Anticipatory Psychological Model of European University

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Abstract
There are many problems met, using NIT: to prepare hypertext, adequate to the learners' semantic and episodic memory, learning styles, to overcome the stress, associated with the time, using NIT, etc. Implementation of NIT makes new demands on teacher, changing relationships between teachers and learners, focus on learning, enlarged role of teachers as facilitators, changing locus of control from teacher to learner. Anticipatory model of European University, using NIT for lifelong Learning in consists of the following components: the appearance and development of need of learning and development of motives of learning, the development of psychological peculiarities of the teacher's personality and creation of adequate learning environments in the process of learning.
Keywords: Lifelong learning, using NIT, anticipatory model of University

1 Introduction

The aim of the research – is to analyse the scopes, benefits and the problems, met by using new information technologies in the process of lifelong learning, to evaluate the role of the universities in lifelong learning and to create the anticipatory psychological model of European University, using new information technologies for lifelong learning.

The objectives of the research are the following :

1. To define the mission of the universities in lifelong learning, using new information technologies.
2. To analyse the scopes, benefits and the problems, met by using new information technologies in the process of lifelong learning .
3. To analyse psychological assumptions of adaptation to new learning environment.
4. To define a new role of a teacher and a learner, using new information technologies in Higher education.

The methods of research : analysis of literature, qualitative and quantitative analysis of research data .

Why using NIT in Lifelong Learning is a challenge to Higher Education?

- it demands psychological preparation for everyone, using NIT: a) it demands adaptation for the users of NIT to the new and changing learning environments; b) it demands new relationships among teachers and students, students-students and teachers-teachers; c) it demands applying new learning/teaching methods;

- it demands teaching staff and professors continuously up-date their knowledge and skills using NIT, because new information technologies are changing and developing all the time, to implement new learning and teaching methods, to be able to evaluate their effectiveness using NIT and to be able to answer to the changing learning needs of their students, to provide non traditional feedback with their non traditional students; to be able to accept his role as a lifelong learner, organiser, facilitator of learning, co-ordinator, manager, computer user, researcher, etc.;

- it demands students continuously up-date their knowledge and skills using NIT, answering to the tasks of their teachers and changing demands of their future qualifications and very rapidly growing new applications of NIT; he should adapt to new learning styles, to become self-directed learner, to be able to adapt to a changing role of a worker, answering to the new requirements for the jobs, to adapt to the new type of interactions with peers and teachers, to be able to overcome fear and stress of of NIT, etc.

2 Scopes and Benefits of Using NIT for LLL in HE

As many researchers find out, the use of computers increases efficiency in time, money, and effort to provide Lifelong Learning in any organization - in working place or educational institutions. (Bynum, Peter (1991), Timpe, K. P. (1990).

Using NIT it is possible to deliver content through prepared learning materials, using CD-ROM, broadcasts, the World Wide Web. Many materials are designed for interactive learning, and they are a source of information and research data. NIT provides interaction and a dialogue through use of email, computer conferences, bulletin boards and video-conferences. NIT helps people to learn lifelong in non traditional environments (Jenkins, Janet, 1999).

Jones, A. et all (1996) describes evaluations of CAL (computer-assisted learning) at the Open University (Great Britain) as very usefull in science teaching and in Home Computing Policy.

Some researchers found, that it is possible to learn to solve interpersonal conflicts, using NIT. Jones, Ann, Price, Emma, Selby, Carolyn (1998) reports on a comparative study in the United Kingdom of how a group of children with emotional and behavioral difficulties and children who attend a mainstream school use the computer application, Bubble Dialogue, to express themselves. Discusses strategies the children used to resolve interpersonal conflicts and implications of results.

Using computers it is possible to provide for students possibilities for individual career consultations, Jackson, Anita (1998).

Denny, Verna Haskins (1998) reports, that the Self-Directed Workplace Literacy Distance Learning Project demonstrated a model workplace literacy program that helped direct care workers in state-operated developmental disabilities facilities improve their literacy skills for a changing workplace.

As describes Kneidek, Tony (1996) computer-assisted learning allow student exploration and individualized learning.

Other researchers find out that using NIT it is possible to individualize learning and to create programs answering to the individual learner's needs. As show Vassileva, Julita, Deters, Ralph (1998) study, the Dynamic Courseware Generator (DCG), which runs on a Web server, was developed for the authoring of adaptive computer-assisted learning courses. It generates an individual course according to the learner's goals and previous knowledge, and dynamically adapts the course according to the learner's success in knowledge acquisition. The tool may be used also for collaborative authoring/learning.

Speitel, Thomas, Iding, Marie (1997) describes computer software that allows selective recording of various past audio events, and discusses the potential applications for second-language learning, particularly for students with visual, hearing, motor, or learning disabilities and for selective memory enhancement.

Elias, Joseph S.Yoder, Zelda (1998) describes, that using computer-assisted learning to deliver math instruction for General Educational Development (GED) students would increase achievement through individuation and free class time for developing critical-thinking skills. This would maximize the part-time experience of GED students.

Radlinski, E. Robert, Atwood, Michael E.(1998) argue that, individually, both intelligent tutoring systems (ITSs) and distance-learning systems have inherent limitations, but through the proper integration of these technologies, many of these limitations can be overcome. The authors support these conclusions by reflecting on their own experiences in attempting to field ITSs and distance-learning systems in industry. The authors describe the development of the Grace Tutor and its fielding in both academic and corporate settings; the goal of the Grace Tutor effort was to take current state-of-the-art ITS technology and apply it to the advanced development of a tutor that is used in real corporate classrooms. The authors then describe results of the DIME (distributed intelligent multimedia education) initiative, which was focused on computer-guided problem solving to support learning by doing, not learning in isolation.

3 Educational Problems met, Using NIT

As it was described by Jenkins, Janet, (1999), NIT "is not only bringing change to the world we live in, it also changing the way we can learn to live in it."

As describes Draper, Stephen W.(1998), there are no generalizations about what features of technology or software type makes computer-assisted learning (CAL) successful.

Blackler, Frank (1990) describes, that the new information technologies are not infinitely flexible. He concludes that psychologists are to play an effective part in helping to overcome pressures towards minimalist or conventional applications of the new technologies.

Farber, Jerry (1998) questions whether distance learning is as effective as face-to-face learning. The model, supported by research into educational effects, is discussed in relation to the distinction between semantic memory and episodic memory, and in relation to the role of context in memory.

Analysis of a widely-cited summary of 248 studies comparing distance learning and face-to-face learning concludes that these studies, which generally fail to go beyond measurable competence, and fail as well to support the newer interactive technologies commonly associated with distance learning, do not support any transfer of postsecondary education from the classroom to the screen. Limitations of distance ducation are discussed in relation to their broader social implications.

Many researchers, analysing face-to-face communication find a lot of benefits of observation each other in the dialog for learning. For example McKendree, Jean, Stenning, K., Mayes, T. Lee, J.Cox, R.(1998) study is investigating the fundamental role of dialogue for learning. More specifically, the project is exploring the benefits to learners of being able to observe others participating in discussion. Such opportunities are becoming fewer with the proliferation of computer-based courses and distance learning, as well as growing student numbers. This 'logic model' of dialogue breaks discussions into two parts: the introduction of new premises and the derivation of new premises by the application of rules of reasoning in the domain. It is argued that in ordinary conversation the first aspect dominates while in educational dialogues, many misunderstandings arise from the need for more emphasis on explicit demonstration of use of rules.

4 Adaptation to New Learning Environments

4.1 Students'and Teachers' Integrated Learning Environment

Wilson, Tina & Whitelock D. (1998) projects using Computer Mediated Communication (CMC) is becoming of interest to all academic institutions worldwide. STILE (Students and Teachers' Integrated Learning Environment) is one such project which used a CMC environment with one hundred and ten students and nine tutors in the United Kingdom and Europe. The participants were on-line for a period of ten months in 1995. The course selected was Fundamentals of Computing (M205) which catered for both technical and no technical students. The provision of these facilities enabled distance learning students to avail themselves of better communication with their tutor and fellow students and to download extra electronic course materials. They could also send their computer code, created for the course, around electronically. This

paper discusses student reactions to the on-line collaborative experience and reports on their collaborative behaviour with respect to the conferencing environment.

4.2 Distance Learning Environments

Martens, Rob, Valcke, Martin, Poelmans, Patricia, Daal, Muriel (1996) describes the importance of the design and elaboration of learning materials in distance education. Despite the potential of new information technologies, printed learning materials are still the dominant delivery format.

To support the learning process, the printed materials are enriched with "embedded support devices" (ESD), such as schemes, illustrations, examples, pre- and post-questions, tasks, margin texts, etc. Developers of learning materials assign functions and effects to these ESD. It is concluded that ESD are used and appreciated by students and lead to better study results. The impact of individual characteristics of students was less clear.

Another problem concerning learning materials is text in the screen. How the text should be designed to answer to the learning possibilities of these students - how it can be perceived in the working memory of the learners?

As the study of Wenger, Michael J., Payne, David G.(1996) show, the specific processes that support comprehension and retention of hypertext information and the manner in which those processes differ. Results and directions for research with new information technologies are discussed using the constructs of a limited-capacity working memory and material-appropriate processing.

4.3 Multimedia Environments

Another learning material using NIT is multimedia CD-ROM storybook. The study of Underwood, Geoffrey, Underwood, Jean, D., M. (1998) describes the possibilities and effectiveness of using this type of learning materials. This article on children's' interactive talking books examines: (1) how pairs of children interact when using the Broderbund multimedia CD-ROM storybook "Living Books"; (2) whether their patterns of interaction reflect the gender composition of the pair; and (3) if different types of pairs interact differently and remember the activity differently.

The new possibilities of using new learning materials in Higher Education were demonstrated by Ravenscroft, Andrew, Tait, Kenneth, Hughes, Ian (1998),describing U.K.'s Teaching and Learning Technology Programme (TLTP) developed a General-Purpose Integrated Learning Support (G-PILS) tool-kit and shell. G-PILS creates course/module specific learning support systems to manage the integration of courseware in a range of knowledge media (e.g., games, tutorial packages, simulations, electronic documents, interactive presentations) within tailored environments.

4.4 Talking Book Software Environment

Some authors (Lewin, Cathy,1998) reports on a survey designed to identify how Talking Book software is being used to support reading development in U.K. classrooms and the potential benefits of adapting such software to meet individual learners' needs. Preliminary results highlight the success of this software for both early readers and older children experiencing difficulties in learning to read.

4.5 Telematic Learning Environment

Some authors (Veen W., Lam, I., Taconis, R.,1998) are describing a telematic learning environment needs specific pedagogic actions: In the T3 project (telematics for teacher training) seven European partners actively used telematics in their teaching programs. Partners collaborate through face-to-face meetings, videoconferencing and Web-based virtual workshops. The first virtual workshop organized within a telematic learning environments reported. Concludes that to stimulate learning in virtual workshops specific pedagogical actions must be taken.

The similar report on telematic learning environments (Selinger, Michelle, 1998) describes, that Telematics in the form of text-based, computer-mediated communications can support teaching and learning and can help the formation and cohesion of communities of learners. This paper examines the development of a "critical community of learners" through this medium, based on experiences with students studying the Open University (OU) preservice teacher education course.

5 Changing Role of a Teacher

5.1 New Demands for a Teacher

Implementation of NIT makes new demands on teacher, whether in university, school or college. These changes are resulting in a "change in relationships between teachers and learners, focus on learning, on increased autonomy of learners and on group and collaborative learning; enlarged role of teachers as facilitators and managers of learning as well as purveyors of knowledge; changing locus of control from teacher to learner".(Jenkins, Janet 1999, p.3).

Using NIT creates a lot of problems for teaching stategies as de Corte, Erik (1990) asserts, the new information technologies can only contribute substantially to the improvement of schooling if they are appropriately embedded in powerful learning environments. To achieve this aim, it is necessary to base inquiry and development related to educational computing more explicitly on recent research on learning and instruction.

So, the new role of a teacher demands psychological preparation for using NIT in lifelong learning and adapt to the new and changing learning environments and to adapt

to a new relationships among teachers and students, students-students and teachers-teachers.

The new role of a teacher demands to implement new learning and teaching methods, to be able to evaluate their effectiveness using NIT and to be able to answer to the changing learning needs of their students, to provide non traditional feedback with their non traditional students.

5.2 Changing Learning /Teaching Methods

Studing other European projects on NIT it is possible to notice, that they (Watson, Deryn, Blakeley, Barry, Abbott, Chris,1998) are describing a lot of difficulties in the comunication process. As show The King's College London component of a five nation European experimental study (FETICHE Project) of the use of information and communication technologies (ICT) is exploring the reality of communications between teacher trainers in the university and their cotutor partners in schools. Preliminary results indicate that identifying and getting operational suitable means of communication are fraught with difficulties.

The discussion is going, if it is possible to use such active learning methods as computer - based case scenarios. Some authors (Ward, Robert, 1998) discuss ideas and observations about the development, use, and pedagogy of computer-based case scenarios. Outlines two large computer-based case scenarios written to help students develop their skills and knowledge in business information systems. Considers factors in the design of computer-based case scenarios and related activities that might influence depth and quality of learning.

Another study describes possibilities of organizing discussions using NIT. Zhu, Erping (1998) study describes how VAX Notes--an electronic conference software tool was used at a large Midwest university in a graduate distance learning course. Students' electronic discussions, knowledge construction, and instructors' methods for organizing the electronic conference in the course were saved and analyzed to reveal patterns of students' electronic discussion and knowledge construction practices.

Moreover, this research reviewed and analyzed various ways of organizing the electronic conferencing and mentoring in a distance-learning course. In effect, this study provides insight into how to employ electronic conferencing technology to facilitate teaching and learning. Results show that discussions usually centered around several major themes emerging from the weekly readings, that electronic discussion supported both vertical and horizontal interactions, and that electronic discussion seemed to address Ss' zone of proximal development.

Akpinar, Y. Hartley, J. R. (1996) describes the design principles of computer-assisted learning (CAL) environments in which the software is interactive yet adaptable to different styles of learning and teaching, illustrated with a mathematics application. Following implementation, initial evaluation data taken from students showed marked

performance improvements, and indicated how design features of the system (FRACTIONLAB) contributed to their understanding.

Another dissicusion is going if it is possible to implement cooperative learning in this new environments. Overview of the cooperative learning process, including its rationale, research base, value, and practical considerations, show, that it is possible to put emphasis on two key characteristics:

1) cooperative learning's ability to create communities within classroom,

2) well-structured, sequenced assignments which allow students to internalize information.

Teacher, organizing cooperative learning should be classroom manager to be able to structure the classroom, to assesst and support the cooperative efforts.

The study of Millis, Barbara J. Cottell, Philip G., Jr. (1997) discusses components of a cooperative learning using NIT. The study include forming structured-learning teams, assigning and rotating roles within the group, and using team-building activities. Various cooperative-learning structures that can be implemented into college courses are described, including reciprocal or paired teaching activities which focus on cooperative problem solving and metacognitive strategies; the complex variations of peer teaching and coaching; the use of cooperative learning principles with educational games, problem-based learning, and cooperative case studies; and technological approaches, such as networked multimedia labs and computer-assisted learning.

Stefanov, Krassen, Stoyanov, S.Nikolov, R.(1998) describes the possibilities of providing cooperative learning, using Internet. They present the main design issues of a distance learning course on Business on the Internet. The instructional design is based on a learner-centered instructional strategy which allows learners to construct their own knowledge while solving real business problems and transferring their knowledge to other learners. They learn autonomously taking the responsibility for their learning and following their individual cognitive styles, interests, preferences.

The learners have access to the Internet being members of a global, cooperative learning community. The learning community involves students and tutors who collectively take responsibility for the design and evaluation of the course content and the teaching methods to be applied. Both students and tutors inhabit a virtual learning environment that offers different virtual places and services: virtual university, virtual enterprise, auditoriums, workshop rooms, cafes, libraries, etc. where students from different locations can meet, interact, learn and work together, as if they were face-to-face.

Another study also describes possibilities of peer interaction using NIT. Berrow, Teresa (1998) describes a project that used computer-supported peer review to develop higher-level learning skills. Subjects were part-time U.K. students from a course in Computer Studies.

Other researchers (Kumpulainen, Kristiina, Mutanen, Mika, 1998) examine the ways in which the collaborative use of a multimedia-based CD-ROM encyclopaedia in a sixth-grade Finnish classroom fosters science learning. Results show that students' activities during task-processing were highly procedural and product-oriented. Students

had inefficient skills in accessing and retrieving information from the multimedia software.

The other authors (Whittington, C. David, Sclater, Niall,1998) also agree on possibilities to organize cooperative learning by NIT. At Clyde Virtual University, Scotland (CVU) is a test for exploring, developing and evaluating techniques for delivering learning materials, supporting collaborative learning and carrying out assessment over the Internet.

Other authors discuss the social role of the computer and the use of computers to facilitate learning through language and computer-assisted learning through dialog. (McLaughlin Catherine, Oliver R., 1998).

6 Changing Role of a Student

There is positive attitude towards open and distance learning courses for training without leaving working place and the introduction courses of NIT are very attractive to the potential students and trainees in open and distance learning programmes and courses, concludes the study of Galabov, Boris (1999).

Bee, Richard H.,Usip, Ebenge E.(1998) studied perceptions about distance learning of 153 undergraduate students enrolled in quantitative economics courses. Students were asked about their perceptions and use of the instructional materials placed on the World Wide Web (WWW) as a supplement to the traditional classroom lecture/lab approach. Part of this research in economic education via the Internet entailed a series of hypothesis tests to determine attitudinal differences between users and nonusers of Web based instruction (WBI). Users of WBI concluded that as a result of their participation they improved their course performance and their cumulative GPA and were able to secure general knowledge by surfing the cyberspace of the WWW. Nonusers believed that the university should help provide financial assistance to defray the associated cost of a computer and modem and ancillary costs of going on-line.

Sewell, Robert D. E. et all (1996) study revealed that students found definite benefits in computer-assisted instruction to supplement laboratory practicals, with noticeable increase in understanding of application of theoretical concepts.

Using New Information technologies increase psychological stress for the users as learners. This is clear from several studies. Scrubb, Monica Maureen (1996) study was conducted to measure stress as perceived by doctoral students in a distance learning university. The subjects in the study were doctoral students enrolled in Walden University, a distance learning university. The result indicated that doctoral students in a distance learning university experience significant stress and the factor perceived as the greatest stressor was time.

Another study, also finding the stress among NIT users was made by Kleintop, Wiliam (1996), which identified the perceived job insecurity and attachment to organization also work and learning by NIT. Workers at the company described the need

for management support and expressed stressing attitudes towards new electronic mail technology and users.

Korunka, Christian, Zauchner, Sabine Weiss, Andreas (1997) study describes New information technologies as predictors of subjectively experienced stress and dissatisfaction at work. The autors investigated the effects on workers of continuous implementations (i.e., implementations of new information technologies on workplaces already equipped with computers). Contextual factors postulated to moderate employee reactions to new information technology included: type of implementation, implementation style, job profiles, external workload of employees, and personality factors. Compared to a control sample, employees in the implementation sample had an increase in subjectively experienced stress and no changes in dissatisfaction shortly after the implementation. Both preimplementation values and changes in subjectively experienced stress and dissatisfaction seemed to be highly influenced by contextual factors at an organizational level. Regarding job characteristics (decision latitude) and external workload (e.g., family, children, and household responsibilities), employees with low decision latitude at their workplaces and a high external workload showed the strongest increases in subjectively experienced stress after the implementation.

So, summarising the research findings, it is possible to conclude, that the changing role of a student demands students continuously up-date their knowledge and skills using NIT, answering to the tasks of their teachers and changing demands of their future qualifications and very rapidly growing new applications of NIT; he should adapt to new learning styles, to become self-directed learner, to be able to adapt to a changing role of a worker, answering to the new requirements for the jobs, to adapt to the new type of interactions with peers and teachers, to be able to overcome fear and stress of NIT, etc.

So, what kind of psychological model do we need to implement for successful use of NIT (new information technologies) for Lifelong Learning in Higher Education?

7 Psychological Aspects of the Mission of the University in Lifelong Learning, Using NIT

The psychological model of using NIT in lifelong learning was developed on the basis of data of research, where the reasons of dropping out of sequential system of education where determined (Beresnevičienė D., 1995) and psychological characteristics of adults as learners were identified (Beresnevičienė, D., 1996), the role of a teacher as organiser of lifelong learning and the lifelong learner himself were described (Beresnevičienė D., 1997) and psychological characteristics of process of learning, using NIT revealed.

In the centre of the model is the teacher as an organiser of lifelong learning, (responsible for creation of appropriate learning environments for his students' learning, for choosing adequate learning methods and developing students' motivation for lifelong learning, using NIT) and as a lifelong learner himself.

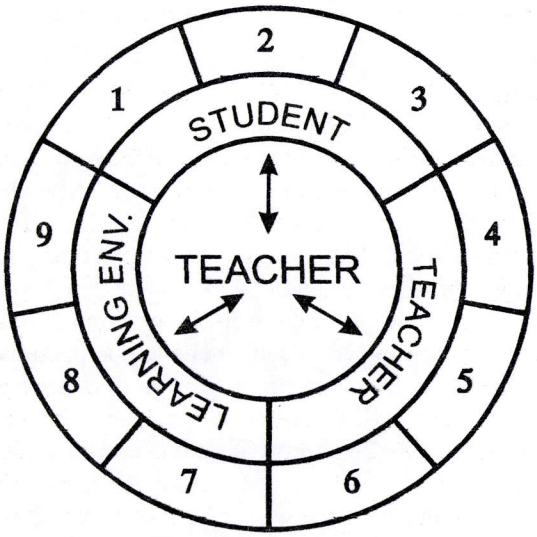

Figure 1: The Anticipatory model of European University consists of the following components:

I. The development of students motivation of lifelong learning and ability using NIT:
   1. The appearance and development of need of learning.
   2. The appearance of motivation of lifelong learning using NIT.
   3. Acceptance of the new role of a student as lifelong learner.

II. The development of psychological peculiarities of the teacher's personality:
   4. Perception and acceptance of the role of teacher using NIT for lifelong learning
   5. The self-concept of the teacher as the organiser of lifelong learning.
   6. The role of the teacher's expectations and attitudes towards students.

III. Creation of adequate learning environments in the process of learning:
   7. Providing methods of learning, answering to the students' and teacher' needs.
   8. Creation of equal conditions of learning.

   Implementation of appropriate structures in Higher Education for lifelong learning.

8 Anticipatory Psychological Model of European University

I. The development of students motivation of lifelong learning and ability using NIT:

1. The appearance and development of need of learning depends on students acquaitance with new information technologies, which may start already at school. Development of technology user's skills creates good psychological conditions for appearance of the need for lifelong learning, using NIT. This need for non traditional students e.g. for drop outs, looking for second chance or unemployed or potential

unemployed, seeking to update their knowledge and skills in the use of computers for learning could be formed also by mass media, through television programs, newspapers, journals or entrance requirements as the condition for the access to the University. It would be good for exeptional students (with lower social or economical status) to get free preparatory courses in the use of new information technologies as a part of access program to the university.

2. The appearance of motivation of lifelong learning using NIT develops according different learning needs of the individual student. This need for lifelong learning, using NIT could be formed by the following needs:

a) for carrer seekers (employment possibilities are growing with improvement of nettskills, of becoming the "master" of rapidly changing new applications of NIT);
b) for self-actualizers (seeking for the development of their personal abilities, for the increasing their competence in using NIT, or for those, seeking to improve their leisure time, etc.);
c) for special target groups, seeking for the second chance and previosly excluded from Higher education (mothers, taking care of their children, householders, disable persons, refugees, migrants, prisoners, etc.);

3. Using NIT requires different role of a student as self-directed learner, who is able to plan, to evaluate effectiveness of his own learning, to assess his own learning achievements and to control his learning by the ability to find his mistakes and to formulate his learning problems. Acceptance of the new role of a student as lifelong learner also requires having moral responsibility for his own learning and developing as a person. Lifelong learner as a students is not alone he is able to find new World Wide Web friends with similar learning needs and to share his own experience by email, or in other ways (video conferences, using Internet networks, etc.) organising his own co-operation with the other distance students.

II. The development of psychological peculiarities of the teachers personality:

1. Perception and acceptance of the role of teacher using NIT for lifelong learning

Using NIT in the process of Lifelong Learning in Higher Education requires a new role of a teacher as an academician and as a pedagogue. As an academician University professor is acquiring all the time new possibilities and new applications of rapidly changing new information technologies and is acquainted with new research methods, suggested by NIT. As a teacher he is acquiring a new role, too. Teacher is becoming a manager, facilitator of students learning, tutor at the distance, co-ordinator of his students' learning activities, receiver of a feedback by email, special questionnaire, distributed to all the students, etc.

2. The self-concept of the teacher as the organiser of lifelong learning and lifelong learner himself. This new role of a teacher requires a new understanding of himself as a lifelong learner, improving his competencies in his subject, (for rapidly changing new information in the field), and improving his competencies in applying NIT in teaching, learning and research. He as a learner develops such competencies and skills as learning

to learn in different learning environments. This new role of a teacher demands enough courage to accept all the time improving his students competence in using NIT and create for them new possibilities to use NIT for achieving teacher's formulated learning achievements. It also requires to provide necessary information on learning through NIT for those students, who are not enough acquainted with NIT.

3. The role of the teacher's expectations and attitudes towards students. Changing role of a teacher requires changing his expectations and attitudes towards students. Teaching in distance also needs to understand his unvisible students learning needs, learning progress and weakness, to be ready to help them to overcome stress, using NIT, loneliness, working alone, without face-to-face interaction with the peers, to provide necessary feedback with dissable students, prisoners, unemployed or potencial unemployed or other special target groups, who needs encouragement and understanding. So the teachers expectations should be realistic and adequate to the students learning needs and abilities.

III. Creation of adequate learning environments in the process of learning:

1. Providing methods of learning, answering to the students' and teacher' needs means good and realistic evaluation of students skills, knowledge, attitudes and learning styles and adequite understanding of the same characteristics of teachers. Choosing new learning environments, teacher should to decide which kind of learning materials is better to use for creation of most effective learning situation for his students - paper based materials or computer screen? New information technologies can offer all necessary opportunities.

Teacher can choose the method, getting acquaintance with students' needs, abilities and expectations. If the student feels alone and needs encouragement from peers and the teacher, the organizer of lifelong learning can organize team learning using cooperative learning through video conferences or asking students to achieve the same learning results using Internet and share their experience with one another by E-mail or another type of communication.

If a student has low self-esteem for different reasons (he is from family of lower social or economical status, has various learning problems, is prisoner in the moment, etc.), and is prepare to learn alone, it would be more suitable for him to organize individual learning program and provide with necessary learning materials, answering to his skills, using NIT, his abilities and expectations. It could be paper based materials or computer screen as well.

2. Creation of equal conditions of learning is the next requirement for the teacher, if he wants to create learning environments, encouraging students to continue to participate in the process of learning. It is possible to create equal conditions for learning, if the materials in the screen are designed according to the learner's achievements and abilities, with special attention to the dissable and very successfull students, with special orientation to the learner's working memory, speed of thinking, other psychological characteristics, necessary for learning using computer's screen.

Table 1: Structures of Anticipatory model of European University

LEARNING ACCORDING NEEDS AND INTERESTS	**LEARNING ACCORDING ABILITIES AND ASPIRATIONS**	**LEARNING ACCORDING SOCIAL POSSIBILITIES**
CORRESPONDENCE COURSES AT THE UNIVERSITIES	COURSES FOR THE PREPARATION TO STUDY IN HIGHER EDUCATION	DISTANCE EDUCATION COURSES AT HIGHER EDUCATION SYSTEM
EVENING COURSES AT THE UNIVERSITIES	OPEN UNIVERSITIES	MODULAR COURSES
DUAL SYSTEM COURSES (COMBINING STUDIES AT THE INDUSTRY AND UNIVERSITY)	MASTERS DEGREE COURSES AT THE UNIVERSITIES FOR WORKING ADULTS	OPEN LEARNING
HIGHER EDUCATION COURSES AT THE ENTERPRISES	"UNIVERSITIES OF THE THIRD AGE"	STUDIES THROUGH LABOUR EXCHANGE (FOR REQUAILIFICATION OR BROADENING KNOWLEDGE OF UNEMPLOYED)
		OTHER INSTITUTIONS

Creating equal conditions of learning especially important is the process of assessment. Asssesment for distance students means encouragement for the students with lower abilities and development for the need of achievement for successsful students. So teacher in distance should design the course materials after evaluation of his students expectations towards learning and to know his students abilities and motivation of learning by organizing the feedback of learning process befor the process of assesment.

3. Implementation of appropriate structures in Higher Education for lifelong learning should also answer to the needs of learners. Flexible structures, ctreating flexible time, shedule or individualized module for learning are encouraging participation in lifelong learning.

So, it is possible to suggest the structures of Anticipatory model of European University, given in **Table 1**.

8 Conclusions

1. Using NIT for lifelong learning in Higher Education, is the challenge for the university, because it demands psychological preparation for everyone, using NIT: a) it demands adaptation for the users of NIT to the new and changing learning environments; b) it demands new relationships among teachers and students, students-students and teachers- teachers; c) it demands applying new learning/teaching methods.

2. Using NIT for lifelong learning in Higher Education it increases efficiency in time, money, and effort to provide Lifelong Learning in any organization, there are assumptions fro interactive learning, it is possible to learn to solve interpersonal conflicts, NIT helps to express the learner himself, and to prepare individual programs, according to the learners' needs and interests.

3. There are many problems met, using NIT: to prepare hypertext, adequate to the learners' semantic and episodic memory, learning styles, to overcome the stress, associated with the time, using NIT, etc. It requires adaptation to new learning environment for teacher as well as for the students.

4. Using NIT for lifelong learning in Higher Education, the role of the teacher and student is changing. Implementation of NIT makes new demands on teacher; changing relationships between teachers and learners, focus on learning, enlarged role of teachers as facilitators, changing locus of control from teacher to learner. Using NIT creates a lot of problems for teaching strategies and requires adapting to new relationships among teachers and students, students-students and teachers-teachers.

5. Anticipatory model of European University, Using NIT for lifelong Learning in consists of the following components: the appearance and development of need of learning and development of motives of learning, the development of psychological peculiarities of the teacher's personality and creation of adequate learning environments in the process of learning.

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