eLearning and New University Students

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Abstract: - eLearning has become a common expression in university education these days. If applied appropriately, it contributes to increasing the efficiency of the educational process, decreasing the amount of face-to-face instruction and strengthening the dimension of self-study and project activities, and thus it contributes to the process of developing students' key competences. Plenty of universities offer students e-courses even in the first year of their studies. The point is whether students coming from secondary schools are ready to use the offered eLearning tools and the potential to the full. Faculty of Informatics and Management has carried out a questionnaire survey for over a decade to collect relevant information about students´ access to the Internet, their abilities to use it and eLearning awareness. Data collected and processed within this survey are presented in this contribution.

Key-Words: - ICT, eLearning, digital literacy, Internet access, students, survey.

1 eLearning as a Precondition

Currently eLearning has not been a new phenomenon but it is more or less efficiently implemented in the educational process in numerous tertiary institutions. Experience proves that to succeed in implementation of eLearning concept into of process of education it is necessary to run several procedures. [6]

Series of significant steps have been made to facilitate the successful implementation of eLearning at the Faculty of Informatics and Management, University of Hradec Kralove.

Purchasing of a modern learning management system (LMS) was the first step. Today there exist numerous systems based eithr on commercial basis or open-source technologies. They do not differ substantially. A LMS system offers e-subject designers a wide scale of tools for creation and running their courses. [1] The crucial precondition of successful implementation is to decide for *one* concrete system, and not to dissipate efforts into several software solutions used in various institutions or changing the choice after some period, as it can be often seen. In 1999 the Faculty of Informatics and Management decided for the Lotus LearningSpace system, which was highly appreciated these days, and since 2001 the LMS WebCT has been used because of growing number of users. [4]

Another important factor supporting the development of eLearning is the availability of computing technology. Faculty academic staff dispose both hardware and software modern equipment at their workplace, and notebooks are provided most of them. There are 80 notebooks that academic staff can borrow for their work outside the faculty at present.

The third necessary precondition is education, both in the field of using modern teaching methods and adequate technologies. [5] OLIVA seminars (On-LIne VýukA meaning On-line instruction) have been regularly organized for academic staff since 2001 at the Faculty of Informatics and Management. These seminars deal with methodology of preparing distance learning materials and designing eLearning courses. Except for OLIVA seminars there is a wide variety of courses that teachers can attend. These courses focus on the issue of information and communication technologies in education and are organized by the faculty: Internet in Education, Modern Presentation and Education, Constructivism within the tertiary education etc., or they are organized by external subjects, e.g. the University of West Bohemia, Plzeň, or The Distance Education Centre, Palacký University, Olomouc, which run courses e.g. NetTrainers, Introduction into Distance Education, etc. Another possibility where staff can improve their computer literacy is the ECDL course (European Computer Driving System) that is organized by their own faculty.

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Design, implementation and running of e-courses are backed by a motivation system which has been embedded in the dean statement.

From 2001 to 2011 over 180 e-subjects were prepared for students of the Faculty of Informatics and Management. This number represents the best evidence of efficiency of the taken steps into eLearning environment.

2 Survey

Generally, current concepts of study plans include eLearning, i.e. e-subjects, already since the first semester of university study. Each teacher should ask following questions before speaking with students about eLearning and studying in e-courses.

Are students prepared from their secondary schools for this modern kind of education?

Do students know possibilities that Internet provides, do they use them?

These questions can be among others found in the questionnaire survey which has been regularly given to students enrolled into the first year. The Faculty of Informatics and Management has been collecting data from this survey for fifteen years.

The questionnaire is divided into a few logical parts. Part One focuses on the interest in studying at the Faculty of Informatics and Management. The important deal is devoted to the field of information sources that were important in the decision-making process which faculty the student should apply for.

Part Two finds out which information channels were used by students to learn results of their entrance exams.

From the perspective of future eLearning use Part Three of the questionnaire seems really important because it identifies current ways of students´ access to the Internet.

And the last part deals with the existing students´ experience in eLearning.

The questionnaire has been used since 1996 (the part focusing directly on the e-learning phenomenon was added later). [3]

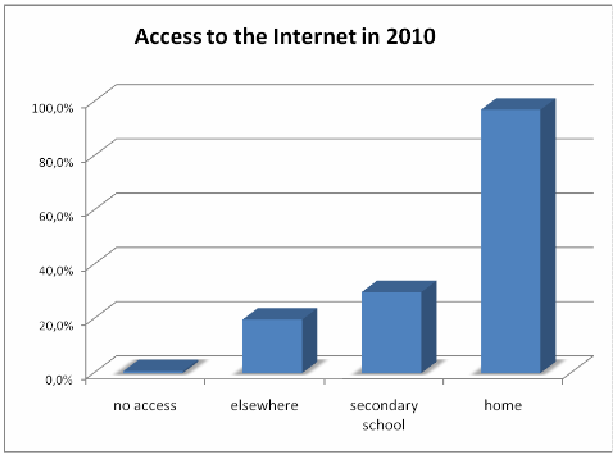
Table 1 Numbers of participants and questionnaires

	Enrolled students	Participating in survey	Return rate
1996/97	274	195	71%
1997/98	328	287	88%
1998/99	346	267	77%
1999/2000	292	238	82%
2000/01	384	311	81%
2001/02	338	321	95%
2002/03	430	350	81%
2003/04	615	498	81%
2004/05	654	525	80%
2005/06	637	517	81%
2006/07	693	500	72%
2007/08	866	625	72%
2008/09	895	526	59%
2009/10	809	476	59%
2010/11	934	551	59%

2.1 The Internet Accessibility for Secondary School Graduates

From the perspective of a possible future use of eLearning within university education there are essential items in the questionnaire dealing with the accessibility to the Internet by new students entering the faculty. [2]

One of the questions focuses on the access point to the Internet, i.e. whether students use the Internet from home, from the secondary school, from some other place, or they had no chance to use the Internet at all. Students mark proper answers from four choices.



Graph 1. Access to the Internet in 2010

The findings relating to the academic year 2010/11 show that 97 % of students have access to the Internet from home, 30 % used the Internet at the secondary school, 20 % of students had the access to the Internet from somewhere else and only 1% of students stated that for the time being they had no access to the Internet at all. (see Graph 1)

Thanks to long-time monitoring it is possible to detect distinctive expansion of the Internet accessibility from home from only 13% to current over 97% of students entering the faculty. (see Graph 2, Graph 3)

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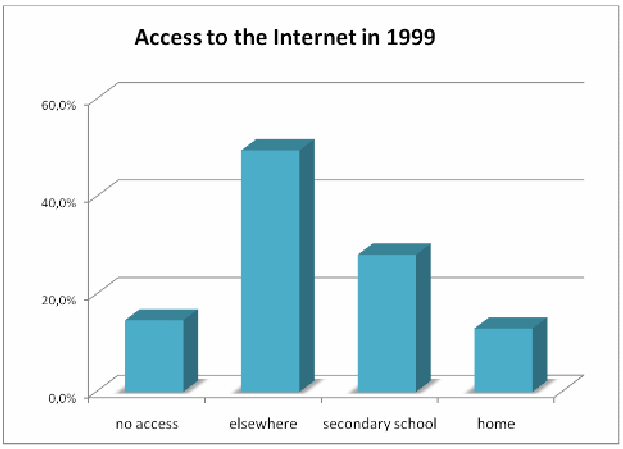
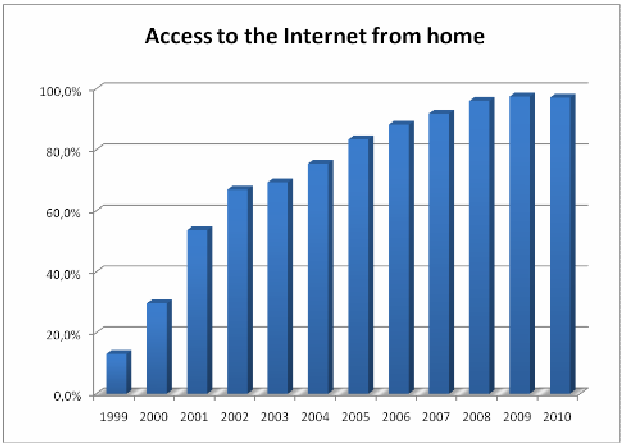
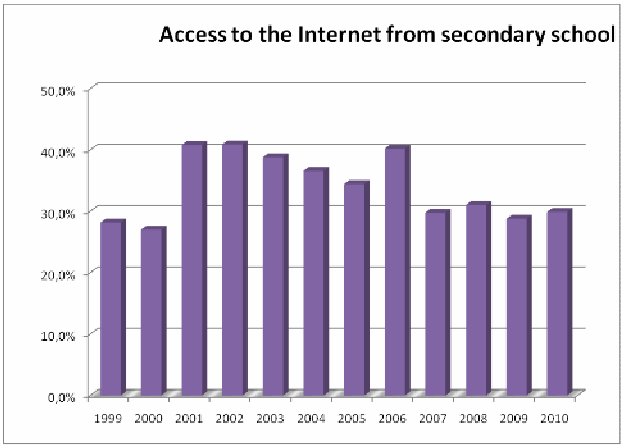


Graph 2. Access to the Internet in 1999



Graph 3. Access to the Internet from Home

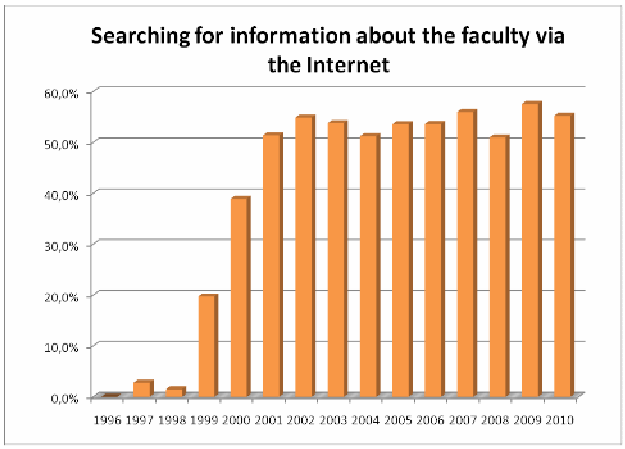
The Internet accessibility from the secondary school does not prove such an expressive tendency, nevertheless from the original 28 % it moved to over 30 %; the most distinctive growth came in 2001, it has stayed at the nearly same level since. (see Graph 4)



Graph 4. Access to the Internet from the secondary school

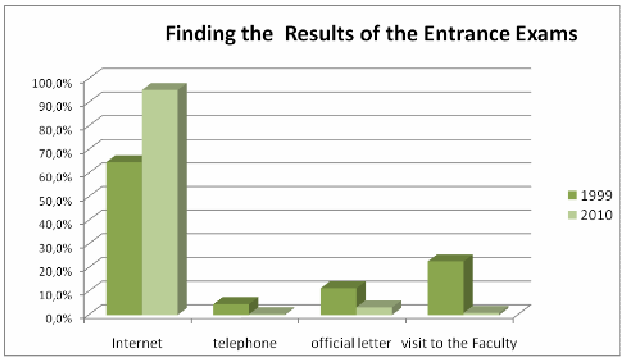
Strong increase in importance of the Internet is reflected in questions focused on finding information about universities or results of their entrance exams.

In 1996 none of the students searched information about the faculty on the Internet but in 2010 the Internet was the dominant source, information about studies at the FIM UHK was searched by 55 % prospective students. (see Graph 5)



Graph 5. Searching for information about the faculty via the Internet

Since 1999 results of entrance examinations have been published on web sites of the faculty. In 1998 and before students used to make telephone calls or came to the faculty to get required information. At present the Internet is the prevailing information channel, the others are fading. (see Graph 6)



Graph 6. Finding the entrance exam results

As it is apparent from the previous graphs the access to the Internet and the Internet utilization has significantly increased in recent years and today´s students used it without any hesitation. It means that eLearning utilization already at the beginning of their university study does not represent any

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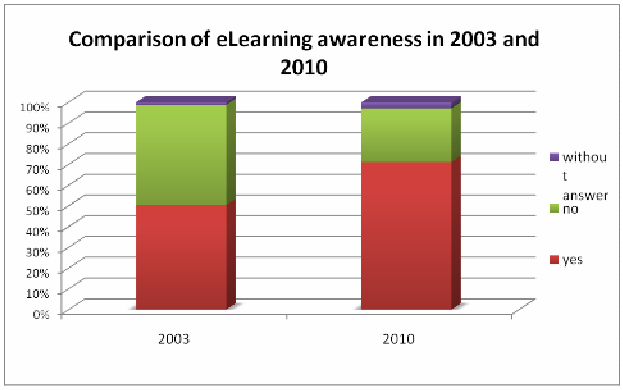
obstacles usually arising from lack of experience with the Internet and Internet services.

2. 2 eLearning awareness

The number of e-subjects designed and implemented for the Faculty of Informatics and Management students is increasing, due to this growth new questions focusing on eLearning experience of newly enrolled students have been added since 2003.

From the perspective of implementing e-subjects into the process of education it is important to know whether they met with this modern phenomenon in education before entering the university or whether they participated in some of eLearning courses.



Graph 7. Comparison of E-learning awareness in 2003 and 2010

71% of students said that they had met with e-learning phenomenon in 2010. Eight years earlier only 50% of students knew this expression. (see Graph 7)

Students are to write what they think the eLearning expression means. The possibility to comment upon the word e-learning was taken by 227 students in 2003.

In 2003 the most frequent answer was "Learning/teaching via the Internet" with 102 occurrences. Other opinions are following:

- Education via the Internet (47 occurrences)
- Learning/teaching by means of modern information technologies (computer, the Internet) (11 occurrences)
- Access to materials and tests on the Internet (9 occurrences)
- Courses via e-mail, communication with school by e-mail (9 occurrences)
- Self-study (education) by means of computer, the alternative form of studies when common form of study, common attendance is not possible (6 occurrences)

In 2010/11 academic year most respondents were able to define the expression of eLearning correctly. The widely spread explanations are as follows:

- instruction, education on the Internet 101x
- Internet-supported learning 79x
- study on the Internet 32x
- electronic study 14x
- learning materials on the Internet 18x
- online study 10x
- tests on the Internet 8x
- self-study on the Internet 6x
- instruction supported by the Internet, without teacher being in the classroom 6x
- a course on the Internet 5x
- online study 5x
- electronic courses 3x
- instruction on the computer 3x
- education on the computer 3x
- OLIVA (**O**n-**LI**ne **V**ýuk**A**, i.e. on-line instruction) 2x
- online communication with teachers 2x
- instruction supported by interactive programmes on the Internet 2x
- collecting information about subjects (content, terms and conditions, deadlines etc.) 2x
- portal for electronic instruction 1x
- sharing learning materials through the Internet 1x
- Internet school 1x
- type of learning 1x
- instruction by the system of tests 1x
- using multimedia classroom and the Internet 1x
- setting the learning content through the Internet 1x

Practical experience with e-learning has not spread distinctively in recent years, only about 18% of enrolled students have some experience with eLearning. (see Graph 8)

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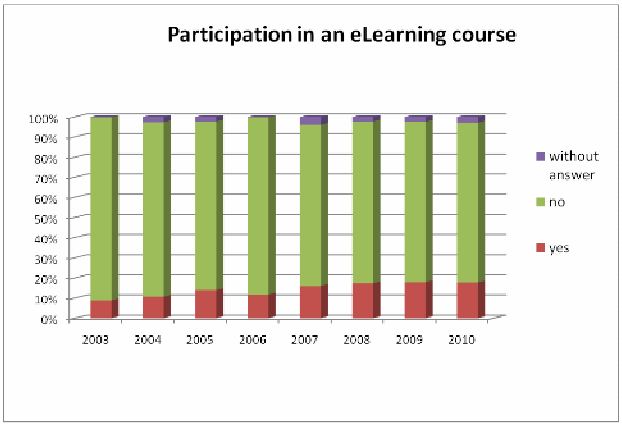

Graph 8. Participation in an eLearning course

5 Conclusion

The collected data empower us to state that in spite of the fact that future university students do not have much actual experience with eLearning, they know this phenomenon. On the other hand the Internet is accessible to the vast majority of them before starting the university study; using the Internet is a common activity of the everyday life.

Acknowledgements

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