THE USE OF INTEGRATED E-LEARNING SYSTEMS – ACCEPTANCE STUDY BETWEEN ACADEMIC TEACHERS AND STUDENTS

ABSTRACT

The paper presents the problem of readiness for using e-learning systems in education process. Students and academic teachers are the target group. Web systems for creating and managing query sheets have been used for testing purposes. Using www forms is much more efficient than standard paper query sheets. The paper presents the results of research which are connected with the opinion of academic teachers about instructing type e-Learning.

Keywords: web forms, e-Learning, FormAssembly

STRENSCHENIE

Artykuł podejmuje zagadnienie gotowości środowiska akademickiego do stosowania rozwiązań e-Learning w procesie edukacji. Do przeprowadzenia badań użyto webowych systemów do tworzenia i obsługi formularzy ankietowych, co jest nowym i bardziej efektywnym podejściem do zbierania cennych informacji. W artykule zaprezentowano wyniki badań związanych z opinią kadry akademickiej na temat nauczania typu e-Learning.

Słowa kluczowe: formularze internetowe, e-Learning, FormAssembly

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1. Introduction

The approach to science has been changing within centuries. Primitive man perceived science in a completely different manner than those who live in modern times. Since the dawn of time science has been strictly related to survival – nature was the sole source of knowledge and the only teacher that mankind could learn from. Lack of will to explore the world was synonymous to the lack of survival chances. However, the means of gaining knowledge were few and limited to experiments with things that one had been unfamiliar with so far. Simple, uncomplicated or even non-existent communication caused that one was left on one’s own for a long period of time.

In turn, the twentieth century man perceives science in a bit different way. The aim of exploring the world is to broaden one’s intellectual horizons, as only a man who has sense of fulfillment can be considered to be a wise one. Moreover, the means of gaining knowledge have changed considerably and, in retrospect, one can say improved. Nowadays the media are powerful means of transmission. Television, newspapers, books, radio stations and the Internet are the sources of knowledge regarding every subject. However, it is electronic transmission which at the moment is the most frequently used method to gain information. Treating computer and the Internet as a teacher who has changed its form from material and tangible to a moving one on a computer screen may significantly improve a previous approach to conventional methods of teaching. Teaching with the usage of modern IT technologies and their multimedia possibilities, such as e-learning appears to be a complementary or even alternative method of receiving education.

2. E-learning systems

While discussing e-learning systems, three different aspects should be considered: people, knowledge and communication. Thanks to a three-dimensional diagram one can match particular systems with the appropriate aspects (the elements on the axes). And so:
– people – LMS system,
– knowledge – LCMS system,
– Communication – LCS system.
The above mentioned systems are displayed as a three-dimensional model classifying e-learning systems (Fig. 1).
LCMS – Learning Contents Management Systems;  
AT – Authoring Tools;  
LMS – Learning Management Systems;  
SMS – Skills Management Systems;  
AS – Assessment Systems;  
LCS – Life Communication Systems;  

The route of information flow from content creation to receiving a particular material by an addressee is shown in Fig. 2. The diagram displays LCMS, LMS and LCS systems which are shown as the processes they are responsible for [1].

![Diagram showing the route of information flow in e-learning systems]

**Fig. 1. E-learning systems classification**  
**Rys. 1. Przyporządkowanie systemów e-Learningowych**

**Fig. 2. E-learning process elements**  
**Rys. 2. Elementy procesu e-learningu**
3. Investigations of academic staff

In December 2008 a piloting survey was conducted among a representative group of 70 people. The poll concerned academic teachers’ opinion on all e-learning courses. The respondents were chosen among a department of a university’s staff. The questionnaire was prepared with the usage of a free Form Assembly application and made available online.

The respondents included: males (89%) with seniority over 10 years (66% – over 10 years, 19% – less than 5 years) with their didactic-educational activity assessment as Acategory: PhDs – 63%, holders of a postdoctoral – 16%, masters 14% and professors 6%).

Despite the fact that 52% of the respondents had never been in contact with e-learning courses or platforms before, they declared for using such a form of courses (46%) due to: the possibility of adjusting learning period to one’s needs and possibilities (46%), easy access to the materials via the Internet (27%), time saving (16%), other (solely 10% of the respondents declared their skepticism regarding different than traditional teaching methods stating that they would never use the method unless forced or immobilized by illness. Attractive price was perceived as another advantage (1%) – f3.

Fig. 3. Factors influencing taking the decision to start e-learning education: 1 – easy access to the materials, 2 – attractive price, 3 – time of learning adjusted to individual needs and possibilities, 4 – time saving

Rys. 3. Uzależnienie decyzji o nauce w formie e-Learningu od: 1 – łatwy dostęp do materiałów, 2 – atrakcyjna cena, 3 – czas nauki dostosowany do własnych potrzeb, 4 – oszczędność czasu
Considering the period of time necessary to participate in the course, the best solution is to divide the training program into 10 classes units – picture 4.

E-learning distinctive feature is shifting the concentration in the process of teaching from tutor to trainee and the possibility of choosing a preferable form of receiving knowledge and the pace of its transmission. Hence, 61% of the respondents shows inclination to receiving the materials via the Internet, whereas 18% prefers classic course books, 13% is in favor of videoconferences and 7% prefers videotaped lectures. In turn, 47% of the respondents favors contacting the teacher directly, 30% via e-mail and 19% prefers online contact. In the days of a common computer technology 97% of the respondents has everyday internet access, where 22% uses the transfer of 2 Mb/s, 20% – not more than 1 Mb/s and only 3% of the respondents not more than 192 kb/s.

Methods of encouraging to participation in e-learning courses play also a significant role. 44% of the respondent wants their employers to pay for the courses, 20% suggests reducing the number of obligatory teaching hours during academic year, 13% would participate in the course for their own benefit, 7% to gain extra credits, whereas 4% of the respondents have stated that only e-learning course high efficiency would persuade them to participate in it.

3. Conclusions

As the idea of distributing education from a distance is growing more popular, it is important to take advantage of the possibilities of e-learning courses. However, as the e-learning market has not been developed yet, the task is not effortless.
Table 1

<table>
<thead>
<tr>
<th>STRONG POINTS</th>
<th>WEAK POINTS</th>
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<tbody>
<tr>
<td>– Easy access to the materials (24 ours a day)</td>
<td>– Limited motivation</td>
</tr>
<tr>
<td>– Reduced costs</td>
<td>– Technical problems</td>
</tr>
<tr>
<td>– Making education possible for the disabled and those who come from distant towns</td>
<td>– Limited participation in practical classes</td>
</tr>
<tr>
<td>– Making education more accessible to those who work and raise children</td>
<td>– Large amount of effort required to prepare the first edition</td>
</tr>
<tr>
<td>– Time saving</td>
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</tr>
<tr>
<td>– Thanks to CMS usage the software is easy to introduced</td>
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<table>
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<tr>
<th>CHANCES</th>
<th>RISK</th>
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<td>– Contacting larger group of addressees</td>
<td>– Limited possibilities of checking one’s theoretical knowledge</td>
</tr>
<tr>
<td>– Improving institution’s image</td>
<td>– Technical problems</td>
</tr>
<tr>
<td>– Contacting students in an easy way</td>
<td>– Students’ incompetence</td>
</tr>
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<td>– Monitoring</td>
<td>– Lack of employers’ trust in skills and education received via e-learning</td>
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<td>– Increasing the number of students in Poland</td>
<td>– Lack of society’s trust in such a type of teaching method</td>
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The research results show that gaining knowledge via e-learning classes is the future of education, and although it still requires improvement, there are chances for it to become a typical teaching method within the nearest ten years (tab. 1).

However, one’s attachment to conventional teaching methods and one’s indecisiveness when it comes to carry out experiments and promoting e-learning result in the lack of e-learning access and its benefits. The right course of action that ought to be chosen by evolutionary education process is to support the conventional teaching methods, whose advantages are commonly known, with the new and modern ones. Combining these two methods in the light of general-developmental trend appears to be the most appropriate one at the moment.

References