

## Let's learn easily and quickly – lifelong, anytime, anywhere

**Kende, György<sup>1</sup>, Miskolczi, Ildikó<sup>2</sup>, Seres, György<sup>3</sup>**

(<sup>1</sup>ZMNDU Department of Logistic, <sup>2</sup>Szolnok University College Department of Economic Analysis and Methodology, <sup>3</sup>ZMNDU PhD Institute in Military Technology)

[kende.gyorgy@zmne.hu](mailto:kende.gyorgy@zmne.hu) , [miskolczi@szolf.hu](mailto:miskolczi@szolf.hu) , [drseres@drseres.com](mailto:drseres@drseres.com)

### **Abstract:**

How do we e-teach? There are so many answers, as many questions, or as many forms of education, schools, subjects, or teachers are. The different professional systems of eLearning help the teachers to compose e-curriculums, to organize and to realize it. However, a teacher is able to realize his curriculum (perhaps with the help of the professional developers) and he can take it to the students of e-courses (let it be a presence, mixed or a distance course) he has to know not only the *knowledge of digital reading* but the basics of *digital writing's* phrases too.

The knowledge of digital reading is wide-spreading nowadays. Better part of the students and teachers in the trainings of adults has the knowledge they need and necessary to the e-learning. This knowledge is about using the computer and apply internet.

However, some kind of community forums must be worked for the wide range of the knowledge of digital writing (beside to learn the special courses). These forums can help to change the information between the teachers, students, researchers and managers who are interested in using Info-communication Technology (ICT).

We bring into being a private pilot internet portal to show this possibility in the practice. The name of the test-portal is E-TANÁR – E-TEACHER. We started to work out the curriculum of a distance course.

### **Good priest studies until death**

Live and learn - as the phrase goes. However, up to the middle of the last century, in general it was true for those whose gene contained too much curiosity or, they were military men who in peacetime had to participate in trainings and exercises regularly. Most people who went through the shops or took a diploma were able to live on for life.

In the second half of the 20th century development in science, technology and society was so rapid that the knowledge acquired at schools became obsolete many times in the active period of human life, therefore it was necessary to buckle down to learning again and again to keep up competitiveness in the labour market. By the end of the century the want of lifelong learning (LLL) had been formulated.

The conventional scholastic system of education, of course cannot meet this requirement. For this reason – following a thousand-year-old tradition of armies – the big companies themselves organize systematic training of their employees, while for the smaller ones professional educational firms provide systematic retraining.

Beside demand, the 20th century also created efficient means of teaching and learning. In the last few decades, recording motion picture and voice revealed itself at the beginning of the century by means of computer, digital data recording and transmission - in other words info communication technology (ICT) – made technical opportunity of such efficient education that was inconceivable before.

This info communication technology – the possibility of eLearning or eTeaching – today “in small” is already available for educational institutions and organizations of almost every level, which enables the efficient lifelong learning to be organized.

However, to make the picture full it must be said that the eLearning begins to gain ground in education of IT experts, in learning languages and in continuative education of experts of multinational companies. The frame systems supporting multimedia education and online distance teaching are used in the intranet systems of more and more Hungarian companies and educational institutions, but proper Hungarian educational content provided does not allow, in general, full utilization of their capabilities yet.

So, the building of eLearning, the Internet has been built. The classrooms, in other words the local Intranet networks equipped with systems of learning organization are being built. The computers – the most modern desks – are ready to welcome students. Multimedia devices – smart-boards and presentation software – are at service for teachers providing all the imaginable and unthinkable forms of demonstration.

Now in this well-equipped building the only questions to be answered are:

- **Who** should be eTaught?;
- **What** to eTeach?;
- **Who** should eTeach?;
- **How** to eTeach?

The answer to the question of **Who should be eTaught?** is relatively simple: everybody – sooner or later.

After its “invention”, human **speech** as the first teaching aid became a common form of teaching for thousand years – he who wanted to learn that first of all had to learn to speak.

Invention of **writing** and then **printing** greatly increased efficiency of knowledge transmission accumulated by the by mankind – literacy is a prerequisite for learning for centuries.

The use of means of **image** and **motion picture** and **voice recording** in teaching and learning became general and efficient only by the application of **multimedia** devices in eLearning, digital data recording and transmission and displaying, computers, and local and global computer networks – “digital literacy” has been a prerequisite for eLearning.

Nowadays not everybody meets this requirement yet – they can only be taught in conventional way. However, the generation growing up in kindergartens with “childproof” (or in Hungarian usage “cocoaproof”) computers will surely be an eLearner.

But even today there are target teams for whom digital literacy – user-level knowledge of computer and Internet – is one of the job requirements. For example, eLearning can be an ideal solution for employees of big firms, public employees and professional strength of the Army to meet lifelong learning requirement.

The question of **What to eTeach?** can be answered similarly: everything – sooner or later, that has to be acquired within an organized framework.

eLearning enhances not only efficiency of conventional theory teaching, but the most varied virtual models, simulators and character games can greatly improve cost-effectiveness of practical training as well.

To answer the question of **Who should eTeach?** is much more difficult.

In a conventional school it is the teacher who gives a lecture on a specified or selected curriculum, coaches students and then checks or examines and evaluates acquisitions.

The question of **Who teaches?** comes up in the case of a multimedia curriculum package elaborated for acquiring a set of knowledge – subject, topic etc. – by eLearning.

- Is it the *teacher*, who selected and worked the curriculum up?
- Is it the *graphic designer*, who composed the presentations facilitating understanding?
- Is it the *information specialist*, who wrote the screenplay?
- Is it the *narrator*, who gave the lectures?
- Is it the *programmer*, who recorded the result in a digital data medium or an assigned network address, in a form easy to handle by the student?
- Is it the *tutor*, who holds intercourse with the students during distance learning?

It would seem the simplest solution when some one person would perform all these tasks, however it is impossible and unnecessary to prepare every teacher for studying so many professions. The knowledge standards mentioned in introduction make it possible to organize curriculum-objects worked out by prominent experts of the country or a linguistic area into content- storehouses from where teachers, schools or other educational institutions can collect material for compiling curriculum suitable for their aim. Of course, eCurricula necessary for subjects of institutions of higher education and special courses require mostly individual working-out, and close co-operation from participants performing abovementioned tasks ranging from working-up curriculum to checking acquisitions.

The higher educational institutions which are interested in the trainings of adults, and the e-curriculums of the course of the special trainings' subjects are need personal working-out, and working together from to formulate the curriculum to the controlling the knowledge.

Peter Gerő writes about this in his university course book „*Life-tailored training*”: „*Making curriculum is a teamwork in horizontally and vertically too – principally, if multimedia elements are in it.*” [1] p. 165.

To the question of **How to eTeach?** so many answers can be given as many forms of education, schools, subjects and teachers exist.

Different professional Learning Management Systems (LMS) of eLearning help teachers to compose e-curriculums, to organize and to realize it<sup>1</sup>. However, a teacher is able to realize his curriculum (perhaps with the helps of the professional developers) and he can take it to the students of e-courses (let it be a presence, mixed or a distance course) he has to know not only the *knowledge of digital reading* but the basics of *digital writing*'s phrases too.

The knowledge of digital reading is wide-spreading nowadays. Better part of the students and teachers in the trainings of adults has the knowledge they need and necessary to the eLearning. This knowledge is about using the computer and apply internet.

However, some kind of community forums must be worked for the wide range of the knowledge of digital writing (beside to learn the special courses). These forums can help to

---

<sup>1</sup> For example, Zrínyi Miklós National Defense University uses the ORACLE-iLearning, Budapest Tech Polytechnic Institution uses the MOODLE, and Dennis Gabor Applied University uses the ILIAS system, but many Hungarian firm developed own special LMS.

change the information between the teachers, students, researchers and managers who are interested in using Info-communication Technology (ICT).

### An attempt to promote the digital-writing capability

We bring into being a private pilot internet portal to show this possibility in the practice. The name of the test-portal is E-TANÁR – E-TEACHER (Figure 1). We started to work out the curriculum of a distance course.



Figure 1. *The home page of the portal*

Aim of the planned course is to take a review about the possibilities of ICT in the teaching or the information- and the knowledge-transmission and to show possibility of special hardware and software – for inspiration of the more effective using of them.

The frameworks of the categories and the curriculums of some categories are complete now. In our work we want to apply those curriculums and presentations which made or used our developers in their works, and the illustrative curriculums too.

We kept experimental courses with some voluntary students by the already elaborated topics. Distance education technology and face of the portal was developed using skill of these experiences<sup>2</sup>.

<sup>2</sup> One of the authors, Ildikó Miskolczi, took a presentation on Conference of the Knowledge Management Commission of the Hungarian Academy of Sciences about her observations [2].

Much interest is shown for the topic, that the searching-robots discovered the portal in short time, and many users attend our pages daily from all of the world – regardless closed character of the portal and work already of only the Hungarian variant (Figure 2).

Beside the few thousand anonymous visitors, more than a hundred persons are registered; the portal has more than fifty recurrent visitors.

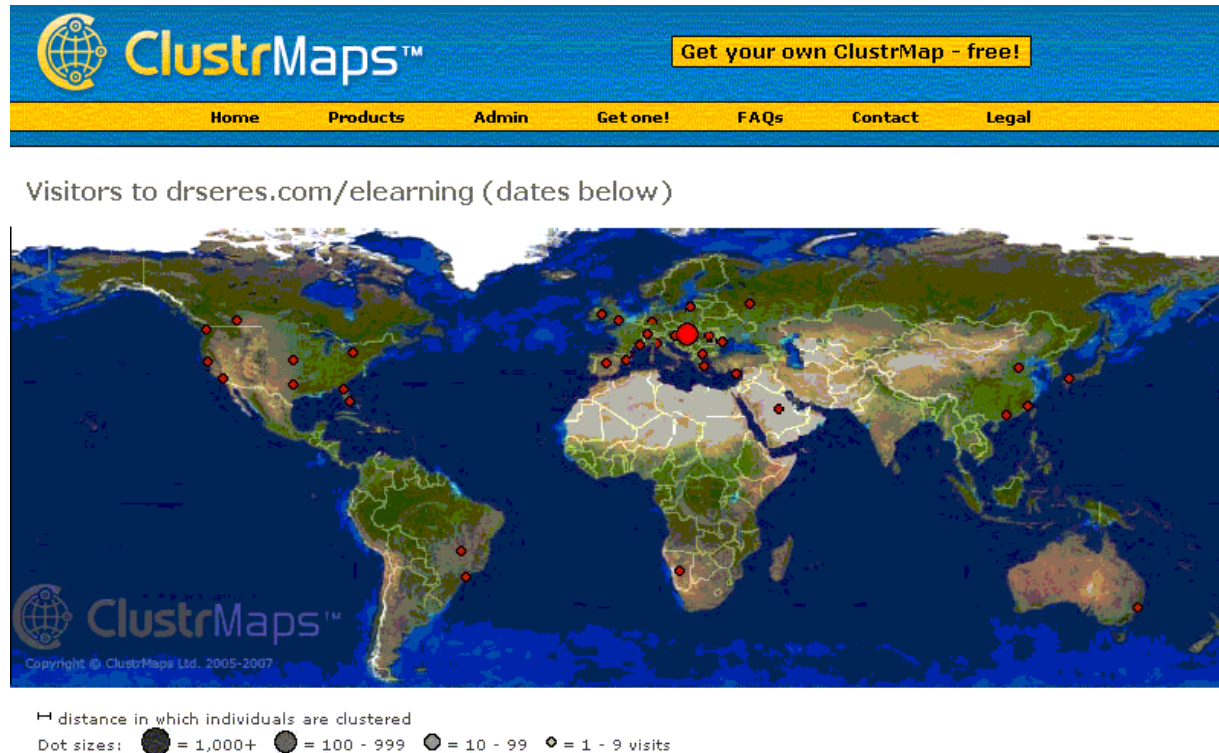


Figure 2. Attendance of portal E-TANÁR

The portal can be visited after an adjustable registration which registration gives different rights for the users.

Visitors can read the pages of the curriculum's chapters without a registration and check-in, but to interactive being switched to registration – in the period of the development it is free.

Registered and accepted by the webmaster visitors can come to know the treatment of the portal and its services<sup>3</sup>, the function of the sample course<sup>4</sup> created as an illustration, they can join to the community's work. They can take comments to the chapters and categories just as the discussion of the forums<sup>5</sup>.

*Péter Gerő writes in his already quoted course book: "The learning has to be in accordance not only with the aim, but with the learning situation, and with the student's full situation too." [1] 29. oldal.*

Course forms of the portal planned by conformity of the candidates' claims, his abilities, his technical and material opportunities – according to the basic principles of the life tailored learning:

<sup>3</sup> <http://drseres.com/elearning/altalanos>

<sup>4</sup> <http://drseres.com/elearning/mintakurzus>

<sup>5</sup> <http://drseres.com/elearning/forum>



E-group 1

- *One contact lesson* or videoconference *at the beginning and at the end* of the course – at the time *stated by the tutor*.
- On-line processing one chapter per week – at the time *stated by the tutor*.
- The worked out by student's tasks and their assessments *are available* for the group's members.

E-group 2

- *One contact lesson* or videoconference *per topics* – at the time *stated by the tutor*.
- On-line processing one chapter per week – at the time *stated by the tutor*.
- The worked out by student's tasks and their assessments *are available* for the group's members.

E-group 3

- *One contact lesson* or videoconference *per chapters* – at the time *stated by the tutor*.
- On-line processing one chapter per week – at the time *stated by the tutor*.
- The worked out by student's tasks and their assessments *are available* for the group's members.
- 

VIP 1

- *One contact lesson* or videoconference *per topics* – at the time *stated by the student's claim*.
- On-line processing one chapter per week – in the order and *time stated by the student's claim* and checked by the tutor.
- The worked out by student's tasks and their assessments *are not available* for the group's members.

VIP 2

- *One contact lesson* or videoconference *per chapters* – at the time *stated by the student's claim*.
- On-line processing one chapter per week – in the order and *time stated by the student's claim* and checked by the tutor.
- The worked out by student's tasks and their assessments *are not available* for the group's members.

VIP3

- *One contact lesson* or videoconference *per chapters* – stated by the student's claim.
- On-line processing one chapter per week – in the order and *time stated by the student's claim* and checked by the tutor.
- The worked out by student's tasks and their assessments *are not available* for the group's members.
- Some topics can be changed by individual claims of the student.

Classification of the students onto the distance education courses occur by their answer to the questions of an on-line questionnaire<sup>6</sup>.

The tutor informs the candidate about the acceptance of the registration, getting the course and the information for signing in to the on-line, virtual intranet user account of the portal by e-mail.

### Virtual intranet

We created an exclusive, virtual, on-line intranet network inside the frameworks of portal's domain with using of the Google „Applications”<sup>7</sup>. All of the participants and teachers of the courses has an individual user account (Figure 3). Currently four applications run in the network's framework:



Figure 3. Signing in to user account of distance-learning portal

All of users can take up undermentioned four services of the achievement of the portal:

1. All of users of the portal has a mailbox (Figure 4), primarily for the inner correspondence, but it is usable<sup>8</sup> for exterior correspondence in possession of permission too. Mailbox is available from anywhere at any time .

---

<sup>6</sup> <http://drseres.com/elearning/jelentkezés0.htm>

<sup>7</sup> <http://www.google.com/a/help/intl/hu/edu/index.html>

<sup>8</sup> <http://mail.drseres.com>

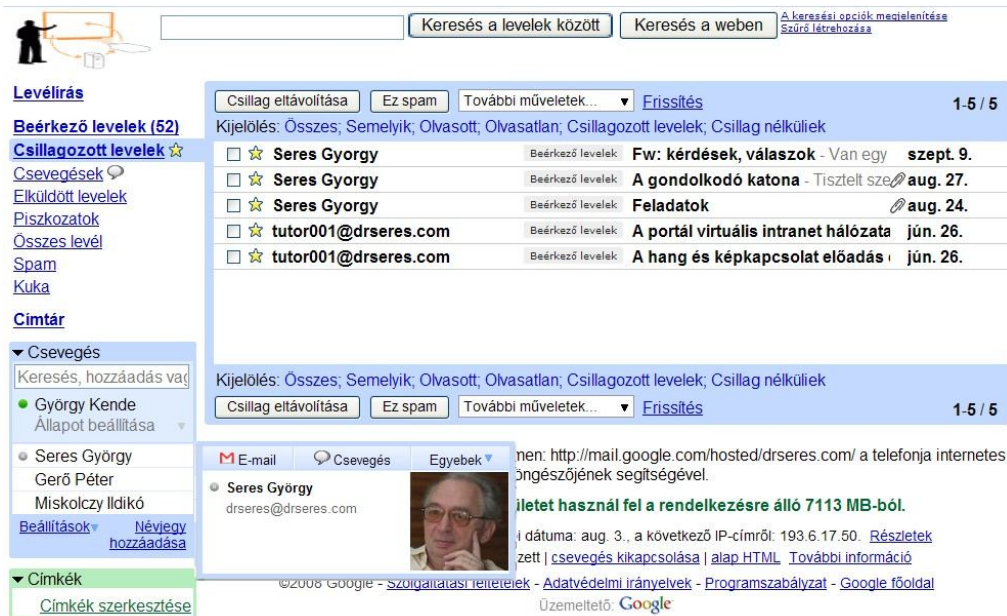


Figure 4. Virtual mailbox

2. All of users of the portal has a timetable-calendar<sup>9</sup> (Figure 5) , which plays role of the virtual timetable primarily. Basically it is visible by owner and lecturer or tutor only. Students of the course may divide it between each other within the domain. Calendar is available from anywhere at any time.

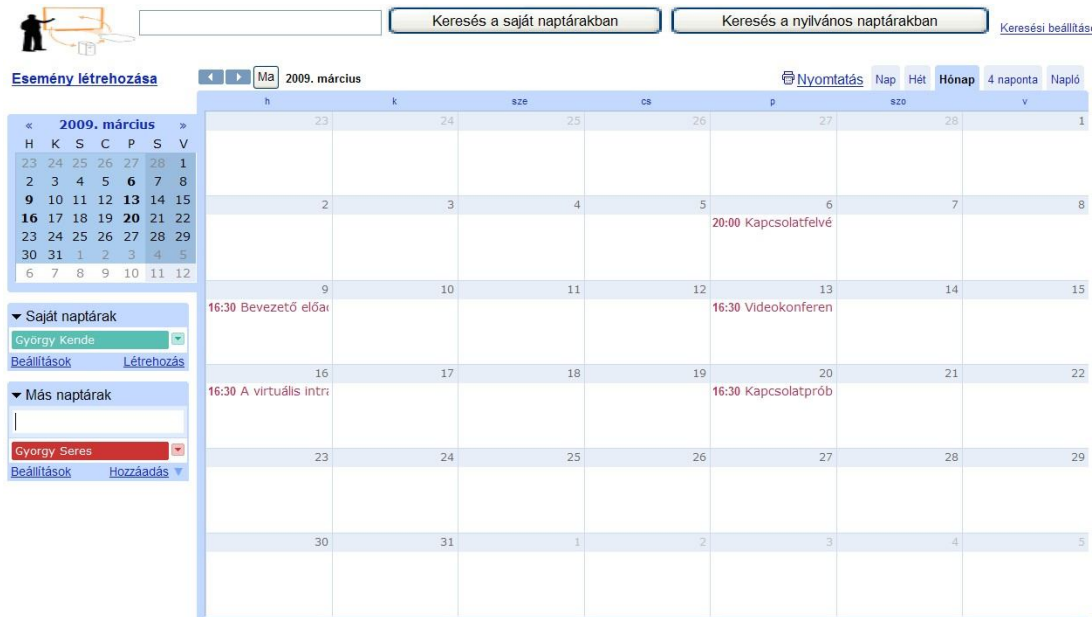


Figure 5. Virtual timetable

3. All of users of the portal can use an online interactive document editor system<sup>10</sup>. There is available each required curriculum and recommended literature of the course from the virtual directory of the document editor (Figure 6). Presentation can be observed, text and table documents can be constructed on-line real-time individually or jointly. System is suitable for the completion of the prescribed tasks, a real-time on-line

<sup>9</sup> <http://calendar.drseres.com>

<sup>10</sup> <http://docs.drseres.com>



presentation (Figure 7), writing papers (Figure 8.), testing (Figure 9) and examining (Figure 10) excellently. Editor-library is available from anywhere at any time.

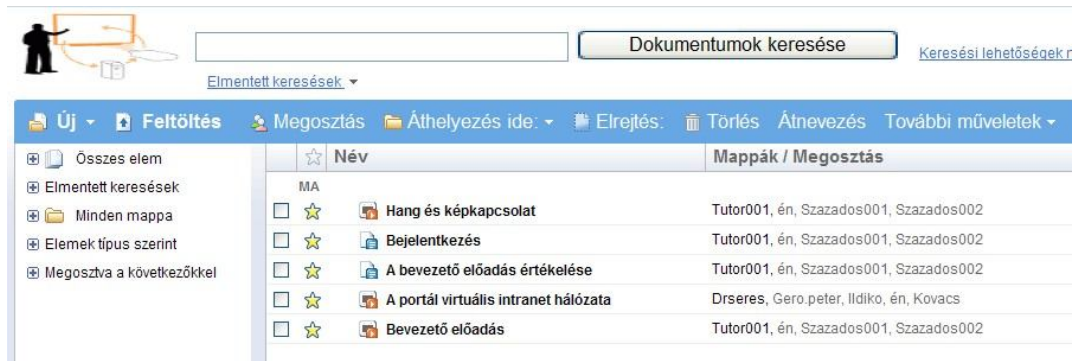


Figure 6. Directory of the virtual library of the on-line document editor

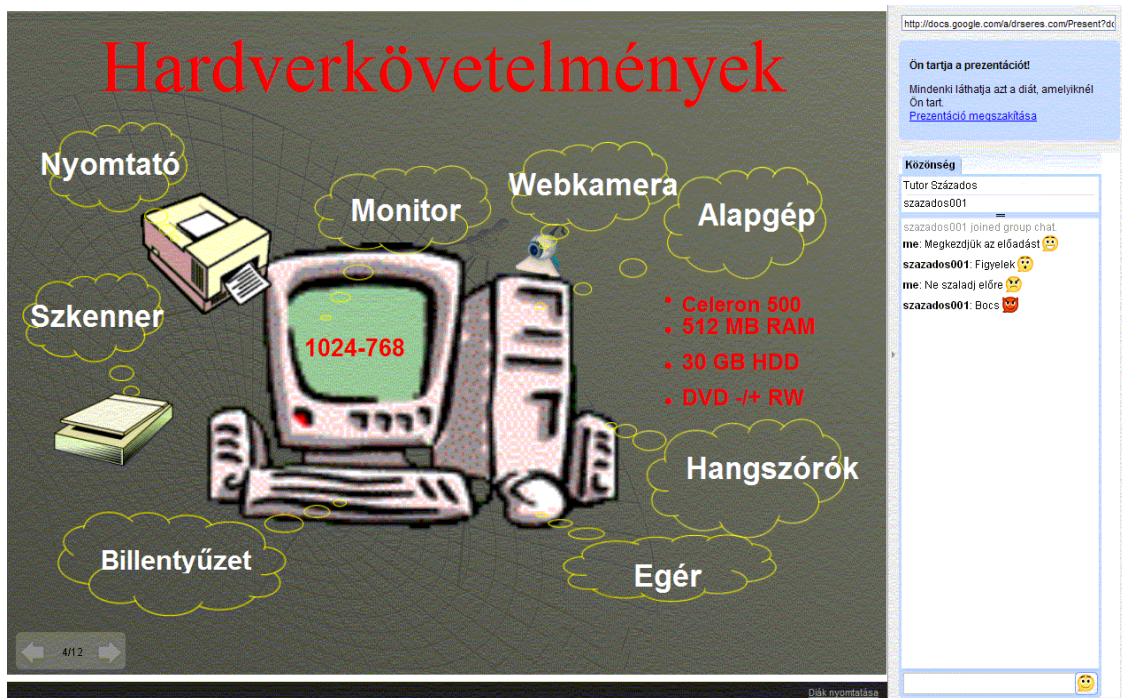


Figure 7. Online presentation with chat room

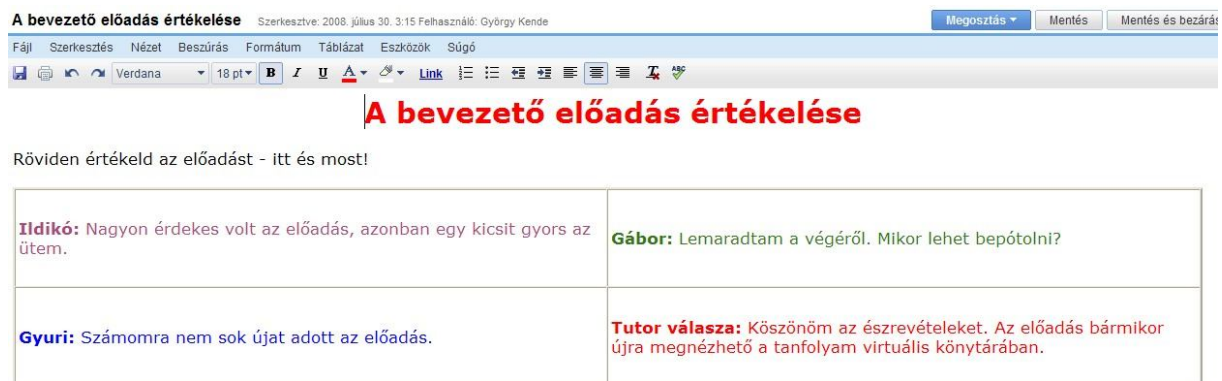


Figure 8. Joint writing papers online

**probateszt-kovacs-001**

Végezd el az alábbi műveleteket!  
a \*-gal jelölt kérdést kötelező megválaszolni!

**3+3= \***  
Add össze!

5

6

7

**5\*5= \***  
Szorozd össze!

20

24

25

**100/4= \***  
Osszad el!

**Értékelés**

Ezt majd a tutor tölti ki!

1

2

3

4

5

Figure 9. Demo test

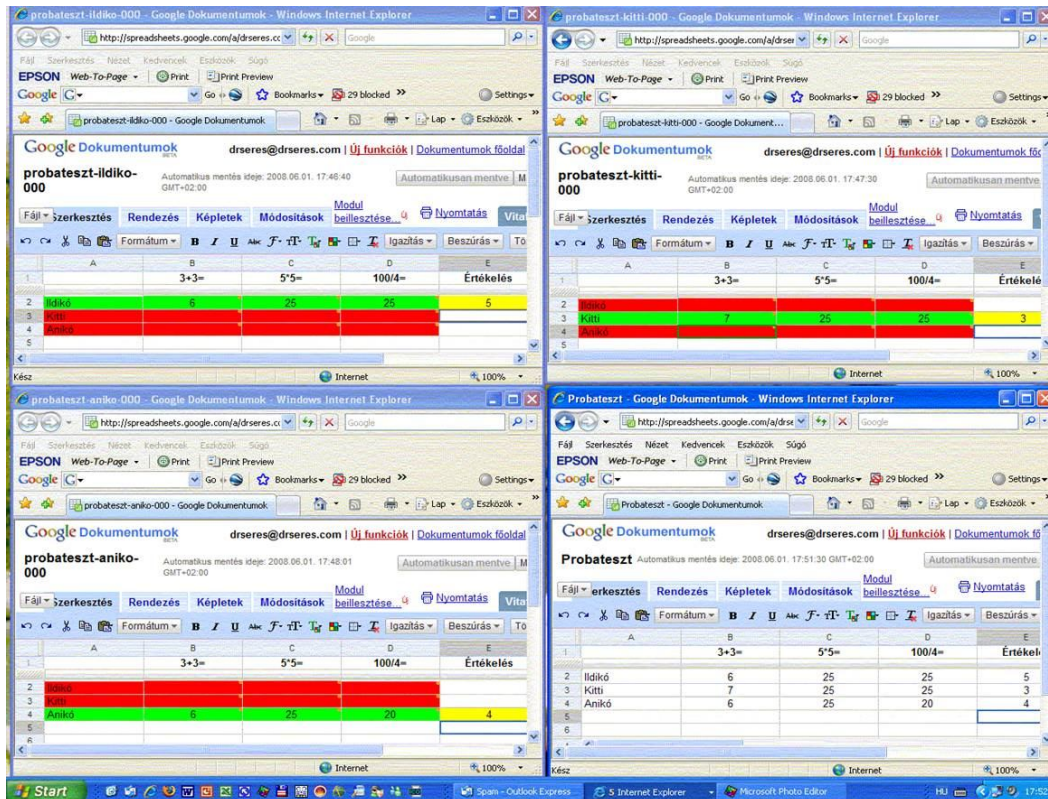


Figure 10. Demo examining online of three students on the screen of tutor



4. An on-line chatting system is an important service for every participants. It makes possible change text messages in time of common on-line presentations and editing other documents (see on Figure 7). Beside invitation for chatting is possible from mailbox inside group among students and/or tutor - who is on-line state (se on Figure 4).

On-line voice and picture contact can be managed among lecturer or tutor and students by any of the free systems (Skype, Windows LiveMessenger, GoogleTalk). We executed many tests, and the Skype system appears most reliable. It allows one two-sided sound and picture contact, or one conference talking up to 24 participants.

### Some special services

The registered – putted on for the planned distance education courses and assigned into the special groups – students get permission to come to non-public sides and forums of the course. They can create their own „home page” (Figure 11). On the own website the students can charge their own problem solving and their publications as a „Child-page”. Respectively they can wait the tutor’s or the other students’ comments as a “New comment”.

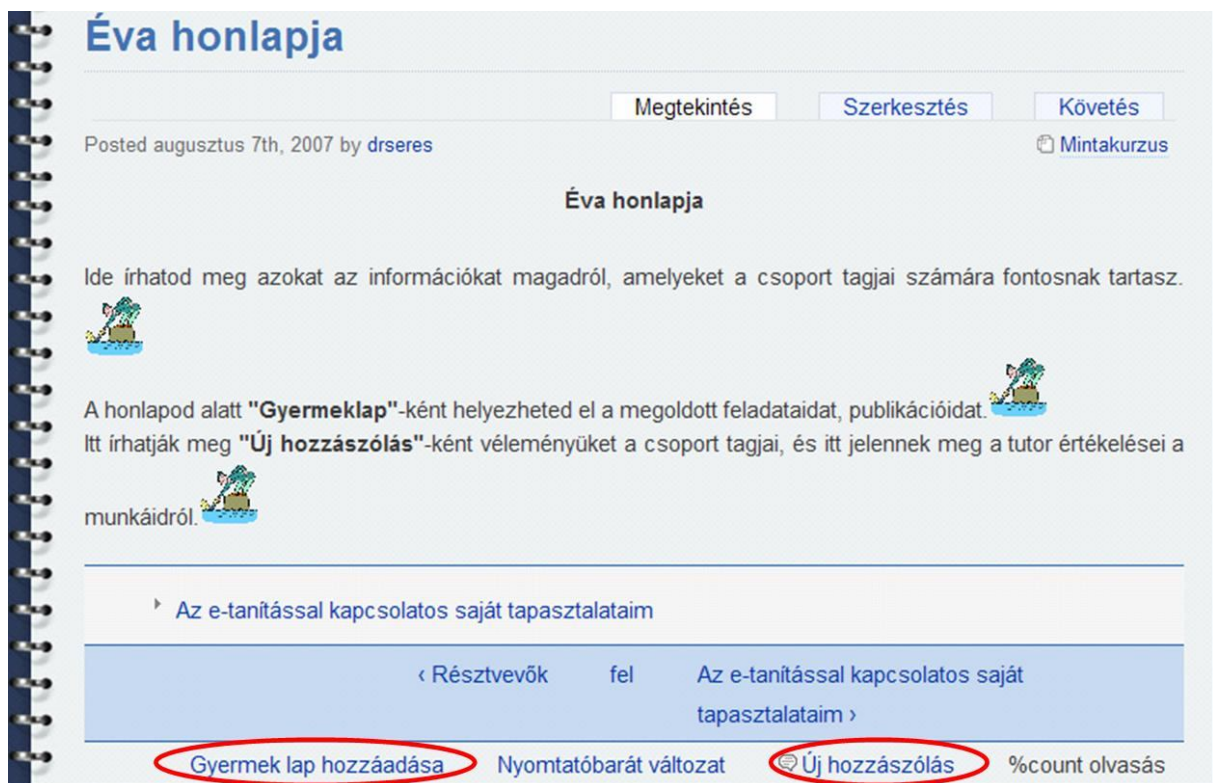


Figure 11. Personal „home page” of a student of a course

The portal ensures special permissions for the teachers. From among these the most important ones are:

1. Tutors are allowed to ensure an entitlement the portal-picture of the own and students belonging to their course – „makeup” – to modify what makes the unique appearance possibility of their course (for example figure 12).

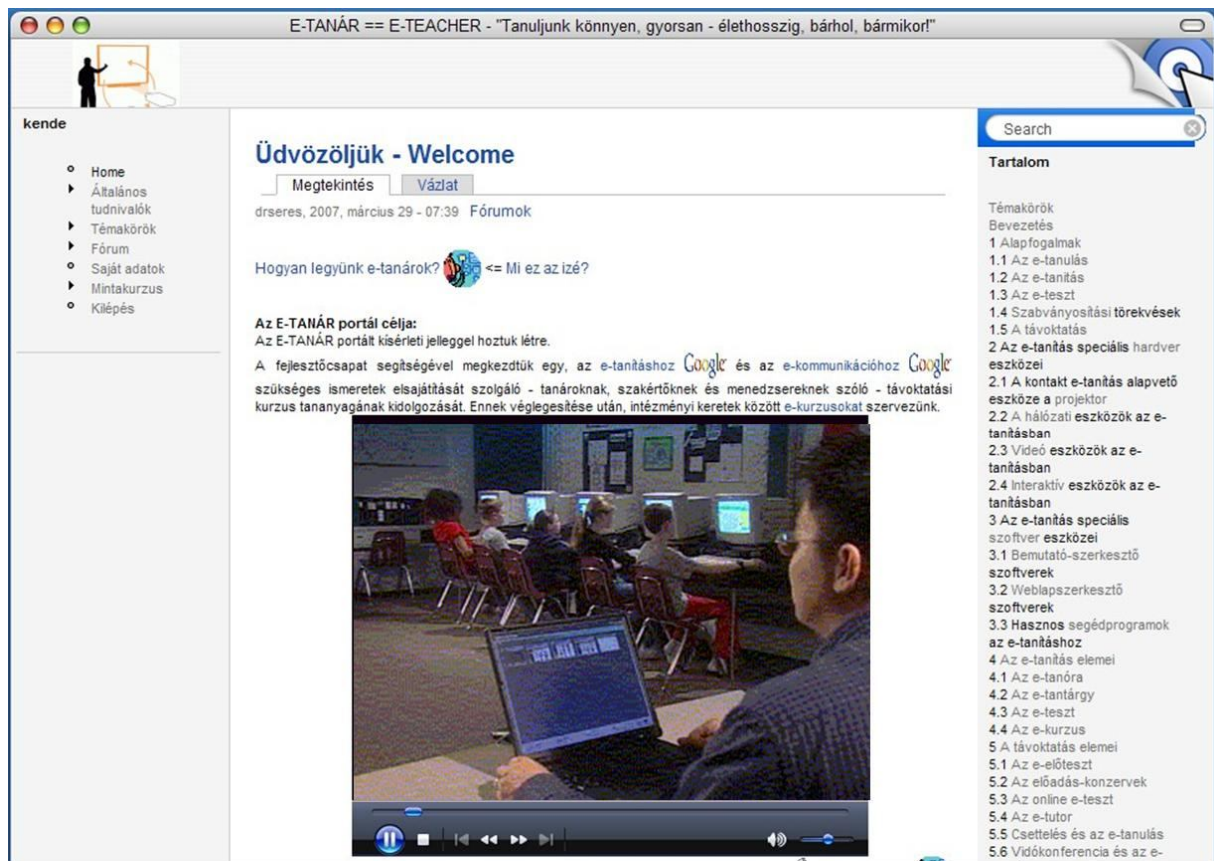


Figure 12. The unique opener sheet of the portal

2. Teachers can control own curriculums' by setting of the unique access of permission – collaborative or reader – in the document editor system (Figure 13).



Figure 13. Setting of the access permission in the document editor system

3. Tutors can control a “Notice board” for presentation of the students' works, which counting on the interest of public (Figure 14.)

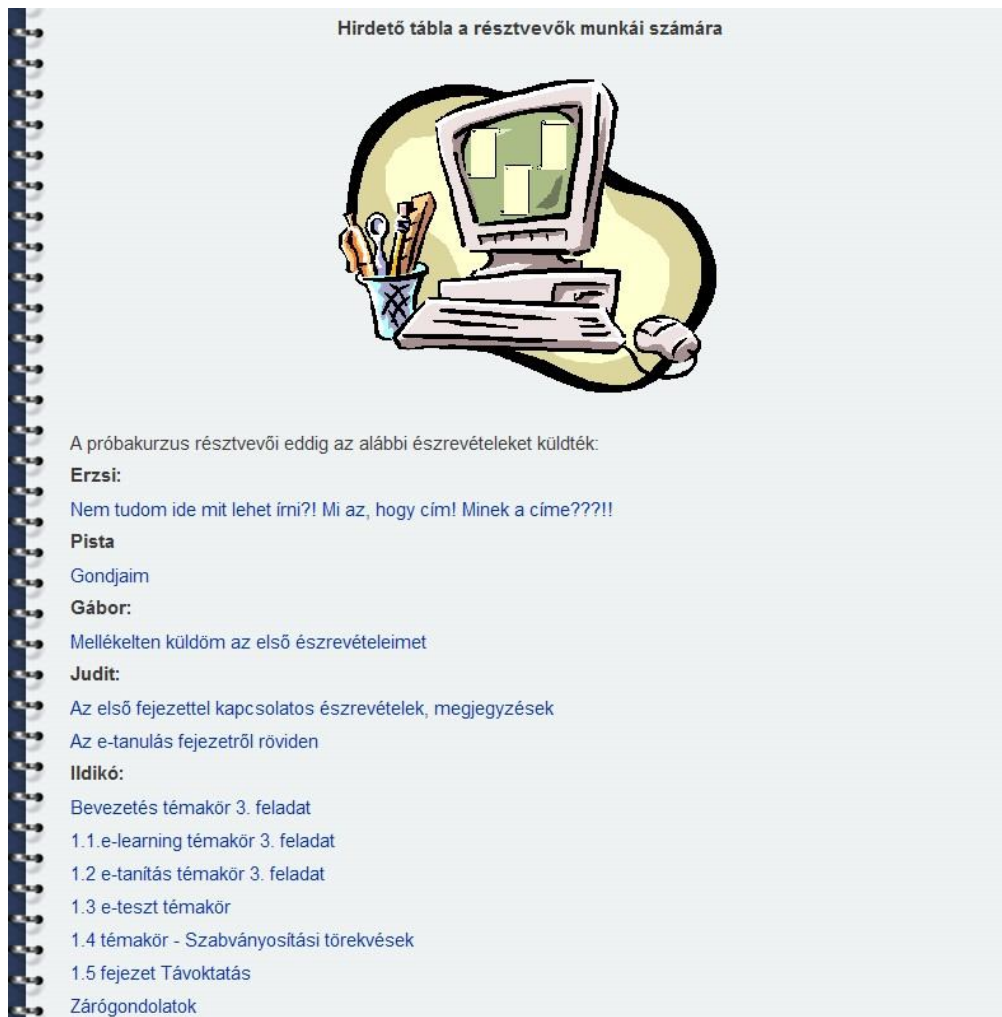


Figure 14. Billboard for the presentation of the students' works

4. Tutors can check the student activity – sending of materials sent (Figure 15) and their page-visits (Figure 16).

gero.peter

Megtekintés   Követés   Szerkesztés   Kapcsolat

Tartalmak követése   Oldal látogatások követése

Típus	Tartalom	Szerző	Válaszok	Legutóbbi beküldés
Könyvlap	Gerő Péter honlapja	gero.peter	0	2 nap 19 óra
Könyvlap	Levél az Olvasónak <b>frissült</b>	gero.peter	0	1 hét 17 óra
Könyvlap	Az élethelyzethez igazított tanulás	gero.peter	0	1 hét 17 óra
Könyvlap	Néhány tanács és javaslat az élethelyzethez igazított tanulás tanulmányozásához <b>új</b>	gero.peter	0	1 hét 1 nap
Fórum téma	Tankönyv	gero.peter	1	1 hét 3 nap

Figure 15. Check of sent by a student material



Időpont	Oldal	Műveletek
2008-09-11 16:46	Üdvözöljük - Welcome portal	részletek
2008-09-11 16:46	Üdvözöljük - Welcome portal	részletek
2008-09-07 22:39	Mintakurzus mintakurzus	részletek
2008-09-07 22:38	Referenciák saját	részletek
2008-09-07 22:38	Részvétel a portál zártkörű, online, virtuális intranet hálózatában saját-intranet	részletek
2008-09-07 22:38	Részvétel a portál zártkörű, online, virtuális intranet hálózatában saját-intranet	részletek
2008-09-05 14:00	Gerő Péter honlapja gero_peter	részletek
2008-09-05 13:59	Mintakurzus mintakurzus	részletek
2008-09-05 13:59	Üdvözöljük - Welcome portal	részletek
2008-09-05 13:59	Üdvözöljük - Welcome portal	részletek
2008-09-04 15:24	gero.peter user/128/track	részletek
2008-09-04 15:23	Néhány tanács és javaslat az élethelyzethez igazított tanulás tanulmányozásához gero_peter_tanacs	részletek
2008-09-04 15:23	gero.peter user/128	részletek

Figure 16. Check of a student's page-visits

5. Teachers can see on-line the attendance register from the students in the virtual classroom (Figure 17).

**Bejelentkezés-kovacs** Elmentve: 2008. szeptember 12. 10:15 Felhasználó: György Seres Megosztás Mentés Mentés és bezárás

Fájl Szerkesztés Nézet Beszűrés Formátum Táblázat Eszközök Súgó

Verdana 10 pt B I U Link

### Bejelentkezés

- Ha bejelentkeztél a fiókodba, töröld ki az offline jelzését, és írdjál egy X-et az online mezőbe.
- Indítsd el a Skype-ot, és várj a a tutor hívására!
- Mielőtt kijelentkezel a fiókodból, állítsd vissza az offline állapotod jelzését!

<b>Ildikó:</b>	offline		<b>Gábor:</b>	offline	X
	online	X		online	
<b>Laci:</b>	offline	X	<b>Tutor:</b>	offline	
	online			online	X

Figure 17. On-line check-in to the virtual classroom

### **Additional opportunities, first experiences, development**

It was our primary aim with the formation of the portal working exclusively, that create and let us point in a virtual intranet like that it prescribed environment, which makes it possible for the user staying at any point of the world, and it getting at recommended curriculums, the on-line contact keeping and work and the complex calling to account of the acquired knowledge. We brought this closed environment in such a way onto existence that he should not favour the individual work only, let it not ensure the availability of the curriculums only, but let it be suitable for a consultation, contact keeping, working together or onto an independent on-line problem solving, document editing – let it be a text, a table or a show –, and onto on-line check and examining equally. To ensure the interactivity is the fundamental requirement of the sharing of the contact keeping, an exchange of views, experiences, at the same time, so we considered the insurance of our task in this manner.

So the portal does not serve availability of the curriculums merely and ensures it, but gives an opportunity onto a consultation and on-line interrogation too. The system is able to ensure not only one, but more courses in line with. It is suitable to reach the all kind of appliance of distance education and e-learning in the twenty-first century which are fundamental system of asset which can be reached anywhere for anybody after all, his linking and his application.

However our development work did not end here. First of all we have to finish the all curriculum. Although the portal is tested, experiences of the everyday life, opinion creation by way of the user with a bigger staff number may shape its construction, his function system for increasingly easier use. We consider additional refinement of the examination opportunities.

### **References:**

- [1] Gerő Péter: Az élethelyzethez igazított tanulás.  
*Egyetemi tankönyv, ZMNE, Budapest, (2008.)*
- [2] Kende György – Seres György: A haditechnikai kutatás-fejlesztés.  
*Multimédiás egyetemi tananyag, ZMNE, (2005.)*  
<http://drseres.com/tavoktatas> (2008. szeptember 10.)
- [3] Kende György – Noszkay Erzsébet – Seres György: A tudás-átadás és a tudásbázis-fejlesztés egyidejű alkalmazása a K+F területén.  
*Előadás az MTA Vezetés- és Szervezéstudományi Bizottságának Tudásmenedzsment Albizottsága 2007. évi workshopján.*
- [4] György Kende – Erzsébet Noszkay – György Seres: Role of the Knowledge Management in Modern Higher Education – the e-Learning  
*AARMS, Vol. 6, Issue. 4 (2007) p. 559-573*  
<http://www.zmne.hu/aarms/docs/Volume6/Issue4/pdf/01kend.pdf> (2008. szeptember 10.)
- [5] Kende György – Seres György: Egy interaktív e-learning portál első tapasztalatai  
*Előadás az MTA Vezetés- és Szervezéstudományi Bizottságának Tudásmenedzsment Albizottsága 2008. évi workshopján.*  
<http://vati.szie.hu/files/vati/mta-2008.pdf> (2008. szeptember 10.)
- [6] Miskolczi Ildikó: Egy e-learning kurzus tapasztalatai.  
*Prezentáció az MTA Vezetés- és Szervezéstudományi Bizottsága, Tudásmenedzsment Albizottságának 2008. évi workshopján,*  
<http://vati.szie.hu/files/vati/Miskolczi.ppt> (2008. szeptember 10.)