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Developing Students’ Information Competencies in the Context of Multicultural Education Using University E-learning Platform

Abstract

In this paper we would like to introduce our way of thinking about approaches to students in the term of e-learning use in the context of a multicultural society. We are focusing on the question of developing the information competencies in the environment of multicultural education. This paper also provides examples of good practice especially when teaching via e-learning platform, LMS Moodle, at the University of Žilina.

Keywords: e-learning, information literacy, information competencies, information education, information technologies, communication technologies, evaluation criteria, LMS Moodle, multicultural education

Changes in Education and the Use of E-learning

Nowadays, the society is changing significantly. This change is also reflected in reforms in the area of education. The pressure of the market, globalisation, and finance can be noticed here. The efforts to reduce the cost of education lead educational institutions to seek less expensive ways of organising education, for example by its computerisation (Sakálová, 1998; Zacharová & Bomba, 2012). The school loses its monopoly on information. The traditional role of a teacher
is changing, just as the way of educating. This happens under the influence of penetration of ICT (Zacharová & Bomba, 2012).

Another significant change of this society is its internationalisation. We can assume, for example, that the socio-cultural diversity of Slovakia’s population will increase due to the growing number of refugees from various areas of the world, who are suffering from crisis, poverty, and unemployment. Logically, we have to take into account students coming from different countries. Students will directly seek educational institutions on the market that are prepared for the internationalisation of education.

A university teacher frequently meets students from different cultural environments. They are coming to the university through different programmes which support students’ mobility (the Erasmus+, Grundtvig, etc.). In addition, university teachers also realise teachers’ mobility to different countries and are involved in the cooperation among universities. These are all reasons that lead us to reflect at this time on the use of e-learning in the context of a multicultural society.

Today, terms such as information and communication technology (ICT), e-learning, virtual environment, and online learning are standard parts of the dictionary for both a teacher and a student. According to Průcha (2006), we need to identify and summarise all the pedagogical aspects of applied and used ICT tools. Many authors have subscribed to the most current issue of applying new educational strategies – that of evaluation of the impact of ICT on methods of learning, teaching, learning styles of students, the teaching style of a teacher, the quality of education, and the competencies of students and teachers. We could ask ourselves the following questions:

• Are we prepared to teach students from different countries using ICT?
• Could we compare how students learn using ICT or without using these tools? Which mode is more effective?
• Could we apply some positive effects of using ICT to all students, or only to those who have a positive attitude towards using the modern information and communication technologies?
• Would the large quantity of information received through e-learning have a positive effect on the learning process and the level of a student’s knowledge structure, especially when teaching students from various cultures?
• How could we design and develop an educational curriculum in virtual environments, when students are drawn into an enormous amount of information?
• Which pedagogical principles of teaching and learning should be respected in the design of e-content?
• How could we help students analyse, classify, interconnect, and integrate this amount of the offered information?
• How could we ensure that students coming from different cultures are able to communicate or present information obtained in a virtual environment adequately?
• How could students become familiar with teachers’ criteria for evaluation of the quality of their work with ICT?
• What criteria are best for as objective evaluation as possible?
• Is it better (easier) to teach with ICT if students come from different cultures?

Certainly, educators play an active role in identifying and developing students’ information competency regarding their ability to find, define context, and create a non-linear relationship with this mass of information. It seems that this would be a good way to integrate modern technologies and utilise the traditional educational environments currently existing in our schools. This can be the beginning if an educator wants to be near the educational environment from which international students are coming.

According to the Association for Educational Communications and Technology, an information literate student has basic skills to work with the computer as a didactic teaching tool, but computer literate students are not necessarily information-competent. Zacharová (2011, p. 154) asks: “Do teachers accept this situation in general or is there only a small group of enthusiasts, ‘e-teachers’ who can accept it?”

### Theoretical Background

From our personal experience we know that for students just the lack of information literacy devalues cognitive processes and learning outcomes themselves as computer literacy. As we mentioned in the introduction, the area of development of the capabilities to search for relevant information and to work with it effectively – to learn the methods of its processing and applications – becomes the key to a change of the paradigm of education. When we mention information and media literacy, we mean the ability to search for, evaluate, and use information from various sources, and also a disposition to work with various forms of media (text, images, animation, films, etc.) as carriers of information (Smith, 2003). According to Müllerová (2001), when the learner processes, analyses, and selects information, it is the innate cognitive style in which he or she explores the world and acquires access to human cognition. In addition, in the context of

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1 In general, an information literate person is able to: use the opportunities of the information society, obtain the necessary information, identify potential sources of information, improve the strategies for seeking information in book and electronic form, disclose information using information and communication technologies, evaluate information and organise it systematically for application in specific situations, integrate new information into conceptual structures, and form a special, individual style in effective interaction with the world of information (cited by the American Library Association).
multicultural education, “We must promote a positive vision of cultural diversity and advance cultural literacy through learning, exchanges and dialogue. These are essential for fighting against discrimination, prejudice and extremism. Cultural diversity and cultural literacy are essential forces for the renewal of our societies” (as spoken by I. Bokova, 2013, UNESCO).

We are thinking about multicultural education as a process through which individuals create positive perception and assessment of cultural systems different from their own culture, and on this basis regulate their behaviour towards members of other cultures (conception of Průcha, 2000). The necessity to deal with the multicultural education (Trabalíková, Macháčik & Zemančíková, 2014) has the source in the cultural diversity of humanity. Studies relevant to multicultural education show that education can play an important role in the coexistence of the human race in conditions of cultural variability.

Klein (2007) states that in the multicultural education we emphasise interaction between teachers and students as well as among students themselves. Multicultural education cannot work without developing strategies of politeness, meaningful discussion, effective communication, constructive cooperation, and critical thinking. At the level of instructional methods, it is recommended to encourage discussions, brainstorming, cooperative learning, situational games, and project-based teaching. In the study, Sawir (2011) examined whether the presence of international students has an impact on the staff’s teaching practice. Some of the teachers reported that they made no adjustments to their teaching, and they treated all students as one student group. Others said that there were changes in their teaching in response to the presence of international students in their classroom.

Especially in the context of multicultural education, we have to take into account the degree of suggestibility of components of student learning styles. The deepest layer (personal cognitive style of a student) is the most stable, while the next layer is only partly influenced by external interventions. Another layer comprising social, motivational, and emotional processes is more susceptible to external influences. Student preferences are viewed as processes, methods, and forms that a student prefers in the learning and the teaching process. These are influenced by the educational action of a teacher (Mareš, 1998, in Müllerová, 2001). We assume that by changing the paradigm of education, the scope for influencing the information processing strategy will be greater. As stated by Kosová (2002, p. 6), the major role of a teacher in today’s information society becomes “a diagnostic role, facilitator and guide of the development of each student or effective teaching situations manager, reflective professional and innovator, creator of the stimulating and emotionally safe class-or group- climate.” While teaching students from different cultures, we know that the class does not become a good team when students are only connected with a lot of data. It is also necessary that a consistent dialogue about what children learn at school and what reaches from
outside the classroom exists. The school becomes a place where pupils’ culture meets the culture of school and society. In this situation, it only makes sense if we teach the basis of values of equality, democracy, solidarity, and empathy. Values that students and teachers share with each other are crucial for the further development of a positive social change. Some sources of information (for example the Internet) tell students “almost everything,” but they do not tell them how to search, filter, verify, select, accept, or reject information. Yet, to decide which information is worth remembering and which is not, is an art (Eco, 2007, in Vančíková, 2011).

The terminological lexicon of new information-communication technologies and their implementation (Katuščák, 1998) in a broader definition of informational education understands it as the implementation of “rational education and training of the human for the use and creation of knowledge in order to acquire a comprehensive system of knowledge, skills and habits in the cognitive process” (p. 128). Sakalová (1998) writes that information is a critical source of the development of the society. This transition from an industrial to an information based society is changing the status of traditional schools; they are no longer the dominant source of information. The content of information education is derived from the assumption that the most important task of the school is to develop the learners’ personality to prepare them mainly for life in the information based society. According to Horváthová and Švejda (2006), the major objective of information education is to contribute, together with other subjects, to the development of students in lifelong learning systems.

The educational and didactic side of information education in today intercultural society includes certain methods of interaction with new media, case studies, individual and group information tasks, and methods to stimulate activity and creativity. It is important to use new media forms to educate a broad public about diversity and intercultural competencies. The question is how to catch up with the current possibilities, since new media are rapidly developing, and new uses for old media are expanding daily. An innovative approach to spreading intercultural competences is taking advantage of the possibilities offered not only by the current mass media, but also by many social and new media forms (Papastergiadis, 2006). Other possibilities include “e-notebooks on peace and intercultural dialogue” providing a readily accessible vehicle for young people around the world to use in sharing personal initiatives and experiences for everyday peace and dialogue (UNESCO, 2011, in UNESCO, 2013). Chupáč (2007) claims that work with information itself is one of the creative methods of the teaching process – it teaches autonomy, analytical thinking, concentration, attention, and “in-depth learning style” (p. 21).
Supporting Information Competencies in the Context of Multicultural Education

In National Educational Curriculum in the Slovak Republic, competencies for all levels of education are defined and classified. Classification and characterisation of core students’ competencies is adjusted according to the recommendations of the European Parliament and the Council from 2006 related to key competences for lifelong learning. This set of competencies serves teachers in knowing where to direct their educational activities through purposeful, meaningful development, appropriate for children.

At the primary level of education, when describing information competence (The national curriculum ISCED 1, Ministry of Education, 2008/2009), the term “a competence in information and communication technologies” is used within the national curriculum.

Thus, a student must demonstrate:
• the use of selected ICT in teaching and learning,
• knowledge of the necessary fundamental computer applications,
• adequate communication via electronic media,
• the ability to actively search for information on the Internet,
• the use of a variety of instructional programs,
• the basic knowledge of algorithmic thinking,
• the understanding of the difference between the real and virtual world, and
• awareness that there are risks associated with the use of the Internet and ICT.

Teaching strategies, forms, and instruction of lower and upper secondary level education are trying to achieve the following attributes of information competencies in the spirit of the Slovak school system:
• to use effectively information and communication technologies in education, creative activities, project based learning, expression of thoughts and attitudes, and solving real life problems;
• to acquire the ability to use the Internet and ICT to obtain and process information in text and graphic form;
• to be able to think algorithmically and use these skills in real life;
• to be aware of the difference between the real and virtual world; and
• to understand the opportunities and potential risks associated with the use of the Internet and ICT.

At the university level, information literacy, as part of information competencies (in literature the term “media literacy” is often used), is defined as follows (National Forum on Information Literacy):
3. An information literate student defines the scope and nature of the necessary information:
• formulates the requested information clearly and understandably,
• identifies various forms and structures of particular sources of information,
• considers the value of the obtained and acquired information, and
• reviews the scope and nature of the requested information.
4. An information literate student acquires necessary information quickly and efficiently:
• selects the most appropriate strategy for information retrieval, and online information and database search;
• creates and applies effective search methods; and
• flexibly adjusts and changes strategies of access to information according to needs.
5. An information literate student evaluates and integrates information into an adequate conceptual structure:
• summarises the main concepts, ideas from the received information;
• applies appropriate criteria for the evaluation of information according to the objective;
• synthesises data into appropriate concepts; and
• interprets information to other entities of the teaching process and experts in the field (e-mail, discussion groups).
6. An information literate student can individually or as a member of a group use information effectively for specific purposes:
• uses priority information when presenting the results of the learning process, and
• incorporates information to the prior knowledge.
7. An information literate student understands the legal, ethical, and social issues related to the use of information sources:
• respects the rules applied by citation of primary and secondary sources.

When educating in the multicultural society and supporting information competencies of students, we should tackle the questions of intercultural competencies very carefully. Fantini and Tirmizi (2006) describe it as “…a complex of abilities needed to perform effectively and appropriately when interacting with others who are linguistically and culturally different from oneself” (p. 12).

The objective of multicultural education is to prepare students for life in a culturally pluralistic society by equipping them with the necessary intercultural competencies. These competencies consist of:
• knowledge of the various ethnic and cultural groups living in the Slovak and European society;
• abilities to orient themselves in a culturally pluralistic world, and benefit from intercultural contacts and dialogue to enrich themselves and others; and
• attitudes of tolerance, respect, and openness to different groups and life forms, including the knowledge of the necessity of personal commitment (Klein, 2006, p. 17).
men and women who have unimagined opportunities for global conversations as it is written in a Conceptual and Operational Framework by UNESCO (2013).

From our point of view, schools are a crucial place to develop such knowledge, abilities, and attitudes. In the project “Innovation and Internationalization of Education – An Instrument for Increasing the Quality of the University of Žilina in the European Educational Space,” university teachers are preparing new study materials. The main goal is to support the quality of education at the university by developing innovative forms and attractive study materials, and rationalising study programmes. Some materials will be processed into a form of reusable objects, and supplemented by multimedia and interactive elements. These materials will be prepared also for international students and can be particularly useful in breaking the language barrier, which occurs when teaching students coming from different countries together with Slovak students. From our own experience as university teachers, we can confirm that many university students have a limited ability to find, process, and interpret required special information, or determine the importance of information in appropriate ways. Their low level of information-communication competencies is also reflected in the findings that many students can pass the required 5–6 pages of continuous scientific text, i.e. information obtained in the field, but they cannot explain, reproduce, prepare the hierarchical structure of important and less important information, ask questions on the subject, work with graphs and diagrams, etc. Empirical experiences of Sakálová & Matthaeidesová (1999) confirm that many current high school graduates who are seeking university education do not know the basics of self-study methodology.

It follows that the contents of the undergraduate educational teacher training should encompass not only acquiring skills for computer, information, and communication technologies (promotion of computer literacy), but mainly working effectively with information in the printed or electronic form. This area should be an essential part of a teacher’s preparation of professional standards, respectively the process of professionalisation of teacher education. This is why we focus on the development of the ability to seek, evaluate, and use information from various sources with students of teaching study programmes at the Faculty of Humanities, University of Žilina from the beginning of their university study.

Support of the Information Competencies in the Context of Intercultural Education at the Faculty of Humanities, Žilina

E-learning in Tertiary Education

In tertiary education (in contrast to primary and secondary education), teachers have greater autonomy in the definition of the curriculum, which is a benefit in the
intercultural environment. However, a didactic transformation of the curriculum at university level education is a relatively complicated, multi-level process (Figure 1).

![Figure 1. Didactic transformation of the university curriculum](image)

**Source:** Own elaboration based on Janík et al., 2009 in Slavík, 2012.

Figure 1 shows the results of the ontogenetic transformation. The main actors should be the universities themselves, in collaboration with professional and employers’ organisations, and the Accreditation Commission. As a criterion for the university education content selection, the above authors proposed to evaluate expertise and scientism, usefulness and importance for the future graduates, cultural importance and historical significance of the content. Psychodidactic transformation should be ensured by university teachers in the role of study programme and subject supervisors. The output of this transformation process should be well-prepared teaching units (lecture, workshop, tutorial) through which university teachers effectively implement results of scientific theories, or results of their own research activities. The process of the university education content transformation is completed in the third cognitive phase, in which the actors are students. The cognitive phase approach to learning, learning styles, a type of study motivation to “empower” new knowledge and skills, the integration into existing knowledge structures, and the application to real and practical situations is important (Slavík, 2012). Teaching methods and strategies are also a way to regulate, organise, and support students and their own personal learning style, ability to learn, and positive attitude to lifelong learning. As reported by Maňák and Švec (2003), this aspect is often underestimated. As a consequence, many university students do not embrace rational learning methods. We also agree with Kaliská (2009) that “one of the key competencies – an individual’s interest in lifelong learning, can be developed through the ability to ‘learn how to learn.’
If a learner understands their own learning process, he/she will become more independent, more responsible and more confident. The education passes into motivated self-learning” (p. 288).

According to Zounek (2006, p. 339), there is no clear definition of a direct understanding of the concept of e-learning. For example, the European Commission (www.elearningeuropa.com) defines e-learning as “the use of modern multimedia technologies and the Internet to improve the quality of education, in particular by facilitating access to resources, services, information exchange and distant cooperation.” We agree with Zounek (2006), who defines e-learning as “any learning process with varying degrees of intentionality, in which ICT are used when working with data in electronic forms. The method of use of ICT is dependent primarily on educational objectives and content, the nature of the learning environment, needs and opportunities of all factors of the educational process” (p. 339). According to Singh (2003), application of e-learning forms has gone through two stages in recent years. The first stage meant digitisation of traditional “classroom-based courses” to the environment of the Internet and forms of online learning. In the second stage of e-learning, many teachers, tutors, and educators began experimenting with interesting and even promising alternatives in ICT-assisted learning with “blended learning.” Blended learning is a combination of: a) face-to-face teaching (contact, full-time course) with traditional teaching instructions, b) asynchronous teaching (off-line teaching) which includes different forms of student self-study or participants in training courses and modules, and c) practical training of sensomotoric skills (especially in professional education). A rapidly emerging field of study which started in the late 1980s is Computer-Supported Collaborative Learning (CSCL). Arranging students to work collaboratively at the computer reaps the benefits both of the use of computer simulation as an exploratory tool and of peer collaboration (Tao & Gunstone, 1999). Hruščeký (2005) characterises the online education and blended learning by using an approximate quantification of the course content. The online course indicates that a score of at least 80% of the rate is via the Internet. Contact (full-time) training is not usually part of this form of education. If the course is supported with ICT, but only about 30% of the content is transformed into an online form, we are talking about blended learning. The use of e-learning and blended learning at universities proves to be useful and effective for both students and teachers.

The Department of Educational Studies, Faculty of Humanities, University of Žilina in undergraduate (initiating) teaching programmes provides guidelines for the education roles and the obligation to convey the curriculum to students in a clear, interesting, and attractive manner. It is the combination of the presence of traditional and electronic forms of study via LMS Moodle (Learning Management System), which supports us in those efforts. Our experience and our colleagues’ experiences (e.g. Hasajová & Villim, 2014) with e-learning are based on a number of methodological assumptions for creating e-learning material. As stated by
Drozdová (2007), didactic support for the development of students’ information and media competencies in computer-assisted instruction should be well designed study material in an interactive, preferably multimedia electronic form. This means using efficiently and professionally processed themes, graphic illustrations of processed information, verification of knowledge through feedback, and interaction of graphic and text information. These are important characteristics of the effectiveness of the educational process, in which the essential feature should be the percentage of the learners’ work and the whole Learning Management System – LMS. When using forms of blended learning in undergraduate education, the methodological principles described below are applied.

Creating appropriate study materials in the e-form for students

We respect the fact that scientism and professionalism of teaching material presented in the e-form is not directly related to the disproportionate number of specialised words and the complexity of expressive language. Teaching material available to our students in an electronic learning environment serves as the basic orientation of the topic. It also serves as support and working material for students. Students can work with materials by adding examples, other notes, diagrams, and links (during contact teaching). Thus, during face-to-face teaching, more focus can be placed on the specifics of the presented issue. Within the graphic design of study material, we focus on an efficient inclusion of hyperlinks, adequate font size, variety of colours in the academic text (examples, summaries, links to key and new concepts), appropriate integration of suitable plans, diagrams, etc.

Figure 2. A sample of several possibilities of interactive activities supporting the objectives and background of blended learning concepts

Source: University e-learning platform.
Detecting feedback from students continuously

To achieve effective communication with students, study material in an electronic form contains interactive elements. Study material should provide effective feedback, because then students are encouraged to pursue other activities by such feedback (e.g. use a dictionary of basic concepts, manual, links to other print and electronic resources, contacts, forums, etc.). Providing questionnaires continuously – including the international students – is also beneficial in obtaining feedback on work with the electronic system of education. When this is available, a student is no longer in the role of a passive observer. We have chosen a few sample questions and responses from the formative evaluation questionnaire as examples for the purpose of this paper (see: Appendix 1).

Developing students’ critical thinking when using a wide variety of sources and materials

After several years of experience as university teachers, we find that through blended learning the following options and elements can be applied:

• fostering the creativity and independence of students (especially for future teachers as this is part of their future professional competencies);
• the presence of feedback tasks that constantly give students the answer if they pay attention and thus achieve a predetermined teaching goal;
• flexibility and complexity in the processing of assigned tasks and issues with the use of multiple sources of information, and visual and graphic aspects;
• diversity and uniqueness of the sources of knowledge;
• teaching in blended learning and e-learning as a less dominant source of information, but rather a guide in building adequate conceptual structures within the topic subject.

In this sense we try not only to explain to students, but also to practically lead them in the use of conceptual mapping methods (Figure 3).

Finally, students are encouraged to use a wide variety of sources and material, and are also led to learn to evaluate and compare the quality and reliability of sources. This is an advantage especially in the development of critical thinking. We also create instructional material (the manual) with a set of tasks to be achieved. The manual contains the following objectives for students in undergraduate teacher education:

• teaching students to evaluate and systematically organise information for application in specific educational and teaching situations;
• teaching students effective orientation in information sources – particularly printed and electronic texts – when creating quotes, excerpts, etc.;
• offering students concrete tasks for a selected curriculum at primary and secondary schools (students are acquainted with both the curriculum, and the actual content of education at primary and secondary schools);
• encouraging students to independently practice the skills of working with teaching software; and
• encouraging students in education through the university e-learning portal.

Figure 3. A sample of a conceptual map that serves students to systematise the acquired knowledge and encourage the formation of students’ information competencies in the initiating teacher education

Source: A student’s work.

In such communication, we use written feedback, in which our students can select the attitude to the following statements (on the 5-grade Likert scale):
1. Access to and communication with the university teacher affects my approach to pupils when realising teacher’s practice.
2. Methods and forms used by the university teacher inspire my choice during teacher’s practice.
3. The university teacher prepares me for the “reality” connected with working as a teacher.
4. Innovative organisation of teaching (e.g. using ICT, e-learning) should be a routine part of the university students’ education.
5. The level of the university teacher’s knowledge should exceed the level of his/her teaching skills.
6. The university teacher positively influences my view of the teaching profession.
7. The university teacher’s character and personality significantly affect the quality of his/her teaching.
In this paper, we have already indicated that in addition to the application of group or cooperative forms of learning and blended learning at FHV ZU, we also seek to assess and develop university students’ metacognitive strategies to support learning processes (especially when working with and learning from text information). Students of humanities and social sciences frequently work with academic texts. Particularly, students in the first year are acquainted with metacognitive learning strategies and effective reading strategies (in subjects like Introduction to the Study, General Education, etc.). We have good experience with strategies that promote students’ learning. Examples of this strategy include SQ3R strategy, PLAN strategy, KWL strategies (for more in the guidance for the application of those strategies, see: Heldová, Kašiarová & Tomengová, 2011). This is particularly true for groups of students with different cultural background. During the courses, students are led to order key information according to certain criteria and to express the information graphically (conceptual maps). We also require students to present the content of the selected topics in their own words and to express their own opinion about the topics. The aim is to develop students’ skills to create questions about the selected topics and further analyse the topics through various forms of their own reflection (a weblog, an essay, etc.).

Table 1.
Activating tasks to support students of teachers' programme information competencies in the initiating stage of education

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| **Situation:**
At the beginning of their teaching practice, teachers may encounter the situation when there is no "support teaching material" which pupils need to work with. How will you solve this situation?

**Your task:**
Please prepare suitable teaching material in the form of one chapter of a textbook (at least 4 pages, a title page is not counted, line spacing 1.5, and standard page margins) for a chosen age group (any grade at primary or secondary school) for your teaching subject. Try to maintain the methodological principles of clarity of the information presented, the adequacy of the terms, and explanation as appropriate for the chosen age group of students.

**Use:**
- a suitable topic for study material and choose a grade of primary or secondary school to which the material will be directed;
- a selection of appropriate text and images from the Internet;
- colour differentiation according to the relevance of the information (to distinguish important from less important terms) to create an appropriate structure of the text according to cognitive abilities of students; also, use headings and subheadings;
- the toolbar with drawing or sketchbook to create diagrams;
- forms of columns, tables, framing the text.

Modify the cover page of teaching material (use header and number of pages, and at the end of the study material devise tasks (questions) to identify the level of the knowledge gained from the teaching material created by you).
Development of students’ critical thinking through creation of clear rules when evaluating their work

In connection with the development of students’ critical thinking, we emphasise the question of evaluation of material created by students. During direct interaction with students at seminars, we observe the students’ work, and we provide feedback in many ways. Students are sensitive to any assessment. Both university teachers and university students have their specific ideas and intentions associated with assessment. Obviously, (Kolář & Šikulová, 2005) any assessment should be an attempt to improve the relationship between teachers and students. Assessment should include formation of the relationship of mutual expectations of work performance, the relationship of cooperation, searching for solutions for handling knowledge, etc. It is possible that this is the way of strengthening a teacher’s authority, students’ confidence, but also students’ ability to think critically about various phenomena and issues (including their own achievement). Existing options for teachers to subjectively evaluate students’ achievement are an expression and a symbol of a professional teacher’s competence. Thus, teachers have a unique right and responsibility to assess the quality of students’ performance (Slavík, 1999).

When students present the created material, we emphasise that the material must be in a form which the audience will understand. In this situation of evaluation, having clear rules is the benefit. The existence of clear evaluation rules is an assumption that both sides will understand and perceive the assessment as objective. As a result, we stress that university teachers and students need to know how to evaluate and continuously develop this skill. It is very important to acquaint students with both the requirements for their presentation and the evaluation criteria. Evaluation criteria can vary. The example given in Table 2 can be modified depending on the situation and needs of students and teachers.

| Table 2. An example of Evaluation Sheet with criteria for evaluating students’ presentation |
|---------------------------------|---------------------------------|
| Evaluation Sheet | Score |
| | Clarity, conciseness, and adequacy of the information |
| | Adequate text processing (font size, colour) and background in presentation |
| | Identification of the sources used in the presentation |
| | Systematic arrangement, structure of the information |
2. Quality of work with e-sources

The diversity and uniqueness of the sources
Connection to the topic
Using knowledge from practice
Completeness of processing the topic
Appropriateness for the selected age group

3. Quality of students’ presentation skills

Communication with the audience, eye contact, keeping their attention
Adequate gestures, appropriate level of self-confidence, inflexion of voice

Total score

Conclusions

This article deals with information education in the context of multicultural education. It addresses didactic aspects of the use of ICT in educational environment. Now, more than ever, university teachers and students in Slovakia are in contact with students coming from different cultural backgrounds. This text points out the principles of teaching and learning which should be considered in the design of e-content, with an emphasis on developing students’ information competence linking all aspects of multicultural education. In this context, it aims to contribute to the objectives of multicultural education (according to Mistrik et al., 1999). It means the development of students’ ability to tolerate and appreciate other cultures (respect for the existence of other cultures), which is, however, not only acceptance of other cultures (ability to empathise with feelings of the people), but also active involvement (care about a different world). By doing this, we empower young people to take an active role in their learning, and subsequently to take an active role in their future jobs and life in general. The authors promote the exchange of information, knowledge, and materials about all relevant issues concerning education in multicultural societies amongst teachers, teacher trainers, and professionals working in the curriculum development, which is one of the main aims of the International Association for Intercultural Education (IAIE).
Appendix 1

Formative evaluation questionnaire

1. How do you evaluate your work with a virtual learning environment LMS Moodle? (Circle only those statements that match your opinions.)
   a) I have problems with the work in LMS Moodle when connecting to the Internet.
   b) I have connection problems only when I work with the Internet Explorer browser.
   c) Access to the Moodle LMS was quick and smooth.
   d) At the beginning I could not orientate myself in LMS Moodle.
   e) I propose that the tasks should be sent only via e-mail.
   f) Moodle environments are transparent.
   g) I am not satisfied with graphics and editing virtual environments.
   h) Moodle environment is understandable, the “user-friendly” is intuitive.
   i) Working with Moodle is pretty good, I prefer it to pen and paper.
   j) I am satisfied with graphics editing in virtual environments.
   k) I still need help with language because some icons and titles in LMS Moodle are not in English.
   k) Other …

2. If you see the positives in the study with LMS Moodle, what are they? (Circle only those statements that match your opinion.)
   a) It is appropriate for “blended learning.”
   b) It is appropriate for the combined form of higher education.
   c) It is appropriate for distance learning.
   d) Such courses using virtual environment and passing tasks force me to do regular work.
   e) I appreciate the choice of time for working on tasks.
   f) I do not know about more effective forms of learning yet.
   g) I appreciate summarising information from the workshops, I understand it better.
   h) Tasks facilitate the preparation for the exam test.
   i) I appreciate lectures available in .ppt version.
   j) Other …

3. If you see the negatives in the study with LMS Moodle, what are they? (Circle only those statements that match your opinion.)
   a) I do not have the ability to connect to e-learning now in school at PC classrooms of FHV.
   b) I am not sufficiently motivated to work in LMS Moodle.
   c) I miss more active conversations with the teacher.
   d) Not all teachers at FHV use this technology in teaching, although it could facilitate study and access to information.
   e) Tasks could be more attractive and “in practice.”
   f) I missed synchronous chat for questions related to the subject or lecture.
   g) Other …
References


On Networking. The Analysis of Selected Aspects


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**Andrea Kubalíková, Jana Trabalíková**

**Rozwijanie kompetencji informacyjnych studentów w kontekście edukacji wielokulturowej przy pomocy uniwersyteckiej platformy e-learningu**

**Streszczenie**

W niniejszej pracy chcielibyśmy przedstawić nasz sposób myślenia o podejściu do studentów pod względem wykorzystywania e-learningu w kontekście społeczeństwa wielokulturowego. Koncentrujemy się na kwestii rozwoju kompetencji informacyjnych w środowisku edukacji wielokulturowej. Niniejsza praca pokazuje również przykłady dobrych praktyk, zwłaszcza przy nauczaniu za pośrednictwem platformy e-learningu, LMS Moodle, na Uniwersytecie Żylińskim.

**Słowa kluczowe:** e-learning, alfabetyzm informacyjny, kompetencje informacyjne, edukacja informacyjna, technologie informacyjne, technologie komunikacyjne, kryteria oceny, LMS Moodle, edukacja wielokulturowa
Развитие информационных компетенций студентов в контексте поликультурного образования с использованием платформы электронного обучения университета

Аннотация

В статье представлены размышления о подходах и перспективе использования студентами электронного обучения в контексте мультикультурного общества. Мы сосредоточены на вопросе развития информационных компетенций в условиях поликультурного образования. В статье также приводятся примеры новых практик, особенно при обучении с помощью платформы электронного обучения, LMS Moodle, в университете Жилины.

Ключевые слова: электронное обучение; информационная грамотность, информационные компетенции; информационное образование; информационные технологии, коммуникационные технологии; критерии оценки; LMS Moodle, поликультурное образование

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Desarrollando Competencias de Información en los Estudiantes en el Contexto de la Educación Multicultural Utilizando una Plataforma Universitaria de E-learning

Resumen

En este artículo se informa sobre las opiniones de los estudiantes sobre el uso del e-learning en el contexto de una sociedad multicultural. Nos centramos en la cuestión del desarrollo de las competencias en materia de información en el ámbito de la educación multicultural. Este artículo también proporciona ejemplos de buenas prácticas, especialmente cuando se enseña a través de la plataforma de e-learning Moodle en la Universidad de Žilina.

Palabras clave: e-learning; alfabetización informacional, competencias en materia de información; educación de la información; tecnologías de la información, tecnologías de la comunicación; criterios de evaluación; LMS Moodle, educación multicultural