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Abstract level description for an e-psychology generic environment

ICT and e-services have invaded the psychology domain and have created the term e-psychology. This abstract presents an e-psychology generic environment. The environment supports the major Psychology approaches (cognitive, psychodynamic, behavioural-learning, phenomenology-humanistic and biological) with respect to different approximations to psychological process and intervention. The environment offers tools and services, which fall into two major groups of services, the informative group and the communicative group of services. The former offers electronic tests and auditing tools, automated diagnosis, electronic content and knowledge for instant access, online databases hosting frequently and non-frequently found cases, tools to trace the impact and the progress of any treatment or supporting method etc. On the other hand, the latter offers alternative paths of communication (real time and non real time) between the psychologist and the supported person, in order to trace the impact and the progress of therapy, supporting, consulting and intervention. It is important to underline that e-psychology is not an alternative psychology field, but a resource to encase the conventional psychology process. E-psychology offers powerful infrastructures, tools and services in order to deliver their advanced quality to the end users, both psychologists and supported persons.



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“Abstract level description for an e-psychology generic environment”

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Net Media Lab Activities

- Is involved in the development of the **academic and research network** of Greece since 1985
- E-services such as **e-learning, e-culture, e-commerce, e-business, e-procurement, e-testing, e-government, e-health and e-psychology**
- Has been running more than **30 Projects** in the last 5 Years at National and International Level
- Is active as a **counselor for e-services** (design, development & running) for various organizations and Ministries of Greece since the early 1990s



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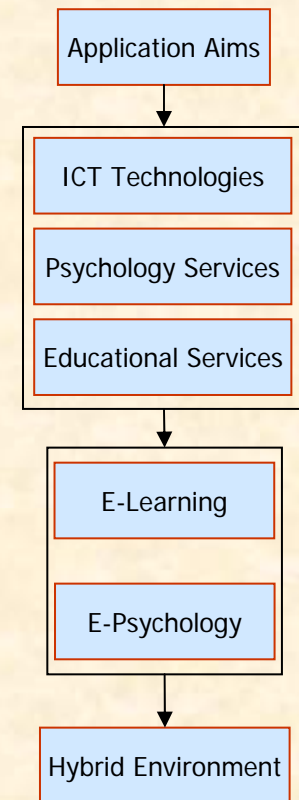
The environment offers tools and services, which fall into two major groups of services, the **informative group** and the **communicative group** of services. The former offers **electronic tests and auditing tools, automated diagnosis, electronic content and knowledge for instant access**, online databases hosting frequently and non-frequently found cases, tools to trace the impact and the progress of any treatment or supporting method etc.

On the other hand, the latter offers alternative paths of communication (real time and non real time) between the psychologist and the supported person, in order to trace the impact and the progress of **therapy, supporting, consulting and intervention**. It is important to underline that e-psychology **is not** an alternative psychology field, but a resource to encase the conventional psychology process. **E-psychology offers powerful infrastructures**, tools and services in order to deliver their advanced quality to the end users, both psychologists and supported persons (students or pupils).



1. Abstract Level Description - Logical Structure

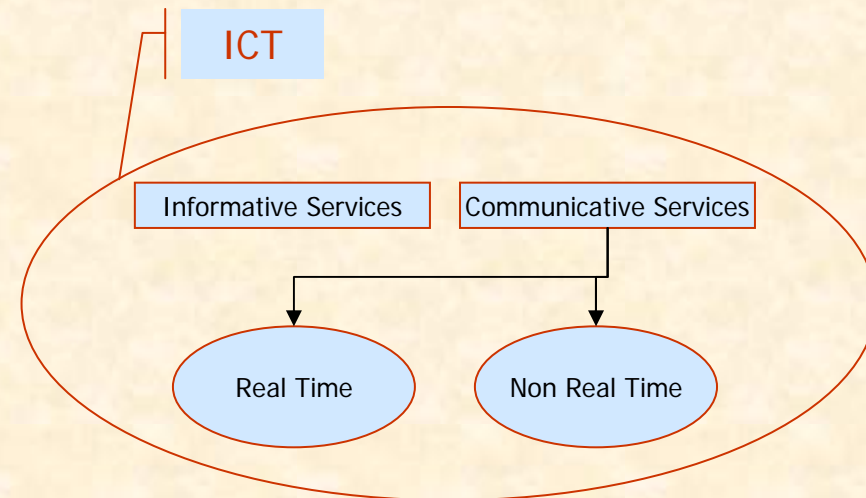
The aim of the platform is the integration of the ICT with the traditional learning and psychology processes for the development of a electronic system that supports the **e-learning** as well as **e-psychology**.





1. Abstract Level Description - ICT Services

As far as the ICTs are concerned they are distinguished into two major service categories. The “**informative**” and “**communicative**” services. The latter are divided into two services subcategories. The real time and non real time services which determine the terms “**synchronous**” and “**asynchronous**” environments. These technologies were used for the development of the electronic system imprinting the traditional learning and psychology processes with “**synchronous**” and “**asynchronous**” learning and **counselling tools** in the system.

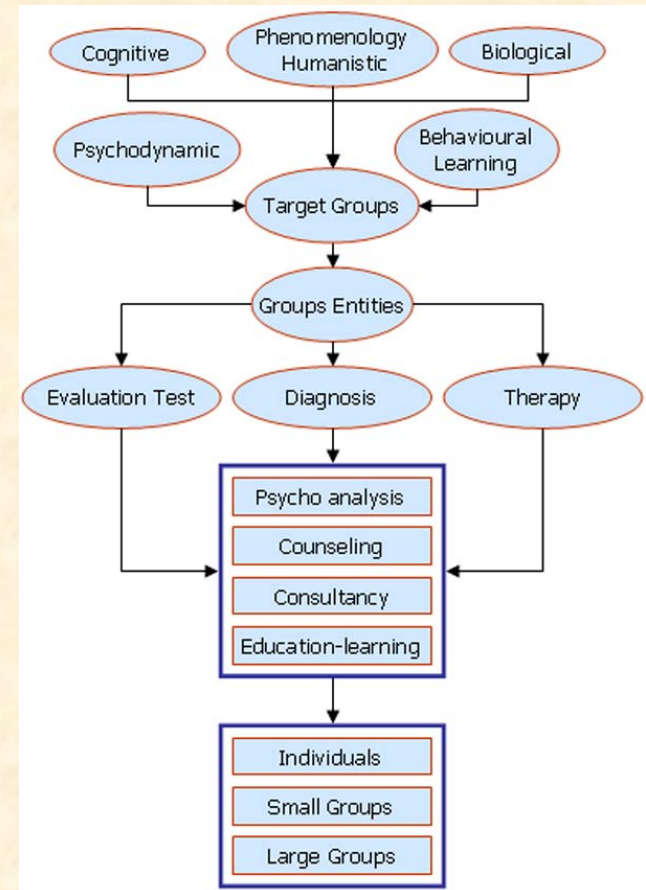




1. Abstract Level Description - Psychology Services

Psychology is distinguished into six major branches with respect to the cause of one's unusual behavior. All psychology branches refer to specific **target groups** based on unusual behavior problems. The method that each branch uses differs from the others while the **processes** (evaluation tests, diagnosis, therapy) are the same in all branches.

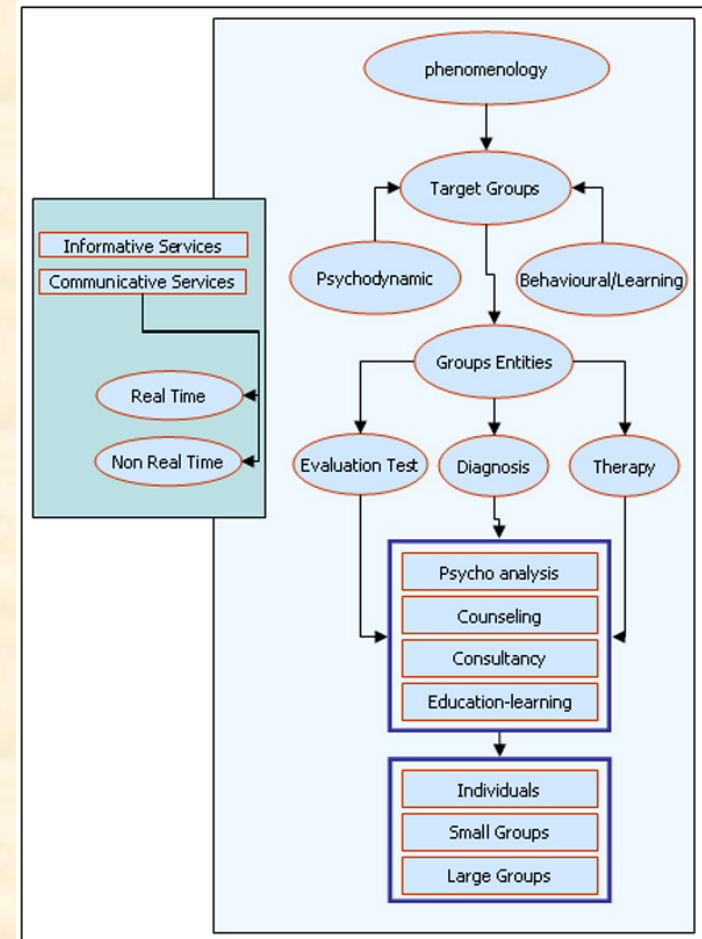
The possibility of supporting **personal teaching** - learning as well as of supporting **classes** or larger entities like levels of learning or **virtual schools** finds also similarities and proportions to e-psychological circle, with the possibility of supporting psychological consultancy in a **personal way** or in a **small group**, or larger handling entities of them, like therapy directions, or **virtual psychological health centers**.





1. Abstract Level Description - E-Psychology Structure

The result of the ICT integration with the psychology processes is depicted in figure. This integration of the psychology branches in a **web-based environment** is available to the internet user. The methods and processes that each branch follows are materialized via electronic tools such as: **discussion forums, message boxes, video and audio conferences** etc. Similarly, the learning methods and processes are introduced into the same web-based environment via **informatics tools**.

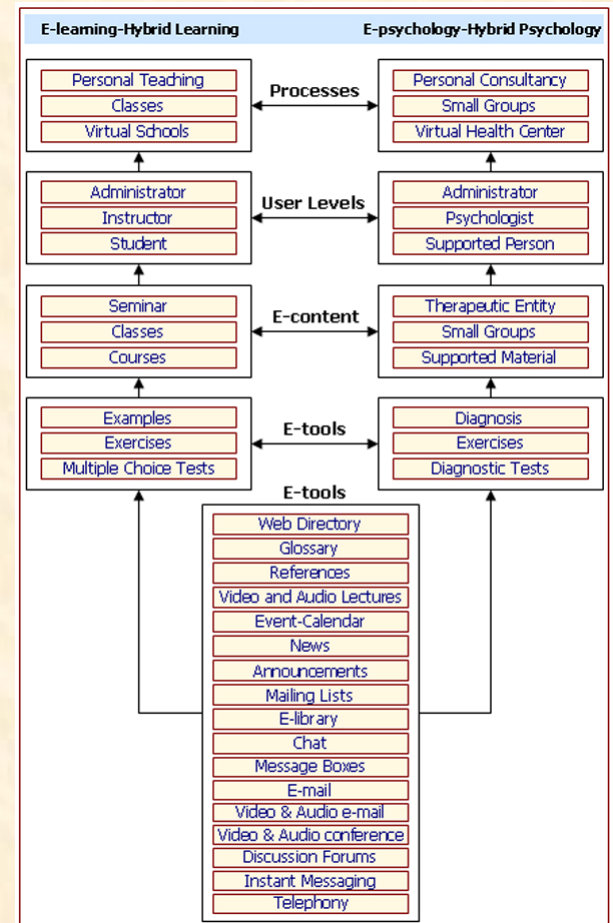




1. Abstract Level Description - Modular Environment

The way that the e-learning and **hybrid** learning tools are related to the correspondent e-psychology and **hybrid** psychology tools, is presented in figure. From the figure above, it is obvious that the roles of the "instructor" and "student" are transformed into the roles of "psychologist" and "supported person" respectively. The "classes" are turned into "small therapy groups" and the "courses" into "Supporting material". The "consulting material" (examples, exercises, multiple choice tests) correspond respectively to diagnosis, educational exercise for treatment and diagnostic tests.

Finally, **all the tools** (web directory, glossary, references, video and audio lectures, event-calendar, news, announcements, mailing lists, e-library, message box, e-mail, video and audio e-mail, video and audio conference, discussion forums, instant messaging, chat, and telephony) can be easily applied in both platforms.

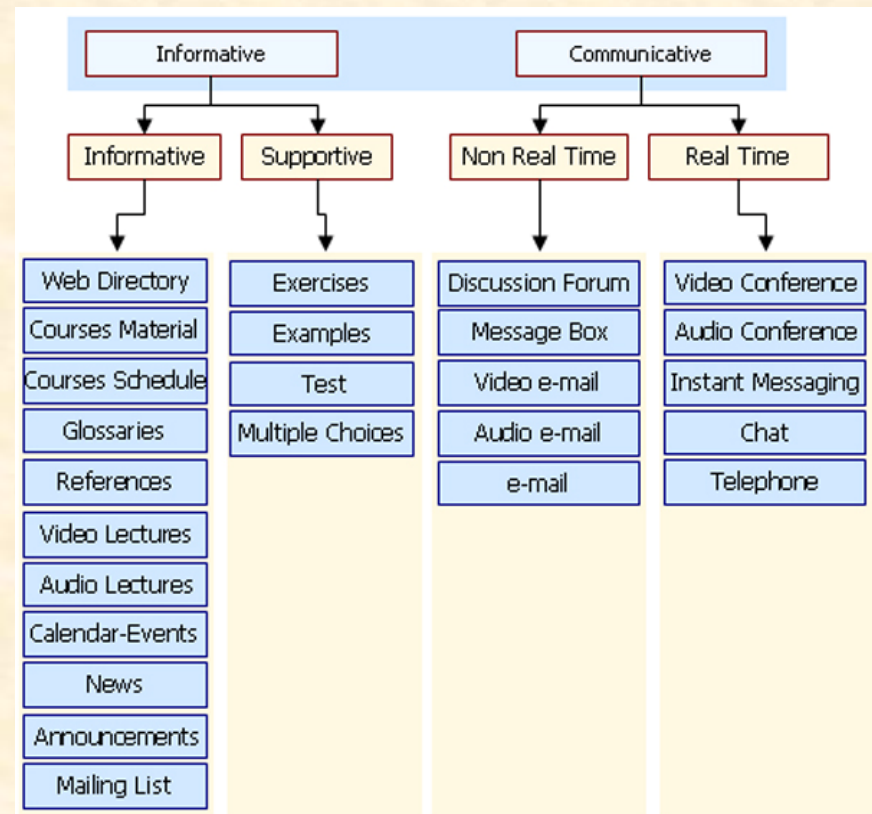




2. System Analysis - Environment Tools

The environment includes tools that offer **flexibility** and **adaptability** depending on their use. The design of these tools was based on existing **web services**, such as discussion forums, chat, message box, e-libraries, which are widespread in the public web community. These tools are distinguished in two major groups: **“informative”** and **“communicative”**.

The former is divided further into two subcategories: **“informative”** and **“supportive”** tools, which include services related to the educational-supporting material and its presentation. Similarly, the latter, is also divided into two subcategories: **“real time”** and **“non-real time”** tools, which include services that allow the communication of different user groups (users belonging to a different session level).



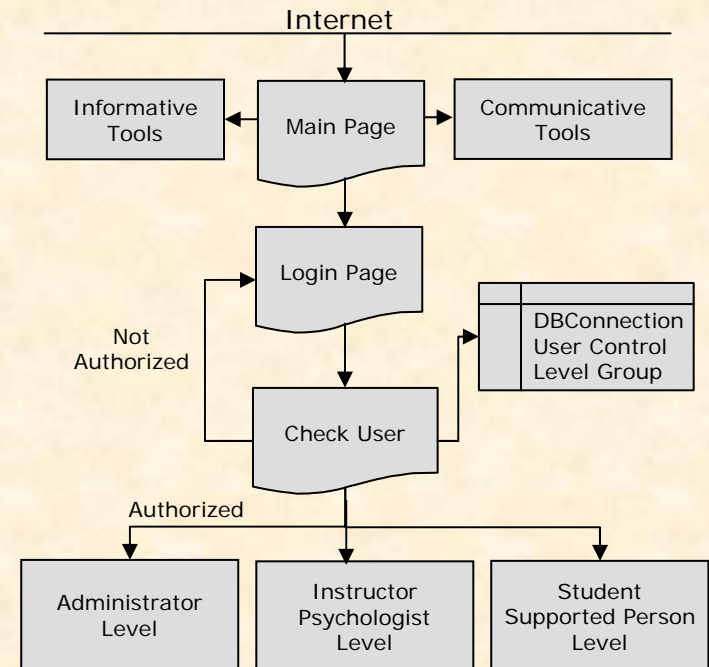


2. System Analysis - User Levels

Four user levels are distinguished in the environment, each of which uses different supporting tools. Depending on the corresponding use, these levels have a different role: **administrator**, **instructor-psychologist**, **student-supported person** and **unauthorized user**.

The user levels for hybrid learning and e-learning correspond to the relative user levels of hybrid psychology and e-psychology. That is to say, that every administrator for example, whether for e-learning or e-psychology has **the same tools** and services at his/her disposal as well as the same restrictions.

Each of them interacts with the other through the **“informative”** and **“communicative”** tools related to each level.



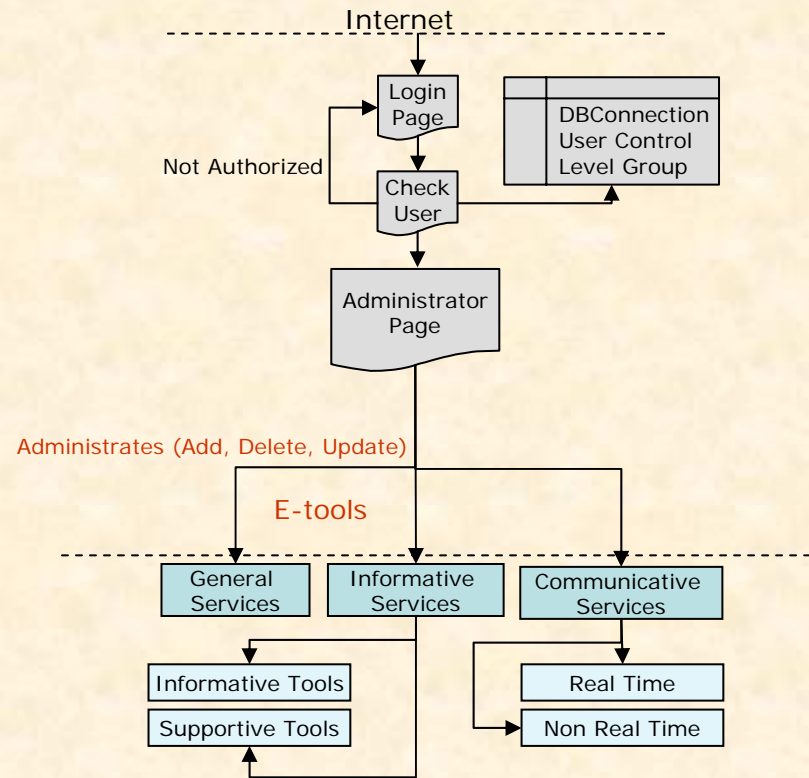


2. System Analysis - Administrator

The administrators **coordinate** and **manage** the corresponding application via the corresponding **administrative tools**, depending on whether they are e-learning or e-psychology administrators.

They also determine which user **level-group** has the permission to use the corresponding **“informative”** and **“communicative”** tools.

Moreover, the administrator can **communicate** with the instructor or psychologist in order to be kept informed about the progress of the instructors'-psychologists' courses and sessions respectively.



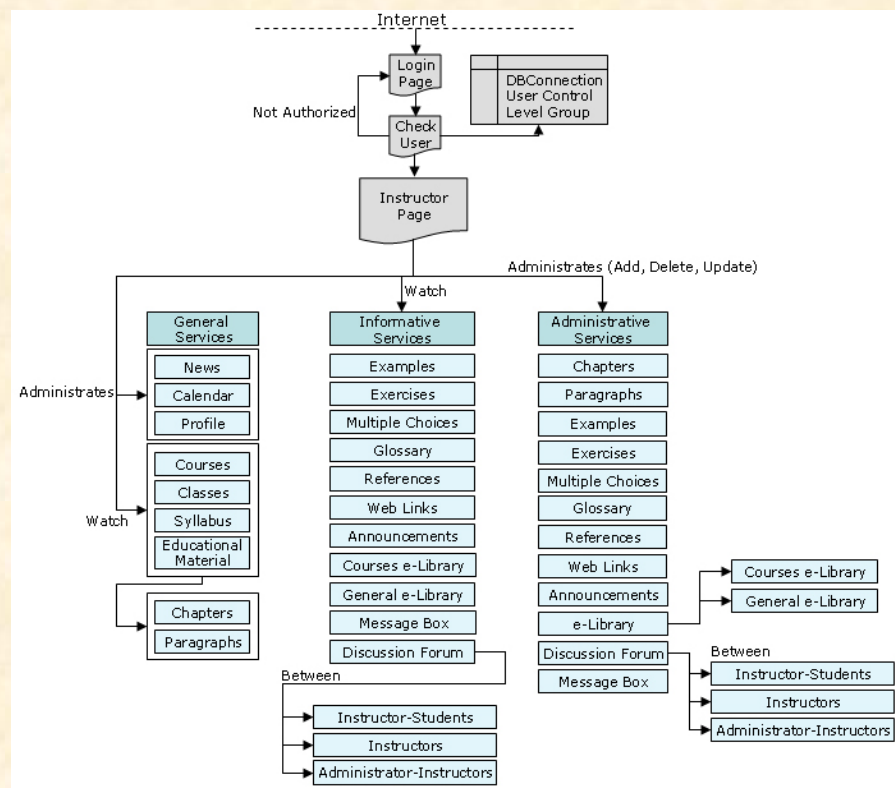


2. System Analysis - Instructor - Psychologist

At this level, the instructors determine the **educational** and **consulting material** depending again on whether they are e-learning or e-psychology instructors. In addition, they also determine the development and the way that the material will be presented to the **students-supported persons** and to the **entire** internet community.

The instructors are able to **produce the e-content** of their course, aiming at the better comprehension and assimilation of it from both their students-supported persons as well as the unauthorized visitors.

Finally, at this level, the **communication** between the **instructors** and the **students-supported persons** aims at the resolution of questions that rise during the courses and sessions respectively.



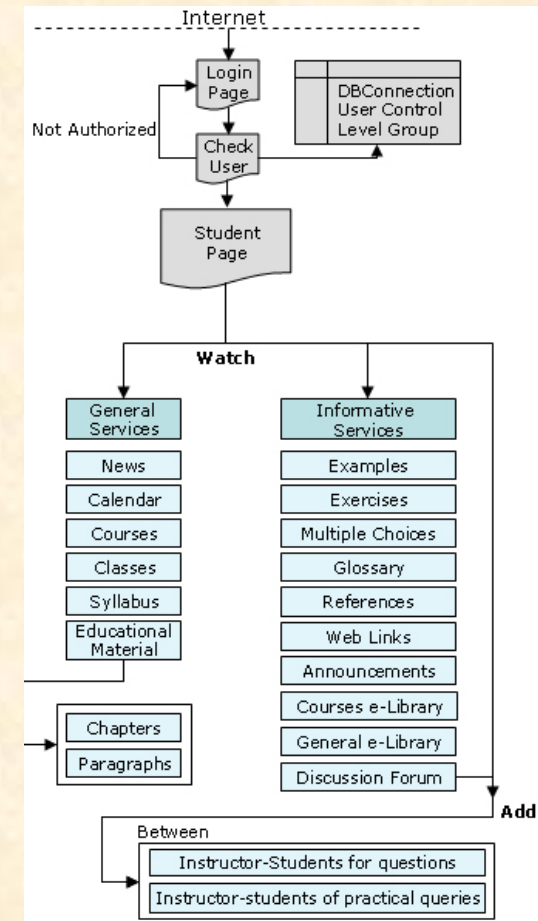


2. System Analysis - Student-Supported Person

The students-supported persons determine the **successful development** of the seminars and courses.

Moreover, they read the **educational-psychological material** registered by the instructor, and **communicate** and **pose questions** to the instructor who is responsible for resolving the exercises and multiple choice questions.

A remarkable fact is that the students-supported persons **have access to all** the information and services, regardless of when they undertook a certain course-session, which results in the better development and understanding of the courses-sessions.





2. System Analysis - Unauthorized User

At this level, the visitors can easily browse the **e-content** of corresponding **courses-sessions**. The innovation of this level is the fact that the visitors can have access not only to the **consulting material** for each course-session, but also to the **discussion forums** between the instructors and the students-supported persons (carried out during courses or during practical applications).

Finally, this level follows the philosophy-standard "**knowledge-access for all**" giving the permission to the random visitors to obtain the knowledge of their object of interest.



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3. Pilot Project

The presented environment was developed under the framework of the Greek research program, namely, **“Conditions Improvement of Inclusion to Educational System of Individual with Multiple Handicaps”** that was funded by the O.P.E.I.P.T. European community program (Operational Program of Education and Initial Professional Training).

The project’s main objective was the **training of special education teachers on multiple handicaps issues**. The work included two seminar periods: **“training”** and **“specialization”**. The former included training in **physical classrooms** while the latter included training in physical classrooms as well as **e-learning**.

This hybrid environment was parameterized and **configured properly**, to conform to the project specifications and needs. In this way, it assured the distant training form and also supported the dissemination of new ideas and knowledge in the **special education community**.



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4. Conclusions

From the detailed analysis carried out throughout this presentation, the numerous advantages of the platform that supports **e-learning** as well as **e-psychology** became clear. Its main advantage is none other than the fact that it offers the **pioneering experience** for either pair “**teacher-student**” or “**psychologist-supported individual**” to span two **completely different worlds**, the **physical** and **online worlds**, simultaneously.

What makes e-learning - e-psychology worth while and **innovative**, is the fact that it gives the instructors (whether teachers or psychologists) the unique opportunity to experiment and incorporate **e-services** in their **courses-sessions**.

This has immediate results, in that it enables them to carry out their respective work traditionally, slowly incorporating technology while at the same time, it offers the opportunity to make their work more **appealing** and **interesting** for them as well as for their students-supported individuals.

Undoubtedly, the use of ICT enhances the learning-psychology environment a great deal, making the learning-psychology process a whole new and **beneficial experience for all**.