "comprehend and enjoy the masterworks of visual communication" (Debes, 1969, p. 27).

The prevailing traditional education provides limited visual "study." During their development, students acquire visual skills with respect to cultural models implemented by institutionalised educational requirements, environmental priorities, and individual needs. Manipulation and ideological implications of visual statements, which take place in the visual environment of a human being, are also pointed out at this stage of education.

Currently, due to the elevated educational needs resulting from the disseminating visuality of the 21st century society, it is essential to develop visual language skills, similarly to developing verbal language, in order to decode visual meaning (theatre, film, fashion, advertising, art, photography, public information, and education). Visual literacy is an autonomous discipline, which is not limited to the traditional history of arts, but – with the interdisciplinary cognitive background – it brings the technology and methodology of learning to education.

In order to efficiently decode and interpret images, and creatively encode and compose the meaning of visual communication, five stages of visual communication have been distinguished (Figure 1).

The first step is sensory perception – identification on the basis of individual experience; this is what one sees through lines, colours, shapes, and writing technique in relation to the individual development, acquired knowledge about the world, and perceived forms. The second step is the mental choice along with the description of these elements which build the entire representation, and of how

they influence the sense and the meaning that is captured. In the methodology of visual interpretation used in history of arts, both of these stages create what is called the pre-iconographic description. The next step is defining the meaning, naming the individual forms with respect to cultural references, semantic contents, and iconographic formats (iconographic description). The next step of the iconographic analysis is finding references for perceived forms in a broad cultural and civilisational perspective, in various possible historical, social, political, educational, and many other contexts. In the next step, described as a critical evaluation of the image, it is necessary to conduct a valuation of the meaning decoded in the previous stages with reference to independent views, rules, and values, as well as to confront it with other interpretations and opinions of the same type. It has to be an analysis and evaluation of both good and bad sides of this phenomenon, its nature being that of an intellectual inspiration, presented from a point view with specified values, for example: ethical, scientific, cognitive, aesthetical, and practical. It may concern content-related correctness (content-related criticism and empirical criticism), formal correctness (logical criticism), science (scientific criticism), methods (methodological criticism), etc.

Contemporary images we encounter every day – in commercials, journals, magazines, electronic publications – are works of designers, who digitally process photos according to graphic design rules, adapting the project to the needs of a visual message. These images are the outcome of numerous conversions and artistic manipulations which prevent the application of an objective analysis that implies the shift of visual impressions and formal differentiation of the composition onto the meaning perception and the interpretation of the conveyed content. Reflection of the reality through the image becomes more complicated because of adding meaning and contextual references. Direct associations of the meaning of the forms depend on the intentions of the creator of the visual message as well as on the interpretative capabilities of the recipient, i.e. the persons taking part in the communication process through image. According to the adopted interpretative scheme, one is assumed to conduct a formal analysis during the pre-iconographic interpretation, which includes intuitive differentiation of the simplest visual schema, and to attach justified cultural and mental meaning afterwards. By occurring relations, they will be subject to an interpretation resulting from the context of the visual presentation, conveying the intended content. The quality of the information obtained by the recipient is subject to critical analysis, depending on one's communicational comfort.

In the history of the visual message form, there have been many styles and methods of recording images. Historical reception variability, evaluation, and influence of the visual works of art, coming from the changing ideologies of the consecutive ages, is the source of the visual knowledge which currently is a component of a competence preparation of the contemporary society. When analysing a visual presentation, one cannot stop at the direct overview. References

to our visual knowledge should occur automatically, introducing interpretation to contextual links, revealing immaterial visual content (form–content–idea).

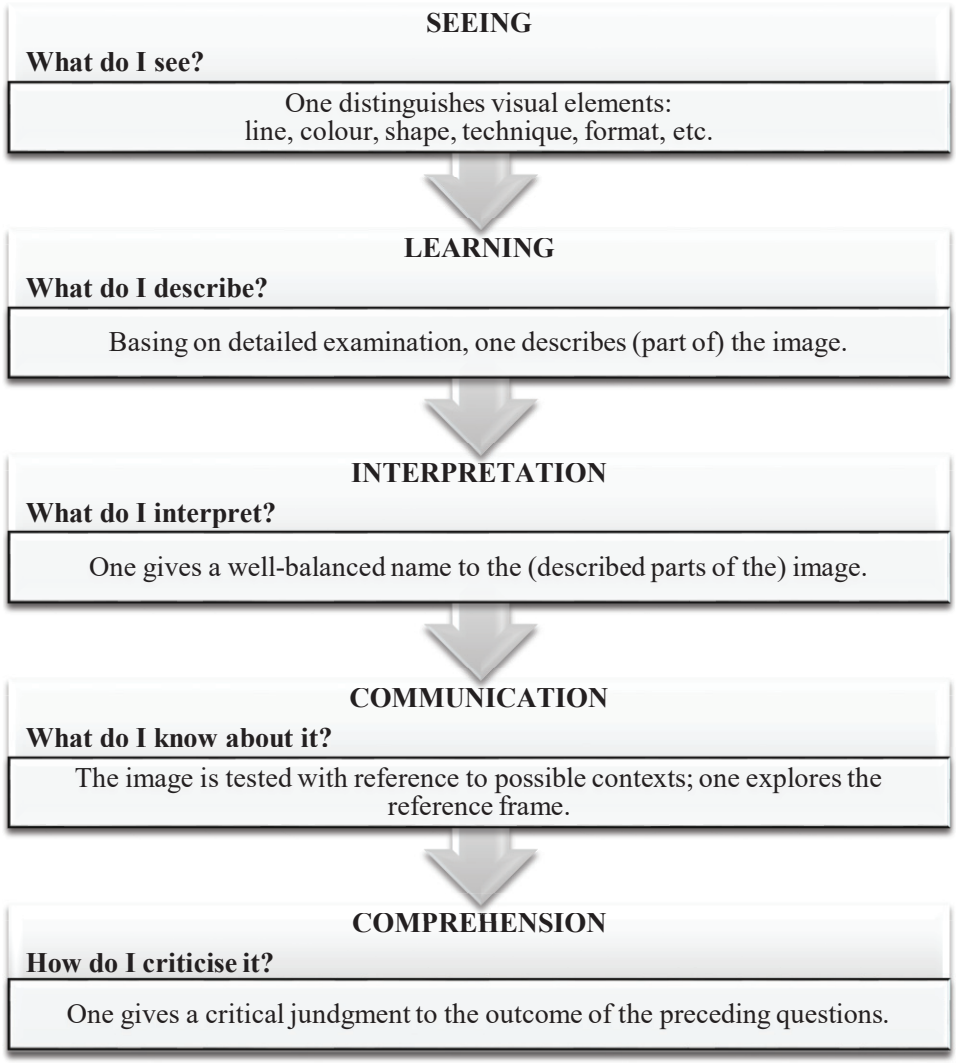


Figure 1. Visual communication in the educational process.

S o u r c e: Own work based on Velders, de Vries, & Vaicaityte, 2007. Retrieved from http://doc.utwente.nl/59769/1/Velders07visual.pdf. Accessed 29 February 2016.

Visual Literacy Programme

Contemporary culture is currently increasingly dominated by visual communication due to globalisation and the simplicity of using images, in contrast to verbal communication, which requires the knowledge of national languages.

The separation of language from the image – which has existed since the times of Gutenberg when the printed word dominated – has become less evident. Currently, elements belonging to conventional visual communication, i.e. iconography, illustration, schema, instruction manuals, charts, advertisements, comics, graffiti, websites, are combinations of verbal information and visualisation. Mass visual communication based on this system is a mixture of knowledge and conventional images that are in general circulation and thus widely available. According to T. Velders, S. de Vries, and L. Vaicaityte (2007), visual communication consists of syntax and semantics in order to create a form composed of visual elements, conveying specific content.

Visual communication in education corresponds to guidelines of learning which are focused on the method and the result. Below, there is a scheme of reading, writing, and communicating through image, consisting of a structure of undertaken actions with images based on the theory of image developed so far, in the context of educational and cultural needs. The three interweaving elements of visual communication – form, meaning, and idea – find reference in the educational process, in creating visual messages at the message conveying level (Figure 2).

Similarly to the three levels of verbal language – grammar, dialectics, rhetoric – in the visual literacy programme one can distinguish three levels of visual language, such as visual elements, visual dialectics, and visual rhetoric (Velders et al., 2007).

Visual elements (form–pre-iconographic description–symptom) present phenomena through a system of perceived details. The basic elements outlined by the eye are: line, colour, shape, as well as amplifying elements: form, space, and composition, dependent elements: repetition, point of view, and time, and material elements: texture, technique, and innovations. Dialectics (content–iconography–signal), understood as a method of study and conversion of the world, is the ability of having a dialogue with the use of an image. It is based on the knowledge of signs and symbols used for visual communication which have a universal character. However, visual rhetoric (idea–iconology–symbol) is focused on images we use in symbolic communication in order to persuade someone. It is both the practical creation of persuasive messages and their analysis. The spectrum of exploration conducted with the use of visual images concerns the persuasive purpose set in the previous stages, when choosing form and meaning.

The construction of visual didactic statements in the framework of e-learning with the use of computer networks and the Internet is an original solution for the information architecture in such forms of education as iconography, interactive and multimedia presentation, and network visualisations. It is based on natural human cognitive methods of visual and verbal utterance – repetition, abstraction, schematisation, integration, association, focus of attention, comparison, and profiling. In *Metafory komputerowe w e-kursach* (Kushtina, Różewski, & Susłow, 2007), the authors identify an independent knowledge unit in a so-called computer metaphor.

VISUAL LITERACY

FORM visual language structure	**CONTENT** visual communication	**IDEA** visual rhetoric

– in iconographic-iconological analysis (*Iconography. Iconology*, 1999)

Pre-iconographic description (and pseudo-formal analysis)	**Iconographical analysis**	**Iconological interpretation**
•Primary or natural subject matter constituting the world of artistic motifs (A) factual, (B) expressional. •Practical experience (familiarity with objects and events). •History of style (insight into the manner in which, under varying historical conditions, objects and events were expressed by forms).	•Secondary or conventional subject matter, constituting the world of images, stories, and allegories. •Knowledge of literary sources (familiarity with specific themes and concepts). •History of types (insight into the the manner in which, under varying historical conditions, specific themes or concepts were expressed by objects and events).	•Intrinsic meaning or content, constituting the world of "symbolical" values. •Synthetic intuition (familiarity with the essential tendencies of the human mind), conditioned by personal psychology and *Weltanschauung*. •History of cultural symptoms or "symbols" in general (insight in which, under varying historical conditions, essential tendencies of the human mind were expressed by specific themes).

– in educational process (Velders et al., 2007)

SYMPTOM	**SIGNAL**	**SYMBOL**
•grammar •visual elements	•dialectics •visual conventions	•rhetoric •visual metaphors

Figure 2. Visual communication in the educational process.

S o u r c e: Own work based on Velders et al., 2007; *Iconography. Iconology,* 1999. Retrieved from http://w3.gril.univ-tlse2.fr/Proimago/LogiCoursimage/panofsky.html. Accessed 10 June 2012.

It is an illustrative form of projecting reality, a simplified version of content in graphic form, possible for verbalisation. As a visual form of information it conveys meaning and allows for immediate understanding in various symbolic systems. By means of visualisation or illustration, the computer metaphor is a way of combining object semantics (describing meaning) with semantics of its surroundings in the form of a shared graphic model. Its purpose is to evoke mental activities, for example concept structuring in the field of graphic elements such as: map, diagram, concept hierarchy, hypertext, or semantic network (Kushtina, Różewski, & Susłow, 2007).

In the face of continual learning, e-learning methods meet the needs of different age and professional groups in the framework of required knowledge and planned professional actions of the students. Every kind of activity – cognitive, psychomotor, and emotional – takes place when interpreting terms presented in the visual form, their analysis and intellectual deduction being based on the ability to self-study. Psychomotor abilities serve as tools for observation, simulation, and processing of the graphically illustrated reality and virtual reality. Emotional activity, which is connected to experiencing and building values, is evoked by carefully designed computer metaphors, which are manifestations of attitudes towards the surrounding reality. Simultaneously with the acquired knowledge, the emotional background is also created, which can influence its durability.

The contemporary visual message is structured as an integrated system, differentiated with respect to the level of difficulty and functionally categorised. It consists of a network of intellectual links and references to mental meanings of a high level of symbolism and abstraction. The cognitive approach to the role and function of the image in the current educational system allows for using the visual message as an independent knowledge unit in message conveying (Schnettler, 2011). Being the modern form of communication, visualisation faces the cognitive needs of the contemporary society; the changing lifestyle forces the creation of adequate means of communicating knowledge, adapted in form and functionality for more demanding users in the framework of transliteracy (Duffelmeyer & Ellertson, 2005).

Research on Visual Literacy

Extensive studies conducted by the author of the project "Legitimization of visual literacy in the learning process" consist of a multicultural and technological context, evolving from the specifics of the evolutionary culture of the image. This programme encourages the information technology skills to be used in practical ways in the learning process. The assumption of the research project implemented in academic bodies is to release the creativity and the cognitive potential of the young generation in the scope of the visually transmitted information (conception, searching and acquisition, interpretation, assessment, usage, designing, and sharing). There will be an analysis of the effectiveness of learning in visual literacy

based on the results from the seven cognitive areas. The study on visual skills tests objects as well as social standards and activities in the context of interpreting culture, in connection with evaluating the effectiveness with regard to IT. Having visual competencies, humans should also be critical consumers of visual media and competent participants of the culture in visual knowledge.

Working with visual information should be based on searching skills, usage, sharing, and creating visual materials and as well as on the ethical and legal awareness of sharing and distributing visual content. It is one of the elements of the information competencies skill set of the contemporary society, which combines information skills, interpretation, culture, and visual communication with technological capabilities in terms of using digital media.

In the context of global learning, *Visual Literacy Competency Standards for Higher Education* (2011) is a positive example of actions meant to unify the strategic competence and didactic priorities that create new possibilities for using and evaluating visual methods of work and their professional development. Categorisation of visual competencies is marked by the behaviour of the contemporary information society which information needs may be met through new emerging visual interpretations of knowledge (http://scimaps.org/). Abstract thinking elicited by images, similarly to traditional linear memorising, responsible for expanding knowledge and intellectual development, refers to the intercultural intellectual resources. In light of the endless amounts of contemporary information, their acquisition depends on the specific mode of recording information which facilitates cognitive processes of structuring, systematising, symbolising, generalising, abstracting, etc. The image as a synthetic set of various contents – data, relationships, phenomena, hypotheses, conclusions, ideas – meets the cognitive needs even of the most sophisticated academic environments, and it currently functions as an independent body of knowledge susceptible to analysis and research according to specific disciplinary dogmas. In countries with an advanced information potential, the visual methods are commonly used in learning for theorising, making a point or proving hypotheses.

The analysed standards and competencies within visual literacy may be a step forward for the Polish education system at the academic level in order to spread the visual methods within the higher education system, reaching out to the needs of the modern multicultural information society.

Visual Literacy in Transliteracy

Transliteracy includes all current literacies (information literacy, media literacy, digital reading, digital literacy, visual literacy, etc.), allowing the use of the media and giving users technology and information base for communication, education, and discussion. By definition, it is "the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film, this digital social networks" (Thomas et al., 2007). It is

based on the convergence of media, forcing them to adopt a new, comprehensive perspective of interpretation. Transliteracy is located at the intersection of many disciplines, i.e. the humanities, social sciences, and technological disciplines. It is the basis of contextual interpretation of contemporary cultural texts based on cultural and intellectual event information. It is more the concept of working with modern media than the skill, which aims to strengthen the cognitive and social benefits by the participation of new technologies and the opportunities they offer.

In formalised education around the world, the reference to educational actions in higher education is a set of standards which precisely explains the competencies required for working with information at the academic level (Wieczorek-Tomaszewska, 2014; *Information Literacy Competency Standards for Higher Education*, 2000). In 2011, a similar document dealing with visual skills was created in academic environments in the USA (The Association of College and Research Libraries (ACRL)) – *Visual Literacy Competency Standards for Higher Education* (2011). It describes a set of dispositions concerning abilities such as: searching, interpreting, using, creating, describing, spreading (according to law) of visual content, which are a part of visual communication.

Among the visual communication standards in force at the academic education level, the following skills appear in the document:

- defining one's informational needs, including types of necessary visual materials;
- effective and efficient searching for images and visual media in the available resources;
- interpreting and analysing the meaning of images and visual media in the cultural, social, and historical context;
- evaluating images and verifying their sources;
- using image forms in order to effectively visualise terms, phenomena, and processes;
- designing and creating own visual messages; and
- having the knowledge of ethical, legal, social and economic issues related to the process of creating and using images and visual mass media, including the familiarity of the legal systems defining the scope of copyrights (*Visual Literacy*…, 2011).

In *Standards*, the attention has been focused on the awareness of individual informational needs in the scope of visual materials through defining the situation, in which such needs evoke the efficient use of images. The conscious user of visual materials is able to independently define the criteria for the selection of concrete presentations, and specify the goals of these actions (illustration of terms, process models, construction schema, and photography). He or she can also identify the available visual resources and types of media.

The unlimited capacity of the World Wide Web is the source for creating collections of visual materials, potentially meeting the cognitive and creative user

needs. In the framework of visual competencies, the ability to find images and graphic materials in many different sources plays a fundamental educational role. In order to take advantage of this ability, what is necessary is the knowledge of sources: where they are, what their limitations are, and what the conditions of using them are; in order to do this, one can use search engines for photos, images, clip arts, etc. The choice of the appropriate search engine is a substantial difficulty for many people, similarly to a properly edited Works Cited section.

Apart from the awareness, the searching ability, and the description, the next step within a specific competence in the framework of visual communication is image perception, decoding of meaning, and interpretation along with the analysis in the context of existing conventions, and environmental, social, or cultural conditions. The interpretation occurs on the basis of the visual knowledge, the context and the intertextuality of the meaning. The visual knowledge is constructed along the process of education and socialisation of a person; it can be acquired through interaction with other members of the society, i.e. through gathering opinions and establishing terms. It is an element of knowledge and cultural competencies, a cultural capital, a component of one's habitude as a member of the society in which he or she lives and grows up.

Thanks to this knowledge, one can conduct an analysis and an evaluation of the content from different perspectives, that is – position the message in informational, cultural, and historical contexts. It is connected to another competence skill in the scope of visual communication, i.e. the evaluation and verification of the sources of the visual messages. It results from the need to shape informational consciousness with respect to the used procedures, allowing for manipulation of data and facts. In this case, the estimation of credibility of the recorded sources – the origin of the images and visual messages – constitute basic visual qualifications.

Information consciousness is a state allowing for creative and efficient use of visual representations in a form that is appropriate to the context, i.e. as a quotation, illustration of an object or term, proofs of claims and hypotheses, visual models, phenomena visualisation. Information consciousness is also an independent unit of knowledge built according to its internal structure, whose purpose is to accomplish the cognitive objective. In the framework of a creative use of visual forms, there is a possibility of going outside the known schema and experimenting, which enriches one's own work, giving it an unconventional scientific character through using visual thinking skills in order to explain and solve problems.

The next area of competence concerns workshop and technological skills allowing independent preparation and construction of graphical forms to deliver the informational and educational content. It is an element of the visual knowledge where, apart from cultural, content-related, and informational knowledge, there exists a condition of technological efficiency which ensures effective communication. Because of this, there will be a possibility of building single messages or entire narrations in a visual form, i.e. iconographies, posters, schema, presentations,

mind maps, etc. The rules for designing informational visual messages regulate competence conditions of correctly constructed images, including disposition of the sender, as well as perceptive skills of the recipients, for whom the message will be adapted. Currently, the professional informational statements in a visual form are works of artists and computer graphic designers. Such materials are used by the educational, public, and industry sectors (Pulak & Wieczorek-Tomaszewska, 2012). It should be assumed that with the spreading of graphic software and the increase of the technological skills of the society, there will be a shift of graphical design skills as a voicing element in many areas of life, including education and science.

The successive competencies covered in *Standards* are ethical and legal conditions concerned with acquiring and using informational material from the web. The need for shaping competencies in the field of understanding legal issues, the familiarity of licence regulations that ensures the appropriate use of information, visual as well, is currently – in the light of global social protests (Jurczyszyn, Kołtan, Kuczyński, & Rakusa-Suszczewski, 2014) – a subject of prioritised educational treatments. The habits of illegal copying, downloading, and abusing copyrights are common and indicate that there is a necessity of making users aware in the field of issues concerning intellectual property and its practical use in conjunction with social, economic, and ethical issues. The appropriate use of images and visual media, identification of typical licence limitations, allowing for appropriate use of image and the awareness of personal laws as the creator of the image for intellectual property is a subject of study conducted by the two authors in the further part of the presentation.

The presented visual literacy scope of competence, developed for higher education by ACRL, defines the level of skills and the spectrum of knowledge. It allows the students to search for visual information, conduct formal and iconographic analysis, give visual presentations, read contexts and applied conventions within scientific disciplines, and understand cultural references. As a conscientious user of information, a student, one should recognise the need for using visual forms, and as a participant of digital culture one should have the knowledge to acquire necessary images for creating own documents and studies, one should be familiar with publically available visual and audiovisual resources, and one should be able to select visual materials using adequate evaluation criteria. Preparation with respect to information technology and computer graphics helps define the appropriate data format, design own visual materials using numerous graphics editors, as well as use visual forms as a supplement for textual messages. The entirety of these behaviours will be called informational behaviours and the visual information, and working with it, in this context, will constitute an element of the information culture of the contemporary society building its standards of behaviour with respect to own cognitive needs for learning through entire life.

Visual Competencies in the Light of Own Research

Methodology

The selected research methods were determined by the goal of the project, save the unilateral analysis of the visual literacy phenomenon (statistically in the aspect of the representativeness of the results as well as acknowledging the quality). The project included the quantity approach as well as the quality approach. In order to organise the obtained information, the SWOT analytical tools were used, which are a starting point for further explications. The triangular method used in the project, meant for the supplementary usage of diverse techniques (two types of reconnaissance, questionnaires, data analyses) and sources of data (Polish and American students), makes for obtaining a depiction of the phenomenon from different perspectives and allows for better explaining the visual skill issue of the studied group as well as for determining the factors which influence the increase in the education activity in that field.

There is an analysis planned on the effectiveness of learning in the field of *visual literacy* based on the results from the seven cognitive areas. The author's goal for the participants of the research project was to play the role of critical consumers of visual media as well as competent participants of the visual knowledge culture.

The assumed classification in the project, based on *Visual literacy competency standards for higher education* (2011), is aimed at analysing the actions of the participants in an interdisciplinary environment of information of the higher education system in the context of defined competencies (Table 1).

Visual skills are considered to be a part and an extension of the information competencies of the contemporary multicultural society, which allow for freedom of movement in the intricacies of the information and communication systems. Within the information culture, they bring together *information literacy*, interpretation, and visual communication with technological skills in the scope of using digital media (Batorowska, 2013). Images make for individual objects of knowledge that retain their structure and logic (infographics, simulations, schemes, multimedia messages), and are susceptible for interpretation and academic analysis. They are aesthetic conceptual objects, designed to take the human perception to different levels of analysis. In environments based on standard textual methods of obtaining knowledge, they require specific cognitive skills which facilitate modelling of conscious and abstract thought processes. As a tool for the information architecture, they introduce structural designing of the information space meant for organising information.

Table 1.
Designed criteria and indicators for research
Seven groups of visual competencies. Tasks and indicators

Competencies tasks within visual literacy	Indicators
S-I Define your needs in terms and an image	Areas of exploration Sources Criteria Generating ideas Types and formats
S-II Find images	Research programmes Identification Selection Discoveries Organisation
S-III Interpret and analyse an image	Observation Textual data Context Understanding the mining
S-IV Access image usefulness	Source usability Effectiveness Aesthetics Transformation accuracy
S-V Effectively use images	Goal of the research project Using technology Impact of the project Communication Visual conceptions Choosing of the project
S-VI Create new images	Graphical representation Experimenting Creative reusing of visual motifs Visual conceptions Choosing of the best project
S-VII Ethically quote images and videos	Intellectual property Copyrights Censorship Privacy Documentation

S o u r c e: Own work based on *Visual Literacy Competency Standards for Higher Education*, 2011.

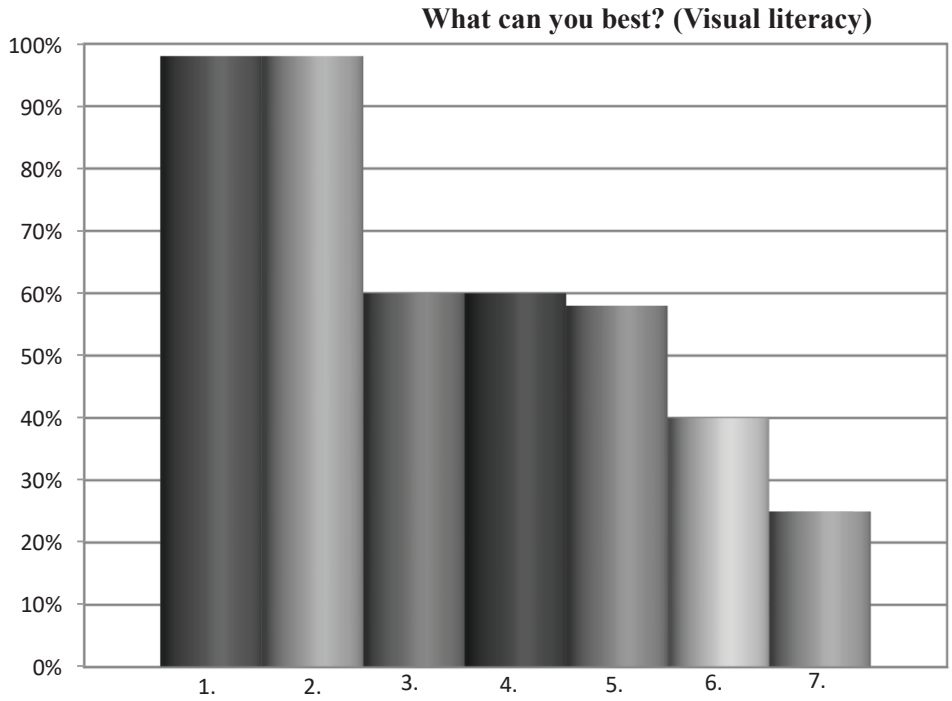
Report on the Pilot Research Programme of the Visual Literacy in the Academic Environment

The presented report on the pilot research programme is an introduction to the project implemented under the author's research: "Legitimization of visual literacy in the Polish academic environment" (*VLS No. A*). The project consists of groups of students selected from academic circles all over the country, based on the quota sampling. On the basis of the presented stage of the research project which included five focus groups in five academic centres (Pedagogical University

in Cracow, University of Science and Technology in Cracow, University of Silesia in Katowice, Warsaw Polytechnics, and The University of Gdansk), the main focus was on the analysis of understanding the definition of the visual information in the context of Lengler and Eppler's typology (Lengler & Eppler, 2007) and on the diagnostic measurements of the scope and type of *visual literacy* in the context of *Visual Literacy Competency Standards for Higher Education* (2011).

The first stage of the research (diagnostic tools of *Visual Literacy Standards No. A*) consisted of study activities aimed at making an initial diagnosis of the explored phenomenon by defining the appearance of the focus group, analysed with respect to the knowledge of the studied skills (Figure 3).

The research results show that respondents do not have difficulties in determining the goal, type, and scope of conducted visual activities (*1.*). They can properly define the need for using images in specific situations and plan the effectiveness of their visual activities in relation to the set learning goals (98%). A similar proficiency is declared with respect to workshop and logistics related skills (*2.*) of searching, acquiring, and sharing visual materials on the web. The two above skills do not pose any problems whatsoever for the respondents because their source is in the natural activity coming from the need to "exist" on the web, using its resources and communicating with people. The respondents were less prepared with respect to other analysed *visual literacy* standards, connected with the quality approach to the visual information, i.e. (*4.*) evaluating the image and its source and (*5.*) choosing the visualisation method for efficient visualisation of data, relationships, and ideas – these are the skills which were declared by 60% of the respondents. Even less of the respondents (58%) declared that they accurately interpret and analyse the meaning of images (visual activities) with an appropriate reference to cultural, social, and historical texts (*3.*). The creative approach in terms of visualisation (*6.*) connected with the ability to create visual messages would be used by only 40% of the respondents. The rest of the respondents did not have the chance to try out their visual information skills, be it using traditional or digital methods, during their institutional education process. Yet, a worse score was obtained with respect to the standard whose main focus is the ability to properly function in the Internet reality (*7.*), connected axiologically to the set of norms and rules in the modern information society. As much as 75% of the respondents do not possess the sufficient knowledge on ethical, legal, and economic topics connected with the process of creating and using images, and visual means of mass media.



The results based on the tasks performed by the respondents

- 1. Defining one's informational needs, including types of necessary visual materials (98%)
- 2. Effective and efficient searching for images and visual media in the available resources (98%)
- 3. Interpreting and analysing the meaning of images and visual media in the cultural, social and historical context (60%)
- 4. Evaluating of images and verifying their sources (60%)
- 5. Using image forms in order to effectively visualise terms, phenomena and processes (58%)
- 6. Designing and creating own visual messages (40%)
- 7. The knowledge of ethical, legal, social and economic issues related to the process of creating and using images and visual mass media, including the familiarity of the legal systems defining the scope of copyrights (25%)

Figure 3. Results of survey for students. Diagnostic study on *Visual Literacy Competency Standards for Higher Education* (Initial form). Visual competency levels (*Visual Literacy Standards No. A*).

S o u r c e: own work

Conclusion

The appearance of the focus group outlined in the study shows individuals treating their visual activities as highly superficial. The recorded activities show a significant number of declarative behaviours rather than competent activities based on solid knowledge aimed at creating an efficient information visual message. Similarly, with respect to creativity, the research shows the activity of the respondents on a mediocre level. One of the most positive features registered in this section of the research is the desire to master and supplement the knowledge on the issues raised by the focal group which conducted a focused reconnaissance of the issues. The need for supplementing this particular area of knowledge brings certain suggestions in relation to strengthening the standards of preparing young people at initial stages of learning.

The fact that the respondents know so little about the rules of acquiring and sharing visual materials – especially copyrighted materials – indicates an immediate need for education, all the more that the activity of the Internet users in relation to "speaking with images" corresponds to lowering the education standards of the society. If we do not take educational steps towards developing visual competencies, we may be faced with distorting the cultural message, recreated by generation after generation, filled with new values and meanings, with respect to the evolutionary multicultural society.

Currently in the society of the 21st century, transliteracy – which puts the accent on understanding and communication skills – is required for the effective functioning. Visual literacy as a component of transliteracy and a result of media convergence is a natural bridge for the transfer of intergenerational cultural capital through digital media. It creates friendly learning environment for a young person, which is a guarantee of obtaining information, correct understanding, and an inspiration for creative behaviour, non-contradictory to accepted norms and values.

References

Batorowska, H. (2013). *Od alfabetyzacji informacyjnej do kultury informacyjnej. Rozważania o dojrzałości informacyjnej.* Warszawa: SBP.

Debes, J. L. (l969). The loom of visual literacy. *Audiovisual Instruction*, *14*(8), 25–27.

Duffelmeyer, B. B., & Ellertson, A. (2005). Critical visual literacy: Multimodal communication across the curriculum. *Across the Disciplines*. Accessed 4 April 2016. Retrieved from http://wac.colostate.edu/atd/visual/dufflemeyer_ellerston.cfm.

Iconography. Iconology. (1999). Accessed 10 June 2012. Retrieved from http://w3.gril.univ-tlse2.fr/Proimago/LogiCoursimage/panofsky.htm.

Information literacy competency standards for higher education. (2000). The Association of College and Research Libraries (ACRL). Accessed 30 May 2014. Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/standards/standards.pdf.

Jurczyszyn, Ł., Kołtan, J., Kuczyński, P., & Rakusa-Suszczewski, M. (Eds.). (2014). *Obywatele ACTA.* Accessed 10 April 2016. Retrieved from http://www.ecs.gda.pl/library/File/nauka/do_pobrania/Obywatele_ACTA_Raport.ECS.pdf.

Kushtina, E., Różewski, P., & Susłow, W. (2007). Metafory komputerowe w e-kursach. *E-mentor*, *4*(21). Accessed 27 February 2016. Retrieved from http://www.e-mentor.edu.pl/drukuj/artykul/numer/21/id/453.

Lengler, R., & Eppler, M. J. (2007). A *periodic table of visualization methods.* Accessed 10 July 2016. Retrieved from http://www.visualliteracy.org/periodic_table/periodic_table.html.

Mikułowski Pomorski J. (2012). *Jak narody porozumiewają się ze sobą w komunikacji międzykulturowej i komunikowaniu medialnym*. Kraków: Universitas.

Pulak, I., & Wieczorek-Tomaszewska, M. (2012). Visual skills in the context of lifelong learning. In E. Smyrnova-Trybulska (Ed.), *E-learning for societal needs* (pp. 337–362). Katowice/Cieszyn: Studio Noa.

Schnettler, B. (2011). W stronę socjologii wiedzy wizualnej. *Przegląd Socjologii Jakościowej*, *IV*(3). Accessed 10 July 2016. Retrieved from http://www.qualitativesociologyreview.org/PL/Volume8/PSJ_4_3_Schnettler.pdf html.

Thomas, S., Joseph, Ch., Laccetti, J., Mason, B., Mills, S., Perril, S., & Pullinger, K. (2007). Transliteracy: crossing divides. *First Monday*, *12*(12). Accessed 10 July 2016. Retrieved from http://firstmonday.org/ojs/index.php/fm/article/view/2060/1908.

Velders T., de Vries S., & Vaicaityte L. (2007). *Visual literacy and visual communication for global education*. Accessed 29 February 2016. Retrieved from http://doc.utwente.nl/59769/1/Velders07visual.pdf.

Visual literacy competency standards for higher education. (2011). Chicago: The Association of College and Research Libraries (ACRL). Accessed 30 May 2016. Retrieved from http://www.ala.org/acrl/standards/visualliteracy.

Wieczorek-Tomaszewska, M. (2014). Kompetencje wizualne w praktyce akademickiej. *Library and Education*, *5*. Accessed 10 July 2014. Retrieved from http://www.bg.up.krakow.pl/newbie/index.php/bie/article/view/68/68.

Małgorzata Wieczorek-Tomaszewska

Badania *visual literacy* w *transliteracy* jako główne zdolności do rozumienia i komunikowania się w XXI wieku

Streszczenie

Autorka opisuje kulturowy i technologiczny kontekst alfabetyzmu wizualnego, wynikający ze specyfiki ewolucyjnie rozwijającej się kultury obrazu i kształtowania się społeczeństwa informacyjnego w kontekście koncepcji *transliteracy*. Przedstawia wyniki badań pilotażowych dotyczących określonych umiejętności wizualnych polskiej młodzieży akademickiej. Materiałem porównawczym dla przygotowanych w projekcie „The legitimacy of visual literacy in the process of education" zadań badawczych jest opracowany w środowiskach akademickich i naukowych USA (The Association of College and Research Libraries, ACRL) zestaw *visual literacy* (Visual Literacy Competency Standards for Higher Education, 2011).

S ł o w a k l u c z o w e: alfabetyzacja informacyjna, visual literacy, kultura wizualna, kultura informacyjna, transliteracy, edukacja cyfrowa

Małgorzata Wieczorek-Tomaszewska

Исследование визуальной грамотности как основной способности понимать и общаться в 21 веке

А н н о т а ц и я

В этой статье автор описывает культурный и технологический контекст визуальной грамотности, берущей начало из специфики эволюционного расширения культуры имиджа и развития информационного общества в контексте концепции медиа грамотности. Представлены результаты экспериментальных исследований студентов польского университета для конкретных визуальных навыков. Сравнительный материал для подготовленного проекта «Легитимность визуальной грамотности в процессе образования». исследовательские задачи разрабатываются в академических и научных кругах США (Ассоциация колледжей и научных библиотек, ACRL); набор визуальной грамотности (стандарты визуальной грамотности компетенции для высшего Образование, Чикаго 2011).

К л ю ч е в ы е с л о в а: информационная грамотность, визуальная грамотность, визуальная культура, информационная культура, цифровое образование

Małgorzata Wieczorek-Tomaszewska

La investigación de la alfabetización visual en la multialfabetización como capacidad principal de comprender y comunicar en el siglo XXI

R e s u m e n

En este artículo, los autores describen el contexto cultural y tecnológico de la alfabetización visual, resultante de la específica evolución expansiva de la cultura de imagen y del desarrollo de la sociedad de la información en el contexto de la denominada multi-alfabetización. Presenta los resultados de estudios piloto de las habilidades visuales específicas en los estudiantes universitarios polacos. Los materiales del análisis comparativo para las tareas de investigación se han desarrollado por académicos y científicos del grupo de alfabetización visual de EEUU (La Asociación de Colegio y Bibliotecas de Investigación, ACRL), pertenecientes al proyecto ‘The legitimacy of visual literacy in the process of education’, un conjunto de alfabetización visual (Visual Literacy Competency Standards for Higher Educación, Chicago, 2011).

P a l a b r a s c l a v e: alfabetización informacional, alfabetización visual, cultura visual, cultura informacional, multialfabetización, educación digital

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Teachers' Competencies and Their Impact on the Evaluation of Teaching

Abstract

The paper describes the research on teachers' competencies with regard to two forms of learning, i.e. a full-time form of study and blended learning. The research was also tasked to document a difference in the evaluation of these partial competencies in the full-time form and in the blended learning form. This paper deals with the research on the competence assessment of English teachers at the School of Business Administration in Karvina among students in both forms of studies. The introduction outlines the issue of competencies as a result of political, social, and economic changes affecting education in the 21st century. Education is given to deeper relations, in particular with regard to the growing meritocratic aspect. The next part of the paper provides a selection in the list of the most important outcomes of a conceptual nature of key competencies and these are followed by the terminology scope of teachers' competencies. The aim of the research is the analysis of data focused on teachers' competencies affecting the assessment of the quality of teaching foreign languages. Competencies examined were the readiness of teachers to teach and the clarity of their interpretation, erudition, communicability and suitability of transmitting information, and the flexibility of the individual approach to students and their inspiration.

K e y w o r d s: competencies, teacher, assessment of teaching, blended learning, full-time study, teaching foreign languages

Introduction

Education in the 21st century is influenced by political, social, and economic factors. Emerging realities in the European area (information society, information technology, multicultural environment, population migration, etc.) offer a space for competence debates in the Czech Republic and abroad.

The results of an international comparative study "Programme for International Student Assessment" – also known as the results of the PISA study – may seem to be the impetus for numerous discussions. Other triggering mechanisms were the results of the OECD research, which were supposed to reveal possible human potentials in various contexts. The polythematic nature of the human potential is best described by means of the concept of competencies (i.e., core competencies), since the former educational terms, such as the "performance of a student" and "learning outcomes," do not encompass the scope of the concept of competence and its dimensionality.

Problematic aspects in the implementation of key competencies may become important for universities of the 21st century. The society of the last decade is subject to economic and social developments. Education focused on acquiring knowledge will become obsolete in a short time (Kramárová, 2011, p. 20).

It is pragmatic to assume that the meritocratic aspect of education (understood as an emphasis on the skills and knowledge) will be gaining in importance in the future. Changing paradigms of science (Král, 1994, pp. 51–52) affect education. Changes in education can be seen in the changing attitudes towards learning (from teaching to learning) and teaching-oriented competencies.

The above statement opens the possibility of research centres at universities and their interrelated or common research objectives. The common denominator of activities is the prosperity of both the society and the individual. Prosperity, social cohesion, and opportunities for social development largely depend on acquired competencies of its members (Fleischer, Koeppen, Kenk, Klieme, & Leutner, 2013, p. 6). Thus, there is an increasing importance of teachers as well as their responsibility for the educational process.

Publication Outputs of the Conceptual Nature Related to Core Competencies

Although the concept of competence itself is not absolutely new, it became popular not until the last decade (Fleischer et al., 2013, p. 6). Competencies are defined as "cognitive dispositions of the performance specific to the context,

which relate to the situation and functional requirements in certain domains" (Klieme & Leutner, 2006, p. 22). It is also emphasised that competence is "more or less knowledge, skills and strategies specific for the area, which are learnable" (Baumert, Stanat, & Demmrich, 2001, p. 22). This research area predominantly deals with structured competence models investigating the possibility of modelling competencies with regard to requirements in specific situations (Klieme & Hartig, 2007). From this perspective, competence models can be also specified further as:

- structural competence models (Winkelmann, Robitzsch, Stanat, & Köller, 2012), and
- models of competence levels (Klieme & Hartig, 2007).

Differences between structural competence models and models of competence levels lie in the fact that the former models deal with the number and types of partial competencies, while the latter ones focus on a detailed qualitative description.

In a scientific expression, there is the modelling concept increasingly used. Constructs of the educational reality are created in a diagrammatic, structured form, and thus it may happen that the description of the model reality omits some aspects of the educational reality. As stated by Skalková (2004, p. 41), modelling is based on the principle *pars pro toto* and shows a significant element, yet not all characteristics of the displayed unit.

Terminology

The terminology encompassing the determinative characteristics of teachers in terms of the educational process is heterogeneous. We can come across the designation of teachers' competence, personality traits, and beliefs (in German *Lehrekompetenzen*, *Persönlichkeitseigenschaften*, Beliefs). Helmke describes teaching as a "provision of learning opportunities, which are used depending on the individual student starting points for learning" (as cited in Lipowski, 2006, p. 69). Figure 1. shows the central position in the teaching–learning process.

As indicated by Hardy et al. (2011, p. 821), in order to shape teaching suitably, it is necessary for teachers to possess appropriate professional competencies which are marked as knowledge, beliefs, and motivational orientations.

We assume that teachers' competencies are crucial not only for the full-time form of studies but also for blended learning, given the fact that this form of studies has direct tutorials. The competence model is a set of competencies essential for the exercise of the profession. It is related to the business, HR strategies, and HR activities. It has two components, namely, a vertical integration and a horizontal one. The vertical integration has its application in the field of strategic management and is connected with the business. The horizontal integration implies

the interconnectedness of personal activities with the competence model. Hroník defines the competence model as a bridge between business strategy and HR strategies (2007, p. 68).

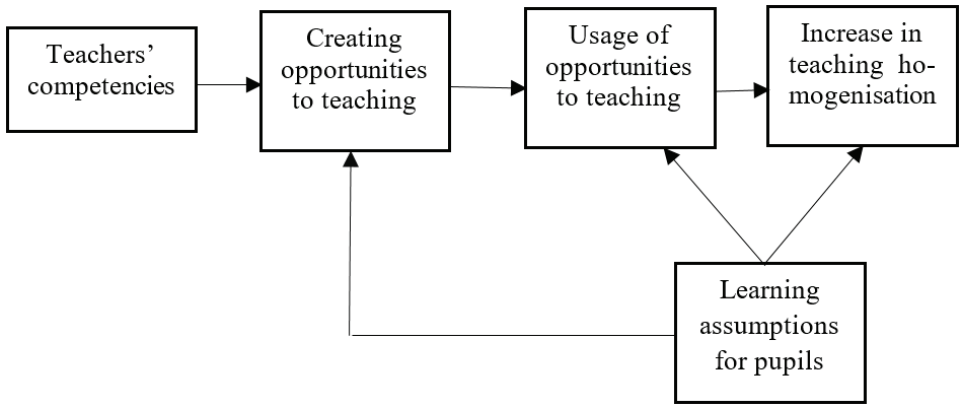

Figure 1. Offer and usage model according to Helmke, 2003.

S o u r c e: Helmke, 2003, as cited in Lipowski, 2006.

For the needs of our research, we tend to approach teachers' competencies relating to professional competencies as a set of knowledge, beliefs, and motivational orientation. In this respect, we have carried out our fractional research (see below).

The Objective, Hypotheses, and Models

The research was focused on the data analysis aimed at teachers' competencies affecting the assessment of the quality of teaching foreign languages. We proceeded from the results of the survey, which was attended by 320 students (i.e. 269 full-time and 61 blended learning students) of School of Business Administration in Karvina, who began studying English at the faculty. This course is abbreviated as BPAJ1 (English 1 for the full-time Bachelor study) and BEAJ1 (English 1 for blended learning).

Owing to the fact that teachers' competencies in the area of foreign languages are extensive from the point of the broad sense of the word itself, we have focused on the research, which was thematically divided into five blocks; hence the paper restricts its analysis to the following sub-areas of teachers' competencies:

1. Teachers' readiness to teach and the clarity of their interpretation;
2. Teachers' erudition;

3. Communication skills of teachers and the ability to communicate knowledge;
4. Teachers' flexibility and individual approach to students; and
5. Teachers' ability to inspire.

The above-delineated competencies were evaluated by students, including a range of ratings from 1 (best) to 5 (worst). The evaluation was conducted anonymously after the end of the term tuition.

The research was implemented simultaneously in both forms of study, i.e. full-time and blended learning. The evaluation of the research was carried out in two stages. In the first stage, we analysed data collected from the full-time form of study; in the second stage, we analysed data from blended learning. Both forms of education were subsequently compared according to the five above-specified aspects of competencies which foreign language teachers should possess. We took into account the data from both forms of study, since we aimed to determine whether a particular form of study affects the evaluation of teachers.

The aim of the research was to analyse the aforementioned data to assess their positive or negative connotations and seek closer determinants of these phenomena.

Results

Concerning teachers' readiness and the clarity of their interpretation, 63.20% of full-time students rated 1, 29.74% rated 2, whereas 5.95% of them rated 3 highest. Only 0.74% rated 4 and 0.37% – 5. As regards blended learning students, 68.85% rated 1. Rating 2 was given by 21.31% of the questioned students. 6.56% of the students rated 3, and rating 4 and 5 was given by 1.64% of them in each case. Table 1 illustrates a comparison of teachers' preparedness and the clarity of their interpretation.

Table 1.
Teachers' readiness and the clarity of their interpretation (full-time and blended learning)

Full-time form of study	Course BPAJ1 %	Blended learning	Course BEAJ1 %
1	63.20	1	68.85
2	29.74	2	21.31
3	5.95	3	6.56
4	0.74	4	1.64
5	0.37	5	1.64

S o u r c e: own work.

When it comes to teachers' erudition, 97.78% of the questioned students rated 1 highest. A mere 2.22% of them rated 2. No full-time students rated 3, 4, or 5. 83.61% of blended learning students rated 1, whereas 9.84% of them rated 2 and 6.55% rated 3. The results are illustrated in Table 2.

Table 2.
Teachers' erudition (full-time and blended learning)

Full-time form of study	Course BPAJ1 %	Blended learning	Course BEAJ1 %
1	97.78	1	83.61
2	2.22	2	9.84
3	0.00	3	6.55
4	0.00	4	0.00
5	0.00	5	0.00

S o u r c e: own work.

Another area of research was teachers' communication skills along with the ability to communicate knowledge to full-time and blended learning students. 95.56% of full-time students rated 1 to teachers' communication skills and appropriateness of the methods of transmitting information. 4.44% of the questioned students decided to rate 2. No students rated 3, 4, or 5. In blended learning, teachers' communication skills and the ability to communicate knowledge were more diverse in terms of the use of the scale menu. Only 75.41% of the respondents were satisfied with the above and thus rated 1. 16.39% of the students rated 2, while 3.28% rated 3, and 4.92% of the students rated 4. No respondents rated 5. Table 3 shows the results.

Table 3.
Teachers' communication skills and suitability of transmitting information (full-time and blended learning)

Full-time form of study	Course BPAJ1 %	Blended learning	Course BEAJ1 %
1	95.56	1	75.41
2	4.44	2	16.39
3	0.00	3	3.28
4	0.00	4	4.92
5	0.00	5	0.00

S o u r c e: own work.

Teachers' flexibility and their individual approach to students are other competencies which deserved our attention. In this way, 63.94% of the questioned students rated 1 to teachers' competence, 30.86% rated 2, and only 5.2% rated 3. Ratings 4 and 5 did not occur in the questionnaire. Regarding blended learning students, 59.02% of them rated 1 to teachers' flexibility and their individual approach to students. 27.87% of them rated 2, and 13.11% rated 3. As was in the case of full-time students, no respondent rated 4 and 5. The results are shown in Table 4.

Table 4.
Teachers' flexibility and their individual approach to students (full-time and blended learning)

Full-time form of study	Course BPAJ1 %	Blended learning	Course BEAJ1 %
1	63.94	1	59.02
2	30.86	2	27.87
3	5.20	3	13.11
4	0.00	4	0.00
5	0.00	5	0.00

S o u r c e: own work.

The last examined competence was teachers' ability to inspire. 60.22% of the full-time students rated 1. 32.71% rated 2, and 1.49% rated 4. Rating 5 was not represented in the questionnaire. As far as blended learning is concerned, 59.02% of the respondents rated 1, 29.51% rated 2, 6.56% rated 3, and 4.91% – 4.

Table 5.
Teachers' ability to inspire (full-time and blended learning)

Full-time form of study	Course BPAJ1 %	Blended learning	Course BEAJ1 %
1	60.22	1	59.02
2	32.71	2	29.51
3	5.58	3	6.56
4	1.49	4	4.91
5	0.00	5	0.00

S o u r c e: own work.

Discussion

The assessment of "teachers' readiness to teaching and the clarity of teachers' interpretation" competence with ranking 1 was higher with blended learning by 5.65%. In contrast, rating 2 was higher for full-time students by 8.43%. For e-learners, ratings 3, 4, and 5 were higher than with full-time students, i.e. by 0.61%, as for rating 4 it was 0.90, and finally rating 5 amounted to even 1.27%.

When assessing "teachers' erudition" competence, 14.17% of the full-time students rated 1, which is more than in the case of blended learning students. 7.62% of blended learning students rated 2 which is more than full-time students. 6.55% of e-learners rated 3.

In the assessment of "teachers' communication skills and suitability to transmit information" competence, full-time students evaluated it higher than blended learning students, i.e. by 20.15% in the case of rating 1. The latter ones rated 2 by 11.95% more than full-time students. The assessment given by ratings 3 and 4 were lower in blended learning, as for rating 3, there was a result of 3.28% for this form of study as well as rating 4 in this form of study with a result of 4.92%.

In the assessment of "teachers' flexibility and their individual approach to students" competence in the case of the full-time students, 4.92% rated 1, which showed higher results than in blended learning. Regarding rating 2, better assessments were achieved with full-time students by 2.99%. Rating 3 was given more again by full-time students, as this rating was given by 7.91% more e-learners than full-time students.

Concerning the assessment of competence teachers' ability to inspire, again this competence was assessed better by the full-time students than by blended learning ones. With rating 1, there was a difference of 1.20% in favour of the full-time form of study. With rating 2, teachers' ability to inspire was assessed by 3.2% more than the full-time form of study. Blended learning was reported worse ratings 3 and 4, in the case of ranking 3 it amounted to about 0.98% more than in the full-time form of study; finally, as for rating 4, it was by 3.42% more than in the full-time form of study.

Conclusion

Teachers' competencies – which undoubtedly include the teachers' readiness to teach along with the clarity of their interpretation, teachers' erudition, teachers' communication skills, as well as the ability to communicate knowledge, teachers' flexibility and individual approach to students, and teachers' abilities to inspire

– are ranked among the key competencies that affect the evaluation of teaching and teachers.

Basing on the research on these sub-competencies, we can assume that blended learning puts greater demands on teachers if its focus is on meeting the students' halfway in this form of study. Especially teachers' erudition, flexibility, and communication skills belong to the competencies that need further and more precise development in blended learning.

References

Baumert, J., Stanat, P., & Demmrich, A. (2001). Untersuchungsgegenstand, theoretische Grundlagen und Durchführung der Studie. Deutsches PISA – Konsortium (Hrgs.). *PISA 2000. Basiskompetenzen von Schülerinnen und Schülern im internationalen Vergleich* (pp. 15–68). Opladen: Leske und + Budrich.

Fleischer, J., Koeppen, K., Kenk, M., Klieme, E., & Leutner, D. (2013). Kompetenzmodelisierung: Struktur, Konzepte und Forschungszugänge des DFG – Schwerpunktprogramms. *Zeitschrift für Erziehungswissenschaft, 16*(1), 5–22.

Hardy, I., Hertel, S., Kunter, M., Klieme, E., Warwas, J., Büttner, G., & Lühken, A. (2011). Adaptive Lerngelegenheiten in der Grundschule. Merkmale, methodisch-didaktische Schwerpunktsetzungen und erforderliche Lehrerkompetenz. *Zeitschrift für Pädagogik*, *57*(6), 819–833.

Helmke, A. (2003). Unterrichtsevaluation: Verfahren und Instrumente. *Schulmanagement, 1*, 8–11.

Helmke, A. (2010). *Unterrichtqualität und Lehrerprofessionalität. Diagnose, Evaluation und Verbesserung des Unterrichts.* Seelze: Kallmeyer Verlag.

Hroník, F. (2007). *Rozvoj a vzdělávání pracovníků*. Prague: Grada.

Klieme, E. (2004). Was sind und wie misst man Kompetenzen? *Pädagogik*, *56*(6), 10–13.

Klieme, E., & Hartig, J. (2007). Kompetenzkonzepte in den Sozialwissenschaften und im erziehungswissenschaftlichen Discurs. *Zeitschrift für Erziehungswissenschaft. Sonderheft*, *8*, 11–33.

Klieme, E., & Leutner, D. (2006). Kompetenzmodelle zur Erfassung individueller Lernergebnisse und nur Bilanzierung von Bildungsprozessen. Beschreibung eines neu eingerichteten Schwerpunktprogramms der DFG. *Zeitschrift für Pädagogik, 52*(6), 876–903.

Král, M. (1994). *Změna paradigma*. Prague: Filozofia.

Kramárová, M. (2011). Uplatnenie konceptu kľúčových kompetencií v cudzojazyčnej edukácii primarneho vzdelávania. *Acta Facultatis Paedagogicae Universitatis Tyrnaviensis,* 17–34.

Lipowski, F. (2006). Auf den Lehrer kommt es an. Empirische Evidenzen für Zusammenhänge zwischen Lehrerkompetenzen, Lehrerhandeln und dem Lernen der Schüler. In *Zeitschrift für Pädagogik. 51. Beiheft. Beiheft Kompetenzen und Kompetenzentwicklung von Lehrerinnen und Lehrern: Ausbildung und Beruf* (pp. 47–70). Weinheim und Basel: Belz Verlag.

Skalková, J. (2004). *Pedagogika a výzvy nové doby*. Brno: Paido.

Winkelmann, H., Robitzsch, A., Stanat, P., & Köller, initial missing. (2012). Mathematische Kompetenzen in der Grundschule. Struktur, Validierung und Zusammenspiel mit allgemeinen kognitiven Fähigkeiten. *Diagnostica, 58*, 15–30.

Hanne-Lore Bobáková, Janusz Karpeta

Porównanie kompetencji nauczycieli w kształceniu w trybie stacjonarnym i w blended learningu

S t r e s z c z e n i e

Artykuł opisuje badanie kompetencji nauczycieli w zakresie dwóch form kształcenia: studiów stacjonarnych oraz nauczania hybrydowego (*blended learning*). Celem badań było udokumentowanie różnicy w ewaluacji tych częściowych kompetencji w trybie stacjonarnym oraz w blended learningu. Artykuł analizuje ocenę kompetencji nauczycieli języka angielskiego przeprowadzoną w Szkole Administracji w Karwinie, dokonaną przez studentów objętych obiema formami kształcenia. Wstęp stanowi zarys problematyki kompetencji jako rezultatu politycznych, społecznych i ekonomicznych zmian wpływających na obraz edukacji w XXI wieku. W kolejnej części autorzy przedstawiają wybrane z najważniejszych efektów koncepcji kompetencji kluczowych, a następnie podają terminologiczny zakres kompetencji nauczycieli. Celem badań opisanych w tej części artykułu była analiza danych pod kątem kompetencji nauczycieli wpływających na ocenę jakości nauczania języków obcych. Badane kompetencje obejmowały przygotowanie zawodowe nauczycieli, jasność przekazu, erudycję, komunikatywność i zdolność do przekazywania informacji oraz elastyczność w indywidualnym podejściu do studentów i ich motywowanie.

S ł o w a k l u c z o w e: kompetencje, nauczyciel, ocena nauczania, blended learning, nauka w pełnym wymiarze czasu, nauczanie języków obcych

Hanne-Lore Bobáková, Janusz Karpeta

Сравнительный анализ компетенций преподавателей в условиях очного и смешанного обучения

А н н о т а ц и я

В статье описывается исследование компетенций преподавателей, в отношении двух форм обучения, очной формы обучения и смешанного обучения. Кроме того, исследование было направлено на выявление различий в оценивании этих компетенций в условиях очного и смешанного обучения. Статья посвящена оценке компетентности учителей английского языка в школе делового администрирования в Карвина студентами двух форм обучения. Во введении излагается содержание компетенций как результат политических, социальных и экономических изменений, влияющих на образование в 21-м веке. Образование включает более глубокие отношения, в частности, с учетом растущего значения меритократического аспекта. В следующей части статьи приведен перечень самых важных ключевых компетенций концептуального характера и приведены соотношения с терминологией сферы компетенций учителей. Целью исследования является анализ данных, связанных с педагогическими компетенциями, влияющими на оценку качества преподавания иностранных языков. Исследованы следующие компетенции: готовность учителей учить и объяснять, эрудиция, коммуникабельность и способность передавать информацию, а также гибкость индивидуального подхода к студентам и способность их вдохновлять.

Ключевые слова: компетенции, учитель, оценивание педагогической деятельности, смешанное обучение, очное обучение, обучение иностранным языкам

Hanne-Lore Bobáková, Janusz Karpeta

Comparación de las competencias docentes en la enseñanza tradicional y en blended learning

Resumen

En el documento se describe la investigación de las competencias que deben poseer los docentes en relación a dos formas de aprendizaje, la forma tradicional y el blended learning. Además, la investigación documentó una diferencia en la evaluación de estas competencias parcialmente y en su totalidad. En este sentido, este artículo analizó la evaluación de la competencia en lengua inglesa concretamente en la Escuela de Administración de Empresas en Karvina entre los estudiantes de ambas modalidades indicadas. La introducción describe las competencias como consecuencia de los cambios políticos, sociales y económicos que afectan a la educación en el siglo XXI. Si se analiza la educación en profundidad se ve que ha crecido la cuestión meritocrática. La siguiente parte del documento hace una selección de los resultados más importantes de carácter conceptual de las competencias clave y se completa con terminología de las competencias docentes. Por ello, el objetivo de la investigación es el análisis de datos centrados en las competencias de los docentes que afectan a la evaluación de la calidad de la enseñanza de lenguas extranjeras. Entre las competencias examinadas estaban la disposición de los maestros para enseñar y la claridad de la interpretación, la erudición, la comunicación y la idoneidad de la información que se transmite. Además de la flexibilidad de la atención individualizada a los estudiantes y su inspiración.

Palabras clave: competencias, maestro, evaluación, *blended learning*, enseñanza tradicional, enseñanza de lenguas

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Technological and Ethical Challenges of Translators Training in Ukraine and Issues of Modern ICT Development

Abstract

This paper aims to explore the challenges of the Ukrainian system of translators training caused by modern technology advancement. The paper applies established ideas in practical approaches to the improvement of translators training system with respect to new technological requirements for the professionals. The relevant data were obtained by the analysis of questionnaire results.

The problems of education of translators in Ukraine under the conditions of dramatic social and political changes are considered. The lack of training in the sphere of technology application for professional development is pointed out on the basis of the research results analysis. The research has also shown the contradictions between the needed level of technological skills of the students of the translation department and modern professional standards. The changes of certification standards for translators in terms of information literacy skills, ethics, and management as related to technological advancement are shown.

The paper discusses the results of the original survey involving high school graduates, students, and faculty staff. The recommendations proposed are based on the critical study of the peculiarities of the system of translators training in Ukraine.

K e y w o r d s: translators training, information literacy, ethics, certification

Introduction

Translation is the occupation in demand in modern Ukrainian society as Ukraine takes steps to become an active member of the world community. A low level of foreign languages proficiency of Ukrainians enhances the importance of translation services for the development of society and upsurge in economic activity. A translator is involved in the intercultural communication as a mediator and thus should do the best to achieve the highest level of efficiency of the communicative process. As translators are among the first persons facing another culture and foreign texts and messages, their responsibilities are quite difficult and demand a wide range of relevant skills and knowledge. A translator's performance requires the proper competence, which "should necessarily comprise bilingual, extralinguistic and instrumental (practical knowledge about the use of documentary sources and ICT: dictionaries, encyclopaedias, translation programs, editing programs, etc.) components" (Acioly-Regnier, Koroleva, Mikhaleva, & Regnier, 2015, p. 147). Ukrainian translators and interpreters are to a certain extent affected by the ideas of former Soviet translation traditions, but they are also open to the new word trends in translation theory, as well as they are quick on the uptake of international standards of the profession. This means that they face the same challenges caused by the current state of technological advancement on the global level (Maksymenko, 2013), but they are a little behind of the newest tendencies.

The instrumental component of a translator's competence is not limited by the ability to use the appropriate means and instruments for transforming the source text into the target text. Translators also face the challenge of receiving, transforming, and communicating information under the conditions of ICT-mediated environment. Thus, the development of technologies has caused the dramatic raise of translation standards in terms of skills required for the proper information reception and representation. The changes were so deep and significant that even one generation of translation professionals could witness the process of technology transformation; G. Samuelsson-Brown (2004) describes his experience as follows: "during my own career as a translator I have gone from writing my translations which were then transcribed by an audio typist (or two during peak production periods), to working directly on a word processor and then progressing to today's technological wizardry" (p. 1).

The technological support of translation activity has advanced the facilities of text processing and the translation process itself. Powerful editing tools save time and increase the efficiency and quality of work. Yet, on the other hand, new challenges have also been issued.

Translation and Technology Challenges

The improvement of the technological support of any economical activity means inevitable changes of performance levels, qualification demands, and professional standards. Technological progress has also become a challenge for translators by changing the communicative processes from the point of view of the channel of communication. The creation of global broadcasting and telecasting networks resulted in the need for immediate rendering of information (news, sport, and other international events) into different languages. The peculiarities of such translation challenges are discussed by M. O'Hagan and D. Ashworth (2002), as teletranslation and teleinterpretation are considered to be new phenomena, emerging as a result of digital technology development and its worldwide spread shaping global multilingual audience in recent decades.

Versatile changes in the translation activity, caused by the influence of modern technology, have called forth various complementary issues such as the widening of the range of ethical aspects of translation from both operational and managerial points of view.

As a result of the development of information exchange technologies, the translation businesses faced the necessity of information safety maintenance. The management of translation services should involve the notion of ensuring the safety of information the workers are dealing with. The challenge concerns the issues of commercial classified information, copyright problems, and other messages to be made public timely, not as a result of information leakage. The system of communication inside the translation enterprise and the job descriptions of personnel should meet the modern requirements of data protection. It is also regulated by the international management standards, but the standards are often regarded as too formal issues, so the formal requirements need to be accompanied with strong understanding of the problem and possible consequences of conscious or unconscious activity (Corsellis, 2008; Samuelsson-Brown, 2006).

A translator faces the need to take the decisions based on the ethical evidence, i.e. which phrase to choose, which one to omit or transform (Kruger & Crots, 2014; Nihan, 2012). The concept of such a choice is not new, as the problem was urgent decades ago, but modern technology takes a very short period of time to bring the problem from the local into the global level. Every accidental mistake or improper wording is immediately replicated, reposted, and commented online by a great number of users. The speed of information dissemination via modern communication technologies is extremely high, which makes it highly influential and increases the level of an interpreter's responsibility. Of course, the problem concerns only specific information messages, but it is quite difficult to predict which item of information will cause difficulties in future.

Thus, the researchers mention the issues of using ICT in the translation activity and communicating with such technology for performing professional tasks, especially with respect to ethical use of information for the professional purposes, which should become an aspect of translators training.

A. Pym (2003) has pointed out the problem of disbalance between the development of translation skills and the skills required by the labour market under the conditions of translators training. He supports the idea of moderate rethinking of the concept of a translator's competence and relevant knowledge, not targeted primary at the technical skills of the source and target texts processing in order to meet the format requirements (Olvera-Lobo et al., 2005). Thus, the problem of translators' competence is related to the concept of information literacy, which means that a translator should be characterised by the understanding of: a need for information, the resources available, how to find information, the need to evaluate results, how to work with or exploit results, ethics and responsibility of use, how to communicate or share the findings, and how to manage the findings. The points refer to the information literate person, as determined by the scholars from CILIP, Chartered Institute of Library & Information Professionals (2009).

Information literacy is a range of skills and knowledge needed for both education, particularly lifelong learning, and professional activity. Information literacy becomes extremely urgent – even in higher education – because of the volumes of relevant information to be perceived, assessed, transformed, and reproduced by students. The first year student faces different challenges: a new training system (lectures and seminars, laboratory works), the need of working with additional sources, and self-instruction. The term papers' preparation as well as surveys of literature on the subjects require advanced information literacy skills. The types of educational activity are based on the knowledge and skills of operating quite huge volumes of information, which means a range of additional skills. Many countries have developed and adopted the system of requirements in the field of information operation (Information Literacy Standards) for different categories of students and professionals. The standards describe the minimum requirements for information search, processing, storage, and development as well as the ethical and economical issues of dealing with different information. It should be noted that, despite the difference in the approaches to the information literacy definition, all systems of standards take into account the problem of ethics of dealing with information resources.

Information literacy is a system of skills which is of vital importance for the professionals in various fields, not only for translators and interpreters. The specific components for translation field are: professional software use, particularly dealing with machine translation systems; knowledge of the peculiarities of information sources which are relevant for the translation process; and considering ethical issues while rendering lexical units from one language into another. As a result of discussions on a modern translator profile in the future (2011), the following

groups of skills are distinguished: 1) the skills relevant both in the future and in the past, and 2) new relevant skills. The former group includes such skills as: communication skills in general, to talk to clients and colleagues; IT literacy; research skills; ethics, etc. The latter one includes: learning translation technology skills; learning to learn about new types of tools; compiling terminology for MT (machine translation); social networking skills, and others. Yet, many translators do not face technological challenges, so they do not recognise a strong need for such skills and qualities development. On the other hand, the list of skills was prepared as based on the ideas of scholars and translation practitioners, so it shows the requirements of modern labour market. This means that the skills are to be reflected in modern professional standards and professional certification systems, and will encourage some professionals to improve their knowledge. However, this is a halfway to problem solving since the certification of translators in a range of countries – and, particularly, in Ukraine – is not compulsory, and only the individuals and companies working on the international level are interested in certification.

We should point out that translator certification is not mandatory due to complexity of criteria distinguishing. Languages are very different in their structure, and the relevant translation skills can be discussed only for a definite group or even pair of languages. Source texts also vary in rate of useful information and expressive means to be rendered. In other words, it is quite difficult to create universal translation requirements and then put them into the testing system. Yet, it is possible to develop standards for definite languages and definite fields of translation activity (interpreting, conference interpreting, scientific translation, court translation, etc.), as based on the concepts of lifelong professional development and lifelong education. The standards development requires efforts of various professional translation associations and a strong theoretical base, so the process is a time-consuming project.

It should be noted that many existing systems of translator certification do not require additional skills, but are mainly focused on the ability to render a message from one language into another. As it is reasoned by Budin, Krajcso, and Lommel (2013, p. 148), the modern schemes of translators certification need improvement, as they do not meet the demands of modern market of translation services. The statement is based on the results of interviewing the individuals involved into the current translation activities (consumers, translators, educators). In response to the challenge, some certification institutions have started the processes of certification criteria renewing (National Accreditation Authority for Translators and Interpreters, 2015) to maintain reliability and validity of their testing systems.

So, informational technology development resulted in the revision of instrumental components of translation certification standards and management standards, called forth new types of translation activities, and increased translators' responsibility. However, the renewing of the standards can scarcely improve the

overall situation of technology implementation into the translation profession in Ukraine. The more effective method is to reshape the process of translators training.

Translators Training in Ukraine as Related to Technology Challenges

The process of translators training in Ukraine cannot be reformed without the modernisation of the whole system of education. Thus, the priorities for improvement should be determined as based on the word professional and educational trends reflecting the most important technological changes in the society.

The development of information technologies caused the need for specific skills and knowledge determining the quality and quantity of people's dealing with the technologies. They are the following: information literacy skills, ethical issues of dealing with information, and communicative skills for ICT-mediated environment. Of course, the list does not claim to be exhaustive, but it correlates with the translation standards changes caused by the technological advancement, sustainable development goals, and global priorities. In moving towards sustainability, higher education requires a comprehensive system approach that is aimed at the entire system and its various subsystems (all activities and the way it is organised) in a need for fundamental system changes and considering all sustainability principles together (Waas et al., 2012).

As an attempt of taking into consideration information literacy skills, ethical issues, and communicative skills, the system of information literacy standards can be used. As it was mentioned, there exist a number of standards, which were developed by various research groups. The adoption of best practices of such standards development in the world's countries is of great value for Ukrainian educators. As for Ukraine, the standards are not developed yet, so there are only some pilots of groups of standards for the definite fields of occupation, but they do not cover the whole problem of dealing with information on the global scale. Thus, the problem of the standards development and implementation remains urgent for the society and educational system of the country. The theory and practice of such standards development, as well as the issues of information literacy and information culture are quite popular among the educationalists (Lypchanko-Kovachyk, 2015). They are in search of the means and ways of forming and developing students' knowledge and skills in the field of dealing with the professional information resources.

The issue of information literacy standards implementation is the task of high importance for the students of translation departments, since their future

professional activity will be based on dealing with information and application of the basic skills determining information literacy. While national standards are not valid, Ukrainian researches are conducted within the frameworks and expertise of the other countries (Jaatinen & Jääskeläinen, 2004; Canım Alkan, 2016). Considering the abovementioned definition developed by CILIP, let us discuss the specifics of the characteristics of an information literate translator. It should be pointed out that the features describe the basic qualities of a translator.

The understanding of a need for information for a translator is reasoned by the lack of reception of the peculiarities of a source text (its style, subject, etc.), which are crucial for rendering the source message by means of the target language. Thus, a translator often needs the general information about the structure of a piece of equipment or an object in order to make a proper choice of linguistic patterns for the target text. The information about physical or chemical properties of an object is not relevant and needed in such a case, but it might be for a different source text translation.

The understanding of the resources available for a translator means the ability to predict the useful sources of information, i.e. to choose the resources which provide with the sufficient information, and are reliable and clear enough for satisfying a need for information.

The understanding of how to the find information for a translator implies the skills of working with the sources of information, using search systems, databases, and other tools.

The understanding of the need to evaluate results for a translator implies analytical skills for comparison of the information found and the initial need for information according to the criteria of validity, efficiency, reliability, etc., as related to the translation process.

The understanding of how to work with or exploit results for a translator means the awareness of the peculiarities of the information found, as related to the translation process (adding some notes or commentary to the target text, using the results, etc.).

The understanding of ethics and responsibility of use for a translator means the consideration of the issues of property, authorship, or privileged information peculiarities for the information involved into the translation process or the information from the source text.

The understanding of how to communicate or share the findings for a translator means the skills of operating different software for the creation of the source text using the additional information, which is needed for rendering the source message.

The understanding of how to manage the findings for a translator is primarily related to the issues of reuse of findings for the translation in future, i.e. the storage of information, or a quick access to some useful sources (e.g. online terminological dictionaries, manuals, etc.).

It should be noted that the list of skills is mainly concentrated on the ability to recognise and satisfy the information needs for performing the translation process. The skills can also be applied to the process of working with information in general, i.e. they cover the technical side of translation. As for the communicative skills and ethical issues of dealing with information, they are based on information literacy skills, so their development is closely connected with the information literacy level of students. It is also worth mentioning that communicative skills and ethical issues of dealing with information are considered to be more specialised than information literacy skills.

Ethical issues include a range of key behaviour models, which are useful for translation decision making. There are some contexts requiring accurate wordings and proper behaviour to overcome misunderstanding. Religion and gender issues can serve as the examples of complicated environment for translation. While translators have enough time to think over their decisions, interpreters are limited in time and situation, so they need ready-made ideas and frameworks of coping with their challenges. Since they are sometimes taking their decision under the pressure of the context and current environment, interpreters should be good at strategic thinking and predicting possible difficulties before the occurrence. As it was mentioned above, the mistakes are very objectionable and sometimes can affect the career deeply. Ethical issues also concern dealing with information while working with source and target texts, determining the tolerable limit of the initial message transformation and keeping confidential under the ambiguous conditions. Various copyright laws in different countries are also to be considered. Information exchange as an aspect of dealing with the customer is sometimes a more complicated process than the process of text translation, so the ethical communication with customers, colleagues, seniors is an important component of translators training (Bahriy & Osiodlo, 2013).

The third group of skills discussed are communicative skills for ICT-mediated environment. They are partially developed in the framework of communicative competence, as it is needed for the realisation of communicative intentions (Council for Cultural Co-operation, Education Committee, 2001, p. 108). The students of translation departments are also involved into various types of educational activities, which enable their communicative competence shaping. The activities include both languages studies (native and foreign) and special translation assessments based on the translation of e-mails and audiovisual translation.

We have analysed the scientific literature and found out that technology challenges are considered to be the reason for professional translators' standards review. Our analysis concerned the changes of translation standards and the problems of the educational system in Ukraine. To determine the current state of students' knowledge of the specifics of dealing with information to perform professional tasks, as well as to estimate the professors' attitude to the problem of such knowledge development, we conducted the special survey.

Methodology of Research

In order to obtain the data for analysis, we have developed three types of questionnaires – the questionnaire for students, the questionnaire for the faculty staff, and the questionnaire for school graduates – and asked participants to fill in the printed forms. The questionnaire for school graduates was the least professionalised, and the questionnaire for faculty staff was the most professionalised one. Both qualitative and quantitative data from the questionnaires were analysed, but the preference was given to the qualitative data in order to compare the results and characteristics of an information literate person (for students and school graduates) and an information literate translator (for students only). Thus, the description of a typical student and a school graduate was based on the positive or negative answers quantity between 60% and 90%. As for the results of the faculty staff answers, they were given with the proper percentage of positive answers.

Participants

The students and faculty staff of translation departments, as well as school graduates, were involved in the survey. The study was conducted during the 2014/2015 academic year in the State higher educational institution "National Mining University" and Dniprodzerzhyns'k State Technical University. The number of participants was the following: 100 third-year students of translation departments; 50 members of the faculty staff, who deliver lectures for the students of translation departments; and 100 school graduates. We should point out that only high school graduates interested in studying at the translation department were considered for the survey results analysis. They were involved in our research activities for the purpose of comparison as zero reading for university level students.

Instruments

The main instruments of the study were the questionnaires. The Questionnaire 1 was aimed at the students of translation departments specialising in the scientific and technical translation. The questionnaire consisted of 25 questions. The questions were based on the characteristics of an information literate person and translator, which were considered above, and were aimed at the study of students' knowledge and skills, including ethical issues of dealing with information and communicative skills for ICT-mediated environment. Most questions were of a general type, and began with the statements such as I know… / I can… / I use… In order to obtain the information about the software they use and skills, we also offered the students some questions of an open type. We used the same questionnaire for school graduates (Questionnaire 2); the only difference was in its introduction.

The Questionnaire 3 was targeted at the faculty staff of higher educational institutions. The questionnaire consisted of 25 questions. The questions were based on the characteristics of an information literate translator, but they were aimed at investigation of the teaching staff's attitude to the problem of students training in the field of information processing, as well as the role of students' information knowledge and skills development under the conditions of the definite translation courses delivering. We were not interested in the professors' profiles as information users or creators, but in their consciousness of the challenges of modern trends in students training and the role of their courses in the students' education as a grounding in professional training.

Research Results

As a result of the questionnaires' analysis, we can create a typical high school graduate profile, as related to dealing with information. A high school graduate has the skills of information search, but limits the search process by googling or using other search systems and key words on the information needed. Libraries, and libraries' sites and search systems are almost not applied in the information search. A high school graduate works with a PC (or laptop), but the latter is mostly used as an entertaining means (games, listening to music, watching films or video clips, communicating via social networks). The knowledge of most common software for text processing and table handling is also the characteristic of school leavers.

As for the information needs, the school leaver is pragmatic, and is satisfied by the information taken from a student book or delivered by a subject teacher to meet the most study challenges. If the information is insufficient, the student turns to the additional loose information from the Internet, irrespective of its origin, but the newer sources are sometimes preferable. The questions of veracity and relevance are not taken into consideration in the majority of cases. The information is mostly stored in data stores; sometimes some notes are taken or sketches created on paper. As for the devices, PCs, laptops, and mobile phones are used for different purposes.

Thus, we can assume that a modern high school graduate has some knowledge and skills of dealing with information, but the efficiency of the activity is not always high enough to meet the challenges of the study. If compared to the characteristics of an information literate person, a typical school graduate demonstrates a range of information processing skills, but they cannot be described as "strong." There is some knowledge of ethical issues of dealing with information, and use of ICT for informal communication.

Let us compare the generalised data based on the high school graduates' and translation students' questionnaires. Table 1 shows the main statements from the

questionnaires and the percentage of positive answers provided by both school graduates and university students.

Table 1.
General results of data analysis from the graduates' and translation students' questionnaires

Statement	Graduates' positive answers, %	Translation students' positive answers, %
I know how to find the needed information.	72	80
I usually search for information using:		
Google,	82	85
a library and a library site,	17	26
I ask my teacher for help to improve the process of search.	5	17
I use my PC:		
for entertaining,	98	100
for doing home assignments.	84	86
Using special software, I can:		
process texts,	92	93
handle tables,	43	50
translate texts.	14	92
For studying purposes I use information:		
from a student book,	92	74
delivered by a subject teacher,	86	86
from the Internet.	71	92
I usually consider:		
the source of information reliability,	14	26
the date of information,	87	91
the relevance of information.	56	76
I usually store information:		
in data stores,	87	96
as notes,	14	57
as sketches.	5	16
For information searching and processing I use:		
a PC,	80	90
a laptop,	90	90
a mobile phone.	10	21
I know about intellectual property issues.	36	83
I always mention the source of information if I use the texts which were not created by me.	3	46
I know:		
the rules of citation,	92	96
standards of references creation.	10	60

S o u r c e: own work.

As a result of the questionnaires' analysis of third-year university students, we can create a typical translation department student's profile as related to dealing with information. A typical student deals with information in the same manner as a high school graduate does, although information needs of a university student are considerably higher. It is notable that the students often ask tutors for help while starting their searches, and they are more critical to the information which they use to satisfy their needs. The students spent more time at the libraries compared to high school graduates. The fact can be reasoned by the ability of the university library to satisfy the students' minimum informational needs, as they can provide students with student's books and manuals, as well as some sources mentioned by the professors as crucial for their courses. Despite the students' knowledge of copyright laws, they do not know the principles of citation and styles of referencing, as well as the proper ways of information usage. They know the basic ideas, but are in lack of means and ways of doing the right things with their knowledge, i.e. putting it into practice.

The students of the translation department are aware of various professional software (for texts, words, and phrases translation, electronic dictionaries, etc.), but they do not apply the software in their studying and professional activity. The students use online translation resources instead, but the resources mentioned in the questionnaires are of a very low quality, which is not relevant for qualitative professional translation. Thus, they face various difficulties with practice of technical translation as a part of their home assignments because of their inadequate choice of translation resources. The ethical issues of information processing for translation are limited by the knowledge and use of politically correct words. The principles of ethical decisions and ethical problems are not mentioned by the students. Most participants use ICT for communication freely.

If compared to an information literate person, a typical student demonstrates the information processing skills, but they are limited by general information and the information based on the university courses. If compared to an information literate translator, a typical student cannot be described as an independent user, as he or she needs tutors' support for recognising information needs and working with the relevant sources. Ethical issues are solved on the base of the similar cases studied as the examples in different courses.

The analysis of questionnaires for the faculty staff has shown that 100% of professors consider the skills of dealing with information as useful and important characteristics of a translator, but only 52% of them think that students should be trained to deal with information resources by means of specific exercises under their academic curriculum. The teaching staff mentioned texts and audio as the most useful types of information for translators. The most popular types of students' activity for training to deal with information are the following: papers and essay preparation, information search via the Internet, abstracting various texts, and creation of presentations to show the most important findings of the essays.

Professors emphasise the role of dictionaries, guides, and manuals in the process of adequate scientific and technical translation, as well as recommend the sources covering the definite spheres of knowledge. More than 95% of respondents state that they adopt the interdisciplinary approach and deliver their courses with respect to other related spheres of knowledge. They also provide students with possible algorithms for meeting the most common challenges as based on their disciplines. Only 16% of teaching staff report that students follow the algorithms, but nearly 70% choose the answer "I am not interested in the question."

Most professors attract students' attention to the most important information of the lectures and monitor the process of note-taking, i.e. do not encourage students to assess and transform the educational information on their own. They do not consider note-taking as an element of information processing or a step to training texts annotation and abstracting. Only 11% of professors attract students' attention to the problem of copyright laws, as they believe that the issue is familiar to their students. However, teaching staff monitor the quality of the information created by the students (essays, term papers, reviews, translations, etc.) according to the criteria of using the proper terminology, and meeting the formal requirements to the structure and content of the papers. It is notable that the professors (94%) report that students meet the formal requirements in their assignments.

As for the additional sources of information, almost half of teaching staff recommend foreign sources concerning their courses, but only a quarter of them point out the issues of reliability of information and its sources, and the virtues and shortcomings of the definite information sources. The percentage of the professors who involve the students into the analytical activities based on the search and assessment of the information (lack of data, relevant/irrelevant data, redundant, unreliable, or outdated information, etc.) is 27%.

The respondents stated that the students turn to 3–5 sources of information to do their assignments. Most students use their lecture notes and recommended sources, while only about 30% use additional resources. The professors mention that the students do not process and analyse the relevance and reliability of the resources they find independently. Neither can they assess if they are in lack of data or have got the excess information. It is notable that the students do not demonstrate motivation to the development of their knowledge and skills in the field of working with information. They do their assignments, but do not look for extra activities and knowledge.

Most professors of optional courses offer their students various assignments and exercises aimed at the development of information processing skills. The fact can be explained by the predominant theoretical character of optional courses, as they require working with many sources, whereas compulsory subjects for translation students are mostly practice-oriented with the theory immediately put into its implementation in professional practical activity. Still, both compulsory and optional disciplines imply operating various information (oral, written, audiovisual,

or mixed), and students' skills of dealing with it are required to master and adapt new items of information as a part of the whole educational process. The students of translation departments need very good information skills, as their professional activity is fully based on the process of information transfer.

The ethical issues of dealing with information and communicative skills for ICT-mediated environment are not considered to be taught as the special courses. The students take the course of *Basics of Information and Computer Technology* to be provided with the introductory stage of their training. However, it should be noted that there is no course standard, so each university develops its own course and technological philosophy. This is a considerably productive way, but the lack of common system of output requirements deepens the gap between the levels of students' skills in different regions. This is also demonstrated by several studies (Kucheruk, 2014; Voloschuk & Usyk, 2015), which note the substantial difference of the courses' goals, length, target skills, and competencies. From our point of view, the common framework should be developed by the prominent special research teams in order to work out the basis for professional standards elaboration as the future aim.

Analysing the data obtained, we can note that the students of translation departments are not trained to apply modern information technology in the study and elementary professional activity. The system of their skills training is efficient for providing them with relevant knowledge, but not efficient enough to provide them with the motivation to apply technology; neither is it efficient to develop the students' system of values to shape the understanding of the role technology plays in their professional activity.

The state-of-the-art of Ukrainian students' – and thus graduates' – motivation is a reason for their low competitiveness in the international labour market. Upon graduating from university, they have to take additional courses to meet the international certification requirements. From our point of view, the problem solution can be found in the development of students' international activity, i.e. encouraging them to take part in various students' events, fellowship, trainings in the international organisations, etc. The second precondition of the state improvement is the establishment of an independent national certification system for translation services. The existing certification by Ukrainian Translators association is not efficient for the solution of the problem.

Conclusions

The development of informational technology caused deep changes in the system of world translation services, which called forth the revision of professional standards. As a developing country, Ukraine faced new challenges and is

now in search of the ways of problem solving based both on modern global trends and requirements of sustainable development, and on national technological base. The system of information literacy skills, and ethical and communicative issues concerning them, is one of the challenges for Ukrainian translators. The current system of translators training is inflexible and does not allow enough transformations to respond to modern world requirements of the profession. The students of translation departments are provided with sufficient knowledge, but are in lack of motivation for the development of their information skills required for competitive professional activity. Among the possible ways out, the development of students' international activity and implementation of national professional certification in translation can be considered.

References

Acioly-Regnier, N. M., Koroleva, D., Mikhaleva, L., & Regnier J.-C. (2015). Translation competence as a complex multidimensional aspect. *Procedia – Social and Behavioral Sciences, 200*, 142–148.

Bahriy, A. A. & Osiodlo, V. I. (2013). Формування перекладацької компетенції майбутніх фахівців: психолого-лінгвістичний аспект. Збірник наукових праць Національної академії Державної прикордонної служби України : Педагогічні та психологічні науки, *4*(69), 302–312.

Budin, G., Krajcso, Z., & Lommel, A. (2013). The TransCert project: ensuring that transnational translator certification meets stakeholder needs. *The International Journal for Translation & Interpreting Research, 5*(1), 143–155.

Canım Alkan, S. (2016). Use of cloud-based translation management systems in translation education. *Participatory Educational Research (PER), 2016-I,* 43–47.

Corsellis, A. (2008), *Public service interpreting: The first steps*. Chippenham/Eastbourne: CPI Antony Rowe.

Information Literacy: definition. (2009). Accessed 1 February 2009. Retrieved from http://www.cilip.org.uk/professionalguidance/informationliteracy/definition/.

Jaatinen, H. & Jääskeläinen, R. (2004). Introducing IT in translator training: Experiences from the COLC project. Accessed 1 March 2016. Retrieved from http://isg.urv.es/library/papers/JaatinenJaaskelainen_IntroducingIT.pdf.

Kruger, H. & Crots, E. (2014). Professional and personal ethics in translation: a survey of South African translators' strategies and motivations. *Stellenbosch Papers in Linguistics*, *43*, 147–181.

Kucheruk, O. (2014). Основні напрямки розвитку електронної лінгводидактики. Інформаційні технології та засоби навчання, *41*(3). Accessed 10 March 2016. Retrieved from http://journal.iitta.gov.ua/index.php/itlt.

Lypchanko-Kovachyk, O. B. (2015). Експериментальна перевірка педагогічних умов формування готовності майбутніх бакалаврів-філологів до використання інтерактивних технологій навчання у професійній діяльності вчителя іноземної мови.. Гуманітарний вісник ДВНЗ „Переяслав-Хмельницький державний педагогічний університет імені Григорія Сковороди," *II*(62), 474–482.

Maksymenko, O. (2013). Усний переклад мовою “В” у контексті глобалізації і розширення Європейського союзу. Вісник Київського національного університету імені Тараса Шевченка, Іноземна філологія, *45/2012*, 12–14.

Modern languages: Learning, teaching, assessment. A common European framework of reference. (2001). Strasbourg: Council for Cultural Co-operation, Education Committee.

Nihan, İ. (2012). Considering ethics in translation. *Electronic Journal of Vocational Colleges*, *December/Aralık,* 131–134.

O’Hagan, M. & Ashworth, D. (2002). *Translation-mediated communication in a digital world*. Clevendon: Multilingual Matters.

Olvera-Lobo, M.-D., Castro-Prieto, M.-R., Quero-Gervilla, E., Muñoz-Martín, R., Muñoz-Raya, E., Murillo-Melero, M., … Domínguez-López, C. (2005). Translator training and modern market demands. *Perspectives: Studies in Translatology, 13*(2), 132–142.

Pym, A. (2003). Redefining translation competence in an electronic age. In defense of a minimalist approach. *Meta: journal des traducteurs* / Meta: Translators› Journal, 48(4), 481–497.

Samuelsson-Brown, G. (2006). *Managing translation services*. Clevedon: Cromwell Press Ltd.

Samuelsson-Brown, G. (2004). *A practical guide for translator.* Clevedon: Cromwell Press Ltd.

Translator profile: What skills for a changing market? Symposium on the translator profile conclusions. (2011). Accessed 21 December 2015. Retrieved from http://www.ec.europa.eu/dgs/platform/documents/.

Voloschuk, I. & Usyk, G. (2015). Ефективна підготовка перекладачів: системний підхід. Гуманітарний вісник ДВНЗ „Переяслав-Хмельницький державний педагогічний університет імені Григорія Сковороди”, Додаток 1 до Т. *36, II*(62), 75–85.

Waas, T., Huge, J., Ceulemans, K., Lambrechts, W., Vandenabeele, J., Lozano, R., & Wright, T. (2012). *Sustainable higher education – Understanding and moving forward*, Brussels: Flemish Government – Environment, Nature and Energy Department.

Mykola O. Nakaznyi, Olha Yu. Nesterova

Technologiczne i etyczne wyzwania szkolenia tłumaczy na Ukrainie oraz kwestie dotyczące rozwoju nowoczesnego ICT

S t r e s z c z e n i e

W artykule przedstawiono główne problemy szkolenia tłumaczy na Ukrainie spowodowane rozwojem nowoczesnych technologii. Kwestia ta została powiązania z wdrożeniem międzynarodowych standardów zawodowych w kształceniu tłumaczy oraz zmian niezbędnych do poprawy jakości ich szkolenia. Przekonujące dane uzyskano na podstawie analizy wyników kwestionariusza.

W badaniach wzięli udział studenci, absolwenci oraz pracownicy wydziałów translatoryki. Zostały one przeprowadzone w roku akademickim 2014/2015 na dwóch ukraińskich uczelniach oraz w 15 szkołach Obwodu Dniepropietrowskiego. Liczba uczestników była następująca: 100 studentów trzeciego roku wydziałów translatoryki, 50 pracowników katedr translatoryki, którzy prowadzą zajęcia ze studentami, 100 absolwentów.

Wyniki analizy umożliwiły opisów typowego studenta oraz typowego absolwenta szkoły jako użytkowników informacji. Proponowane zalecenia zostały sformułowane na podstawie krytycznej analizy specyfiki systemu szkolenia tłumaczy na Ukrainie zostały sformułowane zalecenia.

S ł o w a k l u c z o w e: szkolenie tłumaczy, kompetencje informacyjne, etyka, certyfikacja

Mykola O. Nakaznyi, Olha Yu. Nesterova

Технологические и этические вызовы в обучении переводчиков в Украине и проблемы современного развития ИКТ

Аннотация

В статье описываются основные проблемы подготовки переводчиков в Украине на основе современных передовых технологий. Проблема осложняется переосмыслением международных профессиональных стандартов в области перевода, а также необходимость учета изменений для целей совершенствования профессиональной подготовки переводчиков. Соответствующие данные были получены путем анализа результатов анкетирования.

Студенты и профессорско-преподавательский состав кафедр перевода, а также выпускников школ, были вовлечены в исследование. Исследование проводилось в течение 2014–2015 учебного года в двух украинских высших учебных заведений и 15 школах Днепропетровского региона. Количество участников было следующее: 100 студентов третьего курса, кафедры перевода, 50 членов профессорско-преподавательского состава, которые читают лекции для студентов кафедр перевода, 100 выпускников учебных заведений.

Результаты анализа позволяют сделать описание типичного выпускника школы и студента-переводчика в качестве пользователей информации. Предложенные рекомендации основаны на критическом изучении системы обучения переводчиков в Украине.

Ключевые слова: обучение переводчиков, информационная грамотность, этика

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Retos tecnológicos y eticos de la formación de traductores en Ucrania y desarrollo de las TIC

Resumen

El documento describe los principales problemas de la formación de los traductores en Ucrania basada en los avances de las tecnologías. La cuestión también se complica por el replanteamiento de los estándares profesionales internacionales de la traducción y la necesidad de considerar los cambios con el fin de mejorar la formación de traductores. Los datos pertinentes se obtuvieron mediante el análisis de los resultados del cuestionario.

Los estudiantes y el personal docente de los departamentos de traducción, así como los estudiantes egresados, participaron en la encuesta. El estudio se llevó a cabo durante el año académico 2014–2015 en dos instituciones ucranianas de educación superior y 15 escuelas de la región de Dnipropetrovsk. El número de participantes fue el siguiente: 100 estudiantes de tercer curso de los departamentos de traducción, 50 miembros del personal de la facultad, que imparten docencia a los estudiantes de los departamentos de traducción y 100 estudiantes egresados.

Los resultados del análisis permiten describir la visión de un graduado típico de la escuela y estudiante de traducción típico como usuarios de información. Las recomendaciones propuestas se basan en el análisis crítico de las peculiaridades del sistema de formación de traductores en Ucrania.

Palabras clave: formación de traductores, alfabetización informacional, ética, certificación

III

Methodological Aspects of E-learning

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Coherence Model of Instruction

Abstract

The article deals with three main issues: the understanding of curriculum in context, the ability of contextualisation, and retention of knowledge in long-term memory. The paper first suggests principles based on the coherence model of instruction, which aims to achieve coherence of knowledge of isolated facts through a network of semantic relationships. Then, the theoretical basis of the model is described, including spatial learning strategies, cooperative learning, and excursions in an authentic environment supported by mobile devices. A methodology of teaching was designed according to the principles of the coherence model, and a virtual guide through educational exhibitions was developed. The virtual guide was tested with students of a primary school during an experimental lecture in the Ostrava Zoo. An evaluation of the coherence model and the virtual guide was carried out using three methods: an observation of students' behaviour and learning during the experimental lecture, a pedagogical experiment, and an evaluation of questionnaires. The results of the evaluation proved that the coherence model of instruction has a positive impact on understanding in context, ability of contextualisation, and retention of the curriculum in long-term memory.

K e y w o r d s: retention of the curriculum in long-term memory, excursion, coherence model of instruction, cooperative learning, mobile learning, museum pedagogy and didactics, understanding in context, spatial learning strategies

Introduction

The paper deals with understanding in context and retention of the curriculum in long-term memory. The author believes that the scope and objective of teaching in schools should not only be mechanical, mindless memorisation of individual facts without context, memorised by a student just to pass the closest test or exam. On the contrary, it is desirable that the student should truly understand the curriculum and, after analysing a problem, be able to synthesise the individual findings as well as to use the gained knowledge in practice. True understanding – when a student is able to organise the learned elements into a network of semantic relationships – also represents a path to long-term memorisation and practical application of those elements.

The paper describes the design, implementation, and evaluation of an educational model, methodology, and an educational application using mobile technologies, all of which aim to achieve a demonstrably positive impact on understanding the curriculum in context. The secondary object is to determine whether the developed model, methodology, and the educational application have a verifiable positive impact on retention of the curriculum in long-term memory.

Pillars of the Coherence Model of Instruction

To improve understanding in context and retention of the curriculum in long-term memory, the author created his own educational model with the working title "coherence model." This working title is to emphasise coherence, that is – the interconnection and cohesion of acquired knowledge and skills of students. The coherence model of instruction is based on spatial learning strategies, on nonlinear representation of knowledge, activating teaching methods, and organisational forms of teaching in an authentic environment, such as excursions in educational exhibitions. First, basing on this model, a methodology was created. Then, the methodology was used to design, implement, and evaluate the educational application for mobile devices (tablets). The pillars of the coherence model and the subsequent stages of its implementation are shown in Figure 1.

The following overview describes the theoretical basis for the coherence model of instruction.

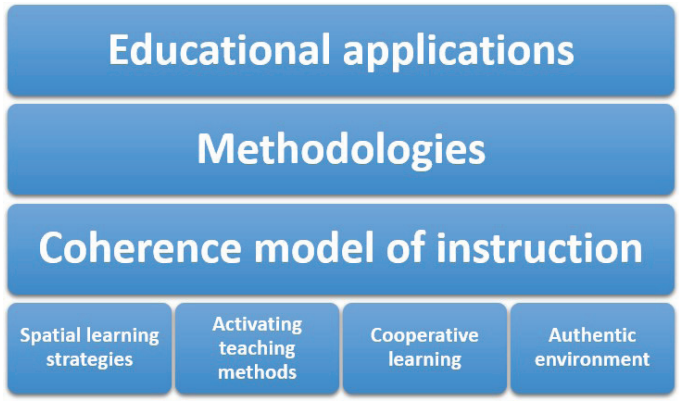

Figure 1. The pillars of the coherence model of instruction and the stages of its implementation.

S o u r c e: own work.

Spatial Learning Strategies

The theoretical starting point in finding ways for students to develop understanding in context and achieve long-term curriculum retention are spatial learning strategies. These strategies use a nonlinear representation of knowledge, i.e. the curriculum. The underlying principle for various approaches in this area is a two-dimensional visualisation of the subject matter structure and relationships between concepts. Spatial learning strategies are built on the assumption that a student first has to "organize everything in his own head," that is – to consciously construct and reconstruct the network of concepts and relationships in his or her *n*-dimensional long-term memory (Mašek & Zikmundová, 2010, p. 8). Besides extended concept mapping, there are other methods of nonlinear knowledge representation, for example hypertext, structuring key concepts, recurrent graphic organising, and semantic networks.

Long, continuous, and unstructured text – whether a spoken commentary by a teacher or a written record in a book – could be too monotonous, overwhelming, and thus poorly understood by the students. Therefore, *typographical features* or *text structures* are being used (Čáp & Mareš, 2007, p. 237). These two highlight the important parts of the curriculum, partially capture its structure, or regulate the student's progress in learning.

Structuring an otherwise linear textbook not only serves better navigation and easier understanding, but also partially reflects the structure of the phenomena of the outside world. The attempts to create a structure are apparent from the highest

level, which is a division of knowledge between individual teaching subjects, to the lowest level, which are the individual paragraphs of the textbook. However, this way of structuring has its weaknesses.

The distribution of knowledge into various subjects is to some extent a matter of convention. Isolation of individual subjects can be an obstacle to understanding in context, finding interdisciplinary links, and also to creative thinking, because many new ideas and innovations arise on the verge of two disciplines.

Structuring a linear text is not sufficient for expressing the fact that the object of learning (the element) can be a part of multiple systems. For example, the object of learning "orangutan" may be included as a part of the curriculum in different systems, for instance in the taxonomic classification system or in the food chain. In terms of higher levels, the same object may be taught about in different subjects as seen by various disciplines, which again makes it difficult for the linear method of teaching.

Print media, diagrams, and figures allow only a static record of the immediate state of phenomena or structures. However, numerous phenomena in nature and in the society are dynamic processes, and their representation through a static record is not as vivid and comprehensible as an animation using information and communication technologies (ICT), especially for younger students. Also, for instruction purposes, static phenomena can be presented better using animation. Explaining the structure can be rendered gradually from the central concept towards more remote concepts so that the students are not confronted with the whole phenomenon at once but gradually. ICT allow for the rendered structure to be complemented with spoken commentary and other multimedia elements, so that the students can engage multiple senses in their learning. Moreover, if touch devices are used in instruction, then students also get to use their sense of touch and fine motor skills.

Another indispensable advantage of ICT used for nonlinear representation of curriculum is the interactivity of educational applications. In such a case, the student is no longer a passive recipient of the multimedia information flow, but he or she becomes an active co-creator of his or her learning process. The advantages of interactivity are especially apparent when providing the student with feedback, i.e. during the formative assessment of the student, because the instruction commentary can be interspersed with automatically evaluated self-tests.

Nonlinear representation of the curriculum using ICT also has its disadvantages. The biggest risk is that a student "loses the thread," because the educational process in not linear, providing a lot of offshoots, and thus some taught structures can be too complex for the student's overall comprehension. Moreover, it is not desirable for the student to think only in nonlinear structures, since most communication acts – whether spoken or written – proceed linearly from the introduction through the body to the conclusion, and individual thoughts expressed in paragraphs should smoothly concur in a logical order. According to the author's

personal experience, it is also a big problem for many university students, who possess only limited ability to consistently express themselves.

Linear and nonlinear ways of representation are best combined in order to eliminate the drawbacks of each of them; furthermore, a synergistic effect may possibly occur, in which the educational effect of the whole is greater than the sum of its parts. The combination of various means of curriculum representation and various ways, methods, and forms of teaching – in order to suppress their weaknesses and intensify their strengths – is the strategy of the coherence model of instruction.

Cooperative Learning

The basis of the coherence model of instruction are spatial learning strategies, and these must somehow be incorporated into the process of teaching. Therefore, the usage of activating teaching methods (Maňák & Švec, 2003, p. 152) and group classroom forms of instruction (Janiš & Lorencovič, 2008) in an authentic environment using ICT is an integral part of the coherence model of instruction.

Activating teaching methods assume that the student is a significantly active element of the instruction. The student's activity is not purposeless, rather being a starting point on the path "activity > autonomy > creativity." Among the means of activating teaching methods are discussion, and heuristic, situational, and staging methods or educational games.

Cooperative learning was selected from the existing means of group classroom forms of instruction for the needs of the coherence model of instruction in the sense of the following definition (Kasíková, 1997, p. 67):

> Cooperative learning differs from individual learning by being built on the cooperation of people in solving complicated tasks. The solvers are encouraged to be able to divide their social roles, plan the whole task, divide the sub-tasks, learn to counsel each other, help each other, align their efforts, monitor each other, solve partial disagreements, unite the partial results into a greater whole, evaluate the contribution of the individual members and etc.

When using cooperative learning, the class is divided into groups. There is supposed to be an active cooperation among the students within the same group, which among other things means that an individual's success in achieving a goal is tied to the success of other group members. Developing social skills necessary for working in groups is also a part of learning. When evaluating group learning,

it is important to consider not only what the students have learned, but also what the social interactions among them were like.

Also, there is one more reason for using cooperative learning in the coherence model of instruction. In strengthening the understanding in context, among others, a method called "learning by teaching" is used, not only as a way of teaching but also as a way of assessing students. In the coherence model, this assessment is not just summarised in the final presentations of students, but it is formative throughout the whole learning process. The work and communication in the students' teams during cooperative learning produces a wide range of planned and unplanned situations. During these situations the students are forced to clearly explain something to other members of the team or to the teacher. In so doing, they get feedback and formal or informal evaluation of their ability to convey their understanding to other people.

An Excursion at an Educational Exhibition

To increase motivation and provide an immediate and lasting knowledge, experiential learning (Hanuš & Chytilová, 2009, p. 53) in an authentic environment was chosen. This means an environment outside of the classroom, as close as possible to the actual object of instruction. Given the fact that in most cases it is not feasible to carry out the instruction in a truly authentic setting, it is possible to use educational exhibitions in museums. In this paper, museums are defined in a broader sense (Museum Definition, 2007), which – in addition to conventional scientific and technical museums – also include zoological and botanical gardens, nature trails, geoparks, planetaria, or art galleries.

Museums are increasingly aware of their educational function, as evidenced, for example, by the rise of children museums, most of which are usually a part of the original museum (Jůva, 2004, p. 35). Museum pedagogy and didactics are developing, which again is evidenced by the number of publications concerning this topic. Nevertheless, according to the author's findings, a systemic use of museums for the extension of formal school education is still not on the same level as in Western Europe, not only when it comes to the frequency of school excursions, but also in terms of the museums' readiness for adequate instruction (from suitably qualified museum tutors through appropriately designed exhibitions to worksheets).

The Preparatory Stage of the Excursion

An educational excursion in a museum as a specific organisational form of teaching was chosen for the implementation of the virtual guide through educa-

tional exhibitions. A full-fledged excursion consists of three stages: preparatory, implementation, and final (Bílek, 2009, p. 17).

During the preparatory stage of the excursion, the students, preferably by their own efforts, get acquainted with history and reality of the individual objects of instruction and start to connect them into free associations. During this stage, the students also learn about the organisational guidelines, in particular in regards to group work and division of roles. The main objective of this stage is to stimulate an interest in both the excursion and the given subject.

The excursion concept of three stages has an analogy with the constructivist model of teaching (Šimík, 2012). The first stage of the excursion corresponds to the phase called "evocation." This phase is about identifying what the students already know about the issue and the problem, or what they think they know. Subsequently, the students form questions and express their confusion. The result should be a particular passion for solving a task or project.

The Implementation Stage of the Excursion

The implementation stage of the excursion takes place in the Ostrava Zoo and is carried out as a form of cooperative learning. The students work in groups of three to five using a tablet and are engaged in active observation, measurements, and experiments. The main objective of this stage is to become familiar with the real objects (exhibits) and recognise the relationships of the actual object (exhibit) with other objects.

A proper excursion is crucial for acquiring knowledge and developing understanding. In the constructivist model of instruction, a phase called "perception of a meaning" corresponds to this stage of the excursion. The student discovers new information, clarifies his or her views and confronts them with his or her original conceptions.

The Final Stage of the Excursion

During the final stage of the excursion, the acquired knowledge of the students should become systematic, categorised, and organised into various hierarchies.

The students who worked in the same group during the implementation stage of the excursion in the educational exhibition present their comprehensive knowledge to others and discuss it. This part may have a competitive or cooperative form. In the first case, all groups worked on the same task, and now it needs to be decided who performed best on the task. In the second case, each group performed a part of a larger task and now it is time to assemble the pieces of knowledge into a whole and to formulate general conclusions.

The final stage is concluded by a teacher, who summarises the acquired knowledge and benefits of the excursion, and initiates discussion on how to use the acquired knowledge, skills, and experiences in further education and life. The "reflection" phase of the constructivist model of instruction, which leads

to deepening the understanding of the curriculum, mirrors this final stage of the excursion. The students categorise and systematise their knowledge and place it into context and schemata.

All three stages in the coherence model of instruction are considered equal. However, according to the author's verification, it is often not so in practice, and the initial and final stages tend to be somewhat overlooked by the teachers.

The stages are connected into a homogeneous whole by a unifying activity, which may be for example:

- a didactic game;
- a problem-based learning to reinforce research activities and independent creative thinking; or
- a project-based learning (Trnová, 2012, p. 72) with a "tangible" outcome, for example creation of the world map of animal biotopes or starting a zoological corner in the classroom.

The recommended unifying activity among the specific applications of the coherence model of instruction is an expedition undertaken by the students. Unlike the incorrectly understood "excursion" as a one-time event, expedition is intended as a long-term student project. From the very beginning of the expedition, the students assume team roles and work together to achieve an atypical goal.

Conclusion

A total of 48 pupils attended the excursion in the Ostrava Zoo. Pupils were divided into two equally large groups (experimental and control), whose level of knowledge was comparable. The pupils worked in groups of three – expedition teams. Using statistical tools, it was tested whether the results of the experimental and control groups are different. First of all null and alternative hypotheses were formulated.

Null hypothesis H_0: the results of the experimental group of pupils are not different from the results of the control group of pupils in the posttest (PostE= PostK).

Alternative hypothesis H_1: the results of the experimental group of pupils are different from the results of the control group of pupils in the posttest (PostE≠ PostK).

Results of testing are shown in Figure 2.

Hypothesis H_0 was rejected on the basis of the results of statistical analysis. This justifies the assertion that the level of understanding among pupils of the experimental group, after completion of education which was based on the coher-

ence model of instruction, is significantly higher than the level of understanding among pupils of the control group, who attended classes not based on this model.

Mann-Whitney U or Wilcoxon Rank-Sum Test for Difference in Medians

Alternative Hypothesis	Z-Value	Prob Level	Decision (5%)
E≠K	-2,4820	0,013063	Reject H0
E<K	-2,4820	0,993468	Accept H0
E>K	-2,4820	0,006532	Reject H0

Plots Section

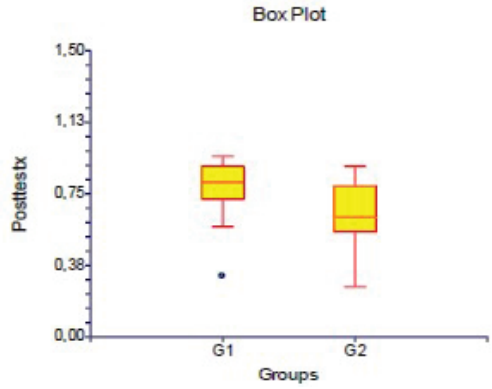

Figure 2. Statistical comparison of the results of the experimental and control group.

The evaluation of the coherence model of instruction, specifically the educational application for tablets, which is based on this model, proved that this way of teaching has a demonstrably positive impact on understanding the curriculum in context and on long-term retention of the curriculum. The students rated working with tablets negatively, especially because the tablets distracted them from learning.

References

Bílek, M. (2009). *Muzejní didaktika přírodovědných oborů a technických předmětů: přírodovědná a technická muzea a možnosti jejich využití ve vzdělávání.* Hradec Králové: Gaudeamus.

Čáp, J., & Mareš, J. (2007). *Psychologie pro učitele.* Second edition. Prague: Portál.

Janiš, K., & Lorencovič, J. (2008). *Organizační formy výuky: odborný text k rámcovému vzdělávacímu programu pro základní vzdělávání.* Ostrava: University of Ostrava.

Jůva, V. (2004): *Dětské muzeum: edukační fenomén pro 21. století.* Brno: Paido.

Hanuš, R. & Chytilová, L. (2009). *Zážitkově pedagogické učení.* Prague: Grada.
Kasíková, H. (1997): *Kooperativní učení, kooperativní škola.* Prague: Portál.
Maňák, J. & *Švec*, V. (2003). *Výukové metody.* Brno: Paido.
Mašek, J. & Zikmundová, V. (2010). *Výukové využití softwarových systémů pro techniku pojmového mapování.* Plzeň: University of West Bohemia.
Museum Definition. (2007). International Council of Museums. Accessed 31 October 2014. Retrieved from http://icom.museum/the-vision/museum-definition/.
Šimík, O. (2012). *Utváření obsahu přírodovědné výuky na 1. stupni* ZŠ v *konstruktivistickém pojetí.* Ostrava: University of Ostrava.
Trnová, E. (2012). *Základy kvalitní projektové výuky.* Brno: Lipka – školské zařízení pro environmentální vzdělávání.

Pavel Kapoun

Model spójności nauczania

S t r e s z c z e n i e

Niniejsza praca zajmuje się trzema głównymi kwestiami: rozumieniem programu nauczania w kontekście, umiejętnością kontekstualizacji i zatrzymywaniem wiedzy w pamięci długotrwałej. W pierwszej kolejności, artykuł sugeruje zasady oparte na modelu spójności nauczania, który ma na celu osiągnięcie spójności wiedzy w zakresie pojedynczych faktów poprzez sieć powiązań semantycznych. Następnie opisana jest teoretyczna podstawa modelu, włącznie ze strategiami nauczania przestrzennego, nauczaniem opartym na współpracy i wycieczkach w rzeczywistym środowisku, wspieranych urządzeniami mobilnymi. Metodologia nauczania została zaprojektowania zgodnie z zasadami modelu spójności. Opracowano wirtualny przewodnik po wystawach edukacyjnych. Jego działanie zostało przetestowane przez uczniów szkoły podstawowej podczas eksperymentalnego wykładu w zoo w Ostrawie. Ocenę modelu spójności i wirtualnego przewodnika przeprowadzono przy użyciu trzech metod: obserwacji zachowania i nauki uczniów podczas eksperymentalnego wykładu, eksperymentu pedagogicznego i oceny kwestionariuszy. Wyniki oceny wykazały, że model spójności nauczania ma pozytywny wpływ na rozumienie w kontekście umiejętności kontekstualizacji i zatrzymywania wiedzy w pamięci długotrwałej.

S ł o w a k l u c z o w e: zatrzymywanie wiedzy w pamięci długotrwałej, wycieczka, model spójności nauczania, nauczanie oparte na współpracy, mobilne nauczanie, pedagogika i dydaktyka muzealna, rozumienie w kontekście, strategie nauczania przestrzennego

Pavel Kapoun

Когерентная модель обучения

А н н о т а ц и я

Статья посвящена трем основным вопросам: понимание учебного плана в контексте, способность контекстуализация и удержания знаний в долговременной памяти. В работе

предлагаются принципы, основанные на когерентной модели обучения, целью которой является достижение согласованности знаний изолированных фактов через сеть семантических отношений. Далее описывается теоретическая основа модели, в том числе пространственных стратегий обучения, совместного обучения и экскурсий в аутентичной среде, поддерживаемые мобильными устройствами. Методика обучения была разработана в соответствии с принципами модели когерентности, и был разработан виртуальный гид через образовательные выставки. Виртуальный гид был протестирован с учащимися начальной школы во время экспериментальной лекции в зоопарке Остравы. Оценку модели когерентности и виртуального гида проводили с использованием трех методов: наблюдение за поведением и обучением учащихся в ходе экспериментальной лекции, педагогический эксперимент и оценка вопросников. Результаты оценки показали, что когерентная модель обучения оказывает положительное влияние на понимание в контексте, способность контекстуализации и сохранение учебного плана в долговременной памяти.

К л ю ч е в ы е с л о в а: сохранение учебного плана в долговременной памяти, экскурсии, когерентная модель обучения, кооперативное обучение, мобильное обучение, музейная педагогика и дидактика, понимание в контексте пространственных стратегий обучения

Pavel Kapoun

Modelo de coherencia de la instrucción

R e s u m e n

La tesis trata de tres temas principales: la comprensión del currículo en el contexto, la capacidad de contextualización y la retención de conocimiento en la memoria a largo plazo. El artículo sugiere primero principios basados en un modelo de coherencia de la instrucción, cuyo objetivo es lograr la coherencia del conocimiento de hechos aislados a través de una red de relaciones semánticas. A continuación, se describe la base teórica del modelo, incluyendo estrategias de aprendizaje espacial, aprendizaje cooperativo y la incursión en un entorno real basado en dispositivos móviles. Se diseñó una metodología de enseñanza según los principios del modelo de coherencia y se desarrolló una guía virtual a través de prácticas educativas. La guía virtual fue probada con estudiantes de una escuela primaria durante una clase experimental en el Zoológico de Ostrava. La evaluación del modelo de coherencia y de la guía virtual se realizó mediante tres métodos: una observación del comportamiento y aprendizaje de los alumnos durante la clase experimental, un experimento pedagógico y una evaluación por cuestionarios. Los resultados de la evaluación demostraron que el modelo de coherencia de la instrucción tiene un impacto positivo en la comprensión en contexto, en la capacidad de contextualización y en la retención de los contenidos curriculares en la memoria a largo plazo.

P a l a b r a s c l a v e: retención del contenidos curriculares en memoria a largo plazo, excursión, modelo de coherencia de enseñanza, aprendizaje cooperativo, aprendizaje móvil, pedagogía y didáctica de museos, comprensión en contexto, estrategias de aprendizaje espacial

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Words Mean. Words Look. Words Sell (Themselves)

Abstract

An article entitled *Words Mean. Words Look. Words Sell (Themselves)* focuses on three issues: dominance of the use of English loanwords over attempts to create their Polish equivalents (as a result of which a product, a process, an event, or an artefact promoted by the English-speaking culture is adopted together with its name), a trend whereby words (and titles composed of words) become images (through a choice of font, a non-standard use of lowercase and uppercase letters, or an inclusion of non-letter characters, e.g. parentheses), and ascribing to words present in micro-acts a promotional function, advertising the entire product – a text. The trends discussed in the article are not new, but it is their intensity level that is new.

K e y w o r d s: word, loanword, neologism, communication macro-act, title

Introduction

Computer-based text editing allows for texts to be visualised in a variety of ways. Such visualisation is best seen in initial parts of texts, i.e. in titles as well as synthetic advertising slogans and informal online messages. A title is a metalingual synthetic message that both summarises and advertises the text. In today's world, where everything (or almost everything) is for sale, titles become meaningful "packaging" for texts. J. Bralczyk, an eminent Polish linguist, has written a paper of several dozen pages on this issue. Its emphatic title – *Język na sprzedaż* [*Language*

for sale] (2004) – encapsulates a multi-aspectual and multi-dimensional review of communication micro-acts, or advertising slogans. The concept of a *micro-act* has been employed by K. Skowronek: "[…] an advertisement is a speech micro-act of indirect nature with a dominant persuasive function, composed of the following micro-acts (direct or indirect): encouraging, persuading, stating, praising, suggesting, offering advice, guaranteeing, promising as well as courtesy micro-acts, whose pragmatic functions are always subordinate to the primary function" (Skowronek, 1994, p. 84).

This article addresses three issues, highlighted in the very title: 1) words mean (they are of symbolic character, see: Aitchison, 1996), 2) words look (i.e. they have specific shapes, formats, colours etc.), and 3) words advertise (themselves) (they not only have meanings but also persuade the reader to get to know the product, i.e. the text the words make up). Adhering to this sequence, I will be committing to paper my reflections on the meaning, shape, and persuasive power of words in various (tele)literacy aspects. In my analysis, I make reference to customary and normative sanction for modern techniques applied to words, invoking, among others, consultative and advisory decisions of the Polish Language Council (hereinafter: RJP), which, however, have no normative authority apart from spelling guidance.

Words Mean

In languages – which are very efficient communication tools – each word has to have a meaning. From an economic point of view, words without meanings are not, or are ceasing to be, words of a particular language. For example, what do the words *mal* and *mil* mean in Polish? These words were used in a phonetic experiment designed to show that the smallest unit of language, which is a phoneme (in this particular case phonemes /a/ and /i/ were involved), can be assigned certain meanings. Most of the participants in the experiment assigned to the word *mil* the meaning of "a large table," and to the word *mal* – the meaning of "a small table." It was concluded that what materially contributed to that decision was vowels – their sound and colour produced certain semantic associations in those taking part in the experiment. Similar experiments, utilising phonetic symbolism, have been carried out on the words *takete* and *maluma* as well as *kiki* and *buba*; cf. one of the earliest publications on symbolism by E. Sapir (1929), or J. Aitchison's book *The Seeds of Speech. Language Origin and Evolution* (1996) as well as articles (e.g. Hatalska, 2002).

The above observations are confirmed by J. Bralczyk's conclusion: "However, there is […] a list of words in whose power senders believe, and by the way,

sometimes they are right in doing so. Some of the words have special formal characteristics – it is thought, for example, that a name should end with a vowel, and the most effective names are those that also start with a vowel" (Bralczyk, 2004, p. 24). Associations relating to words are determined by their sound, visual shape, as well as meaning, including associations evoked (connotations). Words – as J. Bralczyk goes on to say – operate within an entire system composed of associations, which the recipient controls to a varying degree, "therefore familiarity with vocabulary that is attractive in terms of connotation, i.e. knowledge of which words can produce desired effects in the recipient is basically a must for the author of the message" (Bralczyk, 2004, p. 24).

The economy of language manifests itself when words cease to be needed or their designata have fallen out of use (cf. numerous names relating to farming methods, archaic industries), or when obsolete words have their equivalents in the vocabulary (cf. archaic *lija* and contemporary *ulewa* – both meaning "intense heavy rain"). At the other end of the scale, diametrically opposite archaic words are neologisms: words which are waiting to enter circulation (usage) or are gradually penetrating into it (to stay there for a short or a long time). Once a word obtains social approval (i.e. simply starts to be used by speakers of Polish), it enters circulation and after that is incorporated into dictionaries. However, it is difficult to identify the moment when a particular word that, for example, has been used in an advertisement or a news headline becomes a valid word in a given language and ceases to be ephemeral. K. Kleszczowa addresses the subject of neologisms "wearing out" by analysing selected examples in her book entitled *Nowe słownictwo polskie. Materiały z prasy lat 1972–1981* [*New Polish Vocabulary. Press Materials from 1972–1981*]. Kleszczowa claims: "It is astonishing how many of the words mentioned there did not survive until the end of the twentieth century. […] however, this does not change the fact that it took just 20 years for ca. half of the words diligently recorded there to be removed from memory, for example *efektyw* 'efficient,' *filopolsko* 'in a phili-Polish manner,' *lekozależność* 'drug dependency,' *lękliwiec* 'a fearful person,' *linozwijacz* 'rope winder,' *losowiec* 'a person relying on destiny when playing a game,' *lunearny* 'lunar'" (Kleszczowa, 2012, p. 187).

Current loanwords are words of English origin. They are necessary to refer to the processes, facilities, devices, etc. that have found their way into Polish pragmatic space. In the majority of cases, technologies and devices being disseminated as well as their names are "imported" at the same time. Polish language accepts foreign words (mostly English), e.g. *coaching*, *copywriter*, *outsourcing*; *stalking*, *mobbing*, and *bullying*; *Facebook* and *fejsować* (meaning "to publish on the social network site www.facebook.com"), *Google* and *wygooglować* (meaning "to search for information using the search engine www.google.com"), *Instagram* and *instagramować* ("to publish on the portal www.instagram.com"); *Internet* / *internet* (the choice between the uppercase and lowercase version depends on categorising

the lexeme as a proper name – starting with a capital letter, or as a common noun – starting with a lowercase letter), and words with the *e-* prefix (*e-mail*, *e-book*, *e-książka*, *e-teacher*, *e-polonistyka*, *e-literatura* meaning "literature making use of, among other things, network capabilities") or the *i-* prefix (*iPhone*, *iPod*). The word *e-book* has not been added to dictionaries yet. Those in favour of avoiding using loanwords in Polish can use the polonised form *ibuk*, which is used in the name of the website ibuk.pl (http://grzegorj.interiowo.pl/popraw/slow03.html, accessed 11 November 2016). The e-teacher software website informs users: "This [English language learning] software is open-ended: in addition to ready-made exercises, learners can add their own exercises or edit ones provided with the software. It is also possible to create one's own tabs and thematic trees" (http://www.programosy.pl/program,eteacher.html, accessed 10 November 2016). A publication entitled *e-polonistyka* (Dziak & Żurek, 2009) is the outcome of the conference under the same name, held by the Lublin Catholic University (KUL).

Loanwords often retain their original spelling for a certain period of time. Over time their spelling becomes polonised. This was the case with the words *wideo* (*video*), *smartfon* (*smartphone*), and words relating to other spheres of human activity. The degree of polonisation is demonstrated by the spelling of words which initially was identical with the original spelling, but – as loanwords "set up home" in Polish word stock – their spelling takes on a form consistent with Polish orthography. This is evidenced by the growing popularity of the word *e-mail* spelled as *mejl*. This word can be written using both original English spelling (in official communications) and polonised spelling, but it should be remembered that the latter spelling is also acceptable, although it appears it is still reserved for informal settings. On the other hand, another spelling variant – *majl* – being a combination of the original spelling *e-mail* and the polonised *mejl*, has not gained acceptance. "I think," claims A. Dąbrowska of the Polish Language Council, "that the name *list elektroniczny* 'is going through' its transitional phase – the English spelling version is still present (*e-mail*), and at the same time the polonised version (*mejl*) is being increasingly used. Only time will tell which of these versions will prevail. Still, both are correct" (http://www.rjp.pan.pl/, accessed 10 November 2016).

The *cartridge* lexeme could have retained its original form or have become polonised to the form *kartrydż* (some linguists claim that this version is better because the letter "r" is followed by "y", as in the loanword *brydż*) or *kartridż* (the latter form contains the letter combination "ri", unusual under Polish pronunciation rules, which is present in a less popular polonised version of *bridge* – i.e. *bridż*). A review of online store product ranges allows a conclusion that the not recommended version of the loanword – *kartridż* – is gaining ground and prevailing over other forms. Not so long ago, only in 2002, professor M. Bańko, responding to a request submitted by a user to the PWN language usage advice site ("Could you please tell me how to correctly write out the word denoting

a consumable component of printers (particularly inkjet ones), commonly referred to as *kartridż*. Has this word been polonised?"), said: "You pronounce it as you spell, but it should be spelled in the English way – *cartridge*. The word is declined using an apostrophe: *cartridge'a*, *cartridge'em*, *cartridge'u*, *cartridge'e* etc. In Polish you can also say a replaceable ink container" (http://sjp.pwn.pl/slowniki/kartrid%C5%BC.html, accessed 14 November 2016).

A. Dąbrowska, a Polish Language Council representative, explained the mechanism for polonising loanwords as follows: "[…] loanwords, at the beginning of their 'life' in the Polish language, are spelled as in their original language. After a certain time, in most cases, loanwords adapt to the Polish system and speakers of Polish start to spell (and decline) them according to Polish declension patterns. This was the case with such words as *komputer*, *kompakt* or *lider*, which – when they first appeared in the Polish language – were spelled *computer*, *compact*, *leader*. Nowadays, the average Polish speaker would find such spelling objectionable" (http://www.rjp.pan.pl/, accessed 10 November 2016). There are no clear formulas by which to establish when such a polonising change will occur; it is the speakers of the language that have got the final say. The only thing that one can do is take note of a growing trend of using forms spelled according to Polish orthographic patterns.

From time to time, attempts are made by speakers of Polish to replace borrowings with neologisms. This is confirmed by what has happened to the lexeme *copywriter*, which has retained its original version and has a Polish equivalent – the neologism *tekster*. The word *tekster* is included in the latest editions of dictionaries: *Wielki słownik ortograficzny PWN* [*The PWN Great Spelling Dictionary*] edited by E. Polański (2016, p. 808) and *Uniwersalny słownik języka polskiego* [*Universal Dictionary of Polish*] edited by S. Dubisz (2003, vol. 4, p. 38). The latter dictionary defines *tekster* as "a person employed to write advertising or publicity copy; copywriter." It is difficult to predict whether, for example, *copywriter* will continue to be *copywriter* for years to come, will transform into *kopyrajter / kopirajter,* or will be replaced by the lexeme *tekster* (based on this source: http://www.rjp.pan.pl/, accessed 14 November 2016).

According to information found on the Polish Language Council's website, the division of responsibilities with regard to the development of the lexical and grammatical system of contemporary Polish is as follows: "[…] the Polish Language Council, in its capacity as a consultative and advisory body in respect of the use of the Polish language, does not 'approve' any inflection forms (it only has the authority to approve certain orthographic forms). It is society, and especially its educated classes that accept particular forms by using them, and do not accept others by refusing to use them. On the hand, linguists (but not the Polish Language Council as an institution) compile dictionaries in which they describe, sort out and evaluate what has entered common usage" (http://www.rjp.pan.pl/, accessed 10 November 2016).

In conclusion, firstly, the presence of loanwords in Polish is not censurable or unnatural. Foreign words and grammatical structures have penetrated into our language (and into all other languages) ever since these languages came into existence. In the past, we imported such words as *sugar* [*cukier*], *roof* [*dach*], *shirt* [*koszula*], and in the 20th century – *business* [*biznes*], *computer* [*komputer*], *leader* [*lider*]. Secondly, language follows its own rules and is subject to external regulation only to a small extent. One cannot just prohibit, in an authoritarian manner, the use of particular forms or structures even if they face opposition from within society, and, what is more, one should not do that. Language itself records (as a seismometer does) waves of lexical change. Thirdly, if a particular word is part of a Polish text (irrespective of whether it is spelled the English or Polish way), "it is a Polish word, albeit not fully adapted" (http://www.rjp.pan.pl/, accessed 10 November 2016); it is a word which we need for our communication, because at a given time the language does not have a better word (that would convey the meaning better). Finally, regardless of the origin of a given word, it is important that language speakers should want to treat words as a value and seek to maintain its quality both in speech and writing. This is because language is a social phenomenon, and responsibility for its condition lies with each speaker.

Words Look

Words to be used in headlines and titles are often specially selected because of their sound, the specific letters they contain, and their capability of being re-shaped. I refer here, among other things, to the titles of publications on linguistics, cf. *N@ wigacje słowa. Strategie werbalne w przekazach audiowizualnych* [*Word N@ vigations. Verbal strategies in audio-visual messages*] (Wilk, 2000). The first word in the title contains a character commonly associated with Internet communication, which is called *małpa / małpka* [*a monkey* / *small monkey*] in colloquial Polish. A similar technique – using the character @ as a conjunction – is applied in the title of a monograph *Język @ multimedia* [*Language @ Multimedia*] (Dytman-Stasieńko & Stasieńko, 2005). "Inventive, witty titles attract readers' attention, they are intriguing, they provoke, and as they often are allusive and ambiguous, they encourage debate. [...] This is not a disinterested act, but a method to gain readership, to seduce readers" (Kamińska-Szmaj, 2001, p. 61).

For example, the adjective *długi* [*long*] (in certain contexts, it is used as a noun, cf. *Za długi męża nie odpowiadam.* Żona [*I am not liable for my husband's debts – Wife*]) is composed of five letters: *d*, *ł*, *u*, *g*, *i*; however, if we visualise the word, we can arrive at a shape different than the ordinary one, e.g. *dłuuugi* [*looong*]. In this case, the letters added (vowel letter *u*) imitate the phonic shape of the word.

One of the properties of language is the open nature of vowels and the ability to lengthen them for expressive purposes, e.g. to emphasise that a show, or a lecture was indeed very long. Non-standard multiplication of graphical characters is also applied to punctuation characters, and the exclamation mark in particular; multiple exclamation marks can express intense emotion such as agitation, a row (Grzenia, 2012, p. 119). On the other hand, a red exclamation mark appearing alongside an email means high priority.

Phonic properties of written language are evidenced by shapes of words (appearance) that are inconsistent with their spelling, but which can attract the reader's attention, which is the primary objective of such a graphic and phonic procedure, cf. *Dłuuugi weekend* [*Looong weekend*], *Dłuugi zoom dla iPhone* [*Loong zoom for iPhone*] (http://gadzetomania.pl/, accessed 10 November 2016), *AAAAAAAAAAAby do jesieni* [*Juuuuust tiiiiiill autumn comes*] (GW, 10 September, based on: Ślawska, 2008). The above headlines are based on play with phonic forms, graphically recorded. By situating words in space, we substitute seeing for hearing. It is worth recalling here U. Żydek-Bednarczuk's opinion that after the era of phonocentrism there came the era of graphical-centrism. Furthermore, we can speak of "an electronic epoch or rather, electronic writing" (Żydek-Bednarczuk, 2003, p. 4).

When preparing texts, in addition to letter multiplication, one can enhance letters with texture, colour, and mimicking (iconic) effect; for example, in the adjective *biało-czerwony* [*white and red*], upper parts of bold letters are white, while the bottom ones are red, which brings to mind unambiguous association with the national colours of Poland. The red colour of bold font forms background for black dots. As a result, the title *Ladybirds* printed using this font carries a double message about the article. Blue bold letters with white borders in the title *Dolphins* evoke associations with water – the mammals' natural environment. Letters of various colours (each letter is of a different colour) in the headline *Parrots* emphasise one of the characteristic features of the bird – multi-coloured feathers. Example titles are taken from the Polish language magazine *Kumpel*, intended for children of younger school age.

Graphisation (word visualisation) is also utilised in informal Internet communication. Common and widely used techniques (in addition to those referred to above, used in titles) include: a) the use of capital letters (*PROSZĘ, UDOSTĘPNIJCIE TO NA SWOJEJ TABLICY* [*PLEASE POST IT ON YOUR BULLETIN BOARD*]), capital letters having become the Internet code for yelling; b) the decision not to use capital letters according to the rules (e.g. in proper names) resulting either from failing to use the Shift key + lowercase key combination or from a deliberate decision; c) alternating lower and upper case letters (*MoooJeEe tYY sŁoDkIe KoooFFFaniEeE* [*You aaaaaaRe SUuUuUuCh SwEEeeeeeeeT DaaaaaaaaaHliNg*]); d) replacing Polish characters (digraphs, letters with diacritics) with combinations of English and pseudo-English letters (*jush* [already],

poklikash? [will you click?]); and e) the overuse of a particular letter, e.g. *x* (*narx buziax 4 @LL*, *Pozdrowka 4 all* [*Regards for all*]).

The above mentioned "beauty treatments" focus the recipient's attention on the form of words (of titles, slogans, messages, posts). Moreover, most probably – as has been the case with many expression-enhancing techniques described in source literature – they will fall out of use because they will cease to perform their primary function: that is, the expressive function. At the same time, new techniques will take their place, being different, fresh, fascinating, having persuasive and expressive power when they first enter usage. It is the role of linguistic scholars to record and describe such language phenomena. What is more, basing on such research, their role is also to draw conclusions about what is safe for language (for its status quo) and what poses a threat to its essence, i.e. the system.

Words Sell (Themselves)

The title of the third subsection – thanks to the reflexive pronoun – has a double meaning: *words sell themselves* implying "words themselves constitute an outward label (for language), words can be gentle and kind or aggressive and obscene, etc." but also *words sell*, i.e. "words play a service role, they help to advertise what they mean, what they denote." Utilising ambiguity of words is a specific game of meanings and a game played with the recipient interpreting these meanings.

As a result of the aforementioned semantic and formal operations, words *sell (themselves)* in various texts, including scholarly ones, which is evidenced by the titles of selected chapters in thematic monographs. At this point, I wish to emphasise that my intention is to present an autotelic function of these titles, and not to evaluate. Example titles of scholarly papers, in which special precision and quality of language use is required, have been taken from a number of linguistic monographs published in various academic centres in Poland, which I have indicated in my parenthetical references: *Wypasione ściągi jako „protezy umysłu"* [*Def cheat sheets as "makeshift mind"*], *Konceptualizacje nazw portali edukacyjnych w języku licealistów* [*Conceptualisations of educational website names in high school students' language*], *Niedojrzały egzamin, czyli próba odpowiedzi na pytanie, co faktycznie sprawdza matura z języka polskiego* [*Immature examination or an attempt to establish what the maturity examination really verifies*] (Kopeć & Sibiga, 2010); *Czy cel uświęca* środki*? O (nie)szkodliwym łamaniu normy językowej w filmach animowanych dla dzieci* [*Does the end justify the means? On (non-)harmful violations of language rules in animated cartoon stories for children*] (Karkut & Półchłopek, 2010); *Kochany Panie Dziekanie – o przekraczaniu norm w podaniach studenckich* [*"Dear Mr Dean" – on violation*

of language rules in university students' applications], *Proszę mi nie przerywać – o językowych i niejęzykowych regulatorach konwersacji w debacie publicznej* [*"Please do not interrupt me" – on linguistic and non-linguistic means to control conversation in public debate*] (Steciąg & Bugajski, 2009); *Moda na zmysły w służbie cywilizacji medialnej: „epoka ucha" czy „epoka oka"?* [*Senses fashion in the service of media civilisation: "the era of the ear" or "the eye"?*] (Bujak-Lechowicz, 2015); *Język na nielegalu, czyli wpływ multimediów na komunikację werbalną młodego pokolenia* [*Language on an illegal position or impact of multimedia on verbal communication of the young generation*] (Dytman-Stasieńko & Stasieńko, 2005).

The aforementioned titles demonstrate a number of linguistic mechanisms, such as: a) using sociolect vocabulary (*wypasiony*, *ściąga*, *na nielegalu* [*def*, *cheat sheet, on an illegal position*]); b) using phrases present in formal indirect communication (*Kochany Panie Dziekanie* [*Dear Mr Dean*]) and direct communication, for example in public discourse (*Proszę mi nie przerywać* [*Please don't interrupt me*]); c) resorting to ambiguity by placing a part of a word in parentheses, cf. *(nie)szkodliwy* [*(non-)harmful*]; and d) using metaphors and collocations (*niedojrzały egzamin* [*immature examination*], *epoka oka* [*era of the eye*], *epoka ucha* [*era of the ear*], *cel uświęca środki* [*the end justifies the means*]). Such techniques ensure that words sell (themselves).

Close attention to words, visualisation, and meaning of titles – i.e. very synthetic and content-rich messages – is a necessity in modern times. A title sells a macro-product, which is the text. The poetic function in titles appears to be mandatory, desired, or at least – acceptable. This happens irrespective of the form in which a particular text is being disseminated: hardcopy or electronic format. Titles as shop windows for texts proper, on one hand, become active: they call out, encourage, advertise, and sell. On the other hand, words as such, used in titles, have to be of the best quality, most accurate, and most effective; they have to literally sell themselves. J. Fras has expressed this metaphorically, claiming that on the face of it, a title is like a tradesman inviting buyers to look at his merchandise, but, at the same time, it is something more than that – it is a sample of the material, a cut-out of information fabric (Fras, 1999, p. 114).

Conclusion

It is words that are the most readily noticeable material from which texts are made, irrespective of the media in which texts are edited and published (Bralczyk, 2004, p. 60). The meanings of words, their shapes, and their causative power (persuasive, poetic, informative power, etc.) continue to be important in the era

of teleliteracy. Regardless of the origin of words used in communication, the following sentence, part of which I have quoted above, should be considered valid: "Irrespective of whether this word [an Anglicism – M.B.] is spelled the English or Polish way, if it is part of a Polish text, it is a Polish word, albeit not fully adapted" (http://www.rjp.pan.pl/, accessed 10 November 2016). Let me make a second qualifying point here – texts which are properly and carefully prepared in an aesthetically pleasing manner will always be considered an asset. Reading a text (even the shortest one, such as a title or a slogan) is like eating an exquisite dish. That is why texts should be carefully "prepared" and "served" in a way attractive to the recipient. This applies both to texts in a classic form (hard copy) and texts in a teleliteracy form.

While visualisation is not a new phenomenon, it is its intensity that is unlike anything we have seen before. Strategies relating to words (their form and semantics) are utilised both in the traditional media environment (newspaper headlines) and in the audio-visual environment, in which language and language strategies continue to play a constitutive and defining function (Wilk, 2000, p. 82).

References

Aitchison, J. (1996). *The seeds of speech. Language origin and evolution*. Cambridge: University Press.

Bauer, L. (1983). *English word-formation*. Cambridge: University Press.

Bralczyk, J. (2004). *Język na sprzedaż*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.

Bujak-Lechowicz, J. (Ed.). (2015). *Kulturowy obraz mód społecznych*. Szczecin: Volumina.pl.

Dubisz, S. (Ed.). (2003). *Uniwersalny słownik języka polskiego*. Warszawa: PWN.

Dytman-Stasieńko, A. & Stasieńko, J. (Eds.). (2005). *Język @ multimedia*. Wrocław: Wydawnictwo Naukowe Dolnośląskiej Szkoły Wyższej.

Dziak, A. & Żurek, S. J. (Eds.). (2009). *e-polonistyka*. Lublin: Katolicki Uniwersytet Lubelski.

Fras, J. (1999). *Dziennikarski warsztat językowy*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.

Grzenia, J. (2012). *Komunikacja językowa w internecie*. Warszawa: PWN.

Hatalska, N. (2002). Parę słów na temat symbolizmu fonetycznego. *Modern Marketing*, *3/4*, 32–34.

Kamińska-Szmaj, I. (2001). *Słowa na wolności. Język polityki po 1989 roku*. Wrocław: Wydawnictwo Europa.

Karkut, D. & Półchłopek, T. (Eds.). (2010). *Kształcenie językowo-literackie w dobie kultury masowej polisensorycznej*. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.

Kleszczowa, K. (2012). *Tajemnice dynamiki języka*. Katowice: Wydawnictwo Uniwersytetu Śląskiego.

Kopeć, U. & Sibiga, Z. (Eds.). (2010). *Kształcenie językowe w dobie kultury masowej polisensorycznej*. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.

Polański, E. (Ed.). (2003). *Wielki słownik ortograficzny PWN*. Warszawa: PWN.

Sapir, E. (1929). A study in phonetic symbolism. *Journal of experimental psychology*, *12*, 225–239.

Skowronek, K. (1994). *Reklama. Studium pragmalingwistyczne*. Kraków: Instytut Języka Polskiego, Polska Akademia Nauk.

Steciąg, M. & Bugajski, M. (Eds.). (2009). *Norma a komunikacja*. Wrocław: Uniwersytet Zielonogórski & Oficyna Wydawnicza ATUT.

Ślawska, M. (2008). Tytuł – najmniejszy tekst prasowy. *Rocznik Prasoznawczy*, *II*, 117–126.

Wilk, E. (2000). *N@wigacje słowa. Strategie werbalne w przekazach audiowizualnych*. Kraków: RABID.

Żydek-Bedarczuk, U. (2003). Tekst w Internecie i jego wyznaczniki. In *Druga internetowa konferencja naukowa „Dialog a nowe media". Uniwersytet Śląski, Katowice marzec–kwiecień 2003* (pp. 1–9). Accessed 10 January 2017. Retrieved from http://uranos.cto.us.edu.pl/~dialog/archiwum/zydek-bednarczuk.pdf.

Netography

Bańko, M., *Kartridż*. Retrieved from http://sjp.pwn.pl/slowniki/kartrid%C5%BC.html. Accessed 14 November 2016.

Ibuk. Retrieved from http://grzegorj.interiowo.pl/popraw/slow03.html. Accessed 11 November 2016.

Comments and articles published on the Polish Language Council website. Retrieved from http://www.rjp.pan.pl/. Accessed 10 November 2016.

E-teacher software website. Retrieved from http://www.programosy.pl/program,eteacher.html. Accessed 10 November 2016.

Dłuugi zoom dla iPhone. Retrieved from http://gadzetomania.pl/. Accessed 10 November 2016.

Małgorzata Bortliczek

Słowa znaczą. Słowa wyglądają. Słowa (się) sprzedają

S t r e s z c z e n i e

Artykuł zatytułowany *Słowa znaczą. Słowa wyglądają. Słowa (się) sprzedają* opisuje zagadnienie lingwistyczne dotyczące funkcjonowania anglojęzycznych zapożyczeń we współczesnej polskiej komunikacji multimedialnej i naukowej. Tekst pokazuje przykłady takich zjawisk, jak: 1) grafizacja wyrazów, tytułów (w tym tytułów lingwistycznych publikacji naukowych) i sporadycznie – sloganów; 2) proces spolszczania anglojęzycznych zapożyczeń (w tym internacjonalizmów); 3) bazowanie na wieloznaczności leksemów dzięki wykorzystywaniu metafor, znaków interpunkcyjnych (w tym nawiasu wykluczającego lub włączającego wyraz w nim użyty). W podsumowaniu została sformułowana konkluzja, że słowa – jako budulec tekstów – znaczą, a uwikłane w kontekst (np. w tytułach) mogą mieć charakter wieloznaczny, z kolei poddane zabiegowi grafizacji – mogą pełnić funkcję perswazyjną, estetyczną, poetycką. Przede wszystkim jednak w komunikacji werbalnej słowa pełnią funkcję kognitywną.

S ł o w a k l u c z o w e: słowo, zapożyczenie, neologizm, makro-akt komunikacji, tytuł

Małgorzata Bortliczek

Слова имеют значение. Слова выглядят. Слова продают (сами по себе)

Аннотация

Слова имеют значение. Слова выглядят. Слова продают (сами себя) фокусируется на трех вопросах: преобладание использования английских заимствованиях над попытками создать их польские эквиваленты (в результате чего продукт, процесс, событие, являются артефактами английского языка культуры, принятыми вместе с названиями); тенденция в рамках которой слова (и названия, состоящие из слов) становятся образами (по выбору шрифта, нестандартного использования строчных и заглавных букв, включение небуквенный символов, например, круглые скобки), а также приписывание словам присутствующим в микро-действиях промо-функции, рекламирующей весь продукт – текст. Рассмотренные в статье тенденции не являются новыми, но их уровень интенсивности является новым.

Ключевые слова: слово, заимствованние, неологизм, коммуникация макро-акт, название

Małgorzata Bortliczek

Las palabras significan. Las palabras parecen. Palabras (se) venden

Resumen

Artículo: Las palabras significan. Las palabras parecen. Palabras (se) venden se centra en tres cuestiones: el predominio de las palabras prestadas del idioma Inglés sobre los intentos de crear sus equivalentes en idioma Polaco (como resultado del cual un producto, proceso, suceso, cualquier aspecto promovido por la cultura angloparlante se adopta conjuntamente con su nombre), una tendencia por la cual las palabras (y los títulos compuestos de palabras) se convierten en imágenes (a través de la elección de la fuente, el uso no estándar de letras minúsculas y mayúsculas, la inclusión de caracteres sin letras, por ejemplo paréntesis), así como la atribución a palabras presentes en micro-actos de una función promocional, publicitando todo el producto – un texto. Las tendencias discutidas en el artículo no son nuevas, pero es su nivel de intensidad lo que es realmente novedoso.

Palabras clave: palabra, préstamo lingüístico, neologismo, comunicación en micro actos, título

IV
Reports

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DLCC 2016 – Report from a Scientific Conference in Cieszyn/Ustroń, Poland, 2016

The subject matter and the priorities of the conference reflect the conceptual principles underlying the modernisation of education and the reform of the educational systems in European countries, as well as national development strategies for the 21st century. One of the European Union's key educational objectives is the provision of equal opportunities for all with respect to an access to learning and knowledge, regardless of gender, financial and physical ability, and place of residence. Consequently, distance learning has now been granted a status of high priority. If introduced on a wide scale, distance learning and teaching may make a significant contribution towards the achievement of educational goals in member states.

The Faculty of Ethnology and Sciences of Education at the University of Silesia in Katowice, Poland has extensive experience in the implementation of distance learning in other departments across the university. The Faculty's Distance Learning Platform operates smoothly and continues to expand. The conference is designed to bring together all those involved in e-learning – university students, faculty staff, and educators – to explore and share experiences with e-learning and distance learning, both at home and abroad. The partners and co-organisers of the previous editions of the conference held between 2009–2013 include the University of Ostrava (the Czech Republic), Matej Bel University in Banská Bystrica (the Slovak Republic), Silesian University in Opava (the Czech Republic), and Constantine the Philosopher University in Nitra (the Slovak Republic), which are also involved in many activities in the field of e-learning and ICT, in particular within the framework of their jointly participated project "E-learning as a road to communicating in the multicultural environment," supported by the International Visegrad Fund (IVF). Among our participants, there were also researchers and scientists from different countries.

The strengthening and widening of international cooperation resulted in starting another international scientific 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" (www.irnet.us.edu.pl), financed by the European Commission under the 7th Framework Programme, within the Marie Curie Actions International Research Staff Exchange Scheme (2014–2017), with participating 10 universities from 9 countries: the University of Silesia in Katowice (US, Poland) (Coordinator), the University of Twente (UT, the Netherlands), the University of Extremadura (UEx, Spain), Constantine the Philosopher University in Nitra (UKF, Slovakia), Lisbon Lusíada University (LU, Portugal), the University of Ostrava (OU, the Czech Republic), Curtin University in Perth (CU, Australia), Borys Grinchenko Kyiv University (BGKU, Ukraine), Dneprodzerzhinsk State Technical University (DSTU, Ukraine), Herzen State Pedagogical University of Russia, St. Petersburg (HSPU, Russian Federation). Therefore, the 8th Annual Conference DLCC2016 was organised with support of numerous partner universities from West, Central, East Europe, Australia and of course with participation of speakers from different countries.

The topics of the conference included:

1. **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 practice;
- MOOCs – methodology of design, conducting, implementation, and evaluation; and
- contemporary trends of world education – globalisation, internationalisation, mobility.

2. **ICT tools – effective use of education**:
- selected Web 2.0 and Web 3.0 tools;
- Massive Open Online Courses, etc.;
- social media;
- comparing and evaluating LMS (learning management systems), CMS (Content Management Systems);
- VSCR (Virtual Synchronous Classrooms), SSA (Screen Share Applications), CSA (Content Sharing Application);
- cloud computing environment;
- multimedia resources and didactic materials; and
- video-tutorial design.

3. **E-learning and intercultural competencies development in different countries**:
- legal and social aspects of distance learning in different countries;
- psychological and ethical aspects of distance learning in different countries;
- teacher-student and student-student relationships in distance learning;

- theoretical, methodological, and practical aspects of distance learning;
- successful examples of e-learning;
- distance learning of humanities: native and foreign language, philosophy, history, etc.;
- distance learning of science and mathematics;
- quality of teaching, training programmes and assessment; and
- e-learning for persons with disabilities.

4. **Distance learning and lifelong learning**:
- computer training, for prospective and actual teachers, in distance learning;
- lifelong learning supported by distance learning; and
- personnel, scientific, information, and library services.

5. **E-learning in the development of the key competencies**:
- key competencies in the knowledge society;
- use of e-learning in improving the level of the students' key competencies; and
- teachers' and learners' competencies in distance learning and computer science.

6. **Other alternative methods, forms, and techniques in distance learning**:
- simulations, models in distance learning;
- collaboration work in distance learning;
- distance learning systems; and
- m-learning.

This year's conference took place on 10–11 October 2016 in Ustroń. It was the 8th edition of the international scientific conference *Theoretical and Practical Aspects of Distance Learning* (the subtitle of this year's conference was *E-learning Methodology – Implementation and Evaluation*) under the auspices of the Rector of the University of Silesia in Katowice prof. dr hab. A. Kowalczyk, the Dean of the Faculty of Ethnology and Sciences of Education prof. dr hab. Z. Gajdzica, and the Director of the Institute of Sciences of Education dr hab. prof. UŚ K. Śleziński.

Co-organisers of the conference were: the University of Ostrava, Silesian University in Opava, Constantine the Philosopher University in Nitra, the University of Extremadura, the University of Twente, Lisbon Lusíada University, Curtin University in Perth, Borys Grinchenko Kyiv University, Herzen State Pedagogical University of Russia, St. Petersburg, Dneprodzerzhinsk State Technical University.

Participants and guests were solemnly welcomed by the Conference Coordinator, prof. E. Smyrnova-Trybulska, who presented a brief history of the conference, its aim, subject matter and programme, partners within the framework of the IRNet project (Figure 1), co-organisers, and conference guests. Welcoming remarks were also delivered by the Director of the Institute of Educational Sciences prof. K. Śleziński.

The conference was attended by participants from the following countries: Austria, Australia, the Czech Republic, Spain, the Netherlands, Poland, Portugal, Russia, Slovakia, and Ukraine. The first day of the conference consisted of three sessions: one plenary and two thematic ones. During the plenary session, the

following lectures were delivered: "Virtual and Contextual Mobile Learning Through Empathic Technologies" by prof. P. Isaías from the University of Queensland, Brisbane, Australia, and "Education, Culture and Technology; Triangle for Developing Higher Education" by prof. P. Kommers of the University of Twente, the Netherlands. During the plenary session, there were also delivered papers "Philosophizing with Children Using Open Educational Resources (OER)" by doctor F. Feiner from the Catholic Pedagogical University, Graz (Austria), "Openness and Quality of E-educational University Environment" by prof. N. Morze from the Borys Grinchenko Kyiv University, Ukraine, Vice-rector for Informatisation, and the lecture "About Skills in the School of the Future" by prof. A. dos Reis, the Director of the Graal Institute (Portugal).

The next two conference sessions, which included 13 speeches, were led by doctor R. Makhachashvili (Ukraine) and dr M. Roszak (Poland). The first conference day also featured a videoconference and an e-round table debate "E-learning and Open Education Quality – a Comparison of European, National, Internal Standards and Regulations," led by prof. A. Dos Reis, prof. E. Smyrnova-Trybulska, and dr M. Roszak. The videoconference was attended by experts from different universities of different countries: prof. N. Morze, Borys Grinchenko Kiev University (Ukraine), prof. P. Kommers, University of Twente, Professor UNESCO (the Netherlands), dr Tomayess Issa, Curtin Univerity in Perth (Australia), prof. G. Delicado Puerto, University of Extremadura (Spain), prof. A. dos Reis, the Graal Institute (Portugal), dr F. Finer, Catholic Pedagogical University in Graz (Austria), doc. dr J. Malach, Ostrava University (the Czech Republic), doc. dr E. Piwowarska, Warsaw University of Technology (Poland).

On the second day of the conference, two conference sessions were held, led by dr B. Kołodziejczyk, mgr R. Kalamarz (Poland), and dr M. Hruby (the Czech Republic). The presentations delivered during the two sessions included the following: "Wiki Tool in Higher Education: An Australian Perspective" by Tomayess Issa, Theodora Issa, and Touma Issa (Australia); "Teacher–Student Collaboration: Challenges and Opportunities" by N. Morze, R. Makhahchashvili (Ukraine), E. Smyrnova-Trybulska (Poland), and H. Pavlova (Ukraine); "Foreign Language Competence Supported by Distance Learning" by M. Hrubý (the Czech Republic); "Development of Intercultural Competence with ICT Tools – Proposals, Implementation and Evaluation" by B. Grabowska, A. Szafrańska-Gajdzica, Ł. Kwadrans, and E. Ogrodzka-Mazur (Poland); "Individualized Teaching Process for Pupils with Moderate Mental Disability" by L. Klubal and K. Kostolányová (the Czech Republic); "Robots in Elementary School: Some Educational, Legal and Technical Aspects" by E. Smyrnova-Trybulska (Poland), N. Morze (Ukraine), W. Zuziak (Poland), and M. Gladun (Ukraine); "Information and Communication Technologies in Education Management" by P. Żebrok (Poland); "Well-being as Context of ICT Development and Research" by R. Stefańska-Klar (Poland); and other presentations.

Also, on 11 October a videoconference and an e-round table debate "Teacher's Skills for the 21st Century Teaching," led by prof. A. Dos Reis, were held. During the videoconference, the following lectures were presented: "Preparing and Presenting Contents" by F. Carrera, Lisbon Technical University (Portugal); "On-line Tutoring" by X. Basogain, University of the Basque Country (Spain), "Formative Assessment" by T. Noskova, T. Pavlova, and O. Yakovleva, Herzen State Pedagogical University of Russia (Russia); "About LMS" by Tomayess Issa, Curtin University in Perth (Australia); "Virtual Classroom Technology" by S. Cubo, University of Extramadura (Spain), "Conclusions and Recommendations" by P. Pinto, Lusiada University, Lisbon (Portugal). Experts and participants of the videoconference and the e-round table took part in an interesting debate, and presented on the international forum their own experience and some research results on "Teacher's Skills for the 21st Century Teaching."

Undoubtedly, a valuable event is the workshop organised every year within the framework of the conference. This year there was a particularly interesting workshop on "Effective use of mobile technology for learning and teaching," which was led by dr L. Klubal (the Czech Republic). This year's edition of the Cieszyn conference was full of important topics, interestingly formulated problems, and suggestions of methodological and pedagogical practical solutions. As a follow-up to the conference, the best articles prepared by the participants of the conference were published in the monograph *E-learning Methodology – Implementation and Evaluation*. E. Smyrnova-Trybulska (Ed.). Vol. 8. 2016. Katowice/Cieszyn: Studio Noa for University of Silesia.

The conference encouraged the exchange of experiences, strengthening international cooperation, joint problem solving, implementation of innovative methodologies, creation of a European global educational space. With the contribution of the conference content, the scientific community indicated a considerable opportunity to support education with professional solutions in the scope of e-learning methodology, its implementation and evaluation. At the end of the conference, a photograph of all the participants was taken (Figure 2).

Figure 1. The participants of the European IRNet Project www.irnet.us.edu.pl and the international scientific conference *Theoretical and Practical Aspects of Distance Learning* (the subtitle of this year's conference: *E-learning Methodology – Implementation and Evaluation* (www.DLCC.us.edu.pl)), October 2016, Ustroń, Poland.

Figure 2. The participants of the international scientific conference *Theoretical and Practical Aspects of Distance Learning* (the subtitle of this year's conference: *E-learning Methodology – Implementation and Evaluation* (DLCC2016)), October 2016, Ustroń, Poland.

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ICEduTech 2016 Report from a Scientific Conference in RMIT, Melbourne

ICEduTech (http://icedutech-conf.org/) is a scientific conference addressing the real topics as seen by teachers, students, parents, and school leaders. Scientists, professionals, and institutional leaders are invited to be informed by experts, and to increase the understanding of what education needs and how to achieve it.

Previous IADIS conferences were held in Malaysia (2013), Taiwan (2014), and Brazil (2015).

Topics for the ICEduTech Conference 2016 were as follows:

1. **Education in context**: a) education in the network society; b) educational games; c) social media in education; d) home schooling; e) students' rights; f) parents' rights; g) teachers' rights; h) student-safe searching; i) school violence; j) education and tolerance for peace; and k) education in developing countries.
2. **Education as professional field**: a) teacher education; b) teachers' professional development; c) teachers' workload; d) teacher support for grading, time tabling, grading, learning tools, and online learning software; e) teachers' learning in communities of practice; f) web-based communities for teacher support; g) teachers' career planning; h) legal and financial issues; i) conflict resolution and mediation; j) governance and servant leadership; and k) educational policies.
3. **Curricular evolution**: a) problem-based learning; b) critical thinking skills; c) creativity skills; d) learning citizenship; e) global education; f) media literacy / pedagogy; g) multicultural education; and h) alternative assessment methods.
4. **Learner orientation**: a) student-oriented learning; b) peer- and collaborative learning; c) learning strategies: learn how to learn; d) motivating students; e) recognising students' learning styles; and f) special education.

5. **Integrating educational technologies**: a) social media and social networking; b) the Semantic Web 3.0; c) podcasting for broadcasting video lectures; d) podcasting feedback to students; e) Wiki and blogs in higher education; f) mobile, virtual, and vicarious learning; and g) simulations and modelling.
6. **International higher education**: a) marketing higher education as a business case; b) pitfalls and solutions in joint and double degree programmes; c) enculturation and international teacher accreditation; d) web-based, mobile, virtual presence, and social media to overcome student mobility; e) blended learning and student assessment at a distance; f) student mobility and distance education; g) new-emerging standards and benchmarks for higher education; h) education, research, exchange in capacity building; i) 21st century academic and industrial brain exchange; j) academic salaries, faculty contracts, residence permits, and legal issues; k) international student exchange funding programmes: Erasmus Mundus, the U.S. Council on International Educational Student Exchange, and the Euro-American "Atlantis" programme; l) networks for international higher education in the Pacific, Australian, Asian, and European countries; and m) higher education, cultural diversity, tolerance, and political conflict.

The conference was composed of several types of contributions: full papers; short papers; reflection papers; posters / demonstrations; tutorials; panels; invited talks; doctoral consortium; corporate showcases, and exhibition.

On 6–8 December 2016, the conference was held in the Royal Melbourne Institute of Technology (RMIT), organised by the International Association for Development of the Information Society (a non-profit association), and RMIT.

IADIS has the following goals:

- to develop the cooperation and solidarity between its associates, by developing initiatives in the Information Society domain;
- to promote the study, research, and dissemination of news related to the Information Society;
- to make information and bibliography relating to the Information Society available to its associates;
- to organise working groups, to research, study, develop, and analyse issues related to the Information Society;
- to publish magazines, journals, or other documents of significant interest;
- to organise meetings, seminars, and conferences;
- to promote people's training with the goal of integrating them in the Information Society; and
- to promote the exchange and cooperation with national and foreign associations and entities which seek the same goals.

Among participants of the conference, there were researchers from different countries and continents: Europe (Poland, Ireland, Germany, Croatia, Russia, Ukraine, and others), Asia (the United Arab Emirates (UAE), China, Japan, Sin-

gapore, South Korea, and others), Australia, Africa (the South African Republic, Tanzania, and others), North America (the USA), South America (Brazil), and other countries (Figure 1).

Conference co-chairs were P. Kommers (University of Twente, The Netherlands) and E. McKay (RMIT University, Australia). **Conference Programme co-chairs were** Tomayess Issa (Curtin University, Perth, Australia) and P. Isaías (University of Queensland, Australia).

The international team of researchers of the IRNet project (www.irnet.us.edu.pl) participated in this conference. Prof. E. Smyrnova-Trybulska presented two collective lectures:

1. E. Smyrnova-Trybulska, E. Ogrodzka-Mazur, A. Szafrańska-Gajdzica, N. Morze, R. Makhachashvili, T. Noskova, T. Pavlova, O. Yakovleva, Tomayess Issa, & Theodora Issa, "MOOCs – Theoretical and Practical Aspects: Comparison of Selected Research Results: Poland, Russia, Ukraine, and Australia," and
2. E. Smyrnova-Trybulska, N. Morze, P. Kommers, W. Zuziak, & M. Gladun, "Educational Robots in Primary School Teachers' and Students' Opinion about STEM Education for Young Learners,"

which were printed as scientific publications in the Proceedings of the International Conferences on *Internet Technologies & Society 2016* (ITS 2016), *Educational Technologies 2016* (ICEduTech 2016), and *Sustainability, Technology and Education 2016* (STE 2016), Melbourne, 6–8 December, 2016. P. Kommers, Tomayess Issa, Theodora Issa, E. McKay, & P. Isaías (Eds.). IADIS 2016. Indexed in Web of Knowledge, Scopus, and other international scientific bibliometric databases.

During the presentation of the first lecture by E. Smyrnova-Trybulska in a presence mode, Tomayess Issa took part in a remote online mode from the Curtin University via Adobe Connect.

We would like to stress with pleasure the fact that for the lecture "Educational Robots in Primary School Teachers' and Students' Opinion about STEM Education for Young Learners," E. Smyrnova-Trybulska – on behalf of the international team of co-authors – received the diploma for the best paper of the conference from the Chair of the conference, prof. P. Isaías (Figure 2).

Figure 1. The participants of the international scientific conference ICEduTech 2016 in Melbourne.

Figure 2. Handover of the diploma for the best paper of the conference by prof. P. Isaías to prof. E. Smyrnova-Trybulska.

In addition to the abundant official programme with a lot of conference events – plenary sessions, conference thematic sessions, poster sessions, and PhD presentations – the organisers prepared the interesting social and cultural programme for participants of the ICEduTech 2016: an excursion to Melbourne, one of the largest and wonderful cities in Australia, and conference dinner.

In conclusion, we could like to note and emphasise the fact that ICEduTech 2016 in Melbourne is one of the best examples of international scientific conferences, aimed at strengthening of cooperation between the researches and scientists from different countries around the world, and providing opportunities for exchange of experience in the field of e-learning, ICT in education, development of digital environment, contemporary sustainability society, and development of inter- and multicultural competencies.

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Report from the International Scientific-practical Conference *E-environment in the Open Pedagogical Education*, Herzen State Pedagogical University, Sankt Petersburg, Russia, December 2016

On the 1st December 2016, in the Discussion Hall of Herzen University, the opening of the international scientific-practical conference *E-environment in the Open Pedagogical Education* took place. The event was organised by the Institute of Education and Psychology and the Institute of Computer Science and Technology Education.

At the plenary session of the conference, an IRNet participant, prof. T. Noskova presented the keynote speech. T. Noskova spoke on the topic: "Electronic Educational Environment: the Challenges of Pedagogical Activity." She posed the problem of achieving a fundamentally new quality of educational activity in the conditions of e-learning environment. Today, in the process of informatisation of education, we see new effects associated with remote educational interactions, with the expansion and enrichment of the spectrum of educational services. However, it has not yet reached a new level of quality of educational activity, which would be adequate to the high material and labour costs associated with the establishment and operation of the e-learning environment.

It is proved that the achievement of a new level of quality of education in the process of informatisation of teacher activities requires not just the formation of ICT competencies, but a methodological shift, new professional thinking, and changes in the training of future teachers, who in the 21st century will have to operate in a wide and multidimensional electronic part of the educational environment.

In addition, T. Noskova, T. Pavlova, and O. Yakovleva presented the report "Formative Assessment Tools in E-learning Courses" within IRNet research. They

outlined the key features of the collaborative study, dedicated to the development of recommendations on the use of ICT tools in order to optimise the personal remote educational interaction.

Researchers from Constantine the Philosopher University in Nitra, Slovakia – professors M. Drlik, M. Cápay, P. Švec, and J. Tomanova – participated in the remote mode. The paper entitled "Strategy for Engaging Students in Learning Activities" was presented. They raised the problems of the modern strategy of activisation of educational activity of schoolchildren. They stressed that the lack of activity of students is a huge problem of teachers around the world, so training materials should include meaningful information for students, designed with the purpose of acquiring knowledge and transforming personal experience of each student. In their paper, the authors provided some examples of tasks to be used in the process of learning the basics of computer science with students, aimed at enhancing their performance, in particular: a series of games and puzzles for children, author workshops using robotics and mobile devices.

The team of authors from the University of Extremadura, Spain – S. Cubo Delgado, G. Delicado Puerto, P. Gutiérrez Esteban, L. Alonso Díaz, J. Arias Masa, R. Yuste Tosina – and the University of Silesia in Katowice, Poland – E. Smyrnova-Trybulska – also participated in the remote mode and presented a report entitled "Evaluation of the Implementation of ICT in Higher Education." This article shows the results obtained after evaluating the incorporation of ICT in the individual professional, teaching, and research development of university faculty members. The research was implemented in the frame of the IRNet European Project (A Marie Curie action).

Figure 1. The participants of the international scientific-practical conference *E-environment in the Open Pedagogical Education*, Herzen State Pedagogical University, Sankt Petersburg, Russia, December 2016.

A questionnaire designed ad hoc was applied to a number of universities members of the project team. The questionnaire was validated by experts from member institutions. Reliability was accomplished by using Cronbach's Alpha procedure, and the coefficient obtained was 0.879. The sample was composed by faculty members from the University of Extremadura, Spain. The results confirm beliefs and attitudes of faculty members concerning the following items: teaching, educational work, research, in-service training, professional development, and understanding the role of ICT in education.

Issues raised during the conference are particularly important for university graduates who will work in the 21st century, in a dynamic and expanding electronic environment, responding with drastic impact on the development of new generations of students.

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1. *Theoretical and practical aspects of distance learning*. Ed. E. Smyrnova-Trybulska. Cieszyn: Wydawnictwo Uniwersytetu Śląskiego, 2009, 308p. ISBN: 978-83-925281-4-2.
2. *Use of e-learning in the training of professionals in the knowledge society*. Monograph. Ed. E. Smyrnova-Trybulska. Cieszyn–Katowice: Studio Noa for University of Silesia, 2010, 344p. ISBN 978-83-60071-30-4.
3. *Use of e-learning in the developing of the key competences*. Monograph. Ed. E. Smyrnova-Trybulska. Katowice–Cieszyn: Studio Noa for University of Silesia, 2011, 462p. ISBN: 978-83-60071-39-7.
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5. *E-learning and lifelong learning*. Monograph. Ed. E. Smyrnova-Trybulska. Katowice–Cieszyn: Studio Noa for University of Silesia, 2013, 587p. ISBN 978-83-60071-66-3.
6. *E-learning and intercultural competences development in different countries*. Monograph. Ed. E. Smyrnova-Trybulska. Katowice–Cieszyn: Studio Noa for University of Silesia, 2014, 484p. ISBN 978-83-60071-76-2.
7. *IT tools – Good practice of effective use in education*. Monograph. Ed. E. Smyrnova-Trybulska. Katowice–Cieszyn: Studio Noa for University of Silesia, 2015, 405p. ISBN 978-83-60071-82-3.
8. *E-learning methodology – Implementation and evaluation*. Monograph. Ed. E. Smyrnova-Trybulska. Katowice–Cieszyn: Studio Noa for University of Silesia, 2016, 479p. ISSN 2451-3644 (print edition) ISSN 2451-3652 (digital edition) ISBN 978-83-60071-86-1.

Coursebooks on e-learning

1. *Wykorzystanie LCMS Moodle jako systemu wspomagania nauczania na odległość*. Podręcznik akademicki. Ed. E. Smyrnova-Trybulska, S. Stach. Authors: E. Smyrnova-Trybulska, A. Burnus, A. Szczurek. Katowice: Studio Noa for University of Silesia, 2012, 560p. ISBN: 978-83-60071-56-4 (http://www.wydawnictwo.us.edu.pl/node/3721).
2. *Zastosowanie systemów CMS w tworzeniu przestrzeni informacyjno-edukacyjnej w Internecie*. Podręcznik akademicki. Ed. E. Smyrnova-Trybulska, S. Stach. Authors: E. Smyrnova-Trybulska, S. Stach, B. Fuklin, D. Staniek. Katowice: Studio Noa for University of Silesia, 2012, 194p. ISBN: 978-83-60071-55-7 (http://www.wydawnictwo.us.edu.pl/node/3731).

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