

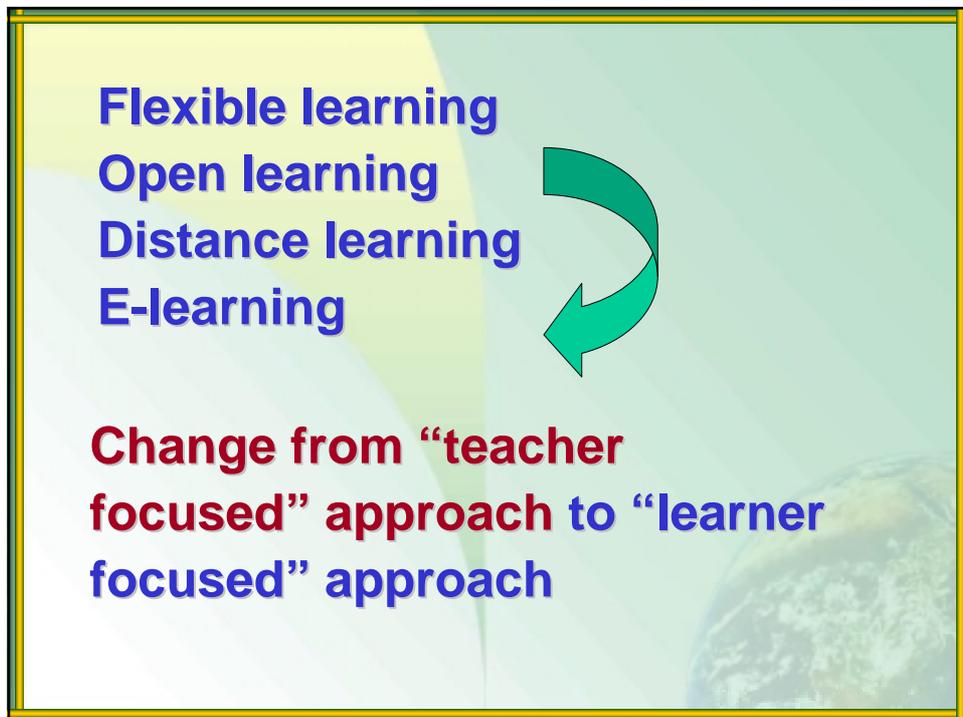
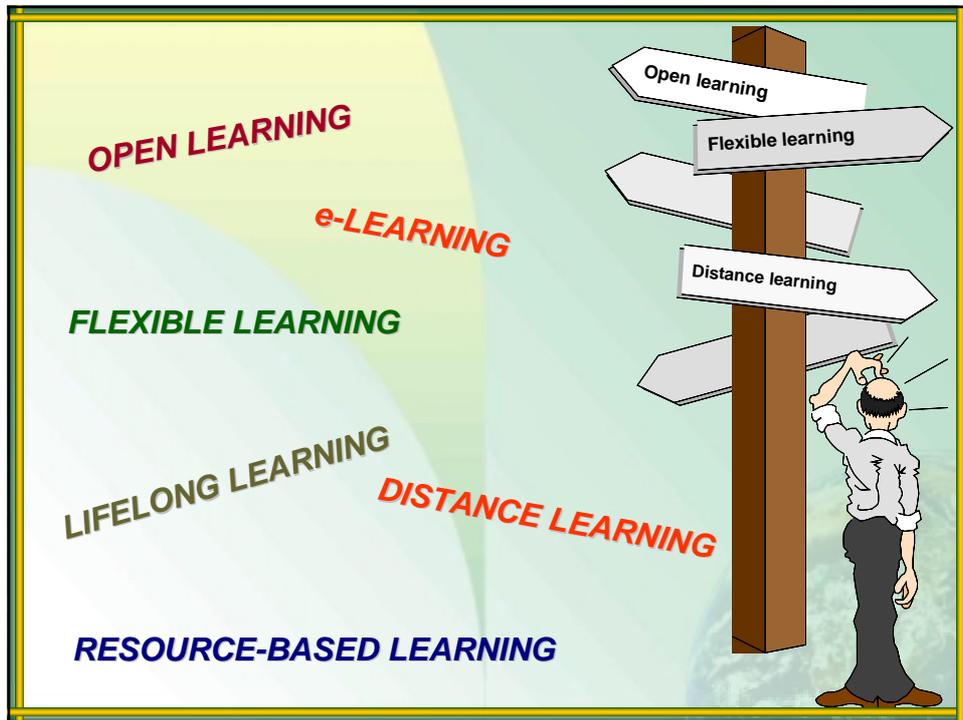


Historical Aspects on the Development of Distance Learning

Airina Volungeviciene
KTU Distance Education Centre

Presentation structure

- 1. Distance Education Development:**
 - Terminology
 - Conception
 - Development Phases
- 2. Lithuanian Distance Education Network**
- 3. Experience of Kaunas University of Technology Distance Education Centre**



England



Sir Isaac Pitman

- origins traced back to the early 19th century
- the first correspondence courses by Sir Isaac Pitman in connection with the teaching of stenography in England (Bath, 1840)
- offered numerous correspondence courses, in particular in the field of accounting

Retrieved from www.labset.net

Germany

- the **first institution** *in Europe* to develop a highly varied range of **correspondence courses** - the school founded by Charles Toussaint and Gustav Langenscheidt in Berlin (1856)
- the institution operated for 18 years
- closed shortly before the Second World War

Retrieved from www.labset.net

USA, France...

- **the first society** "for the encouragement of home study" was created in Boston (USA) in **1873**,
- M. Pigier created his famous **vocational training courses** in Paris (France), in **1877**.

Incidentally, his institution still exists
<http://www.pigier.com/etudiant/index.html>

Retrieved from www.labset.net

First "ICT" tools

Cinema (1913): Edison was already writing in an American newspaper that "traditional school is finished, the cinema will replace everything that existed before, and will be much more effective."

Radio (1921): possibility to send a message several dozen or several hundred kilometres. The first radios were used to create university courses and broadcast them to students who were ill or unable to leave home.

Retrieved from www.labset.net

First “ICT” tools

Telephone, 1876:

- medium invented by Alexander Graham Bell
- was not originally intended for conversations between people
- for listening to concerts, for example
- the development of the network subsequently gave sick or hospitalised pupils access to a range of courses

Television, 1939:

- French broadcasted 15 hours of educational programmes/ week
- broadcasts interrupted by the war
- "Musée pédagogique" or Teaching Museum , one small department of which engaged in distance learning, experimenting with radio, television and correspondence

Retrieved from www.labset.net

On ICT...

Dr. Jack Wilson, Rensseler Polytechnic Institute, USA:

“having such rapid [ICT] market and such increasing salaries, students are not coming to qualification courses. Courses should come to their places.”

(www.syllabus.com)

Institutions...

Britain 's Open University, the pioneering institution of its kind, was created in **1969**. The meaning of 'Open' was different from its current connotation. It meant 'without entry requirements'.

The TV-University of Quebec was founded In **1972**.

Other....

eUniversity: Spain, Estonia...others

Retrieved from www.labset.net

Information Communication Technologies ICT

Information communication technologies – to design, save, select, transmit, broadcast, host and disseminate all kind of information forms. Distance education/ learning methods are based on information communication technologies.



The milestones in ICT development

- 1876 – A.G.Bell invents the telephone
- 1896 – G.Markoni invents the radio
- 1936 – television is invented (BBC)
- 1944 – the first electronic computer
- 1963 – first telecommunication satellites
- 1970 – digital telephone is invented along with digital video and audio technologies
- 1971 – microprocessor is invented
- 1972 – internet connection first implemented
- 1981 – the first personal computer
- 1991 – World Wide Web established

Forms for Learning Material Presentation

- ❖ printed material
- ❖ audio and video material
- ❖ CD-ROMS
- ❖ TV (satellite, channel)
- ❖ Radio broadcast
- ❖ Computers
- ❖ E-mail
- ❖ World Wide Web
- ❖ videoconferences

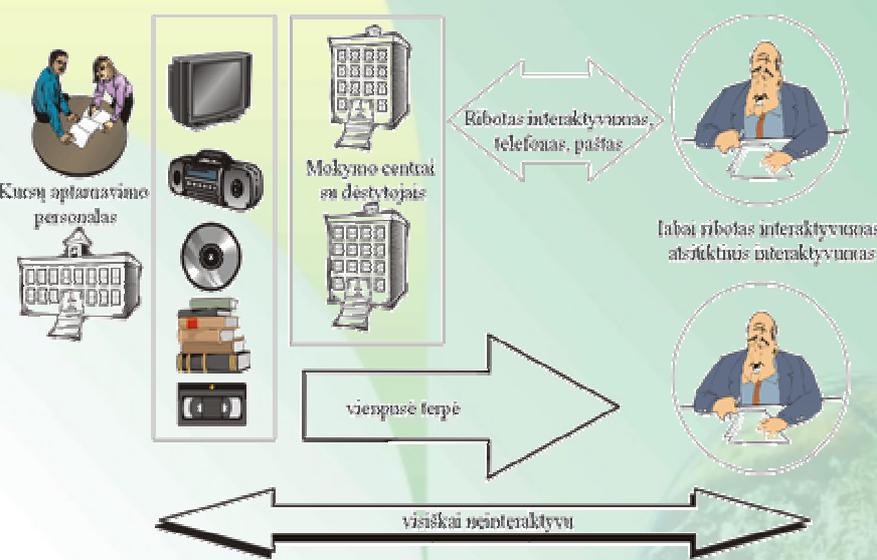


First generation



- Correspondence forms*
- one-way information
- two-way interchange of tasks
- slow delivery by post
- Slow interactivity
- indirect, asynchronous communication between the teacher and the student
- no communication among students

Second generation



Klasų aptarnavimo personalas

Mokymo centrai su dėstytojais

vienpusė terpė

Ribotas interaktyvumas: telefonas, paštas

labai ribotas interaktyvumas, absiūktinis interaktyvumas

visiškai neinteraktyvu

Third generation



Learning using networks

- Books
- Television
- Computer networks
- Video conferences

Interactive regime student-teacher, **student-student**

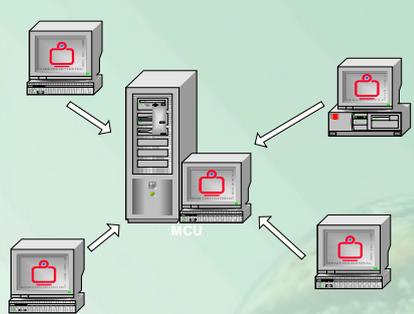
Synchronous and asynchronous communication

Individual and group work possibilities

Third generation technologies

Using Learning Networks:

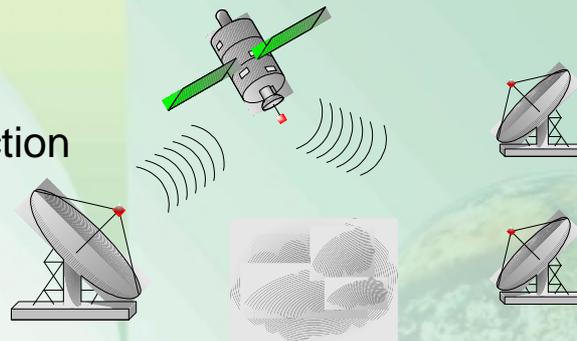
Multi-Point video conferences



Third generation technologies

Using Learning
Networks:

Satelite connection



Information technologies

Generation 1 - Printed information dominated for 400 years

Generation 2 - computers entered (ICT)

Generation 3 - computer networks

Paradox:

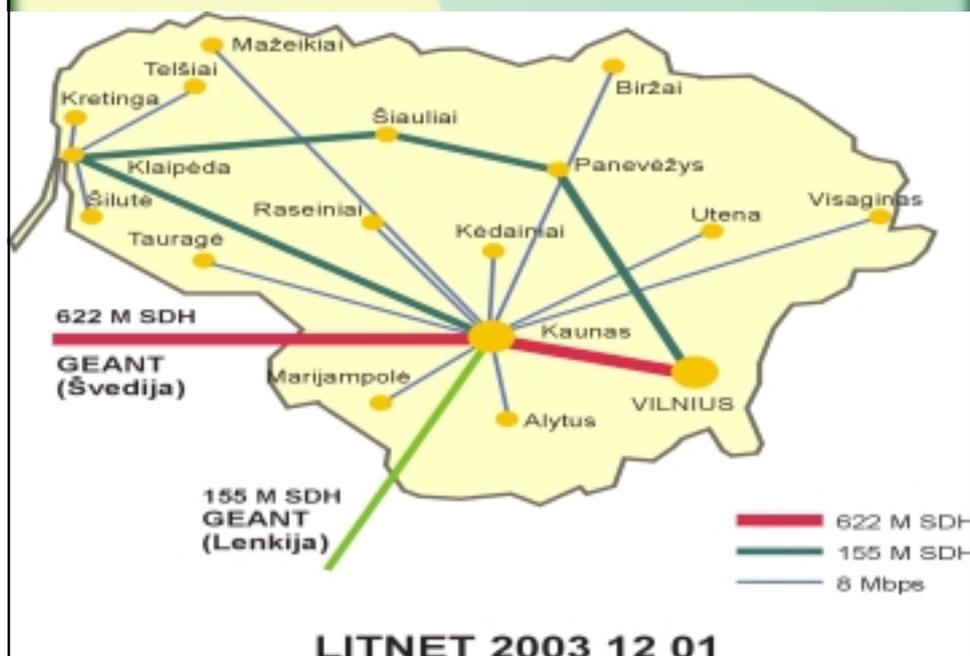
information accessibility \longleftrightarrow information use complexity



Lithuanian Distance Education Network

<http://www.liedm.lt>

LITNET – Lithuanian Academic Internet Network



ITMIS (Information technologies for science and studies) program

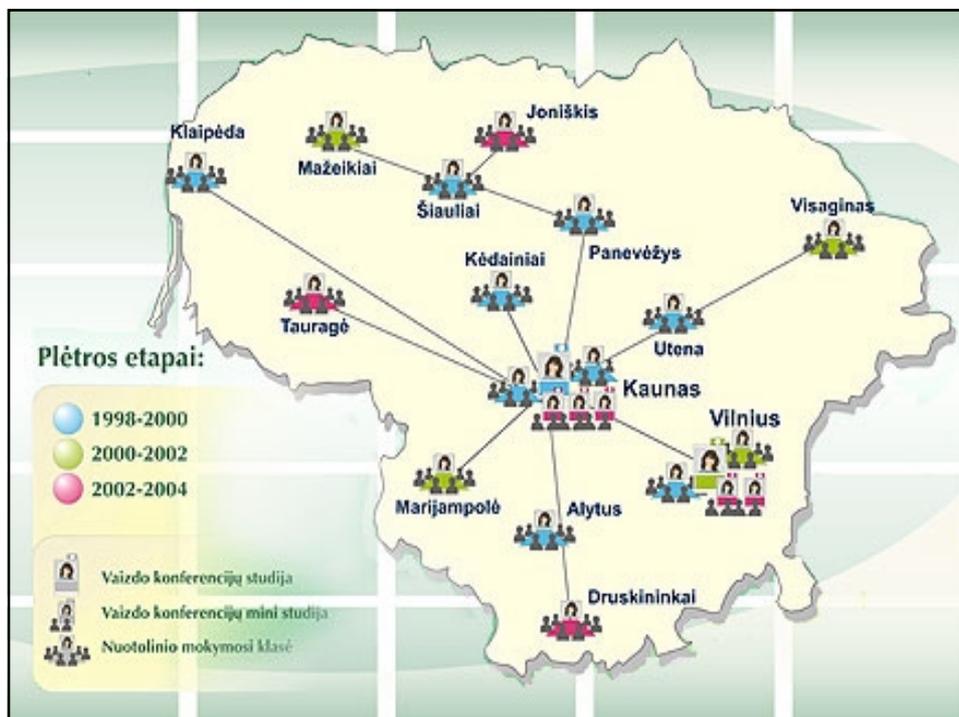
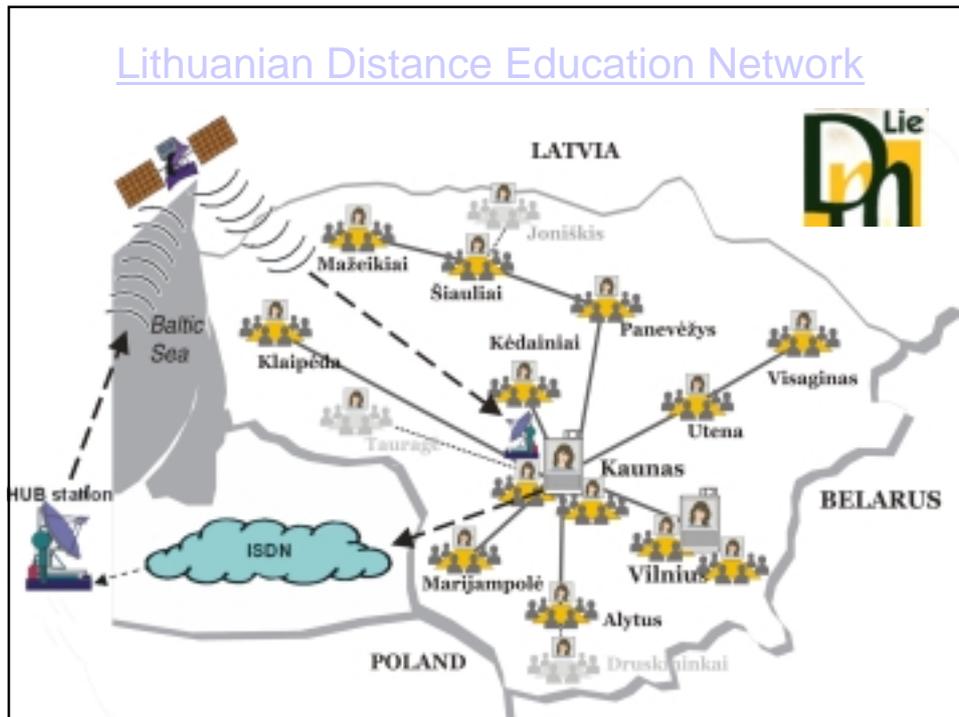
(www.ITMIS.lt)

- Lithuanian academic library network
(LABT, 2003 m. – 1,1 mln. Lt, www.LABT.lt),
- Lithuanian science and study information system
(LieMSIS, 2003 m. – 1,7 mln. Lt, www.LieMSIS.lt),
- **Lithuanian Distance Education Network**
(LieDM, 2003 m. – 1,18 mln. Lt, www.LieDM.lt)

LieDM tasks

- **To develop infrastructure** by inviting public, state and private institutions to participate in DE process
- **To provide accessibility** for DE for each Lithuanian citizen
- **To develop learner and teacher support system**
- **Scientific reserach**
- **Improvement of legal basis**
- **International cooperation in DE** by joining various European and Global DE networks

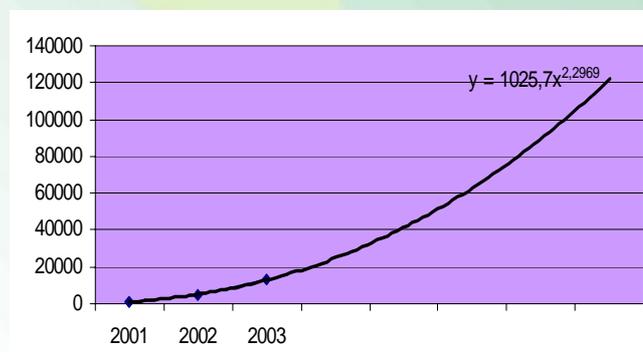
Lithuanian Distance Education Network



***Dynamics of DE learners in LieDM in
2001 – 2004 m.***

	2001	2002	2003	2004
Students in DE programmes	33	69	91	112
Students in DE courses	1052	4706	13357	17468

***Prognosis for DE students dynamics in the
future***



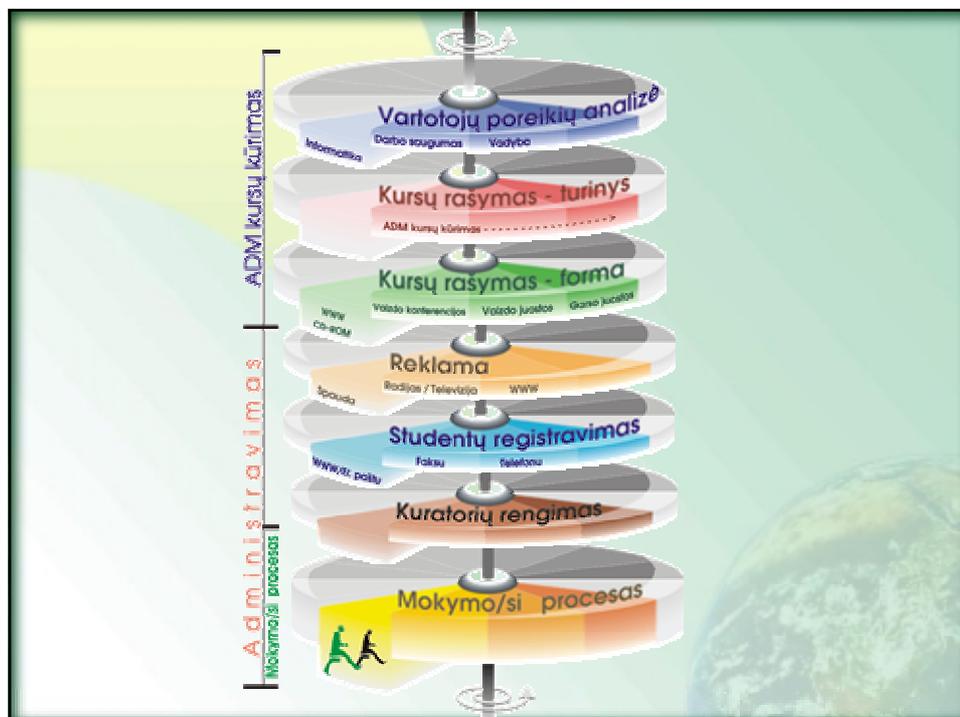
Complexity of DE process today

1. DE course design phase:

- user needs analysis
- course conception
- implementation form and tools

2. DE process management and administration

3. Tutoring and learning process





Kaunas University of Technology Distance Education Centre (DEC)



- established in March, 1996
- at Kaunas University of Technology
- PHARE project “Multi-Country Co-operation in Distance Education”



Lyon, October 30th - 31st, 2003



STAFF



Directorate

2 persons

Course Design and Methodics Department

6 persons

Technology Department

12 persons

Competence Development Department

6 persons

Research Laboratory of Education Technologies

2 persons



Target group:



STUDENTS and TEACHERS

- Kaunas University of Technology
- Lithuanian HE institutions
- Vocational training institutions
- Secondary and other schools...



COURSE DESIGN AND DELIVERY



- Needs analysis
- Existing research and methods
- Learning objectives
- Learning methods
- Adaptation of learning methods to individual learning needs
- ICT selection
- Design
- Delivery/ Tutoring
- Ensuring learning/ teaching quality (editing, amendment, constant change!)



TUTOR ROLES



Zane Berge (1995) classification:

- **Educational roles**, intellectual roles and roles associated with the task
- **Social roles**, enabling a friendly social environment to be created which will encourage learning



TUTOR ROLES



Zane Berge (1995) classification:



- **Managerial roles**, including administrative, procedural and organisational tasks
- **Technical roles**, which ensure the participants' trust in the system



HOW DO TEACHERS FEEL?



- No confidence in themselves
- No skills required (ICT, delivery)
- No competencies (needed for online delivery)
- Fear of losing control
- Fear of hostile virtual learning environments
- Fear to look incompetent
- Other...



Conceptual orientations in relation to educational commonplaces (Sh. Feiman-Niemser)

	Subject matter	Teacher/teaching	Learner/learning	Milieu
Academic				
Practical				
Technological				
Personal				
Critical/social				



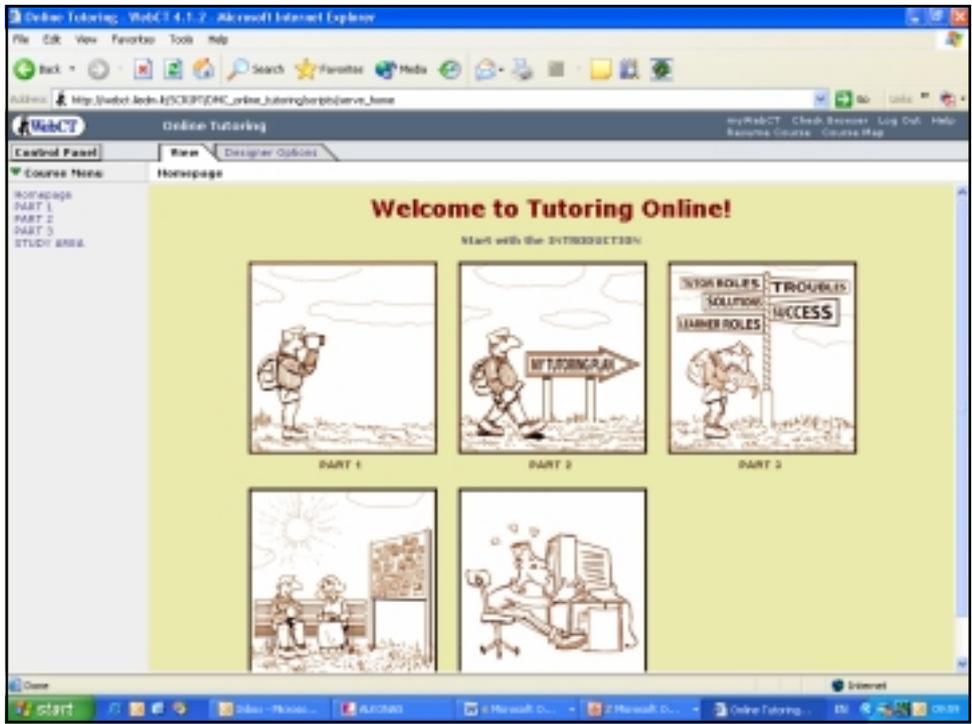
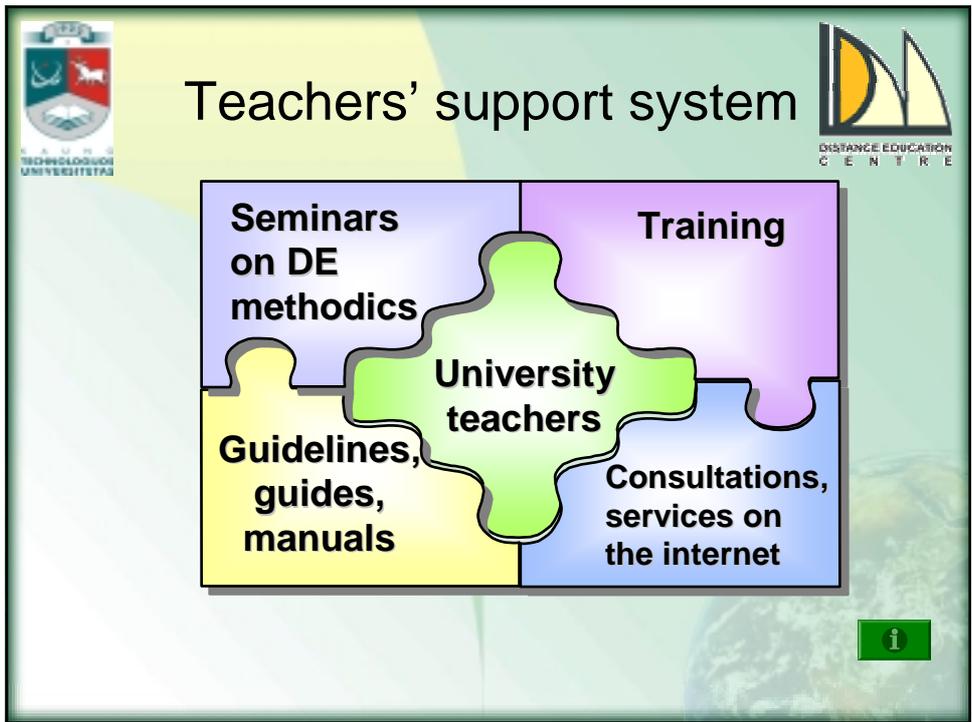
KTU TEACHERS receive (Sh.Feiman-Niemser):

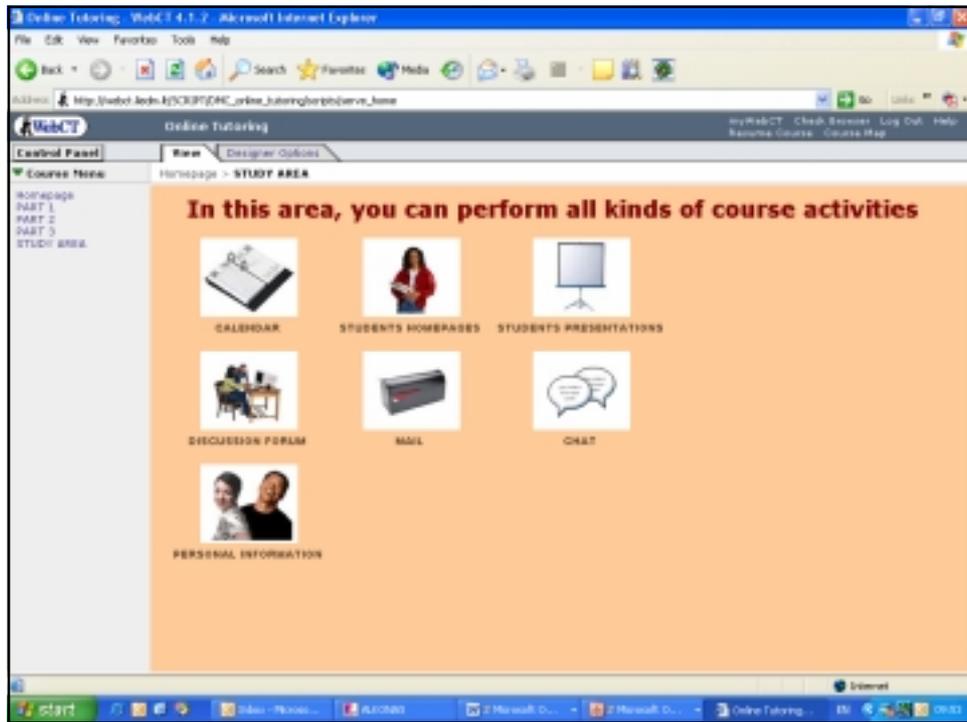
- **Academic** conceptual orientation training (during their academic studies)
- **Personal** conceptual orientation training (by personal experience and personal development (Fuller))
- **Critical/ social** conceptual orientation training (they are all community members)



KTU TEACHERS lack (Sh.Feiman-Niemser):

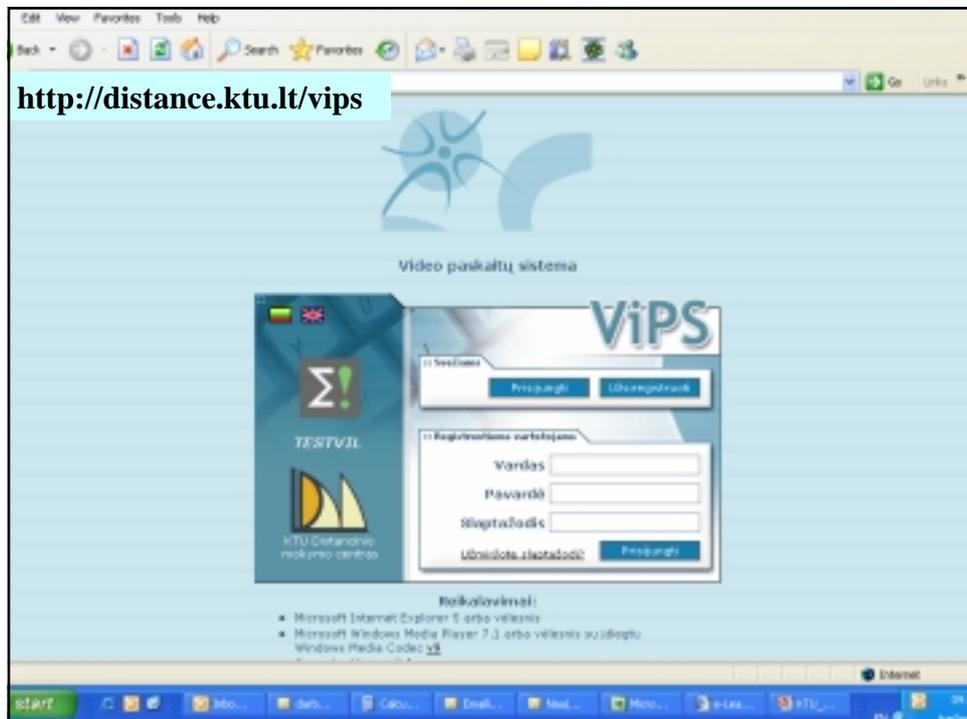
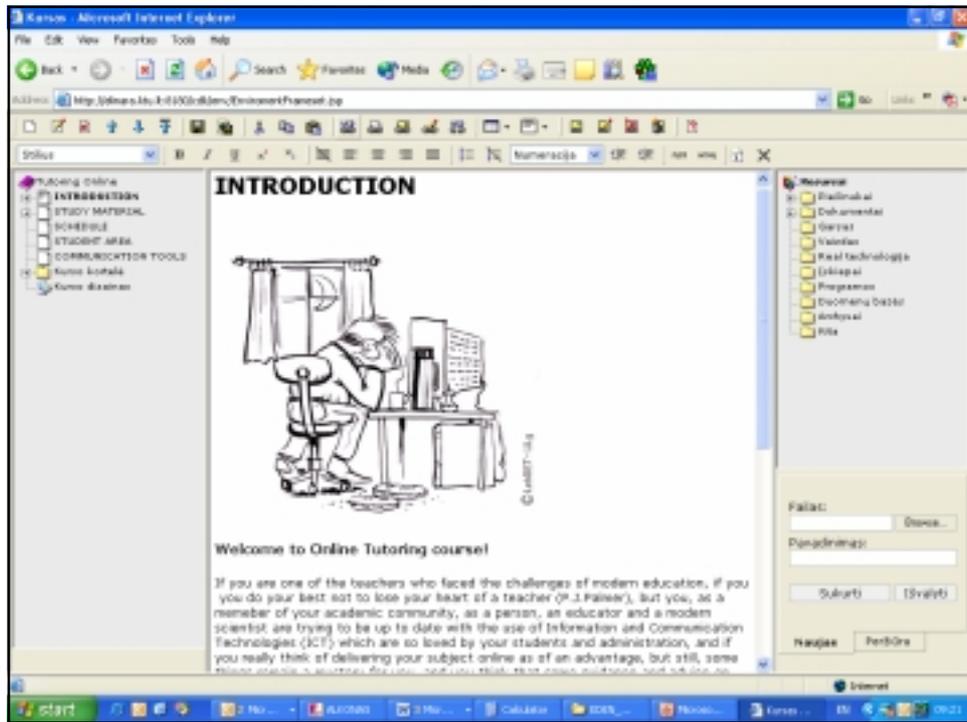
- **Technological** conceptual orientation training (application of professional knowledge to teaching and using research-based principles)
- **Practical** conceptual orientation training (unique, local, uncertain aspects of teaching craft and technique to reveal their work)





CDK - Course Development Kit:

- Designed at KTU Distance Education Centre in 2002
- Easy to export learning material into any learning environment (HTML)
- Easy to integrate PC resources
- Easy to edit, update the material
- Ready-made design options



Specializuotų profesinių studijų programa
 “Pedagogika”
 Distancinė studijų forma

Šiuolaikinės mokymo sistemos ir technologijos

<http://distance.ktu.lt/vips>

Watch broadcast

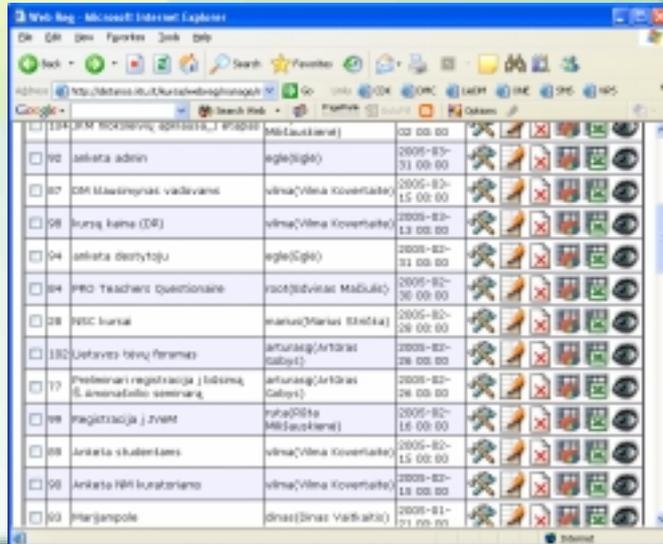
Amerikiečių civilizacija	2004-09-06 15:15 - 2005-11-09 13:42
Pašlaposka	2004-09-22 16:05 - 2005-06-09 15:53
LTDI parodos „Lietuvos astronomas 2004“ seminarų transliacija	2004-09-28 11:36 - 2005-18-02 15:00
Astronomo astronomizacijos projektavimo centrai	2005-01-30 11:58 - 2005-06-31 11:58
KTU IT magistrantūros I kursas (2005.02-2005.03)	2005-02-06 10:22 - 2005-07-07 18:22
KTU IT magistrantūros II kursas (2005.02-2005.03)	2005-02-14 10:22 - 2005-07-07 18:22
Dr. Rimantas Baltus, doc. dr. Rimantas Kavaliauskas	2005-02-24 06:35 - 2005-06-25 18:01
Infliacijos laimėjimai	2005-03-15 14:52 - 2005-06-30 14:53
Ataukimas	2005-03-23 14:15 - 2004-03-23 14:15
LTDI parodos „Ka paauglys... 2005“ seminarų transliacija	2005-03-30 12:03 - 2005-04-30 12:03
Specialiųjų reidemiškosios	2005-03-30 14:55 - 2004-03-30 14:55
Naujosios mokymosi metodikos centrai	2005-03-30 09:43 - 2005-06-31 09:43
Delebi konferencija	2005-04-26 13:58 - 2005-04-27 12:58
PLP konferencija 2005	2005-04-26 14:00 - 2005-04-27 14:03
Mikroseni vėra siuntimo saugumo užtikrinimas	2005-04-27 09:15 - 2005-04-28 09:15

Review presentations

- 2003.02.27 Universiteto karvykščių elektroninio paieškos sistema
- VU Tarybaities žinių elektroninis ir žinių vadybos centro puslapis
- KTU Informacinis faktorietai
- KTU Humanitarinių mokslų faktorietai
- KTU Socialinių mokslų faktorietai
- KTU Telekomunikacijų ir elektroninio faktorietai
- KTU _KONFERENCIJOS / KONFERENCIJOS
- KTU _SEMINARAI / SEMINARAI
- KTU Informacinis mokymosi centras / KTU Informacinis faktorietai

Internet survey tool WebReg

More than 100 surveys with more than 3000 respondents were developed during 2004



ID	Surveys	Author	Start Date	End Date
134	DM Rokšėvič, apšvieta, įRS2004	Milėlauskaitė	02 00 00	
92	anketa administr	agla(Cigla)	2005-02-31 00 00	
87	DM Maistiegnas vadovams	vilma(Vilma Kovertaitė)	2005-02-15 00 00	
98	kuris tema (DE)	vilma(Vilma Kovertaitė)	2005-02-13 00 00	
94	anketa darytojų	agla(Cigla)	2005-02-31 00 00	
84	PRO Teachers Questionnaire	raisa(Raiva Matule)	2005-02-30 00 00	
28	NSC kursai	maria(Maria Štaik)	2005-02-28 00 00	
132	Užkavęs tėvų forumas	arturas(Artūras Gabys)	2005-02-28 00 00	
17	Preseminė registracija į Islandiją, 6. anonsuolbio seminarą	arturas(Artūras Gabys)	2005-02-28 00 00	
98	registracija į ŽVM	rubija(Rubia Mikuckienė)	2005-02-16 00 00	
98	anketa studentams	vilma(Vilma Kovertaitė)	2005-02-15 00 00	
98	anketa NH kūrėjams	vilma(Vilma Kovertaitė)	2005-02-18 00 00	
60	Marjanpole	dina(Dina Varkaitė)	2005-01-21 00 00	



Thank you for your attention.

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Research Laboratory of Education Technologies