Abstract. Information culture of a person is the combination of knowledge, skills and habits of work with information and information technologies. Information culture characterizes the level of a person’s development in the information society. On the other hand, the English language, as “the language of science and technology” serves as a mediator in the information search not only for personal purposes, but also for the study and research purposes online. The aim of the present paper is to examine the impact of e-environment on improving students’ English language knowledge at the tertiary level. The paper describes the results of the research carried out among the undergraduate students to determine their opinion regarding studying English at the university and their habits in using e-environment in English. The results of the study could assist in updating the content of ESP courses, including CLIL elements and innovative activities based on Web 2.0 tools in teaching/learning English.

Keywords: communication in the English language, e-environment, ESP, information culture.

Introduction

In the 21st century the knowledge of foreign languages plays a significant role in business and science, therefore it should be an essential part of education, especially at the tertiary level since students and young professionals are offered various mobility opportunities within the European Union borders and beyond. On the other hand, IT rapid development has formed a new social relationship – the information society and the e-environment has become an integral part of people’s lives. The universities have transformed their study process and use various ICT tools and software including e-courses that support blended learning approach. The students are eager to use technologies but they have to be competent users of information sources and they need a good command of English to be able to study and do research independently searching, selecting and evaluating the quality of information online.

Problem of research

The curriculum of the Latvia University of Agriculture (LLU), a regional university, includes content-based courses of Professional Foreign Language studies in the first years, which according to the needs analysis is mostly implemented in
English (English for Specific Purposes, ESP). The English language studies as a part of the curriculum are not separated from the whole study process, the interdisciplinary approach is stressed when preparing specialists of agriculture and engineering. Besides, the English language serves as a mediator in the information search for the study and research purposes online as well as communicating in social networks as English has become “the established language of science and technology” (Fortanet-Gomez&Räisänen, 2008). The undergraduate students carry out the research activities in the last years of the study programme when they have to apply their information competence and the English language competence in real situations. The aim of the present paper is to examine the conditions regarding the use of the English language knowledge by students in e-environment and find out the possibilities to integrate their ICT habits in the studying process to improve their professional English language competence which could be valuable for further studies in special courses, doing research and elaborating on their Bachelor theses.

Theoretical discussion

The increasing expansion of Information Technologies worldwide creates a new social relationship – the information society. Therefore the necessity of the search and use of information has emerged. The concept of literacy has expanded and acquired a new name – information culture. The objective of the education system is the development of information skills.

Directions among the definitions of information culture include (Asherov, A., Bogdanova, T., 2007): 1) information culture of person; 2) information culture of society; 3) information culture as sphere of culture, special kind of culture; 4) information culture as methodological means of cognition. Information culture of person is the complex of knowledge, skills and habits of work with information and with information technologies. These components refer to user’s information culture. On the other hand, information culture could be defined as the process and the result of person’s development in information society. Information culture characterizes the level of person’s development in information society. The above mentioned refers to specialist’s information culture. Both user’s and specialist’s information culture determine the style of thinking. Describing information culture as the methodological device of cognition it could be mentioned that information culture has some cognitive (skills and ideas about new information image of the world at hypotheses and theories), operational and contextual (practical skills and habits, connected with the receiving, storing, transmitting and processing information), communicative (principles and rules of person’ behavior in information and communicative systems), valuable and reflexive aspects (vital aims, estimations and attitude to the world).

Methods of forming person’s information culture could be used according to the source of knowledge and skills (practical, visual, verbal and work with a book), according to the cognitive activity (reproducing and searching) and connected with integrated methods of training. The information culture is formed at the classes on information science, at non-computer disciplines (including foreign languages) and special disciplines, during distance education, in the library and during individual learning (Zeidmane A., Vintere A., 2008).
Currently students in higher education often believe themselves to be competent users of information resources because of their daily interactions with the internet (Macklin, A., Fosmire, M., 2003). This can lead to disinterest in learning skills to improve their use of search engines and electronic research databases. In addition, the case of transferring between social and academic environments, using the same technology, can hamper the study process in the classroom.

E-learning is an essential part in transformation of society to “information society“. Nowadays it becomes an easily available and effective education tool. In higher education it is widely spread, at least as a progressive support of traditional education. Many authors have been interested in its efficiency and in its particularities distinguishing it from traditional education. On the other hand, e-learning is based on a voluntary approach, consciousness, responsibility and ambitions of individual students who are self-responsible for the selection of their study materials, the way they study, their specialization. They themselves state the goals of their education and adapt them to their own needs, conditions, life rhythm and lifestyle. This shows how the focus of education and responsibility for results is being transferred to the student even more. This form of education plays an important role in life-long education process; e-learning can be also a part of an organized form of study (education, learning), for example distance learning, as well as attendance form of study.

When dealing with the organization of the e-learning study process, the attention should be paid not only to teaching special subjects, but also to the development of a range of important competences: personal and social responsibility, ability to plan, communication, language skills, skill to cooperate and others. In addition, e-learning study process at universities includes not only the use of designed e-courses by the academic staff, but also student independent research work, in which information search is an important constituent part.

The knowledge of foreign languages is necessary for obtaining versatile scientific information online. European Reference Framework (2010) has included communication in foreign languages among eight key competences for lifelong learning stating that essential skills for communication in foreign languages consist of ability to understand spoken messages, to initiate, sustain and conclude conversations, and to read, understand and produce texts appropriate to the individual’s needs. Communication in one’s own language and in foreign languages influences the development of all the other competences as language influences the way people are thinking (Vigotskis L., 2002).

The teaching of language for special purposes for non-philologist students at the tertiary level is meant to develop competences necessary for the world of work. I. Luka (2007) considers that the competence of foreign language for special purposes consists of communicative, intercultural and professional activity competence the components of which interact in a definite socio-cultural context. Study courses of foreign languages for special purposes or ESP, if the foreign language is English, are designed according to the needs analysis and mostly are content-based. Students at the university improve their language skills acquired during the secondary school, and gain new skills and the knowledge necessary for the future carrier and the academic environment. The focus is on the development of knowledge and skills necessary for
the reception of scientific and professional texts, and production skills, speaking and writing, are concerned with scientific and professional activities.

**Material and methods of research**

General methods of research are used: comparative analysis, synthesis, surveys. Undergraduate students of economics and engineering (n=118) of the Latvia University of Agriculture were surveyed. The questionnaire contained 11 questions in which students had to express their opinion regarding studying English in higher education, the use of the Internet and Web 2.0 tools in the English language.

**Results and discussion**

In order to examine the role of using e-environment in fostering the English language studies, the authors of the article set the following objectives: 1) to compare the LLU applicants’ English language proficiency with the average level of school-leavers in Latvia in terms of the results of the Centralized Form 12 English Language Exam, 2) to find out the students’ opinion regarding studying English at the university, 3) to analyze the students’ habits in using e-environment in English. The results of the study could assist in updating the content of ESP study courses and including innovative activities using, for example, Web 2.0 tools in teaching/learning English.

![Figure 1. The comparison of the results of Centralized Form 12 English Language Exam of school-leavers in Latvia and the LLU applicants in 2010](image)

The authors were interested in the undergraduate students’ profile therefore it was important to find out their English proficiency level and to compare it with the average level in Latvia on the whole. Students are not supposed to take an entrance exam in English, since they all pass the secondary school-leaving exam in General English. Figure 1 gives an insight into the Centralized Form 12 English Language Exam results in Latvia in year 2010 in comparison with the LLU applicants’ average English language proficiency level (obtained by the LLU applicants’ survey). The proficiency levels in Latvia are evaluated by Levels from A to F, Level A characterizing the most advanced English proficiency level, but Level F – the least advanced proficiency level. Levels B and C in Latvia correspond to B1-B2 according
to EU classification, level D in Latvia corresponds to A2 according to EU classification. One can notice that Level C accounted for 29.8% of school-leavers in Latvia in comparison with 34.8% of the LLU applicants. Level D accounted for 28.4% of the school leavers in Latvia comparing with 33% of the LLU applicants. The results show that there is a slight difference between the average language proficiency level among the school-leavers in Latvia on the whole and the LLU applicants, the LLU applicants having a slightly less advanced level. The dominating amount of Levels C and D (B1 and A2 according to the to EU classification) permits to make a conclusion that the English proficiency level of majority of the LLU students (77.8%) should be improved significantly during their studies at the university.

Since English is taught in the 1st and 2nd year of the Bachelor programme, the undergraduate students could be classified as pre-experienced, in-study learners (Robinson in Dudley-Evans and St. John, 1998) that have just arrived from the secondary schools. This should be taken into account when setting the aims and designing syllabus for the ESP course, choosing linguistic and professional content and methodology used in the classroom.

As regards undergraduate students’ IT habits, they are “digital residents” as opposed to the notion of “digital visitors” due to the fact that they have had computer science classes since the age of 12. On the other hand, students not always are interested in searching the information for the study purposes, they have not acquired skills of information selection and critical evaluation (the issue of information culture). There are several aspects to be considered: the cooperation between the lecturer and the student in achieving the aim, motivation and the students’ autonomous learning.

As it was mentioned before, the survey comprised 11 questions. Firstly, it was important to find out the students’ opinion regarding the aspects of the English language studies they would like to focus on for professional and academic purposes. It was a multiple choice question and the respondents had to range the aspects of language learning from most important to less important. Figure 2 shows that students consider terminology of the subject field most important, which is followed by reading scientific texts, business communication activities and presentation skills.

![Figure 2. Ranking of ESP classroom activities by students](image)

The second question referred to their opportunities to communicate in English. The results show (see Fig. 3) that 18.6% of the students use the English language every day, which means that they are keen on improving their English language skills.
25.4% of respondents practice English more than 2 hours per week, and almost 40% - communicate in English two hours per week and 22% - less than two hours per week. It can be concluded that there are two groups of students of almost equal number with different interests concerning practicing the English language. Approximately 60% of students do not use the English language outside the classroom. The reason of it could be, firstly, the fact that students are not motivated because the rural regions of Latvia are not accustomed to seeing foreigners. Secondly, the discussions with the students show that those, who have chosen non-philological specialities, sometimes feel discouraged after their experience of learning languages at the secondary school or that in the first year of the university they do not feel motivated enough to see the benefits of mastering foreign languages. However, the approximately 40% of respondents are eager users of different sources in the English language, including the Internet since students have no opportunity of communicating face-to-face with foreigners in the campus of the university.

Figure 3. The opportunities to communicate in English by students

The analysis of the obtained data of the next question referred to the students’ reasons of using the English language online. It was a multiple-choice question where respondents had to choose from several options. The most common reasons in the order of priority were the following (see Fig.4): 89.5% of respondents prefer listening to music, 75.4% of respondents like watching videos, 63.2% use the Internet for finding some specific information for the study process, 33.3% read technical specifications of various products, 19.3% of respondents visit chat rooms and 17.7% of respondents use the English language sites because of other reasons. It could be concluded that the English language is mostly used for entertainment purposes, since the first two places are occupied by the activities of listening to music and watching videos. However, 2/3 of respondents admit that they use the websites in the English language to search for the information necessary for the study process enriching their knowledge or doing homework.
The authors were interested to compare the use of Web.2.0 tools in English and students’ native language (see Table 1). It turned out that young people are quite accustomed to the opportunities provided by the technological advancement. The percentage of respondents using chat rooms and discussion forums in their native language was quite impressive: 93% of respondents stated that they used chat rooms and 73% of respondents admitted that they used discussion forums in their native language at least twice a week. The result was quite opposite as regards the frequency of using the English language websites: 25% of respondents stated that they sometimes used chat rooms in English, and only 10% of the respondents participated in English discussion forums at least twice a week. Reading blogs is a common activity – 52% of respondents read blogs in English at least once a week, but 80% of respondents read blogs in their native language. Writing blogs is not an activity favoured by the first year students as 80% of respondents do not write blogs in their native language, and 87% do not write blogs in English.

Table 1

<table>
<thead>
<tr>
<th>Students’ opinion regarding their use of Web 2.0. tools</th>
<th>Hardly ever</th>
<th>At least once a month</th>
<th>At least twice a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>frequency of using chat rooms in English</td>
<td>5%</td>
<td>70%</td>
<td>25%</td>
</tr>
<tr>
<td>frequency of using chat rooms in native language</td>
<td>2%</td>
<td>5%</td>
<td>93%</td>
</tr>
<tr>
<td>frequency of using discussion forums in English</td>
<td>16%</td>
<td>74%</td>
<td>10%</td>
</tr>
<tr>
<td>frequency of using discussion forums in native language</td>
<td>7%</td>
<td>20%</td>
<td>73%</td>
</tr>
<tr>
<td>frequency of reading blogs in English</td>
<td>7%</td>
<td>41%</td>
<td>52%</td>
</tr>
<tr>
<td>frequency of reading blogs in native language</td>
<td>2%</td>
<td>18%</td>
<td>80%</td>
</tr>
<tr>
<td>frequency of writing blogs in English</td>
<td>87%</td>
<td>2%</td>
<td>11%</td>
</tr>
<tr>
<td>frequency of writing blogs in native language</td>
<td>80%</td>
<td>2%</td>
<td>18%</td>
</tr>
</tbody>
</table>
It could be concluded that students are keen users of Web 2.0 tools in their native language, except for writing blogs. It means that young people are “digital residents”, they are interested in using various online applications. However, the majority of students are not interested and motivated to use the tools in the English language. As regards the negligible number of respondents writing blogs, it is a thought-provoking result which could encourage the academic staff to introduce didactical methods to improve this skill.

Conclusions

1. Latvia University of Agriculture is a regional university which provides education to the students from the regions of Latvia therefore students have different motivation of practicing English language out-of-class and they have various levels of the English language proficiency, according to the data of Centralized Form 12 English Language Exam.

2. The results of the survey show that only 63 % of the undergraduate students consider e-environment as the source of obtaining useful information for the study process in the English language, 75 – 90% of students use the Internet for entertainment. Besides, students do not have a habit of searching the information in the original language if it possible to find the translation.

3. The results of the students’ opinion regarding the aspects of the English language studies for professional and academic purposes reveal that terminology of the subject field, reading scientific texts, business communication activities and presentation skills are ranked as most important.

4. To encourage the use of e-environment in the English language studies, it is necessary to arrange an active and most importantly regular cooperation with the lecturers of special subjects as a result of which the foreign language study content would by regularly updated by issues related to the special subjects. Another suggestion would be to define a problem in the course of the special subject and look for the solution with the assistance of the information search in foreign language, the language teacher having the role of a tutor.

5. One of the solutions of the interdisciplinary cooperation is the application of the method of CLIL (Content and language integrated learning). CLIL is an approach of learning the content of specific subjects with the help of foreign language. The teachers working with CLIL can be language teachers and special subject teachers or both, native speakers and non-native speakers or both.

6. As young people are considered to be “digital residents” in “information society”, the academic staff should include innovative activities in ESP course based on Web 2.0 tools: discussion forums, chat rooms, blogs and wikis.

Bibliography


| Inese Ozola      | Latvia University of Agriculture, Department of Languages  
| Liela street 2, Jelgava, LV-3001, Latvia  
| E-mail: inese.ozola@llu.lv  
| Phone: +371 29665289 |
| Anda Zeidmane    | Latvia University of Agriculture, Department of Mathematics  
| Liela street 2, Jelgava, LV-3001, Latvia  
| E-mail: anda.zeidmane@llu.lv  
| Phone: +371 26773224 |