

"Development of a framework for the e-education of educators of special groups aiming to improve their compatibility with their learners"

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The ESG Framework
PhD Thesis of Maria Pavlis-Korres, University of Alcalá

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Resumen

En las sociedades multiculturales modernas la diversidad es una característica que se extiende incuestionablemente a la educación. Educadores y estudiantes de diferentes culturas y etnias, con diferentes orígenes lingüísticos y sociales tienen un punto de encuentro e interacción en los procedimientos educativos. En la educación multicultural el papel del profesor es primordial para potenciar o no a los estudiantes en la clase, por lo que es muy importante mejorar las capacidades docentes del formador a este respecto si se desea conseguir la igualdad educativa. Esto cobra mayor relevancia aún cuando los educadores se hacen cargo de grupos espaciales, es decir, de cualquier grupo social cuyas características (sociales, culturales, étnicas, lingüísticas, físicas, etc) sean causa de exclusión social, marginalización o estigmatización de sus miembros (inmigrantes, gitanos, ex-convictos, ex-adictos o personas con necesidades especiales). En la educación de grupos especiales la compatibilidad entre educadores y educandos, o lo que es lo mismo, el nivel de conocimiento y aceptación del grupo de discentes y la actitud positiva hacia el mismo afecta directamente a la eficiencia y éxito del procedimiento educativo.

Por otro lado, y dado el auge de las nuevas tecnologías en la educación –con el potencial que esto conlleva–, la utilización de las mismas para conducir programas educativos personalizados ha llegado a ser una práctica globalmente adoptada. Esto permite que la personalización se adecúe a las necesidades del educador en cualquier momento y lugar y que se puedan reducir costes asociados a la educación del educador.

En este documento se presenta un marco (denominado ESG) para la educación a través de medios electrónicos de los educadores de grupos especiales para la mejora de su compatibilidad con los educandos. El marco ESG se sustenta tanto en la tecnología educativa como en la educación multicultural y la educación de adultos, combinando elementos necesarios de todos estos campos. El marco ESG está basado en el modelo de diseño instruccional ADDIE (Analysis, Design, Development, Implementation, Evaluation) con la adición de una fase nueva: Mantenimiento de la

red de la comunidad educativa. El marco ESG proporciona para cada fase directrices dinámicas, flexibles y claras que pueden ser seguidas por diseñadores, desarrolladores, administradores y educadores, optimizando el aprendizaje electrónico personalizado y dotando de una educación efectiva a los educadores de grupos especiales.

Para validar el marco ESG se ha llevado a cabo una aplicación piloto con educadores de un grupo de personas de raza gitana en Grecia. La evaluación del curso piloto ha probado que el marco ESG es eficiente y funcional para la mejora de la compatibilidad entre educadores y estudiantes y que ofrece la posibilidad mediante el uso de tecnologías de e-learning de una personalización de los programas educativos de acuerdo a las necesidades del educador independientemente del lugar y momento en el que se requieran las acciones formativas.

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The ESG Framework
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Introduction

This is a research project aiming to create and prove a framework for the e-education of educators of special groups based on the assessment and improvement of the educators' compatibility with their learners.

The multicultural society being a fact in the 21st century, more and more educators and learners from different cultural, ethnical, linguistic and social backgrounds meet and interact in the educational process. In multicultural education, the educator's role and capacity in empowering or dis-empowering learners has been identified as a major factor in the achievement of equal education prospectives for all learners. This becomes even more important for educators addressing learners belonging in special groups, where lack of compatibility between educator and learner could diminish the above educators' role. In using the term *special group* we refer to the social group whose characteristics (social, cultural, ethnic, linguistic, physical etc) cause social exclusion, marginalization, and stigmatization, to its members (i.e. immigrants, Roma, repatriated-refugees, prisoners/ex-cons, ex-addicts, persons with special needs). By using the term *compatibility* we refer to the level of knowledge and acceptance of, and positive attitude towards, the special group on the part of the educator (Pavlis-Korres, 2007, 2009).

On the other hand, the use of new technologies in education is rapidly increasing and provides education with enormous potential, facilitating learning and instruction. The shift from traditional classroom education to computer-mediated distance learning poses enormous challenges to instructors and learners.

The rapid growth of the Internet and the needs of a mobile society have made online learning environments very attractive and numerous studies have shown that they are not only feasible, but they have many advantages over traditional education, such as the convenience of asynchronous participation, a permanent record of the class, and a plethora of analysis tools (Hiltz, 1997; Kearsley, 1998). Like any new technology, the implementation and optimization of online learning environments needs research and

experimentation over a period of time and more so to approach the maximum potential this new technology offers (Clark, 2009).

The creation of educational material using the computer mediated technology for an improved education of the educators of special social groups is, today more than ever, an interesting challenge.

The main objective of this document consists in the development of a framework for educators of special groups exploiting E-learning technology to deliver personalized educating programs and provide appropriate educational material tailored to each educator's needs anywhere, anytime, enhancing their compatibility with the learners and reducing the cost of the educators' education.

To achieve the development of such a framework, standing in the crossroads of learning technology, multicultural education and adults' education, the necessary elements from all these main fields have been examined in the related literature. The notion of compatibility between educator and learners has been introduced as the main core of the whole approach and the instructional design theories on cognitive domain as well as on affective domain (attitude change) have been reviewed and adapted.

In order to dovetail together E-learning, multicultural education, transformative learning and adult learning in a practical online learning environment, which will be educationally effective, the following research questions were inquired in this document:

- Which are the fundamental elements of adult learning that should be taken into account and integrated in the E-learning design?
- Through which way should the elements of adult learning and multicultural education be integrated into the structure of the E-learning educational framework so that we obtain the most efficient educational result without dramatically increasing the cost?
- Which are the most appropriate instructional design theories to be used in order to improve compatibility between educator and learners and how can these theories be effectively incorporated in an E-learning environment?

 Which vocabularies and extensions to existing metadata standards are necessary for us to create, in order to clearly define the educational material, so that it can be easily retrieved and then reused in other educational environments?

Sound answers to the above questions shall be provided through theoretical approach, development of the ESG Framework and a pilot implementation of this framework with educators of Roma in Greece.

The ESG Framework intends to provide dynamic, flexible but clear guidelines to be followed in each phase of its structure by the designers, developers, administrators and educators, optimizing the personalized E-learning and effective education of the educators of special groups. Within this framework an instructional model has been developed integrating adults' requirements for effective learning in an online learning environment. In the pilot e-course educational material, in the form of learning objects, has been developed and tested for the educators of Roma in Greece.

The ESG Framework for the e-education of the educators of special groups will cover major needs of modern educational procedures and systems where multicultural education and E-learning take new dimensions due to the widespread immigration and globalization, improving the compatibility between educators and their learners. By exploiting the benefits of a flexible E-learning environment, organizations which educate educators of special groups could reduce the cost of the education and provide customized educational programs for the educators, overcoming the barriers of time and space.

This document contains a theoretical part and a practical part. In the treoritical part the necessary elements of learning technology, multicultural education, adults' education and instructional theories have been examined in the related literature, leading in the development of the ESG Framework. In the practical part of the document a pilot course for the education of educators of Roma in Greece has been carried out following all the phases of the ESG Framework and a pilot educational material -in the form of Learning Objects- has been designed, developed and tested.

The qualitative analysis of the course as well as the formative and summative evaluations of the pilot application have provided valuable information for the weak and strong points of the ESG Framework so that remedies have been integrated in the final synthesis.

Due to the fact that in our framework there are educators and learners, but the learners are educators themselves, in order to avoid confusion between the terms "educator" and "learner", the initials ESG (educators of special groups) are added wherever it has been considered necessary.

THEORETICAL PART

Learning Technology

"Learning objects currently lead other candidates for the position of technology of choice in the next generation of instructional design, development, and delivery, due to their potential for reusability, generativity, adaptability, and scalability"

Willey (2000)

The last decades have seen tremendous growth in the use of technology in education so that "Learning Technology" has now justified itself as a full discipline in is own right (Grooms, 2003). Learning Technology (also called Educational Technology) is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources (Richey, 2008).

Knowing for sure that Educational Technology does result in learning (Marshall, 2002) and provides education with new potential facilitating learning and training (Montgomery, 1995; Ziegahn, 2001, 2005; Beatty, 2002; Sadler-Smith & Smith, 2004; Conceicao, 2006; Hew & Cheung, 2007), our effort concentrates in selecting the most appropriate theories, media and solutions which learning technology offers for the purpose of our research.

In the last years, the so called "digital revolution" brought the computer into the classroom in order to support and enhance pedagogical practices. Technologies available in classrooms today range from simple tool-based applications to internet based multimedia, e-mail communication, blogs, wikis and podcasts. The use of these technologies has a positive effect on education, motivating students, promoting learning, and changing classroom interaction (Picchio, 2001; Honey, McMillan Culp & Spielvogel, 2005), the most profound impact of the Internet being its ability to support and expand the various aspects of social learning.

The era of E-learning 1.0, which was focused on using the internet to replicate the instructor-led experience, is long passed and E-learning 2.0 is built around collaboration. Understanding of content is now socially constructed through conversations about that content and through grounded interactions, especially with

others, around problems or actions. The focus is not so much on what we are learning but on how we are learning (Brown & Adler, 2008).

In literature two general distinctions have been made. Students can learn "from" computers—where computers are essentially tutors and technology primary serves the goal of increasing students' basic skills and knowledge, or they can learn "with" computers—where technology is used as a tool that can be applied to a variety of goals in the learning process and can serve as a resource to help develop higher order thinking, creativity and research skills (Reeves, 1998; Ringstaff & Kelley, 2002).

Wilson and Lowry (2000) have introduced three core principles concerning the effective use of the web in teaching:

- Provide access to rich sources of information.
- Encourage meaningful interactions with content.
- Bring people together to challenge, support, or respond to each other.

As Conrad (2008) points out "Our 21st century's e-learning conversation now involves issues of social networking, reflection, socialization, knowledge transfer, and simulation".

As the use of technology is not an end, but it is a means for the facilitation of learning, the most appropriate tools, techniques and applications which Learning Technology offers today have to be matched with the respective educational or training goals in each case (Kirkwood & Price, 2006).

The elements found in most effective learning environments by current educational research (Saunders & Werner, 2002; Merill, 2009) which include problem-based learning, collaborative learning, activation of previous knowledge, demonstration and application of new knowledge, integration of new knowledge into the learner's world and assessment of the learning process and learners' progress, are also in line with the effective requirements of adult education (Cranton, 2000; Leftheriotou, 2005; Rogers, 2007). With ever-expanding content and technology choices, from video to multimedia to the Internet, Marshall (2002) suggests that there is an unprecedented need to understand the recipe for success, which involves the learner, the content, and the environment in which technology is used.

One important factor for the above recipe of success is the collaboration between the people who create the technological means and the instructors, in a way that, through synergy, the appropriate learning tools and technologies are produced to support the various educational and instructional needs and efforts beyond the limits of time and space (Horton & Horton, 2003).

In the context of our research, among the multitude of educational tools Learning Technology has to offer, the Learning Management Systems (LMS) seem to be the key tools supporting the aforementioned elements, as they favor the active learning focusing on the learner, improve relations between instructors and learners, foment the responsibility, improve the handling of time and space, offer equality of opportunities for learners, and facilitate the internationalization of education (Torres, Dodero, & Padron, 2004).

Learning Objects' Instructional Technology

The learning objects paradigm (Downes, 2001) is deeply rooted in the evolution towards a knowledge society, which entails the need for lifelong learning and for more flexible, adaptive learning systems, inside and outside the public education system (Paquette, 2003).

The use of learning objects (LOs) is a relatively newly emerged approach and technique for modeling and implementing learning contents. It promotes the reuse and sharing of learning material between institutions around the world. The use of the Learning Objects' Instructional Technology in Learning Management Systems enables reusability and shareability of educational resources among different LMS, as well as in different context within each system (Horton & Horton, 2003). This is very important in our days as with the spread of new technologies of Information and Communication, we are living a huge demand for Web-based resources for work and learning and thus for the reusability and interoperability of digitized information materials (Jemni & Bahattab, 2005).

Wiley (2000) quotes that "Learning objects seemed to be poised to become the instructional technology of online learning." Horton & Horton (2003, p.538) refer that "Many predict that we are heading toward a learning-object economy in which people design, build, market, buy, combine, and deploy reusable modules of elearning content".

It has also been claimed that the learning object paradigm may transform online education. Whether these claims are going to prove valid or not, learning objects can always be employed to implement online learning strategies. Using learning objects technologies in appropriate ways enable teachers to have as much control as possible over the production process, and students to be supported to access online learning experiences in ways that suit them best (Reid, 2007).

In order to facilitate the widespread adoption of the learning objects approach various advisory and research groups (e.g. LTSC=IEEE Learning Technology Standards Committee, IMS=Instructional Management Systems, ARIADNE=Alliance of Remote Instructional Authoring and Distributions Networks for Europe etc) have developed and promoted instructional technology standards and have worked towards the development of information content metadata. With such standards, universities, corporations and other organizations around the world assure the interoperability of their instructional technologies, specifically their learning objects. The main standards concern packaging, communications, metadata, and quality, and more are on the way (Wiley, 2000; Horton & Horton, 2003).

Learning objects

Many definitions of Learning Objects (LOs) have been given in as many attempts to express their meaning and yet universal definition is still missing. According to Wiley (2000) "the main idea of LOs is to break educational content down into small chunks that can be reused in various learning environments, in the spirit of object-oriented

programming". The LOs "are modular digital resources, uniquely identified and metatagged, that can be used to support learning" (National Learning Infrastructure Initiative). The Learning Object Metadata Working Group (1999) of the Institute of Electrical and Electronics Engineers (IEEE) Learning Technology Standards Committee (LTSC) quotes "Learning Object is defined here as any entity, digital or non-digital, which can be used, re-used or referenced during technology-supported learning" and the same in 2002 refers to LOs as "any entity, digital or non-digital, which can be used for learning, education or training". Wiley (2000) restricted the above definition by charactering a Learning Object as "any digital resource that can be reused to support learning".

Some other definitions are more restricted as they connect Learning Objects with learning aims and under this scope LOs must not be confused with information objects (Metros & Bennet, 2002). Dalziel's (2002, p.7) approach gives to the term "Learning Object" a more narrow meaning as he defines: "A Learning Object is an aggregation of one or more digital assets, incorporating meta-data, which represent an educationally meaningful stand-alone unit". In the same direction McCormick (2003) supports that Learning Objects should include some learning objectives and outcomes, assessments and other instructional components.

The New Media Consortium (NMC), as part of its Learning Object Initiative, has adopted the following definition for Learning Objects: "A learning object is any grouping of materials that is structured in a meaningful way and is tied to an educational objective. The "materials" in a learning object can be documents, pictures, simulations, movies, sounds, and so on. Structuring these in a meaningful way implies that the materials are related and are arranged in a logical order. But without a clear and measurable educational objective, the collection remains just a collection" (R.S. Smith, 2004).

The above definition refers to any digital asset which can be used to enable teaching or learning. It does not require a learning object to be of some particular size. It may refer to many different types of objects, from simple images or video clips to collections of objects arranged in one or more sequences (Tzikopoulos, Manouselis, & Vuorikari, 2007). These learning objects can be delivered or accessed over the Internet or across a local or private network. Learning objects are instructional tools

which are more reusable and more able to be transported and used in multiple contexts than the traditional instructional tools. As Reid (2007) supports the learning object technology provides the capacity for interoperability, scalability and functionality in the development of E-learning systems. We are approaching a time when, through the design and deployment of learning objects, we can: reuse parts of training rather than starting from scratch every time; cost-effectively and quickly customize learning to meet the needs of the individual or small group; and, dramatically reduce maintenance costs (The Herridge Group, 2002).

In the literature many questions and discussions arise, and most of them remain still open, concerning the size of learning objects (how large a learning object should be), the level of instruction within which they will be used (course, unit or individual lesson), and the type of learning objects. There are different ideas on what is the lowest desirable level of granularity for reusable learning objects. Many researchers believe that it is desirable for learning objects to contain only one concept or one objective because they are more reusable or re-purposable than complex objects that focus on a number of concepts (Edwards, Rai, Phillips, & Fung, 2007). There is also some debate whether learning objects should contain instructional design data in relation with their reuse, as pedagogical and instructional design data may limit the reuse of a learning object to a particular context or learning method.

Concerning the type of learning objects we must mention Wiley's taxonomy (2000), which defines five types of learning objects according to certain qualities which learning objects have. Such qualities are the number of individual elements (such as video clips, images etc) combined in order to make the learning object, the type of learning objects that may be combined to form a new learning object, the reusable component objects, the manner in which the learning object type is generally used, the common function of algorithms and procedures within the learning objects, etc.

It is the difference in the degree to which (or manner in which) they exhibit these qualities that makes one type of learning object different from another. The taxonomy differentiates between five learning object types:

- fundamental
- combined-closed
- combined-open
- generative-presentation

• generative-instructional

Wiley supports that his taxonomy of learning object types is instructional design theory-neutral, making it compatible with practically any instructional design theory (Wiley, 2000).

Dalziel (2002) defines three levels of aggregation with the smallest objects "digital assets" consisting of the basic digital resources (e.g. texts, HTML, images etc), "learning objects" which consist of learning content with stand-alone educational value, based on one or more digital assets and last "learning activities" which include discussion groups and chat rooms and are made up of one or more learning objects. Furthermore, Edwards et al. (2007) have proposed a conceptual framework that defines four different levels of aggregation/granularity for Learning Objects:

- data objects,
- information objects,
- knowledge objects and
- learning objects.

Each of the four objects has a different level of granularity and complexity. Data objects (e.g. images, videos, audio files) and information objects (e.g. an image or audio resource and textual document containing information about the image or the audio, a news item with or without images, a textual document which imparts information about a particular topic) are free of pedagogical metadata while knowledge (e.g. lecture notes with or without added resources, a lesson that includes reference documents and a practical exercise, a document that gives instructions on how to carry out a problem solving) and learning objects contain pedagogical metadata. They conclude (Edwards et al., 2007) that learning objects could contain one or more data objects, information objects or knowledge objects. A Learning Object will contain educational metadata, learning objectives and may contain some form of assessment for the topic covered.

Cheal and Rajagopalan (2007) have constructed a taxonomy to show the relationships between educational theory, instructional design and learning objects. They divide learning objects in simple and complex, accordingly to the possibility of reuse and the possibility of interactivity when used. Complex learning objects combine simple learning objects together to form larger objects that have the possibility of interactivity.

It is obvious that a number of unresolved issues still exists, which affects the reuse and interoperability of Learning Objects such as the absence of a standard definition for learning objects and their granularity or the absence of a common accepted typology of learning objects.

Another issue, concerning the sequence of LOs, arising from the instructional design theories, is addressed later, under the relevant section.

Learning Object Metadata

Metadata is defined as structured information that describes, explains, locates, or otherwise helps retrieving, using or managing a resource. It is often called "data about data" or "information about information" (Wiley, 2000; Duval, Hodgins, Sutton, & Weibel, 2002; NISO, 2004).

In the context of E-learning technology, standards are generally developed to be used in systems design and implementation for the purposes of ensuring interoperability, portability and reusability. These attributes should apply to both the systems themselves and the content and the metadata they manage (Friesen, 2005). The development of technical standards and specifications in E-learning can be seen as part of the maturation of this recently emerging field or industry (Friesen, 2005).

Several metadata specifications have been developed in recent years. These include IMS Metadata, Dublin Core, ARIADNE and CanCore specification. With the joint submission of metadata specifications by IMS and ADRIANE to IEEE LTSC, the joint specifications have since been approved as a standard and renamed as IEEE LOM (Koohang & Harman, 2007).

According to the IEEE Learning Objects Metadata (LOM) specifications, characteristics of a Learning Object (LO) are grouped under certain categories: general, life-cycle, meta-metadata, technical, educational, rights, relation, annotation,

classification. However, the LOM standard is a general-purpose specification and in many cases it does not capture the *specificities* of certain domains. For this reason, metadata systems allow for extensions so that particular needs of a given application can be accommodated (Duval et al., 2002). Such extensions may take the form of new terms for existing vocabularies, new vocabularies for existing elements or new elements.

Many researchers have proposed new ways of categorizations of metadata, namely Recker and Wiley (2001) who differentiate metadata that is created by the original design team of learning objects, calling them "authoritative metadata", from the metadata which is generated by users, calling them "non-authoritative metadata"; Sanchez and Sicilia (2003) have proposed the Design by Contract (DBC) learning objects, providing metadata information expressing requirements and outcomes as the best way of "preparing" learning objects to a later search, selection and retrieval from LO repositories; many others have advocated going beyond the existing description model with a greater emphasis on instructional design and pedagogical aspects for more effective use and reuse of learning objects (Koohang & Harman, 2007).

Whatever the system of specifications used to describe LOs, metadata play a vital role in efficient search, retrieve and adaptation of resources, as well as in combining them for creating new learning experiences.

Learning Objects, instructional design and andragogy

In order to enable teaching or learning, learning objects have to be connected with instructional design theories and pedagogy/or andragogy¹ (depending on the age of the learners). Bednar et al. (1991) pointed out the importance of linking theory to

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¹ Andragogy is a term first used by Malcolm Knowles, to describe the education of adults. In contrast to pedagogy, the teaching of children, Andragogy refers to "the art and science of teaching adults" (Knowles, 1980, p.43)

practice in the design and development of any instructional system and emphasized that "... effective design is possible only if the developer has a reflexive awareness of the theoretical basis underlying the design". In the same direction Wiley (2000, p. 29) quotes "Like any other instructional technology, learning objects must participate in a principled partnership with instructional design theories if they are to succeed in facilitating learning". He also notes that the potential of learning objects as an instructional technology is great, but will never be realized without a balanced effort in technology and instructional design areas. Lim (2007, p. 90) stresses that "The driver of a successful learning object-based environment, like any other online environment, should be pedagogy and not technology" and points out that "Learning objects by themselves will not transform learning. Transformation comes by incorporating learning objects as an integral part of curriculum". Furthermore, some have already indicated that without clearly stated instructional objectives, the development and use of learning objects is subject to becoming just another technological fad (Hudak, 2007).

Instructional design considerations entail the most appropriate way of designing an instruction for teaching while pedagogical/andragogical considerations focus on how learning occurs. Both instructional design and pedagogical/andragogical considerations are required to complement each other in the design of effective instruction and learning (Lim, 2007).

Instructional Systems Design

Instructional Systems Design (ISD) is the systematic process in which all parts (teachers, students, materials, and learning environment) are considered critical to successful learning (Dick & Carey, 1978; Dick, L. Carey, & J. Carey, 2001) The process broadly consists of determining the current state and needs of the learner, defining the end goal of instruction, and then designing, developing, implementing and evaluating the instruction (Gagne & Briggs, 1979; Cranton, 2000; Gustafson & Branch, 2002; Kruse, 2002; Malachowski, 2002, L. Nadler & Z. Nadler, 2003;

Koohang & Harman, 2007). There are many instructional design models but most are based on the ADDIE generic model (Kruse, 2002; Malachowski, 2002; Molenda, 2003), an acronym used to designate the five steps process of instructional design which begins with Analysis, Design, Development, Implementation and Evaluation. Each step has an outcome that feeds the subsequent step. During analysis, the instructional problem and the goals and objectives are clarified, while the learners' needs, existing knowledge, skills and attitudes, and any other relevant characteristics are investigated. Analysis also considers the learning environment, any constraints and the delivery options. During Design phase, a systematic process of specifying learning objectives takes place. The Design phase is where the instructional strategies are designed and media choices are made. The actual creation of the content and learning materials based on the Design phase is completed in the Development phase. During Implementation, the plan is put into action and a procedure for training the learner and/or educator is developed. Materials are delivered or distributed to the learners' group. After delivery, the effectiveness of the training materials is evaluated. The phase of Evaluation consists of formative and summative evaluation. Formative evaluation is present in each stage of the ADDIE process. The ADDIE model proceeds from one stage to another with formative evaluation and revision occurring throughout the design process to ensure that the object of design does not run askew from the instructional goals (Farrell & Carr, 2007). Summative evaluation consists of tests designed for criterion-related referenced items and providing opportunities for feedback from the users.

Sabau (2007) supports that the ADDIE model is applicable to the creation of learning objects and there are many models concerning E-learning which have been based on the strengths of ADDIE model e.g. the 'Learning Object Design Model' (Farrell & Carr, 2007).

Dick and Carey (1978), with their Systems Approach Model, view instruction as an entire system focusing on the interrelationship between context, content, learning and instruction. The components of the Systems Approach Model, also known as the Dick and Carey Model, are: Identify Instructional Goal(s), Conduct Instructional Analysis, Analyze Learners and Contexts, Write Performance Objectives, Develop Assessment Instruments, Develop Instructional Strategy, Develop and Select Instructional

Materials, Design and Conduct Formative Evaluation of Instruction, Revise Instruction and Design and Conduct Summative Evaluation. With this model, components are executed iteratively and in parallel rather than linearly.

Reigeluth (1996) supports that the Instructional Systems Design (ISD) process is basically a process for making decisions about the nature of instruction - the nature of ways to facilitate learning. His new paradigm of ISD models view the ISD process as an iterative series of ASEC cycles (Analysis-Synthesis-Evaluation-Change) for progressive sets of design decisions. He defines Analysis, Synthesis and Evaluation as three useful activities for making good decisions and draws attention to issues of Change needed to support the instructional system.

Lim (2007) lists some of the major instructional design processes which constitute the macro perspective of a design for instruction:

- 1. Identifying learning/training needs and outcomes (needs analysis in order to fill the gap between existing condition and the desired one)
- 2. Specifying learning/training goals based on the learning/training needs (specifying goals)
- 3. Formulating learning objectives
- 4. Establishing structure for instruction and learning, which include the nature and scope of domain knowledge, skills and attributes to be covered, course structure, course duration, prerequisites, learning resources, support etc.
- 5. Determining assessment strategy
- 6. Evaluating the course or module or program

All the aforementioned approaches converge in the basic five steps of Analysis, Design, Development, Implementation and Evaluation and in all of them the process begins with a rigorous analysis of the needs of the learners on the subject of the course and the outcome of this analysis leads to the development of the learning objectives of the course. The learning objectives lead to the determination of the necessary course materials, which are then broken into units or modules. At this stage designers and developers may collaborate with instructors for the creation of the learning objects. When the learning objects and structure of the course are in place,

the instructor will then implement and evaluate this design by engaging the learners in participating in the course and facilitating their mastery of the subject. Feedback and observation of the learners' learning process and manipulation of the objects leads to continuous improvement and re-evaluation. The learning objects thus created become self-standing modular units, which can be re-organized in a variety of sequences depending on the objectives at hand (Sabau, 2007).

As we have seen in the aforementioned approaches the process of instructional system design and development is described as a larger or smaller number of stages/phases. Often the process is presented as a series of stages and often these procedures and their relationships to each other are shown in flow charts or diagrams. Gagne and Briggs (1979, p. 20) emphasize "that in practice there is much "recycling"-going back over previous work, modifying it in view of insights gained later. There are also "forward projections" which are later revised". And they noted (p. 40) "That is to say, in practice there is much working backwards and forward in a non-linear fashion, because work done at any one stage gives new insights into other stages" and (p. 21) "These second attempts to improve work at various stages, while costly in time and effort, actually do improve and strengthen the system, as do the later changes which are occasioned by formative evaluations and field tryouts. Even experienced designers have learned to expect imperfections in their first efforts. It is this very recycling, based on empirical testing of the system, that leads to its later effectiveness".

The ESG Framework
PhD Thesis of Maria Pavlis-Korres, University of Alcalá

Multicultural education

"An important aim of teacher education in the first decades of the new century is to help teachers acquire the knowledge, values, and behaviors needed to work efficietively with students from diverse groups. Teachers also need to acquire the knowledge and skills necessary to help students from mainstream groups to develop cross-cultural knowledge, values, and competencies"

J.A. Banks & C.A.M. Banks (2001)

Diversity is a principal characteristic of all the expressions of life in modern multicultural society, with the education area unquestionably included. *Educators* and learners of different cultural backgrounds inevitably meet and interact in educational procedures (Freire, 1970; Brookfield, 1986, 1995; J. A. Banks and C. M. Banks, 1989; Knowles, 1998; Mezirow, 1991; Gorski, 2001; Ndura, 2006; Rogers, 2007). Educators take/bring with them in the classroom their values, beliefs, dispositions, and practices which will influence their ability to work with learners effectively. Their knowledge, awareness, understanding, and attitudes towards learners - especially those who are ethnically and culturally different from themselves – will necessarily influence the teaching and learning dynamic (Jackson, 1995). There has been growing debate about the best way to face the educational challenge of learners' diversity (Coballes-Vega 1992). Some researchers (S. M. Wilson, 1990) have raised questions about the efficacy of teacher education programs attempting to deal with learner diversity and exploring changes in prospective teachers' roles. However, other researchers (J. A. Banks and C. M. Banks, 1989; Bennett, 1990; Sleeter and Grant, 1988; Gay, 2000; Villegas and Lucas, 2002; Irvine, 2003) not only support teachers' educational programs but they have also recommended the content that must be included in the teachers' education curriculum.

Educators of special groups and transformative learning

In this document, as already stated, with the term Special Group we define the social group whose characteristics (social, cultural, ethnic, linguistic, physical, etc) cause social exclusion, marginalization and stigmatization to its members (i.e. immigrants, Roma, repatriated-refugees, prisoners/ex-cons, ex-addicts, persons with special needs etc) (Pavlis-Korres, 2007, 2009).

For the effective education of Educators of Special Groups (ESG), ESG must acquire sufficient knowledge of the characteristics of the special group they have to deal with (Sleeter and Grant, 1988; Sleeter, 1991; J.A. Banks, 1997; Howard, 1999; Gay, 2000; Irvine, 2003). It is also equally important that they become aware of their own attitudes towards the group, they reflect critically on these attitudes, and seek transformation and improvement (Goffman, 1963; Freire, 1970; Allport, 1982; Tomlinson, 1982; Quicke, Beasley, & Morrison, 1990; G.S.A.E., 1999; Gorski, 2001; Ziegahn, 2001, 2005; Irvine, 2003; Cranton 2006).

According to Mezirow (1991, 2000) -the founder of Transformative Learning Theory - a process for personal perspective transformation starts by experiencing a disorienting dilemma, (which is triggered by a life crisis or major life transition, although it may also result from an accumulation of transformations in meaning schemes over a period of time,) when an individual encounters an alternative perspective and prior habits of mind² are called into question. Mezirow supports that during a life crisis or dilemma people experience disharmony and are receptive to learning. Less dramatic predicaments, such as those created by a teacher, also promote transformation (Torosyan, 2007) Habits of mind are uncritically absorbed from our family, community and culture. They include distortions, prejudices, stereotypes, and simply unquestioned or unexamined beliefs (Cranton, 2006). They tend to remain unquestioned unless we encounter an alternative perspective that we cannot ignore. If the individual responds to an alternative habit of mind by

² Habit of mind is a way of seeing the world based on our background, experience, culture, and personality. Since all of our habits of mind are determined by our personal story, it is reasonable to expect that they are interrelated (Mezirow 2000, Cranton 2006)

reconsidering and revising prior belief systems, the learning becomes transformative. As Mezirow (1991, p. 6) put it "reflective learning becomes transformative whenever assumptions or premise are found to be distorting, inauthentic, or otherwise invalid". Merriam and Caffarella (1999) codify Transformative Learning into three phases: critical reflection, reflective discourse and action.

Mezirow (2000, 2003) sees discourse with others as playing a central role in transformative learning. He defines discourse as dialogue involving the assessment of beliefs, feelings, and values. Discourse is a special kind of dialogue or discussion in which people try to understand and justify their interpretation of events or experiences. It does not involve arguing or trying to win someone over, but rather collaborating in order to understand. The sharing of experiences and values within a comfortable group atmosphere can obviously act as a stimulant for critical questioning. We need to engage in conversation with others in order to better consider alternative perspectives and determine their validity. Having an open mind, listening carefully and empathically, seeking common ground and suspending judgment, help us assess alternative beliefs as we participate in discourse. We often are not even aware of our uncritically assimilated assumptions until someone asks the right question or points out that we are behaving in a certain way. Reflective discourse is, therefore, a critical element of transformative learning (Cranton, 2000, 2006). The educator's role in establishing an environment that responds to the needs of the learners, fosters a meaningful group process, provides support and encouragement, builds trust and care and facilitates the development of sensitive relationships among learners, helps challenge people's assumptions and beliefs, accepts and respects learners is a fundamental principle of fostering transformative learning (Taylor, 1998; Cranton, 2006). The goal is to create a community of individuals who are "united in a shared experience of trying to make meaning of their life experience" (Loughlin, 1993). The educator also serves as a role model by himself demonstrating a willingness to learn and change (Cranton, 2006). The educator following Freire's writings (1970) is often a co-learner. The educator who is a co-learner is a participant in the process of learning-discovering, challenging and changing. The educator fostering emancipatory learning may also be provocateur, one who challenges, stimulates, and provokes critical thinking (Brookfield, 1991). A good educator can listen and then ask the kinds of questions that help an individual critically reflect on

his or her habits of mind. Critical questioning can be used to stimulate content, process, and premise reflection (Cranton, 2006). These types of questions can lead people to make their assumptions explicit and to question the sources and consequences of their assumptions.

Recognition, knowledge, appreciation and respect of the diversity of the special group by the educators through critical reflection (Brookfield, 1995) as well as the awareness and transformation of the educators' attitudes towards the special group (Mezirow, 1991; Gorski, 2001; Cranton, 2006) are necessary for a multicultural educational environment which values diversity and appreciates differences (Shaw, 1996, 2007).

The awareness and the transformation of existing attitudes accordingly to the related adults' education literature on transformative learning could occur voluntarily (Granton 2006). Transformative learning is defined as a process by which previously uncritically assimilated assumptions, beliefs, values, and perspectives are questioned and thereby become more open, permeable, and better justified (Granton, 2006).

People may not always deliberately set out to critically question their beliefs and values; many times transformative learning is prompted by an outside event and that event may be unexpected, hurtful, or devastating. Even so, people have the choice of being critically self-reflective or not. In a classroom or other learning environment where the educator has transformative learning as a goal, participants still voluntarily engage in the process. As Cranton (2006, pp.6-7) writes "If someone were to mandate transformation or try to force people into the process, I think we step outside of the definition of transformative learning and into something like brainwashing or indoctrination".

Furthermore, the use of activities which raise consciousness and increase self-awareness as life stories, role plays, keeping a diary, could encourage reflection and initiate/support transformative learning (Cranton, 2006).

In transformative learning the role of rational and the affective are both important. Transformative learning has two layers that at times seem to be in conflict: the cognitive, rational, and objective and the intuitive, imaginative, and subjective

(Grabov, 1997). Although the emphasis has been on transformative learning as a rational process, more recently, researchers have been oriented to incorporate emotional, spiritual and imaginative aspects in the transformation process (Dirkx, 1997; Cranton, 2006). Furthermore, an alternative approach to transformative learning theory is the one of relational transformation or connected approach which supports that people are seen as learning through relationships with others, integrative and holistic ways of seeing the world, understanding others' points of view (rather than debating them), empathic listening, and nurturing and caring (Cranton 2006). According to the connected approach the more the learners disagree, the more they try to understand how the other feels, the more they make an effort to enter into another's frame of mind. As Cranton (2006, p. 98) notes "this could be the crux of the transformative experience-entering into another's frame of mind with empathy rather than critically questioning or challenging points of view as is at the heart of Mezirow's perspective".

Transformative learning requires more time and energy than other types of learning as it requires raising consciousness, reexamining relationships, and redefining personal values and meanings, as well as testing new meanings, values, strategies and skills (Brundage & MacKeracher, 1980).

Acquisition of the essential knowledge about special groups and, more importantly, the development and transformation of the required attitudes are indispensable to all educators of special groups, regardless of the subject each educator is teaching.

Therefore, fostering the cognitive development as well as the affective development of the educators constitutes the foundation of the content of the LOs targeted at educators of special groups. Furthermore, as educators are adults, the principles of Adult Education must be followed in the design and the development of such LOs, taking into account the characteristics of adults as learners, the effective ways through which adults learn and the role of the educator of adults (Knowles, 1984; Jackson & Caffarella, 1994; Jarvis, 1995; Rogers, 2002, 2007).

Compatibility between educator and learner

Educators are not a homogenous group as they have different social, cultural, ethnic, linguistic and physical profiles which influence their work in the classroom (J. A. Banks, 1997; Gay, 2000; Irvine, 2003; Ndura, 2006). The educational needs of each educator may vary considerably, even if they have a common educational background or they are teaching the same subject. Some researchers (First & Carrera, 1988; Bennett, 1990) have focused on the miscues which occur between educators and learners based on misinterpretations, and generalizations, made about their respective cultural background.

There are many terms attempting to describe a variety of effective teaching approaches such as: culturally responsive, culturally responsible, culturally appropriate, culturally congruent, culturally compatible, and culturally relevant. All these terms indicate that educators should be responsive to their learners by incorporating elements of learners' culture into their teaching. In fact, there is general agreement that educators should be responsive to all learners and the learners' social environment (Wittrock, 1974; Cruickshank, 1990; Cooper, 1993; Irvine, 2003). Irvine (2003) also, refers to the phenomenon of *lack of cultural synchronization* when the cultures of African Americans and other students of color are different to the culture of the teacher and as a result are often disregarded. In other words, educators must be *compatible* with their learners in order to maximize the outcome of the educational procedure. The type and level of *compatibility* of each educator with their learners must be assessed and improved.

With the term compatibility we refer to the level of knowledge and acceptance of, and positive attitude towards, the special group on the part of the educator (Pavlis-Korres, 2007, 2009).

The type of compatibility between educators for Special Groups and the respective learners varies in relation with the parameters that define the specific special group itself. These parameters can be social, cultural, ethnic, linguistic or physical. The values for each type of compatibility are: very low, low, medium, high, and very high. For example a Rom teacher has high cultural, linguistic and ethnic compatibility with

a Roma group that he is going to teach, in contrast with a non-Rom educator who has never before met a Rom and he is going to teach the same group, the values for whom/her are very low.

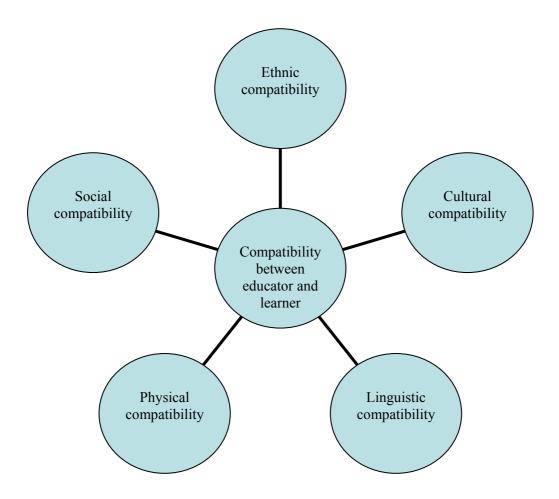


Figure 1. The types of compatibility between educator and learner

In reference with the term *compatibilitly*, its types and its values, we must define the vocabulary to be used for each type:

Table 1. Vocabulary of types and values of compatibility

Social compatibility	It defines the level of
	knowledge, of positive attitude
	and acceptance of the social
	status of the special group by
	the educator
	Values: very low, low,
	medium, high, very high
Cultural compatibility	It describes the level of
	knowledge, of positive attitude
	and acceptance of the culture of
	the special group by the
	educator
	Values: very low, low,
	medium, high, very high
Ethnic compatibility	It describes the level of
	knowledge, of positive attitude
	and acceptance of the ethnic
	identity of the special group by
	the educator
	Values: very low, low,
	medium, high, very high
Linguistic compatibility	It describes the level of
	knowledge, positive attitude and
	acceptance of the linguistic
	identity and specialties of the
	special group by the educator
	Values: very low, low,
	medium, high, very high

Physical compatibility	It describes the level of
	knowledge, positive attitude and
	acceptance of the
	disabilities/impairments of the
	special group by the educator
	Values: very low, low,
	medium, high, very high

The higher the level of compatibility between educator and learner, the more efficient their approach to the special group will be - regardless of the subject the educator is teaching. The higher the level of compatibility between educator and learner, the more their *quality* as an educator is improved, a factor which –as many researchers support (Darling-Hammond, 1999; Wenglinsky, 2000; Irvine, 2003) - has a positive influence the success of their learners.

The main goal of the present research is to focus on compatibility between educator and learner in the design and development of a personalized E-learning framework aiming to improve their quality as educators of special groups.

The ESG Framework
PhD Thesis of Maria Pavlis-Korres, University of Alcalá

Adults' Education

"Adult learners are mature, socially responsible individuals who participate in sustained informal or formal activities that lead them to acquire new knowledge, skills, or values; elaborate on existing knowledge, skills, or values; revise their basic beliefs and assumption; or change the way they see some aspect of themselves or the world around them"

Cranton (2006)

It was in 1968 when in the United States Malcom Knowles³ used the term andragogy⁴ in an article in Adult Leadership and he has become known as the principle expert of andragogy which is a set of assumptions about how adults learn.

Malcolm Knowles (1984) who is considered the father of Andragogy worked in terms of identifying the characteristics of adult learners as opposed to children as learners. His five assumptions are listed below:

- 1. Self-concept: As a person matures his self concept moves from one of being a dependent personality toward one of being a self-directed human being.
- 2. Experience: As a person matures he accumulates a growing reservoir of experience that becomes an increasing resource for learning.
- 3. Readiness to learn. As a person matures his readiness to learn becomes oriented increasingly to the developmental tasks of his social roles.
- 4. Orientation to learning. As a person matures his time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject centeredness to one of problem centeredness.

4

³A. Andragogy ("andr"-meaning "man") could be contrasted with paedagogy (from greek paedagogos, from "pais"-meaning child+ "agogos" meaning leader).

B. Andragogy's roots can be traced back to Alexander Kapp, a German grammar teacher who used it to describe Plato's educational theory (Knowles, Holton, & Swanson, 1998, p. 59). It appeared again in 1921 when another German, Social Scientist, Eugen Rosenstock claimed that "adult education required special teachers, special methods, and a special philosophy" (Knowles, Holton, & Swanson, 1998, p. 59). There is evidence that discussion of andragogy continued in Europe until Dusan Savicevic, a Yugoslavian adult educator, first discussed the concept. After Knowles, numerous adult educators including Brookfield (1986), Mezirow (1991) and Merriam (1999) have addressed the concept of andragogy and/or discussed how it can be used to facilitate adult learning.)

5. Motivation to learn: As a person matures the motivation to learn is internal.

Characteristics of adults as learners

Studying the literature on adults' learning brings up the fact that adults as learners have specific characteristics that set them apart from children.

Although the characteristics pointed out by authors and researchers are various, there seems to be a general consensus in the literature on some common characteristics that have an impact on adults' learning efficacy and the overall classroom experience (Knowles, 1980, 1984, 1998; Cross, 1981; Brookfield, 1986, 1990; Jackson & Caffarella, 1994; Jarvis, 1995; Cranton, 2000; Leftheriotou, 2005; Rogers, 2007).

These characteristics of adults as learners as well as the requirements for effective adult learning must be included in the LOs' design and development.

Table 2. Characterists of adults as learners

- 1. Adults participate in the learning process with concrete intents, goals and expectations. Adults' orientation to learning is life-centered
- 2. Adults already have certain knowledge and experience as well as established perspectives
- 3. Adults have already developed personal styles of learning
- 4. Adults prefer self-directed learning and active involvement in the educational endeavor
- 5. Adults have to deal with certain barriers on their learning process

1. They participate in the learning process with concrete intents, goals and expectations

Adult learners participating in educational programs are motivated by an internal feeling of 'need'. They are coming in the educational process with concrete and immediate goals (e.g. professional, social, personal development). Learners have specific expectations from the learning process and when this process meets their expectations then their motivation for learning is empowered, their positive attitudes are enhanced and their negative attitudes are transformed to positive ones, contributing to the achievement of the educational goals. As Knowles (1998) quotes "Adults are life-centered (or task-centered or problem-centered) in their orientation to learning. Adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems that they confront in their life situations. Furthermore, they learn new knowledge, understandings, skills, values and attitudes most effectively when these are presented in the context of application to real-life situations."

In general, we can assume that the education corresponds to the needs and the expectations of the learners when it takes into consideration the fact that adults are in a development procedure which is constantly evolving (changes are happening constantly in their lives in many and different levels, i.e. physical and intellectual development, feelings, relations, interests, professional life) and the educational process is a part of this procedure.

2. They already possess certain knowledge and experience as well as established perspectives

Adults enter a learning situation having a specific spectrum of prior knowledge and a variety of life experiences – different for each individual. Adults would prefer that these knowledge and experience are both considered and exploited during their current educational process. Learning is facilitated when the instruction is related to these experiences. The rejection of learners' experience is often taken in as a personal rejection which leads to negative reactions and attitudes in the context of the educational process. On the other hand, in some cases the experience, the existing knowledge and the established perspectives could be useless, inappropriate or

prohibitive for the specific education. In this case these assets may have a negative effect on learning.

3. They have already developed personal styles of learning

Each adult has already developed his own learning 'model'. In order to have an effective learning process, the learning style and personal pace of each learner has to be taken into consideration, leading to the adoption of the appropriate learning methods and techniques.

4. Adults prefer self-directed learning and active involvement in the educational endeavor

Adult desire and strive for self-directedness, emancipation and active participation in every situation in life in which they are involved. This fact affects their attitude towards active participation in the educational level. Usually, adults prefer to be self-directed learners.

They wish to be asked for their opinion and to participate in all stages of an educational program (design, conditions of implementation, educational process and evaluation). They often question the content and the process of the educational program in which they participate.

In some cases though, adults in a new learning process or those returning to school after many years may be anxious or uncomfortable and may demonstrate dependent behaviors. Therefore, introducing self-directed learning may increase their anxiety and discomfort. The role of the educator is then to gradually foster independence and self-direction.

5. They have to deal with certain barriers on their learning process

The educational process of adults may face barriers which could render the whole procedure ineffective or cause its termination if not dealt with appropriately. There are three main categories of barriers which adults face as learners (Karalis & Koutsonikos, 2003; Rogers, 2007):

 Barriers related to the organization of educational programs (goals, coordination, infrastructure etc)

- Barriers arising from the situation in which the learners are i.e. physical or contextual factors, concerns or troubles related to personal problems, bad relation between teacher and learners, or between learners, lack of communication inside the learning group.
- Internal barriers which the adults may possess towards themselves. The barriers of this category are further classified in those due to previous knowledge, skills and attitudes of learners (i.e. adherence in existing perceptions, misconceptions) and those arising form psychological factors (i.e. pressure, insecurity, fear of failure or criticism). The existence of internal barriers in the learning process often leads to the development of defensive mechaniSMS which are sometimes expressed lightly (e.g. negative attitude, reasoning, change of topic) and other times strongly (direct or indirect resignation from the educational process).

By studying the above characteristics we realize that in the context of adult education the learning process is influenced by many interrelated factors with unpredictable results. All the characteristics of adults could have controversial effects in the learning process, operating either as catalysts for effective learning or as hindering factors (Rogers, 2007), while variety is the main characteristic of adult learners and adult learning processes.

Requirements for effective adult learning

The main requirements for effective adult learning, as these are defined by taking into consideration the above mentioned characteristics and in the relative literature are depicted in table 3: (Cross, 1981; Courau, 1994; Noye & Piveteau, 1997; Jaques, 2000; Leftheriotou, 2005; Rogers, 2007).

Table 3. Requirements for effective adult learning

Education is centered on the learners	The education meets the needs, the interests and the expectations of learners.
	The ways of learning which the learners prefer are seriously taken into consideration when instruction is organized
	The knowledge and the experiences of the adult learners should be used as much as possible in the educational process
	The orientation to learning should be life-centered; therefore the appropriate units for organizing adult learning are life situations, not subjects.
	The barriers which the learners usually deal with are defined and ways to overcome these are sought after.
The active participation of the learners is both encouraged and intended	The learners are participating actively in the transformation of the learning process (curriculum, choice of educational material and methods as well as the arrangement of many practical issues which rise during the education e.g. time schedule of the meetings, use of audiovisual media etc).
	In the learning process active educational practices are used. Through these practices the development of a critical way of thinking is promoted as well as the "learning to learn" strategy in order for the learners to be able to continue their learning progress after the end of educational process.
The creation of a learning environment based on communication, cooperation and mutual respect	Bidirectional relations between educators and learners are cultivated, governed by sincerity, respect and acceptance.
	Relations of collaboration, mutual respect and trust are cultivated between learners, functioning as a group.

The learning environment created by adherence to the above requirements results in a certain mode of operation of the educator, the role of which is analyzed in the next section.

The role of the educator of adults

Because of the significance of the educator in the learning process, many specialists in adults' education have elaborated on the various qualities the educator must have in order to succeed in his task.

The educator of adults needs to adapt his philosophy and role in order to respond to the diverse individual or group students' characteristics. The educator has to act as an exhorter, motivator, facilitator, inspirer, counselor, animator and adviser instead of adopting the monolithic teacher-authority model (Courau, 1994; Jarvis, 1995; Noye & Piveteau, 1997; Rogers, 2002, 2007).

The educator of adults has to reorient from "educating people" to "helping them learn" (Knowles, 1980). He must be open-minded and flexible in order to create the appropriate learning environment in which the learners contribute, share and mutually participate in many of the decisions within the overall structure the instructor has set for the course, e.g., class times, methods of evaluation, attendance requirements, objectives and goals. The resultant class structure is then intellectually functional for the learners and is more likely to meet their needs.

Knowles believes that adult educators should serve as facilitators of learning rather than content transmitters, and he offers a seven-element process model designed to bring this about. According to Knowles (1984, p. 117), the model consists of the facilitator "(1) establishing a climate conducive to learning; (2) creating a mechanism for mutual planning; (3) diagnosing the needs for learning; (4) formulating program

objectives that will satisfy these needs; (5) designing a pattern of learning experiences; (6) conducting these learning experiences with suitable techniques and materials; and (7) evaluating the learning outcomes and rediagnosing learning needs".

The educator must also serve as a role model by himself, demonstrating a willingness to learn and change (Cranton, 2006). The educator following Freire's writings (1970) is often a co-learner. The educator who is a co-learner is a participant in the process of learning-discovering, challenging and changing.

Billington (1989, 1990) found that in environments where non-authoritarian, self-directed learning was evident, there were significant indications of ego development among learners. This, then, sets in motion the energy with which self-direction begins to perpetuate itself. Individuals gain confidence in their ability to learn, which in turn tends to drive them to experience additional learning situations that they might otherwise have avoided or even considered impossible.

The educator plays an important role in creating an environment which favors and promotes critical thinking. A good educator can listen and then ask the kinds of questions that help an individual critically reflect on his or her habits of mind. Critical questioning can be used to stimulate content, process, and premise reflection (Cranton, 2006). These types of questions can lead people to make their assumptions explicit and to question the sources and consequences of their assumptions.

Stephen Brookfield (1995) targets the adult learner and asserts that there are two central activities involved in critical thinking. The first consists of helping people analyze and challenge the assumptions under which they, and others, are thinking and acting. The other is exploring and imagining alternatives to their current ways of thinking and acting. Brookfield also describes the ideal critical thinking environment for adults as one where six conditions are present:

- *diversity and divergence would be encouraged;*
- *flexibility of format and direction would be welcomed;*
- risk taking and spontaneity would be valued;
- facilitators would model openness and critical analysis;
- there would be no presumption of perfection on the part of the facilitator;

• and there would be skepticism of final answers.

Sisco (1984) has pointed out some of the personal attributes an adults' educator should possess. They are: empathy, use of reward, respect for the dignity and worth of each individual, a sense of fairness and objectivity, willingness to accept new things and ideas, patience, sensitivity, humility and commitment to their own lifetime learning.

Genuineness (Brockett & Hiemstra, 1985) and unconditional acceptance of students (Billington, 1989) are also considered important.

Fisher (1995) refers that the abilities to instantly adapt to situations and to be openly challenged without becoming intimidated are also extremely desirable.

More specifically the adults' educators should: (Mocker & Noble, 1981, in Jarvis, 1995; Fisher, 1995):

- Help the learner identify the starting point for a learning project and discern relevant modes of examination and reporting.
- Encourage adult learners to view knowledge and truth as contextual, to see value frameworks as cultural constructs, and to appreciate that they can act on their world individually or collectively to transform it.
- Create a partnership with the learner by negotiating a learning contract for goals, strategies, and evaluation criteria.
- Be a manager of the learning experience rather than an information provider.
- Teach inquiry skills, decision making, personal development, and selfevaluation of work.
- Help learners develop positive attitudes and feelings of independence relative to learning.
- Recognize learners' personality types and learning styles.
- Use techniques such as field experience and problem solving that take advantage of adults' rich experience base.
- Encourage critical thinking skills
- Create an atmosphere of openness and trust to promote better performance.

• Behave ethically, which includes not recommending a self-directed learning approach if it is not congruent with the learners' needs.

Additionally, as it is pointed in the next section, one of the most important tasks facing the educator of adults is selecting the instructional procedure that will yield the desired learning results. A competent choice of procedures depends upon a number of factors including knowledge of the instructional process, an understanding of participant characteristics, and a reasoned appraisal of the strengths and weaknesses of available methods, techniques, and devices. To use educational procedures effectively requires patience, sensitivity, and flexibility on the part of the educator(Hiemstra & Sisco 1990).

The E-learning environment for adults

"The involvement of the learner in the course, whether one call it interaction, engangement, or building community, is critical if an online course is to be more than a lecture-oriented course in which interaction is primarily between the learner and the content or the learner and the instructor"

R.M. Conrand & J.A. Donaldson (2004)

Taking into consideration the factors which affect adults' learning, as they have been analyzed in the previous section of this research, the online learning environment within which an adult learner could learn effectively has to meet one's needs, expectations and interests, to take advantage of one's existing knowledge and learning styles as well as to promote the multiple intelligences, active learning and participation, to respect each learner's own pace in time, space and momentum and to help overcome the barriers which an adult has to face during the educational procedure (personal, social, vocational).

As Pavlis-Korres and García Bariocanal (2008) point out, the active participation of the learners in the transformation of the learning process, the use of active educational practices, the development of a critical way of thinking and the promotion of the "learning to learn" strategy will help create personal paths beyond the short term of an educational e-course leading into lifelong learning.

Besides the adult related barriers adult learners are already facing, in an online environment they have to deal with new barriers related to access to the courses, the sense of isolation and the sense of immediacy with educator and other learners (Karalis & Koutsonikos, 2003; Waltonen-Moore, Stuart, Newton, Oswald, & Varonis, 2006). An effective educational environment has to overcome all these barriers. In the next sections we shall analyze the notion of immediacy and interaction as both are considered very important in online educational environments and affect the nature and the quality of communication and learning. In the same direction we shall elaborate on the preferable communication mode and the importance of communication tools, as well as the role of the educator in an online environment.

Immediacy and Interaction in online educational environments

Two very important intertwined issues are those of interaction and immediacy and their role in online education. Immediacy and Interaction are considered vitally important for online educational environments and affect the nature and the quality of communication (Grooms, 2003; Merlose & Bergeron, 2007).

Immediacy in online education environment

Mehrabian (1967) defined immediacy as the extent to which selected communicative behaviors enhance physical or psychological closeness in interpersonal communication or in other words lessen the psychological distance between communicators. Immediacy can have verbal and non-verbal forms. Non-verbal immediacy would therefore be understood as a sense of psychological closeness produced by physical communicative behaviors such as facial expression, eye contact, posture, proximity, and touch. Verbal immediacy would thus be a sense of psychological closeness produced by word selection. For example, the use of the word "we" fosters increased relational closeness and is considered more immediate than the comparable statement "you and I" (Woods & Baker, 2004).

Merlose and Bergeron (2007) mention that immediacy behaviors are believed to enhance instructional effectiveness in online classrooms, although the non verbal cues are absent and the construct is not easy to articulate. The experience of liking and feeling close to instructors can lead to positive effects in online classrooms and there are correlations between immediacy and affective learning (Woods & Baker, 2004; Russo & Benson, 2005).

LaRose and Whitten (2000) created a model concerning the interaction and instructional immediacy for Web-based courses. Their model incorporated not only teacher and student immediacy, but also computer immediacy, which they proposed

as a result of an ethnographic content analysis of three Web courses. Within this social cognitive framework, they concluded:

"There are three possible sources of immediacy in the virtual classrooms of the Web that may create feelings of closeness: 1) the interactions between teacher and students (teacher immediacy); 2) interactions between students (student immediacy); and 3) interactions with the computer system that delivers the course (computer immediacy). Collectively, these sources constitute instructional immediacy. In each case, learning is motivated either through social incentives (e.g., approval for good behavior, expressions of interest in the student) or status incentives that recognize or enhance the status of the learner. The immediacy mechanism is enactive if it results from the interaction between a specific individual learner and one of the other agencies present in the classroom. Immediacy is vicarious if it operates through the observation of other learners as they interact "(p. 336).

Butland and Beebe (1992) find evidence that instructor immediacy in a synchronous E-learning environment, such as immediate verbal and nonverbal communications, including timely feedback and use of emoting in text (such as using a word or phrase enclosed in angle-brackets to express emotion, e.g., <sigh>, <grin>), promote increased learning. Grooms (2003) in her study concerning communication immediacy in an online doctoral level course points out the importance of the nature and medium of response as well as the frequency of response as variables of interaction. Thus, online educators need to manifest immediate behaviors when providing feedback to distant learners. Immediacy concerning time is very crucial in order to overcome time and space as barriers and promote interaction in online learning.

Interaction in online educational environment

Interaction is at the heart of the online learning experience. Moore's transactional distance theory considers interaction (1989) a defining characteristic of education and regards it as vitally important in the design of distance education.

Researchers have shown (Booher & Seiler, 1982; Thompson, 1990; Fulford & Zhang, 1993) that interaction is a significant component in promoting learners' positive attitudes towards distance education and when learners perceive a high level of interaction, they will be more satisfied, but when they perceive low interaction, they are dissatisfied and their academic achievement is harmed.

Moore (1989) identified three kinds of interaction that support learning: learner-content, learner-instructor, and learner-learner interactions.

Learner-content interaction is the process in which students examine, consider, and process the course information presented during the educational experience (learners' interaction with the knowledge, skills and attitudes being studied). According to Moore and Kearsley (1996, p. 128), "Every learner has to construct knowledge through a process of personally accommodating information into previously existing cognitive structures. It is interacting with content that results in these changes in the learner's understanding". Learner-instructor interaction is communication between the instructor – educator and the learner in a course. In the case of online learning, such interaction usually occurs via computer-mediated communication and is not strictly limited to instructional communication that occurs during the educational experience, but may include advising, offline communication, and personal dialogue. Interaction with instructors includes the myriad ways by which instructors motivate, enhance and maintain the learners' interest as well as they present information and demonstration of skills, modeling of certain attitudes and values or they organize, evaluate, counsel, support and encourage learners.

According to Rovai (2002) in Asynchronous Learning Networks (ALN) learner-instructor interaction takes the form of intellectual discussion or stimulating

exchanges of ideas. He stresses that facilitating productive interactions is probably the most important responsibility of the online educator.

Finally, *learner-learner interaction* is communication between two or more learners, alone or in group settings, with or without the real-time presence of an instructor. Such interaction often occurs via asynchronous computer-mediated communication, although it may include other forms of interpersonal and small group communication, online and offline, that occurs during the duration of a course. Learner-learner interaction among members of a class or other group is sometimes extremely valuable resource for learning, and is sometimes even essential.

Moore at the end of the 80's supported that it was needed to organize programs to ensure maximum effectiveness of each type of interaction, and ensure they provide the type of interaction that is most suitable for the various teaching tasks of different subject areas, and for learners at different stages of development. In our days with the possibilities which the learning technology offers we can plan for all three kinds of interaction selecting the appropriate media and tools from a rich array.

This threefold interaction construct has been extended and adapted by subsequent researchers in the area of distance and Web-based learning. Other types of interaction has been added to the initial model as "learner-interface interaction" which occurs when learners use technologies to communicate with the content, ideas, and information about course content with the educator and their classmates (Hillman, Willis, & Gunawardena, 1994). According to Hillman et al. (1994, p. 40) learners need to be fully literate with the interfaces which are used in communications technologies in an E-learning course or a program, "The learner must be skilled in using the delivery system in order to interact fully with the content, instructor and other learners".

Furthermore, Burnham and Walden (1997) have defined learner-environment interaction which is "a reciprocal action or mutual influence between a learner and the learner's surroundings that either assists or hinders learning".

Anderson and Garrison (1998) added three more types of interaction: *teacher-teacher*, *teacher-content* and *content-content*. Teacher-teacher interaction considers the professional development efforts of teachers to engage one another in order to

enhance their own pedagogical abilities. Teacher-content interaction is proposed as another component in the interactive model, because new technologies enable teachers to interact with the content far more easily and creatively than in the past. The authors noted that the opportunity for teachers to interact with the learning content provided by other teachers is increasing dramatically as a result of the www. Finally, they proposed content-content interaction noting the growing sophistication of online tools such as databases, search engines, and intelligent agents (Woods & Baker 2004).

Anderson (2003, p. 4) has developed an equivalency theorem concerning interaction and its educational effectiveness as follows:

Deep and meaningful formal learning is supported as long as one of the three forms of interaction (student-teacher; student-student; student-content) is at a high level. The other two may be offered at minimal levels, or even eliminated, without degrading the educational experience.

High levels of more than one of these three modes will likely provide a more satisfying educational experience, though these experiences may not be as cost or time effective as less interactive learning sequences.

This theorem implies that an instructional designer can substitute one type of interaction for one of the others (at the same level) with little loss in educational effectiveness – thus the label of an equivalency theory.

As Anderson (2003, p. 6) very accurately states, "Efforts at enhancing teacher-student interaction through an increase in teacher immediacy (McCrosky & Richmond 1992), or through use of theatrical or multimedia presentation techniques, can also be expected to increase the quality of student-teacher interaction. Further efforts at enhancing student-student interaction in the classroom through case or problem based learning activities, have long been shown to increase not only student achievement, but also student completion and enjoyment rates (Slavin 1995). In these types of activities, increased student-student interaction is substituting for student-teacher interaction".

Online communication modes

A closer examination of the barriers adults may face in an E-learning environment reveals that some of them are related with E-learning itself, i.e. computer literacy, while others are related with the selected mode of online communication (the two basic modes being synchronous or asynchronous) and the way each mode affects isolation, interaction, immediacy etc. The mode of online communication is also affecting some other important adults' requirements for effective learning such as time management, active participation and the development of the appropriate learning environment.

Both communication modes have their strong and weak points. As in many other areas there is no magic recipe. We have considered the asynchronous learning environment to be better suited to the characteristics and requirements for effective adults' learning, as analyzed in the next section.

Asynchronous learning environment

The asynchronous online learning environment seems to be preferable over the synchronous online learning environment for adults' education, as it allows learners to follow their own pace, overcoming the constrains of time and to harmonize their personal, vocational and social life with education (Mayadas, 1997; Harsh, 2002). Furthermore, asynchronous online education appears as one of the most appealing instructional methods for adults' education as it combines flexible access to teaching material with time to reflect, self-study techniques and collaborative learning, while involving the use of low-cost technology.

The greatest benefit of asynchronous learning environment is its flexibility, as it gives the freedom to learners to access the course and participate at any time and from any location they choose through an Internet connection (Kalin, 1994; Bostock, 1997; Dillon & Zhu, 1997; Khan, 1997; Tsinakos, 2002).

The advocates of asynchronous learning support that this kind of a learning environment provides a "high degree of interactivity" between participants who are separated both geographically and temporally (Mayadas, 1997). Since learners have an equal opportunity to participate in an asynchronous communication from where and when it suits them, they can express their thoughts without interruption, they have more time to reflect on and respond to class materials and their classmates than in a traditional classroom (Shea, Pickett, & Pelz, 2003). In communication which takes place in synchronous mode the learners who have a language barrier or those lacking enough confidence, do not dare to speak up. The same learners are seen vehemently participating in electronic discussions through asynchronous mode (Shankar, 2007).

Many studies have also highlighted that on-going asynchronous interaction -such as forums-are preferable to synchronous computer-mediated communication groups in that they help participants to build a better context in which learning can take place (Karsenti, 2007).

Besides the argumentation against distance learning as stated by Kochery (1997), who found that students learning over a distance often feel alone and separated from not only the teacher, but also from the socialization with other students, the adversaries to asynchronous learning environment support that students experience isolation and social disconnectedness which, correlated with students' difficulties with the course, result in failing grades, noncompletion, or withdrawal (Waltonen-Moore et al., 2006).

The answer to the above criticism comes from recent technological innovations, which have reduced significantly the barriers in communication and interaction and have allowed new forms of personal and group interaction as well as course delivery (Pantelidis & Auld, 2002; Galusha, 2009).

It is broadly accepted that learning technology has changed the teaching and learning process. Multimedia, communication tools and Internet navigation are becoming more widely used in different educational levels, influencing education, motivating students, promoting learning, and changing classroom interaction.

Another advantage of the asynchronous environment is that the learning does not have to be geared to the average student. Those who wish to research a subject in more depth can do so in their own time and those who are slower learners can review the educational material an unlimited number of times (Karsenti, 2007).

Additionally, in asynchronous learning all materials and all interactions that occur within this environment, such as e-mails, discussions etc are archived, so that learners and educators can go back and review course materials, assignments, presentations as well as correspondence and discussions between participants (McNamara & Brown, 2008).

In order to benefit from an asynchronous online learning environment, learners have to overcome the barriers inherent to any online learning environment which are related to the learners' access to computers and the Internet. Although personal computers and web access are becoming more and more pervasive every day, this requirement can be a barrier to entry for many learners.

Once the access barrier is overcome, the acquisition of skills needed to participate in the electronic environment by learners and educators in the beginning of each educational program is considered essential as these skills influence directly all forms of interaction which are taking place in an E-learning environment (Hillman et al., 1994). The institutions must also provide a computer network infrastructure and the technical support needed to develop and maintain asynchronous learning environments.

The role of communication tools in an asynchronous E-learning environment in reducing isolation and promoting immediacy, active participation, interaction and collaboration

In order to promote immediacy, active participation, interaction and collaboration, as well as fight isolation in an asynchronous E-learning environment, communication

tools such as email, forums, threaded discussions, conferencing systems, online discussion boards, wikis and blogs, video-conferences etc become of paramount importance. Course management systems such as Blackboard, WebCT, Moodle, Dokeos and Sakai, have been developed to support online interaction and collaborative learning, providing tools that allow users to organize discussions, post messages and replies, upload or download files and access multimedia, working in smaller or larger groups.

Among the above communication tools forum/threaded discussions have a great importance in overcoming certain barriers or achieving specific requirements for effective adult learning, therefore will be further elaborated.

The importance of forum/electronic discussions groups in an asynchronous E-learning environment

As Freire (1970) supports, learning is itself a reflective process and it is dialogue that is central to this reflection.

Discussions are especially important when we are working with the middle and higher level of the cognitive domain (analysis, synthesis and evaluation) as well as with all levels of the affective domain (Cranton, 2000).

Brookfield (1990) also says that discussion supports both cognitive and affective ends, such as problem solving, concept exploration, and attitude change, as well as the kind of active participatory learning that results in engaged learning within the classroom.

By using asynchronous communications tools, learners actively construct their own learning by engaging themselves and others in reflective explorations of ideas, drawing conclusions based on their explorations and synthesizing those conclusions with previous knowledge.

Therefore, forums/electronic discussions groups seem to have taken the lead among asynchronous communication tools (Karsenti, 2007), promoting collaborative

learning and reflection and improving the quality and quantity of education in online learning environments (Hiltz, 1998; McNamara & Brown, 2008; Clark, 2009). Discussions help learners explore different perspectives, recognize their own values and assumptions, develop their ability to defend ideas and learn to respect others' opinions and viewpoints. Discussion topics should be interesting, meaningful and relevant to everyone in the group.

In forums and threaded discussions, people work together to form ideas, argue points, and solve problems. All learners have a voice and no one can dominate the conversation. The asynchronous nature of the discussion also makes it impossible for even an instructor to control. Accordingly, many educators note that students perceive online discussion as more equitable and more democratic than traditional classroom discussions (Swan, 2005). Whereas in face-to-face meetings learners must make their statements one after the other synchronously within a limited timeframe, in forums they can take their time and write their messages asynchronously when it suits them, or within a larger timeframe. Since learners can express their thoughts without interruption and in time convenient for them, they have the opportunity to reflect on their classmates' contributions while creating their own, and on their own writing before posting them (Pincas, 2000; Shea et al., 2003). It is possible for learners to "rewind" a conversation and thus they have time to carefully consider their own and other learners' responses leading to deeper discussion (McNamara & Brown, 2008). This tends to create a certain mindfulness among learners, encourages deeper level of thinking, discourse and a culture of reflection in an online course (Hiltz, 1994; Rheingold, 1994; Swan, 2005). Many researchers suggest that asynchronous threaded discussion boards are a viable instructional method for sustained written interaction that promotes critical thinking (Waltomen-Moore et al., 2006).

Despite the fact that forums/electronic discussion groups are text-based and so lacking in visual and verbal cues, most participants find them strangely personal (Gunawardena & Zittle, 1997) and Walter has called them "hyperpersonal" (Swan, 2005).

MacNarmara and Brown (2008) support that discussion forums need to be carefully structured and managed to ensure that they result in the deep level of collaborative reflection that is desired. They propose three factors which should be considered in

planning an online discussion: the organization of the forum, the motivation of students to participate and the ability of students to participate effectively.

At this point the role of the educator must be stressed. According to the literature, the most appropriate role for the educator using threaded discussions is that of facilitator (Waltonen-Moore et al., 2006). The educator's tasks with regard to the facilitation of discussion boards are: a) setting the scene, b) monitoring participation, c) facilitating critical thinking and d) promoting student collaboration (Youngblood, Trede, & DiCorpo, 2001).

Educators may lead or facilitate discussion by asking for clarification, summarizing major points, and focusing on the issue, or they may participate as a member of the group while learners take on the roles of keeping things on track and summarizing (Cranton, 2000).

Summing up, it is evident that the use of forums/electronic discussion groups in the e-education of educators of special groups could play an important role promoting reflection, critical thinking, collaborative learning and interaction between learners and educator as well as interaction between learners. The asynchronous mode seems to provide a more equitable and democratic environment and better time management for learners enhancing the role of the educator as facilitator.

Community learning networks

A community learning network is a group of individuals or organizations who share interests, information, and learning experience through communication technologies.

Learner network has been defined by Cranton (2006) as any sustained relationship among a group of people with a formal or informal learning context or a relationship that extends beyond the boundaries of the learning group. Under this broad definition we can consider communities of learning, communities of practice or professional communities as learners' networks. Networks of learners could be created during the

course, program of education or/and after the end of it. Learners can rely on networks when they need support and guidance; they can enhance their professional development and update their knowledge and skills. The existence of the network represents a context in which educators interact with other educators, they acquire and share knowledge associated with their profession. Networks of learners can be useful for lifelong learning and community development initiatives.

Through Information Communication Technologies, networking with others, whether they are educators, community leaders, or members of a learning group, can be easy, instantaneous and very convenient. More and more people are using the Internet to both increase their own knowledge and skills, and to help others in their community or to develop the community as a whole.

The creation of learner networks is in line with the theoretical approach of Anderson and Garrison (1998) referring to teacher-teacher interaction. According to the authors Teacher-teacher interaction considers the professional development efforts of teachers to engage one another in order to enhance their own pedagogical abilities. Such interaction might occur at conferences, in seminars, or through informal electronic communication. Learner networks which maintain after the end of the educating course could promote this type of interaction beyond the barriers of time and space and their members could follow their own pace.

The creation of a learner network is a dynamic process as it does not end when the educational course is over but is continuously enriched with new data and experiences from the participants. In fact creation and function of a learners' network corresponds to the learners' need for continuous upgrade conforming to the principles of lifelong learning.

For the creation, development and maintainability of a learners' network a web-based collaborative system must be used, containing as many of the characteristics and tools available to enhance the system's sufficiency (Batista & Machado, 2002).

The role of the Educator in E-learning

As it has been already pointed throughout this section the educator plays an important role in any online educational environment and this role must be taken into account in the design and development of any e-educational course.

The role of educator of adults in an E-learning environment is even more critical than in traditional class, as the educator, on top of the task of "helping people to learn" has also to help learners overcome potential barriers caused by technology, time, and the way interactions between educator, learners, content and interface occur.

In literature a lot has been written about the critical role the educator plays in ensuring online courses are successful (Harasim, Hiltz, Teles, & Turoff, 1996; Minotti, 2002).

Shank (2004) delineates the competencies of the online educator and divides them into five competency areas: administrative, design, facilitation, evaluation, and technical.

The administrative competencies aim to assure smooth course operations and reduce instructor and learner overload.

The design competencies have as main goal to assure adequate learning outcomes and satisfaction. This area of competencies includes plans activities that allow learners to attach personal meaning to content, the incorporation of social aspects to improve satisfaction, the provision of a realistic environment, while they also present multiple viewpoints, and overcome anonymity.

The facilitation competencies have as a primary goal to provide social benefits and enhance learning. Within this area instructor sets or facilitates setting of communication rules and group decision-making norms, he provides compelling opportunities for online discussion, negotiation, debate, he moderates discussion, contributes advanced content knowledge and insights, he models desired methods of communication, he fosters sharing of knowledge, questions, and expertise, he contributes outside resources (online, print-based, others) and encourages learners to do as well, he responds to discussion postings adequately without 'taking over',

he provides acknowledgment of learner contributions and he moderates disagreements and group problems.

In evaluation area the primary goal is to assure that learners know how they will be evaluated and help learners meet course objectives.

Finally, in technical area the actions aim to overcome barriers associated with technical components.

Shank's approach satisfies the requirements of the adults' educator, as these have been analyzed in the relevant section.

It is the educator in an online environment who, by asking questions, using humor, addressing individuals by name, initiating discussion, and sharing personal examples shall produce immediacy and contribute to a sense of psychological closeness. Creating an online environment that promotes socio-emotional-driven interaction, such as exchanging empathetic messages, encouraging self-disclosure, and discussing the backgrounds and interests of learners will help promote feelings of friendship and connections to others and consequently increase immediacy between learners, educator and content in a way that fits to the requirements of effective adult education.

The development of a learning group

The educators must also understand the nature and the importance of group development in an electronic environment if they are to move learners beyond posting isolated replies in response to threaded discussion board prompts, and into real interaction, critical thinking, collaboration and immediacy with and between the learners.

Many researchers have analyzed the stages through which an online learning group is developed. Salmon (2004) identified that students who are separated from one another

by time and distance will progress through five stages of learning group development: the stage of access and motivation (characterized by welcoming and encouraging); online socialization (characterized by familiarizing and providing bridges between cultural, social and learning environments); information exchange (characterized by facilitating tasks and supporting use of learning materials); knowledge construction (characterized by facilitating process); and development (characterized by supporting and responding). Salmon asserted that the intensity of interaction will be different at each stage of development.

In the same direction Waltonen-Moore et al. (2006) identify the five stages of the evolution of online learning group through which initially "virtual" strangers, participants become an interactive and cohesive learning community by the end of a five-week course. The Five stages of online group development are: (a) Introduction (in which the participants introduce themselves to one another), (b) Identification (in which learners and facilitators began to identify with and relate to one another), (c) Interaction ("Sparks" of interaction occur; the first semblance of a conversation/dialogue begins), (d) Involvement (Learners are engaged with one another and are working collaboratively), and (e) Inquiry (Inquiry is guided by the desire to apply learning to real-life).

Another model based on synchronous and asynchronous discussions found three successive stages of development: (a) social bond formation, (b) information sharing, and the (c) advanced stage (Im & Lee, 2003-2004). Whereas the social bond formation stage centers on introductions and participants becoming more familiar with one another, the second stage involves the exchange of information and knowledge among participants. The advanced stage includes the application of metacognitive skills by group members.

Merlose and Bergeron (2007) have integrated the Salmon (2004), Johnson and Johnson (1997) and Tuckman (1965) predictive models of learning group development into three stages: beginning, middle and end. First, learners can be expected to progress through a beginning stage where engagement with content and process issues occurs; second, through a middle stage where encouragement towards task completion occurs; and third, through an ending stage where closure occurs.

According to the finding of Merlose and Bergeron (2007) descriptive research study, that explored online graduate students' perceptions of instructor's immediacy strategies, learners need to know that their instructor would remain attentive to their needs as individuals. "Instructors who communicated: "I'm here if you need me" were perceived as available to them, immediate and present". The use of private emails between instructor and learners open the doors to learners for sharing their individual needs. Liking and feeling close to their teachers helped these graduate learners feel safe, encouraged them to risk participating in group projects and allowed them to achieve closure.

When online course designers, developers and educators have a clear picture of the ways group development is working in web-based instructional settings, they will be helped to support group dynamics, thus allowing for enhanced learning (Waltonen-Moore et al., 2006).

Summing up, in Figure 2 the role and the tasks of the educator in an E-learning education process is presented.

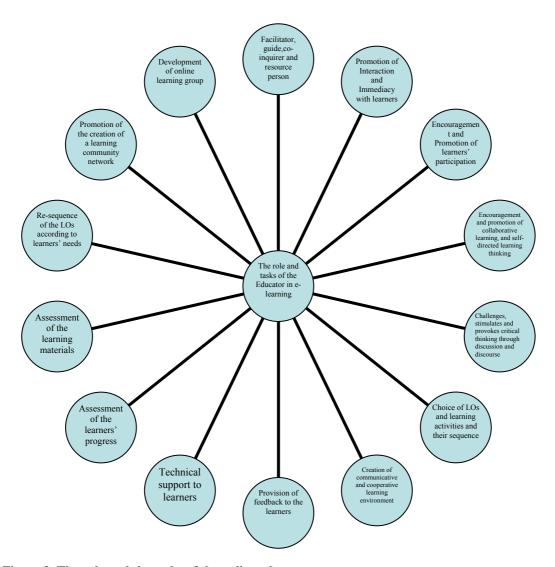


Figure 2. The role and the tasks of the online educator

The above competencies of the educator are not necessarily found in one person, therefore the various actions may be performed by more than one persons acting as a team.

Instructional design theories

"The paradigm of instruction has to change from standardization to customization, from a focus on presenting material to a focus on making sure that learners' needs are met-a "Learning-Focused" paradigm"

C.M. Reigeluth (1996)

An instructional design theory is a theory that offers explicit guidance on how to better help people learn and develop (Reigeluth, 1999). The various kinds of learning and development may include cognitive, emotional, social, physical and spiritual. Instructional design theories have some major characteristics in common:

- a. instructional-design theory is design-oriented (focusing on means to attain given goals for learning or development) rather description oriented (focusing on the results of given events),
- b. instructional-design theory identifies methods of instruction (ways to support and facilitate learning) and the situations in which those methods should and should be not used,
- c. in all instructional-design theories, the methods of instruction can be broken into more detailed component methods, which provide more guidance to educators, and d. the methods are probabilistic rather deterministic, which means they increase the chances of attaining the goals rather than ensuring attainment of the goals (Reigeluth, 1999).

Reigeluth (1996; 1997) discusses the implications of the shift into the Information Age for Instructional Design (ID) theory. The most important aspect of this whole shift is that instruction needs to be customized rather than standardized. This means that the instruction is learning-focused and requires a shift from passive to active learning. The teacher needs to become a facilitator, empowering the learners to construct their own knowledge, rather than being the sole source of direction and knowledge in the class. Reigeluth also suggests an alternative to the linear stages of the ID process. The entire process cannot be known in advance, so designers are required to do "just-in-time analysis" (1996, p. 15), synthesis, evaluation and change at every stage in the ID process.

This is also affecting the sequence of the LOs, on which several instructional design theories have been developed.

Instructional objectives

Instructional designers typically divide instructional objectives into the general categories of cognitive, psychomotor, and affective (Krathwohl et al., 1964; Dick & Carey, 1978; Ormerod, 1983; Gagne, Briggs, & Wager, 1988).

Cognitive objectives have been organized into several hierarchies, the most cited of which is the Taxonomy of Educational Objectives by Bloom, Engelhart, Furst, Hill, & Krathwohl (1956). They identify five levels of cognitive objectives: knowledge, comprehension, application, analysis, synthesis and evaluation. The three last levels (analysis, synthesis and evaluation) commonly are referred as higher order thinking skills, while in the taxonomies of other instructional theorists these are referred as "cognitive strategy" (Gagne), "find a generality" (Merrill) or "apply generic skills" (Reigeluth, 1999, pp. 52-55). In 1964 Krathwohl, Bloom and Masia published the Taxonomy of Educational Objectives, Handbook II: Affective Domain in which the authors explained five levels of affective objectives: receiving, responding, valuing, organization, and characterization.

Speaking of educators of special groups and their compatibility with their learners, cognitive and affective objectives are mainly the ones of concern here, as compatibility refers to the level of knowledge and acceptance of, and positive attitude towards, the special group on the part of the educator. Cognitive and affective development are interrelated and therefore the enhancement of both contributes to the improvement of compatibility between educator and learners.

To achieve the cognitive enhancement, sound information and knowledge about the history, culture and characteristics of the special group, as well as about the nature of prejudice, are necessary (Allport, 1982). This, however, is not enough. Pendry,

Driscoll and Field (2007) support that "prejudice is often based on incorrect information, but the idea that it can be stopped merely by providing the prejudiced with accurate information has been shown to be naive. Prejudice is underpinned by positive or negative emotional reactions (i.e. a strong affective component) and biased interpretation of information and experience, both of which serve to maintain or strengthen entrenched stereotypical beliefs in the face of contrary evidence. Within the attitudes literature, merely providing factual information has been shown to be often ineffectual as a means of evoking attitude change, especially where the attitudes concerned are affectively based."

Furthermore, Martin and Reigeluth (1999, p. 489) state "emotional development is equal in importance to cognitive development and it is an essential foundation for and component of cognitive development".

Development of the cognitive domain

In the development of the cognitive domain within the framework for the education of the educators of special groups the combination of the following instructional theories have been selected, as they seem to respond better to the objectives of educators' education as well as to the principles of adults' education:

- a. Gardner's "Multiple approaches to understanding",
- b. Jonassen's "Designing Constructivist Learning Environments",
- c. Nelson's "Collaborative Problem Solving",
- d. Bielaczyc and Collins's "Learning Communities in Classrooms".

Understanding the main notions of multicultural relations, prejudices, stereotypes and attitudes is of major importance on the part of the educators as well as the cultivation of higher intellectual skills, metacognitive skills in order educators to be able to encounter educational issues concerning special groups. On the other

hand, the above theories meet the needs of adults' education taking into consideration the personal characteristics of the learners (ESG), promoting active, and collaborative and exploratory learning, the use of communicative tools, interaction and involving the learners (ESG) in the learning process. Last but not least, these theories can be adapted in E-learning environments exploiting the possibilities that learning technology offers resulting in a more efficient educational process.

Gardner's "multiple approaches to understanding"

Gardner (1999) aims to foster understanding in ways that capitalize on differences in learners' intelligences. Gardner views intelligence as the ability to solve problems or to develop products that are important in a given environment or cultural community. He originally proposed seven types of intelligences: verbal-linguistic, logical-mathematical, musical-rhythmic, visual-spatial, bodily-kinaesthetic, interpersonal-social and intrapersonalemotional. The aforementioned intelligences are both biological and acquired. Furthermore, they are capable of changing over time. Human beings possess all of these intelligences, having some more developed than others. According to Gardner (2003, p. 13), it is "fundamentally misleading to think about a single mind, a single intelligence, a single problem-solving capacity". Under no circumstances, should educators label a learner as being only talented in a certain area. Their role should be of encouraging learners to have their multiple intelligences developed.

The Gardner's theory proposes the use of "entry points" to engage the student in selected topics, each entry point corresponding to a different intelligence of the learner. Such entry points can be narrational (telling stories), quantitative/numerical (using of statistics and quantitative patterns), foundational/existential (stating the issue in terms of broad philosophical queries and issues), aesthetic (using works of art and appealing to the artistic properties of materials and topics), hands-on (providing hands-on activities) and social (using group settings, role-play, and collaborative arrangements).

Specific modes of understanding can be inculcated by using analogies, metaphors and examples to enhance understanding of new material. The teacher has to qualify each

analogy as appropriate and to make sure that the misleading parts of the analogy are not allowed to distort or cripple the students' ultimate understanding.

In order to convey the core notions of a topic in a reliable and thorough manner the theory suggests approaching the core using multiple representations.

The theory provides instructional designers and e-educators with a stimulus for matching technology facilities to learning styles, thus improving students' adaptivity to learning systems.

Accordingly, the implementation of Learning Objects taking into account the theory of multiple intelligences offer a rich environment for enabling learners to develop their capabilities and potentialities.

Jonassen's "Designing Constructivist Learning Environments" (CLE)

Jonassen (1999) with his "Designing Constructivist Learning Environments" theory sets as a primary goal to foster problem solving and conceptual development. The model conceives of a problem, question or project as the focus of the environment, with various interpretative and intellectual support systems surrounding it. The goal of the learner is to interpret and solve the problem or complete the project. Related cases and information resources support understanding of the problem and suggest possible solutions; cognitive tools help learners to interpret and manipulate aspects of the problem; conversation/collaboration tools enable communities of learners to negotiate and co-construct the meaning of the problem; social/contextual support systems help users to implement the CLE.

The major methods which this theory offers are:

- Selection of an appropriate problem, or question, or case or project for the learning to focus on. The problem should be interesting, relevant and engaging, to foster learner ownership. The problem must be ill-defined or illstructured and should be authentic. The problem design should address its context, representation, and manipulation space.
- Provision of related cases or worked examples to enable case-based reasoning and enhance cognitive flexibility.

- Provision of learner-selectable information just-in-time.
- Provision of cognitive tools that scaffold required skills, including problemrepresentation tools, knowledge-modeling tools, performance-support tools, and information-gathering tools.
- Provision of conversation and collaboration tools to support discourse communities, knowledge-building communities, and/or communities of learners
- Provision of social/contextual support for the learning environment.

In an E-learning environment the presentation of the problem and all the related cases and available information have a dynamic potential. The use of images, videos, audio files could provide learners with attractive stimuli and valuable and easily accessible information in order to support them in solving the problem. Reflection through computer conferences and participation in collaboration tools engender metaknowledge and higher level skills (analysis, synthesis, evaluation).

Nelson's "Collaborative Problem Solving" (CPS)

The primary goals of Nelson's "Collaborative Problem Solving" theory (1999) are to develop:

- content knowledge in complex domains
- problem-solving and critical thinking skills
- collaboration skills

The CPS is most appropriate with heuristic tasks, as opposed to procedural tasks (Nelson & Reigeluth, 1977). As Reigeluth mentions (1999), heuristic tasks are made up of a complex system of knowledge and skills which can be combined in a variety of ways to complete the task successfully. For instance, the type of knowledge and skills that an educator must draw upon when dealing with members of special groups would require an understanding of a wide range of principles of human behavior, different ones of which would be required for different cases. CPS is also appropriate when the goal is the development of conceptual understandings and cognitive

strategies. Developing conceptual understandings includes either developing schemas for new knowledge or assimilating the content into existing schemas. Cognitive strategies include critical thinking skills, learning strategies and metacognitive skills. Furthermore, CPS is most appropriate when there is not only one single answer to a question or only one way of doing something is considered the best, but rather when the nature of the task is considerably different from one situation to another, or when a depth of understanding is desired.

The learning environment which is the most effective for CPS is one conducive to collaboration, experimentation, and inquiry, an environment which encourages an open exchange of ideas and information. Learners should feel free to voice their opinions, explore new ideas, and try out a variety of approaches in their work.

The types of learners in CPS have the characteristics of adult learners, which have been described in the related section of this paper, as they are or can become selfdirected learners. The instructor often will need to cultivate these characteristics in learners, especially if the learners' experiences have been primarily with traditional educational approaches. Both instructor and learners need to become comfortable with making changes in typical classroom power and control structures, creating a more open, collaborative learning environment so that learners feel comfortable and willing to take responsibility for their own learning. Instructors must be willing to encourage self-directed learning by students and to operate as facilitators rather than as dispensers of knowledge, using a wide range of teaching approaches as needed, such as large- and small- group discussion, direct instruction, active learning, and just-in-time instruction. Ideally, cooperative student learning groups should be as heterogeneous as possible to maximize the breadth of experiences and academic skills available to the group (Cuseo, 1996). This is most possible in a course aiming to improve compatibility between educators of special groups and their learners which is addressed to educators from all fields, i.e. social workers, lowers, mathematicians, literature teachers, artists.

Bielaczyc and Collins's "Learning Communities in Classrooms"

Bielaczyc and Collins "Learning Communities in Classrooms" theory (1999) has as primary goal to advance the collective knowledge and skills and thereby to support the growth of individual knowledge and skills. In a learning-communities approach the goal is to foster a culture of learning, where both individuals and the community as a whole are learning how to learn. Furthermore, members of the community share their individual efforts towards a deeper understanding of the subject matter under study. Students learn to synthesize multiple perspectives, to solve problems in a variety of ways, and to use other's diverse knowledge and skills as resources to collaboratively solve problems and advance their understanding. The intent is for members to come to respect and value differences within the community. The activities of learning communities must provide a means for both individual development and collaborative construction of knowledge, sharing knowledge and skills among members of the community, and making learning processes visible and articulated. In learning communities approach, the educator takes on roles of organizing and facilitating student-directed activities. In learning communities discourse functions as a medium for formulating and exchanging ideas. It serves to motivate the research and reflection in the community by raising new questions and hypotheses, which give rise to further research and understanding. In learning communities students need to learn respect for other students' contributions and differences.

In an E-learning environment the learning community could use resources from the World Wide Web and use all the available communications tools to promote discourse and co-construct individual and collective knowledge and skills among members of the community.

Furthermore, the learning-communities approach also fits with the growing emphasis on lifelong learning. This means that in education of educators of special groups learning communities could be extended beyond the classroom "walls". After the completion of the education program/course for the educators a learning community could be maintained through computer networks.

Selecting the appropriate instructional theory

The designer and the educator have to decide which particular approach of the aforementioned design instructional theories corresponds better to the learners' needs, the educator's teaching style and the learning environment at a specific period. Also it is very important to decide if this particular approach needs to be implemented as a whole or certain parts or strategies can be used as isolated units. The fact that a particular element, model, or strategy will work well with a group of adults does not ensure that the same element, model or strategy will work equally well with a different group, or with the same group at a different time. As Hiemstra and Sisco (1990) point out there is no perfect procedure that will work with all learners every time. A procedure that works well with one group might be inappropriate with another. A procedure that works well one week may yield different results the following week with the same group. For example, a closed strategy following a fairly strict sequence of events might be more appropriate for a group of educators who have been just graduated from the university and need more structure and guidance initially. Whereas, an open, more flexible strategy might be more appropriate if the group consists of sociologists, lawyers who have been attending adult courses beyond the official educational system. Therefore, the key is for instructors to avoid relying upon one instructional strategy or approach at all times and be prepared to make adjustments as it becomes necessary. An effective educator is one who is able to select and use a variety of strategies depending upon the situation.

Development of the affective domain

As we have already defined compatibility between educators and learners being "the level of knowledge and acceptance of, and positive attitude towards, the special group

on the part of the educator" the development of the affective domain employs instructional design theories dealing with attitudes and attitude change.

Attitudes

Attitude has been a difficult concept to define adequately although attitudes and attitude change have been discussed at least since the beginning of the previous century (Simonson & Maushak, 1996). According to one of the earliest definitions which was proposed by Thomas and Znaniecki (1918) "attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (in Simonson & Maushak, 1996). Newbill (2005) supports that the definition of attitude depends on the purpose of the definition and most attitude researchers include the concept of evaluation as the basis for the definition. Instructional designers tend to add to this basic definition references to the emotional, cognitive, and psychomotor components of attitude (e.g., Bednar & Levie, 1993; Kamradt & Kamradt, 1999; Driscoll, 2000; Dick et al., 2001). Martin and Reigeluth (1999, p. 496) conclude that attitude is "a state of readiness or as a learned predisposition to behave in a consistent way. It is made up of cognitive, affective, and behavioral elements".

The affective component of an attitude relates to a person's evaluation of, liking of, or emotional response to an attitude object, that is, how one feels about it (basic feelings and emotions associated with the attitude object, including those such as sadness, pleasure, frustration, happiness, and anger). The cognitive element of attitudes relates to beliefs or knowledge about the attitude object. In simple words, the cognitive component refers to how much a person knows about a topic, e.g. Roma. The behavioral element relates to behaviors associated with the attitude object. The attitude object can be an object, a situation, a person, an idea, another attitude, or anything else a noun describes (Newbill, 2005).

Depending on how the three components of an attitude are aligned, an attitude can be strong or weak, conscious or unconscious, isolated or highly integrated with other attitudes. The cognitive and affective components of an attitude are most directly linked to its formation, whereas the behavioral element is most likely to influence an action orientation and is closely linked to the cognitive element.

Attitudes' measurement

Researchers and attitude theorists generally agree that attitudes can be expressed by cognitive, emotional, and/or behavioral responses, while some of them support that attitudes are both based on behavioral, affective, and cognitive experiences and at the same time are capable of influencing or guiding behavioral, affective, and cognitive processes (Newbill, 2005).

Attitudes are latent and not directly observable in themselves, but they act to organize or provide direction to actions and behaviors that are observable (Simonson & Maushak, 1996). This is also reflected by Gagne (1977) who supports that attitudes should be measured in terms of the choices of personal actions taken by the individual.

Therefore, attitudes are typically measured with some combination of cognitive, affective, and behavioral responses. Attitudes vary in direction (either positive or negative), in degree (the amount of positiveness or negativeness), and in intensity (the amount of commitment with which a position is held) (M. J. Smith, 1982).

Researchers proceeded to measure attitude by measuring what they conceived to be the effects of it. We must rely on inference, since it is impossible to measure attitudes directly. Furthermore, Henerson et al. (1987) advocate "behaviors, beliefs, and feelings will not always match, even when we correctly assume that they reflect a single attitude; so to focus on only one manifestation of an attitude may tend to distort

our picture of the situation and mislead us". Additionally attitudes are not stand still but could be volatile or fluctuant.

There are four widely used and accepted approaches for collecting attitude information which have been proposed by Henerson, Morris and Fitz-Gibbon, (1987): self-reports, where the members of a group report directly about their own attitudes; reports of others, where others report about the attitudes of a person or group; sociometric procedures, where members of a group report about their attitudes toward one another and records, which are systematic accounts of regular occurrences, such as attendance reports, sign-in sheets, library check out records and inventories. Within each of the aforementioned approaches there are strategies for measuring attitude-related behaviors. The following techniques are more commonly used: questionnaires and rating scales, interviews, written reports (such as logs, journals and diaries), and observations (Simonson & Maushak, 1996).

In order to measure attitudes, most often, participants in attitude research studies are asked to respond to Likert type or semantic differential questionnaires that require people to process information (cognitive) about their thoughts (cognitive), feelings (emotional), and actions (behavioral), and make a selection (a behavior) based on that information.

In the present research we shall assess initial compatibility between educator and learners of a special group and its evolvement by using self-report procedures, following Henerson, Morris and Fitz-Gibbon (1987), as the people whose attitudes we are investigating are able to understand the questions and have sufficient self-awareness to provide the necessary information as well as they are likely to answer honestly and not deliberately falsify their responses. For the assessment of the evolvement of compatibility we shall use also self-report procedures as interviews, surveys, questionnaires and attitude rating scales, logs and diaries.

Attitudes functions

The basic assumption on attitude's function is that people hold attitudes to fill certain psychological needs (Pratkanis, Breckler, & Creenwald, 1989). The reason for attitude changes are individualized and related to personal functions of attitudes (Simonson & Maushak, 1996).

According to Katz's (1960) theory, attitudes are formed and changed to serve one or more of the four major psychological functions: utilitarian, egodefensive, valueexpressive, and knowledge. These functions are related to the need of people to receive rewards and to avoid punishments, to defend their self-images through processes of denial, avoidance, rationalization, projection, and displacement of their dissatisfaction, to derive satisfaction with expressing attitudes that are compatible with their value system and to the need to bring order to the chaos of their environment (Katz, 1960). Smith, Bruner and White (1956) delineated three attitude functions strongly influenced by Freudian psychology: object appraisal, social adjustment, and externalization. Herek's neofunctional attitude theory (1986) proposed that attitudes are divided into two basic categories: evaluative and expressive. The groups are differentiated by the source of pleasure, reward, or benefit for holding the attitude. Benefits of evaluative (or instrumental) attitudes are derived directly from the attitude object. Benefits of expressive (or symbolic) attitudes are derived from the expression of the attitude. Sharon Shavitt (1990) proposed a slightly different organizational scheme for attitude functions that incorporates most previous delineations. She grouped attitude functions into the three categories of utilitarian, social identity, and self-esteem maintenance. She also suggested that all attitudes fit Daniel Katz's knowledge function category, because all attitudes help people understand the world around them.

A number of researchers have focused on the variables which interact to cause attitudes change (Petty & Cacioppo, 1986). These variables are the following five: a. learner characteristics (need for cognition, need for social acceptance, need for self-acceptance), b. existing attitude variables (function, intensity, domain), c. source

credibility, likeability, and attractiveness d. message strength and e. attitude object characteristics (Newbill, 2005).

Instructional design and attitudes change

Instructional design theories on attitudes change have been elaborated by various theorists. It is important to note that while instructional designers accept the definition of attitude including the three components (cognitive, affective, behavioral), when it comes to specific techniques of instructional design on attitudes, they seem to ignore the emotional component, except of Kamradt and Kamradt structured design technique (Newbill, 2005).

Guidelines for instructional designers aiming to attitude change have been published by Simonson (1979; 1983; 1984), Gagne et al. (1988), Bednar and Levie (1993), Simonson and Maushak (1996), and Kamradt and Kamradt (1999).

Michael Simonson led the research on relationships between instructional technology and instructional attitude change. Simonson in late 1970s and early 1980s reviewed the media and attitude literature and he summarized the status of the research in this area and attempted to synthesize conclusions about the results of this research. Simonson having reviewed 221 studies that experimentally examined some aspect of the relationship between attitudes, attitude change and instructional media he stated that mediated instruction did seem to contribute to attitude formation and change. He concluded that instructional media are primary carriers of information and play their greatest role in the attitude change process as delivery vehicles. Characteristics of media such as flexibility of use, accessibility of information, and ability to encode ideas were more important than any inherent communication-related characteristics of a medium, which provably were of secondary importance to any development of attitudes or attitude change (Simonson & Maushak, 1996). Also Simonson has summarized a number of methodological problems common to the media-attitude literature. First, attitudes were poorly defined; measurement of attitudes was also

considered inadequate; most studies were considered to be quasi-experimental or experimental and finally it was rare that follow-ups of the results of attitude change treatments were reported. Simonson proposed versions of six guidelines for designing mediated instruction for attitudinal outcomes. Simonson and his colleagues conducted a number of studies to evaluate these guidelines (Simonson & Maushak, 1996).

Simonson and Maushak (1996) organized the six guidelines into two categories and proposed the "model of cumulative effect". The first category contains the first three guidelines refer to message design, and the second contains the last three which relate to learner involvement. According to the "model of cumulative effect" at least one guideline should be selected from each category, and the more guidelines are appropriately included in a persuasive communication, the more likely will be the development of attitude changes. The six guidelines of Simonson and Maushak (1996, p. 1001) are:

- 1. Learners are persuaded, and react favorably, when mediated instruction includes the presentation and discovery of new and useful information about the topic.
- 2. Learners react favorably to mediated instruction that is authentic, relevant to them and technically stimulating.
- 3. Learners are positively affected when persuasive messages are presented in as credible a manner as possible.
- 4. Learners who are involved in the planning, production, or delivery of mediated instruction are likely to react favorably to the instructional activity and to the message delivered.
- 5. Learners who experience a purposeful emotional involvement or arousal during media-rich instruction are likely to change their attitudes in the direction advocated in a mediated message.
- 6. Learners who participate in post-instructional discussions and critiques are likely to develop favorable attitudes toward the delivery method and content."

In Principles of Instructional Design (1979) *Gagne and Briggs* have addressed attitude learning and changing. One of the most effective methods of establishing or changing attitudes according to the authors is called human modeling. Human models,

real or fictitious, are been observed or read about by learners demonstrating the desired behavior e.g exhibiting kindness, rejecting drugs, cleaning up trash. The learners must see that such behavior leads to satisfaction or pleasure on the part of the model. This step in the process is called vicarious reinforcement by Bandura (1969). As long as the learners respect the model, identify with the model, and feel that the model is credible and powerful, they will try to be like the model, and therefore hold the same attitude.

Bednar and Levie published in 1993 a series of attitude change principles which are practical and effective.

They have developed three categories contain twenty two guidelines for instruction in order to change attitudes. The first category was based on communication theory (The source presents a Message through a Channel to a Receiver) and contains the first eleven guidelines. The second category is related to modeling of appropriate behaviors and contains next five guidelines. The last category contains the last six guidelines and is related to creating and managing dissonance in order to produce attitude changes. The principles in this category were based on Festinger's (1957) cognitive dissonance theory.

Kamradt and Kamradt (1999) published their theory "Structured design for attitudinal instruction" which has as primary goal to help a learner change an existing attitude which the learner is willing to reconsider.

Kamradt and Kamradt assume that attitudes are made up of three components which interact through an explicit structure and process: an affective component, a cognitive component, and a psychomotor component. An attitude functions as a tool that allows its owner to respond quickly and effectively to environmental situations related to the satisfaction of fundamental personal needs.

Kamradt and Kamradt believe that within an attitude the components typically do not exist in equal proportion and they call this "the principle of variable proportion". All three components are present in the attitudes but in different proportions.

Kamradt and Kamradt support that within an attitude the three components interact through an explicit structure and process. They claim that in stable attitudes, all three components are consistent (internal consistency). At the same time, each attitude is positioned in a specific location on a continuum of degree (external consistency). The

continuum is bounded on its ends by two attitudes representing opposite extremes, so attitudes vary in direction, negative or positive.

According to their theory if a circumstance arises in which the interaction of the three components of an attitude fails to resolve the need it was expressly designed to resolve, we experience attitudinal dissonance. An attitude which is dissonant is a dysfunctional attitude and the person which holds it is in a state of dissonance which could trigger attitudes change. Attitudinal instruction is based on intentionally creating dissonance through a structured process.

The process of attitude change, according to Kamradt and Kamradt (1999), begins with a direct or indirect activation of the attitude through the presentation by the instructor of a problem situation that calls for an attitude slightly different from the existing attitude of the target audience.

Through the solutions of the problem effected by the participants, the diagnosis of any dissonant components is realized by the instructor by means of specific questions aiming to reveal the component mostly affected.

In relation to the most dissonant components the instructor applies the appropriate techniques, ie. Persuasion for cognitive, demonstration and practice for psychomotor and operant conditioning for affective components.

Finally, a review and transfer technique is used to consolidate the attitude at one point of the continuum before proceeding.

Instructional design theories for affective development, transformative learning and effective adult learning

For the purpose of our research as a base for the instructional design model will be the "Structured design for attitudinal instruction" of Kamradt and Kamradt which will be adapted to the needs of E-learning instruction. Additionally the instructional design model for the educators of special groups will follow as much as possible the six guidelines of Simonson and Maushak.

We have chosen to use Kamradt and Kamradt theory because it goes hand in hand with Transformative learning and the six guidelines of Simonson and Maushak because they are aligned with the requirements of effective adult learning.

The theory of Kamradt and Kamradt (1999) is intended for situations where the learner is willing to reconsider an existing attitude. This is very important for the education of educators of special groups as one of the goals of their education is the awareness and the transformation of existing attitudes which transformation, according to the transformative learning theory, could only occur voluntary (Granton, 2006). The dilemma or the life crisis which Merizow describes corresponds to the notion of dissonance which is the base of Kamradt and Kamradt theory. An initial stimulus, which creates a dilemma or dissonance to the learner, triggers the reconsidering and revising of prior attitudes and promotes self-reflection and critical thinking. Central role in the instructional process has the discourse in the forum where the learners share and exchange experiences, assumptions, values, beliefs and feelings. Discourse, dialogue and support from others (educators, colleagues) appear to play a major role in transformative learning. "Educators especially need to be aware of learners' needs for supportive and challenging feedback during transformative learning. Mezirow (1991) says that it is unethical to engage in transformative learning if we are unwilling to support learners as they go through it" (Cranton 2006, p. 66).

On the other hand the model of cumulative effect by Simonson and Maushak fits to the requirements for effective adult education. The three requirements for effective adult education (education is centered on the learners, the active participation of the learners is both encouraged and intended, creation of a learning environment based on communication, cooperation and mutual respect) are in harmony with the six guidelines.

Sequence of Learning Objects

There are several existing instructional design theories concerning the scope and the sequence of LOs as Reigeluth's Elaboration Theory (1999), van Merriënboer's Four-component Instructional Design model (1997) and Wiley's who synthesized these and other instructional design theories into a learning object-specific instructional design theory, called Learning Object Design and Sequencing Theory (LODAS) (2000).

Reigeluth's Elaboration Theory stresses that a main concept that must be taught first within the subject area, followed by elaboration of the concept. It is intended for medium to complex kinds of cognitive and psychomotor learning, but does not currently deal with content that is primarily in the affective domain.

Van Merrienboer's model describes the four essential interrelated blueprint components in training programs for complex learning: (a) learning tasks; (b) supportive information; (c) JIT(just in time) information, and (d) part-task practice. The Four-Component Instructional Design (4C/ID) model should be used to develop training programs for complex skills and when transfer is the overarching learning outcome. Merriënboer, Clark, and de Croock (2002) note that the Four-component Instructional Design model allows to adapt instruction to differences in learner progress, by adjusting dynamically the sequence and timing for the presentation of information and practice opportunities. "For example, instead of designing a fixed sequence of learning tasks with learner support diminishing at a fixed rate, one could design sets of learning tasks where each set contains several versions of the same learning task but with different amounts of learner support. During training either a

human tutor or a computer-based system can select and present learning tasks with an optimal amount of learner support, based on learner performance on previous learning tasks. Only when the required level of performance for a particular task class has been reached does the learner continue to the next task class." (Merriënboer et al., 2002, p. 58). Furthermore Merriënboer and Kester (2005) have proposed 14 multimedia principles which are related to the four components when the model is used to design multimedia learning environments. Of the 14 principles the most interesting on the subject of this section are the sequencing and the individualization principles.

The sequencing principle indicates that it is often better to sequence learning tasks or complex pieces of information from simple to complex, than to present them in their full complexity at once. The authors are referring to many researchers and studies with consistent results. The 4C/ID model primarily uses task classes to accommodate the sequencing principle. Task classes and their related supportive information range from simple to complex, while the learning tasks within the same task class are equally difficult. The basic guideline of the 4C/ID-model is to start with a task class where the learning tasks can be solved on the basis of a simple domain model or SAP (Systematic Approach to Problem solving), and to continue with task classes where the supportive information pertains to increasingly more complex and elaborated domain models or SAPs (i.e., mental model progression) (van Merriënboer et al., 2002).

The individualization principle, according to recent studies, shows that adaptive training systems, which dynamically select learning tasks based on the characteristics of the individual learner, yield higher transfer than non-adaptive training systems, which present a fixed sequence of tasks that is identical for all learners (Merriënboer & Kester, 2005). The individualization principle typically takes differences between learners into account by selecting learning tasks in such a way that the task difficulty and/or the available level of support is adjusted to the learner. This fits in very well with the 4C/ID-model. For each learning task, performance needs to be assessed in order to give cognitive feedback to the learners. This assessment information can also be used to select a new task: If performance is low, an equivalent task with a higher level of support will be selected from the same task class or, in the worst case, an easier task will be selected from a previous task class; if performance is high, an

equivalent task with a lower level of support will be selected from the same task class, or, if all performance criteria have been reached, the learner is allowed to move on to the next task class from which a more difficult task with a high level of support is selected.

Wiley designed LODAS (Wiley, 2000), a design process composed of the following six steps: preliminary activities, content analysis and synthesis, practice and information presentation design, learning object selection or design, learning object sequencing and look back for quality improvement. Two important considerations are built into the LODAS theory, scope and sequencing. The scope refers to the range of content covered within a curriculum, instructional unit, or lesson plan. Sequencing refers to the combining or placement of LO's within the curriculum. Sequence is the next step after the selection of LOs. Sequencing normally occurs from simple to complex and from concrete to abstract. Sequencing provides a method of organizing content based on cognitive levels of complexity which in turn aids the learner in moving from cognitive low levels to higher states where the learner actually uses the knowledge learned to create new products or concepts (Villani, 2007).

LOs in LODAS theory should be sequenced first by examining any dependencies among LOs and by sequencing any skills associated with their constituent LO. The principle simple to complex seems to apply. Wiley also notes specific problem sequencing which involves looking at a group of specific problems to be practiced at one level of expertise within a work model and then sequencing them randomly in order to aid with transference of learning from one context to another within the learner.

In the field of adult education, Cranton's approach on sequencing learning experiences is in harmony with the core of the aforementioned theories.

Cranton (2000) presents three sets of strategies: hierarchical task analysis, conceptual sequencing strategies and procedural analysis, the choice of a sequencing strategy depending on the nature and structure of the knowledge we are working with, the experience and characteristics of the students, the methods and material we plan to use and the context of the teaching and learning experience.

For learning at the higher levels of the cognitive and affective domain, where knowledge is communicative and/or emancipatory (which is the core of our research), the conceptual sequencing strategies are more likely to be appropriate. According to Cranton (2000) communicative knowledge is subjective, based on understanding others and the social norms of the group, community, or culture within which we live and it is socially constructed; that is, it is considered valid and true because people in a group or culture agree that it is true, not because it can be scientifically proven. Emancipatory knowledge is also subjective, focusing on our becoming free from personal and social constrains. Establishing good interpersonal relations with others, being aware of how other cultures are different from our own, understanding how groups function, increasing in self-awareness are examples of knowledge that falls within this category.

Choosing a sequencing strategy comprises the experience and characteristics of the learners as well as the methods and materials that will be used. The use of a variety of methods is important both for maintaining learner interest and for connecting with the different learning and personality preferences of students. Some methods require more learner involvement than others. For these methods to work, it is more important that learners are comfortable and trust each other and the educator. If learners are new to a learning situation, anxious, intimidated, or otherwise unsure of themselves, it is often wiser not to expect an immediate high level of involvement or trust. In such a situation, which may be the case of an E-learning environment for adults, a gradual transition from more educator-centered to more learner-centered methods may be important in planning the sequence.

Another consideration in sequencing learning is the context of the teaching and learning experience, which may consist of matters like the time of the day a course or session takes place or the size of the class.

Conceptual sequencing strategies are those that are based on some relationship or set of relationships among the ideas or concepts in the subject e.g. several concepts may be subsumed under one larger framework; or the historical or chronological order of the subject may help determine the development. Figure 3 depicts the plethora of conceptual sequencing strategies which Cranton describes.

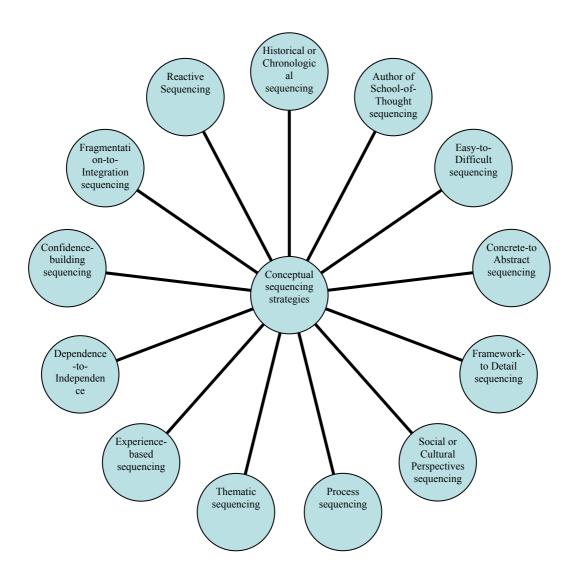


Figure 3. Cranton's conceptual sequencing strategies

As in adult education it is very important to start a learning sequence "where the learners are" it is the strategies that are based on the intended development of the learner rather than of the content of the subject that definitely meet the requirements of effective adult learning.

In the framework for the e-education of educators of special groups the needs analysis will provide the educator with the appropriate knowledge on what learners (ESG) are doing currently that is relevant to the course and also on their past experiences. This approach has the added benefit of drawing individuals into the course in a personal way.

The dependence-to independence sequencing is moving learners toward independent and autonomous learning, accomplishing the common goal in adult education: the fostering of independence/autonomy or self-directed learning. Initially the learners are been helped to build the skills they need in order to be autonomous learners, such as setting their own objectives and developing learning plans, in an atmosphere that is comfortable and trusting. Subsequent activities encourage students to develop their own norms or boundaries for classroom behavior. Opportunities for exploration and reflection then follow, along with group-building activities.

The confidence-building sequencing is appropriate to a group of adults who may be anxious, lacking in confidence or have low self-esteem. In this case, initial activities will emphasize what people already know and can do in order to develop confidence and personal self-esteem and new materials and skills can be gradually introduced and linked each time to concepts with which learners already feel at ease.

The fragmentation-to integration sequencing facilitates the intellectual development of the learners towards critical thinking. Most models of intellectual development include stages that move from fragmented, authority-based knowledge towards synthesized, integrated awareness. In the final stage of development the goal is to construct an individual point of view and see that this point of view is open to reevaluation and revision in the light of more new evidence.

Finally, in reactive sequencing the educators must be ready to respond to student needs and progress and re-sequence material if desirable or necessary. The initial planned sequence for a course often may be interrupted by a new sequence that students need in order to be successful. Good educators and even more adults' educators are continually examining the teaching and learning environment for problems and arising needs and are adjusting and readjusting as they go.

Summing up we conclude with Cranton's (2000, p. 98) words "we may be following a concrete-to abstract sequence or chronological sequence when it becomes clear that we need to back up, review, repeat, come at the same topic from different angle, or bring in material we intended to use at a later date. Reactive sequencing cannot be as clearly defined as the other strategies, but it may, in the end, be one that matters the most".

Problem statement and objectives

"Authentic education is not carried on by "A" for "B" or by "A" about "B", but rather by "A" with "B', mediated by the world – a world which impresses and challenges both parties, giving rise to views or opinions about it. These views, impregnated with anxieties, doubts, hopes or hopelessness, imply significant themes on the basis of which the program content of education can be built".

Problem Statement

The main objective of this document is the development of an e-education framework for educators of special groups under the principles of both adult education and multicultural education while conforming to the specifications of Learning Design.

But how could E-learning, multicultural education, transformative learning and adult learning dovetail together in a practical environment which will be educationally effective?

The basic research questions inquired in this document are:

- Which are the fundamental elements of adult learning that should be taken into account and integrated in the E-learning design?
- Through which way should the elements of adult learning and multicultural education be integrated into the structure of the E-learning educational framework so that we obtain the most efficient educational result without dramatically increasing the cost?
- Which are the most appropriate instructional design theories to be used in order to improve compatibility between educator and learners and how can these theories be effectively incorporated in an E-learning environment?

Paulo Freire (1970)

Which vocabularies and extensions to existing metadata standards are
necessary for us to create, in order to clearly define the educational material,
so that it can be easily retrieved and then reused in other educational
environments?

Objectives

The specific objective of this document is to provide sound answers to the above questions.

The first question has been already partly answered in the previous sections. In order to answer the second question we shall look into the best way of incorporating the fundamental elements of adult education and multicultural education in an E-learning environment. The third question shall be answered though the development of an effective instructional model based on the critical comparison of instructional design theories already made. The fourth question will be met by the development of the e-educational framework itself containing reuse oriented digital resources. The strengths and weaknesses of the proposed framework, aiming in improving compatibility between educators and learners, will be proved through the implementation of a pilot e-educational program for the educators of Roma in Greece.

The concrete objectives for this purpose are:

- To define the phases of the e-educational framework under macro perspective (IDS)
- To develop an educational conceptual framework concerning the educational process (phases, steps, content, presentation).
- To develop all necessary interrelation modules within the phases of the framework.

- To define the Content of the LOs to be used in the framework according to the compatibility between educator and learner.
- To define the Presentation of the LOs to be used in the framework according to the learners' (ESG) profile.
- To incorporate the requirements for effective adult learning in the framework.
- To develop and/or tailor existing instructional design models and methods to the particularities of education of the educators of special groups in order to provide effective educational outcome.
- To accurately describe the LOs using IEEE Metadata (existing specifications and proposed extensions).

Main expected contributions

The development of the framework for the e-education of the educators of special groups will cover major needs of modern educational procedures and systems where multicultural education and E-learning take new dimensions due to the widespread immigration and globalization. Exploiting the benefits of a flexible E-learning environment, organizations which educate educators of special groups could reduce the cost of the education and provide customized educational programs for the educators, overcoming the constrains of time and space.

Educators of adults and adult educating organizations (specifically those that educate educators) will be able to take advantage of this framework by adapting it to the special group which they are dealing with. Thus, they will be able to use this framework for the development of reusable learning objects to be used with educators of different special social groups. As the improvement of the compatibility between educator and learner is mainly dealing with the acquirement of essential knowledge concerning the special group and the awareness, recognition and transformation of existing attitudes (bias, prejudices and stereotypes) it could be used for the e-

education of all educators of special groups, irrelevantly of the age of their learners (children or adults). Needless to say that for educators dealing with adults, extra training on adults' education is needed, while for educators dealing with children extra training on pedagogy is needed.

Moreover, in both cases (adults' educators or children educators) the improvement of compatibility between educator and learners may facilitate the integration of the special group in major society.

As the study of attitudes is not an area of interest or importance in mainstream instructional technology research, there are not many studies dealing with attitudes and attitudes change. In attitudes research, Simonson's review (1996, p. 996) of hundreds of studies published in the literature of educational communications and technology, revealed that less than 5% examined attitude variables as a major area of interest. Therefore this research will contribute to this area providing interesting results on assessing and improving compatibility (attitudes measurement and change), a fact of special importance in today's multicultural society.

Main expected contributions in particular are:

- C1) Development of an e-educational framework useful for educating educators of special groups.
- C2) Development of an educational conceptual framework concerning the educational process (phases/stages) useful for educating educators of special groups as well as the the necessary interrelation modules within the phases.
- C3) Development of an instructional design model addressed to the educators of special groups in order to improve their compatibility with their learners.
- C3) Metadata description of the LOs addressed to educators of special groups.
- C4) The design of a pilot learning object and learning design-based educational course for educators of Roma in Greece in order to improve their compatibility with the target group.

Methodology

The methodology employed in this research is moving through the following stages:

- M1) Analytic comparison/contrast with existing literature on the main issues of the framework (learning technology, adult education, multicultural education, instructional theories).
- M2) Synthesis of an e-educational framework for the educators of special groups (in macro and micro perspective).
- M3) Test of the framework by case study. A case study has been selected as a powerful and effective qualitative research method (Stake, 1995; Merriam, 1997; Tellis, 1997; Yin, 2003) to test the effectiveness of the framework for the e-education of educators of special groups. Using the case study process results, valuable data concerning the functionality, flexibility and effectiveness of the e-education framework are expected to result. Implementing an application of the theoretical framework in real world conditions is expected to provide valuable information for evaluation and modification according to its strengths and weaknesses. Incorporating the views of the "actors" in the case under study (learners, educator, designer) (Tellis, 1997) valuable conclusions are expected to emerge.

The e-education of educators of Roma in Greece has been selected as the case study because Roma are a most representative case presenting more than one of the characteristics which define a special group. This fact is expected to lead to useful conclusions for the final synthesis of the proposed e-educational framework. Furthermore the researcher has a large experience in educating educators of Roma in Greece, a fact that facilitates the access to and the evaluation of the case study.

- M3.1) Needs Assessment of educators of Roma in Greece.
- M3.2) Design and development of specific LOs aiming to improve compatibility between educators and the targeted special group.
- M3.3) Implementation of the pilot program for the e-education of educators of Roma in Greece.

- M3.4) Evaluation of learners' (ESG) actual educational experiences through feedback from both learners (ESG) and educator.
- M3.4) Evaluation of actual instructional design experience through feedback from learners and educator.
- M4) Final evaluation of the framework through the results of the case study and final synthesis.

The development of a framework for the e-education of educators of special groups: the ESG Framework.

"Many political and educational plans have failed because their authors designed them according to their own personal views of reality, never once taking into account (expect as mere objects of their action) the men-in-situation to whom their program was ostensibly directed"

(Paulo Freire, 1970)

The framework for the e-education of educators of special groups, the ESG Framework, is practically an Instructional System Design (ISD) and as such it follows the basic structure of ADDIE model (Strickland, 2006) with the addition of one extra phase which is the Maintenance of the Community Learning Network. During all the phases of the ESG Framework development the principles of adult education are been observed.

The structure of the ESG Framework for the e-education of the educators of special groups consists of the following phases (Pavlis- Korres & García Barriocanal, 2010):

- NEEDS ANALYSIS (assessment of compatibility between educator and learner + learners' (ESG) profile = gap between current situation and desired goals)
- DESIGN (specify objectives +select instructional theories +media)
- DEVELOPMENT (selection of existing learning materials (LOs) or creation of new ones and sequence of LOs)
- IMPLEMENTATION (education of learners (ESG) through actual learning experience)
- EVALUATION (formative and summative evaluation leading to eventual changes)
- MAINTENANCE OF THE COMMUNITY LEARNING NETWORK (creation of sense of community and connection between the learners (ESG) aiming in their continuous and updated professional development)

Each of the aforementioned phases is further analyzed below.

Needs analysis

In the instructional system design process for educating educators of special groups, needs analysis is the first step in order to specify the goals of instruction.

The importance of the needs analysis to educational planning is well established in literature (Kaufman, 1979; Cross, 1983; Witkin, 1984; Sork & Caffarella, 1989; Moseley & Heaney, 1994; Young, 1994; 1996; Caffarella, 2002; Hudak, 2007). In the ESG Framework the needs assessment of the educators of special groups analyses the current condition (skills, knowledge and attitudes of the educators) in comparison with the desired one. In Gagne's and Briggs (1979) words needs analysis defines the gap between the way things "are" and the way things "ought to be". The phase of Needs Analysis in the ESG Framework is aiming to the assessment of existing compatibility between educator and learners as well as the investigation of the learning profiles of the learners (ESG) in order to define the content and presentation of the educational material that has to be designed, developed and delivered. The type and level of their compatibility with the special group which they are addressing dictates the content of the appropriate material. During needs analysis the remaining factors comprising the learners' (ESG) profile and affect the LOs' presentation will be defined ie. the learners' (ESG) personal learning styles, their knowledge and skills in using computers, their access to computers and networks as well as the technical specifications of the devices they will be using.

Needs analysis taxonomy

In the phase of the needs analysis of the educators of special groups the following taxonomy has been created, based on the type and the level of compatibility between educator and learners as well as their learning profiles.

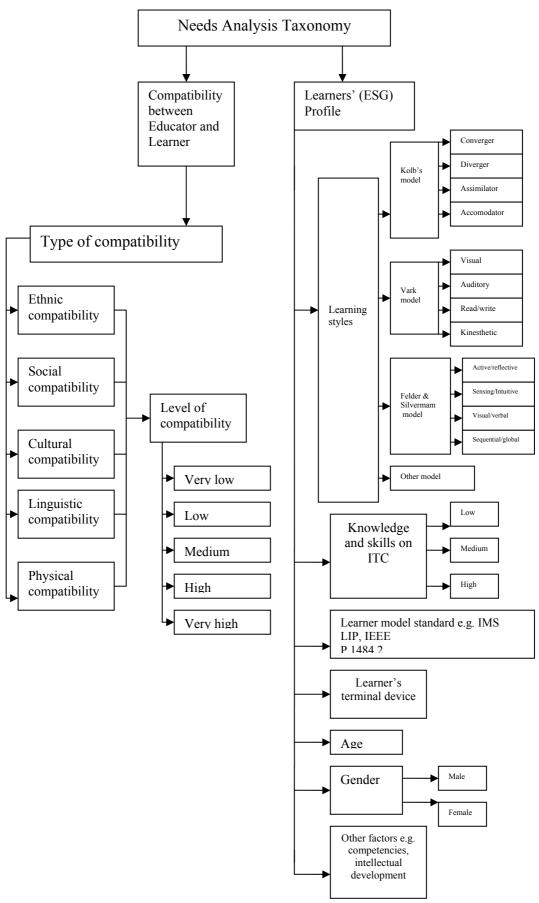


Figure 4. Needs analysis taxonomy

Based on the needs analysis-taxonomy the content and the presentation of the learning objects are defined. As analyzed later in the respective section, the type and the level of compatibility dictates the content of the LOs and the learners' (ESG) profiles defines the presentation of the LOs.

Design

The phase of Design begins with the specification of educational goals based on the learning needs and proceeds to the formulation of concrete learning objectives. Improving compatibility (type and level) is the main specific goal. The learning objectives concerning the cognitive domain are aiming to the knowledge acquisition on characteristics of the special groups and the development of higher intellectual skills, while the ones concerning the affective domain are focusing on awareness and attitudes change towards the special group.

Another important factor that has to be selected in this phase is the appropriate instructional theories and methods which will be used in order to achieve the learning objectives (in cognitive and in affective domain) in combination with the principles of adult education (andragogy).

In the same phase the structure of instruction and learning is established, including structure, prerequisites, learning resources, support etc, as well as the choice of a Learning Management System (LMS) or a Virtual Learning Environment (VLE) that will serve the needs of the curriculum and adults' education. There is no need to invest in an extremely advanced learning technology; taking advantage of existing LMS offering adequate technical solutions and tools under a strong andagogical approach and instructional design theory is considered as sufficient in the present phase for the development of e-educational programs addressed to educators of special groups. Moodle, Dokeos or any other LMS offering the possibility of interactive and collaborative education could serve our purpose. What is of utmost importance is the choice of the tutors which will operate as facilitators in the LMS, so that they can offer the proper monitoring, feedback and communication to the

learners, a basic element in the development of interactive relations and the guidance of the learners educational course.

Learning Objectives taxonomy

In the phase of Design the formulation of the learning objectives is based on Krathwohl, Bloom and Masia (1973) taxonomy (cognitive and affective domain). Their six categories in cognitive domain - knowledge, comprehension, application, analysis, synthesis and evaluation- as well as the five categories in affective domain - receiving, responding, valuing, organization and characterization - can lead to specific learning objectives requiring specific learning objects (Hudak, 2007). Higher level objectives must build on lower level objectives and the learner (ESG) must eventually move into a critical thinking phase where knowledge is more complex, as well as to the reconsideration, revision and transformation of his/her attitudes. The respective taxonomy concerning the learning objectives is presented in figure 5.

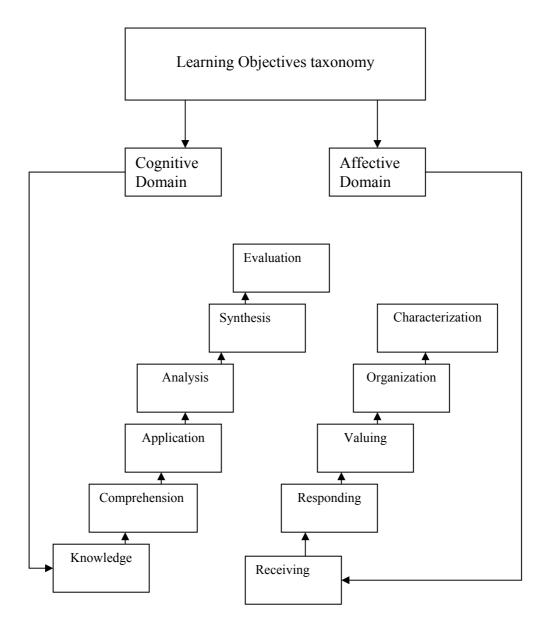


Figure 5. Learning objectives taxonomy

The above taxonomy clarifies the learning objectives concerning the cognitive and the affective domain and provides a basis for organizing topics into a sequence, deciding on teaching methods, finding materials and resources, developing new materials and evaluating what has been learned. The levels of learning within each of the cognitive and affective domain range from simple to complex. The use of this hierarchical taxonomy is especially helpful in sequencing instruction and evaluating learning.

Cranton (2000) notes that there are several strategies for making objectives more meaningful to adult learners. Obtaining information about students' backgrounds, needs, and interests and incorporating this into the objectives will increase comfort and interest. Learners can participate in the review, discussion, and preparation of objectives to varying degrees.

Defining the content of Learning Objects

Having assessed the level of compatibility between educator and special group we are in a position to design, develop and deliver the appropriate educational material, in order to help educators become aware of and improve their own compatibility.

The assessment of the type and the level of compatibility of each educator is the key factor which defines the content of the appropriate LOs for this specific educator (Pavlis-Korres & García Barriocanal, 2008).

Failing to take into account the compatibility between educator and special group has the risk to either provide to an educator boring and oversimplifying material or provide to another a complex and difficult one. This in other words means that we might fail matching the educational material with the needs and the interests of each educator, a fact that would affect negatively the educational outcome. On the practical side, educators' compatibility can be assessed by various ways as questionnaires, interviews, self-assessments etc (Henerson et al., 1987).

A typical example is the questionnaire which has been prepared by the author for the case study of the research, concerning educators of Roma in Greece, in order to assess the type and level of educators' compatibility with Roma. Key points of the questionnaire were:

• Knowledge of and previous experience with the target group and its characteristics

- Awareness of the existence of stereotypes, prejudices and discrimination in Greek society concerning special groups (including Roma)
- Assessment of educators' own stereotypes, prejudices concerning Roma

 The questionnaire can be reached in the Appendix 1.

For each of the 5 types of compatibility there are 5 different levels. For each level of each type of compatibility different LOs must be designed and developed, as they corresponding to different content. The multitude of these LOs should form the content repository in a Learning Management System, from which any LO could be retrieved and delivered to the respective educator as a personalized LO, based on the content, which is dominated by the compatibility between educator and learner.

One important factor that should not be neglected is that the compatibility level of each educator in the respective type of compatibility may be changing (hopefully improving) with the use of the personalized LOs. The role of the educator becomes of ultimate importance as it is him the one to evaluate any improvement of compatibility during the educational process and deliver the appropriate personalized LO in each case.

It is also important that in case of multiple LOs corresponding to the same type and level of compatibility, the sequence in which these will be delivered to the educator should be defined through the proper strategy (Cranton, 2000; Wiley, 2000).

Defining the presentation of Learning Objects

Learners (ESG) differ from one another in a wide variety of ways, such as:

- the types of instruction to which they respond best (learning styles),
- the ways they approach their studies (orientations to studying and approaches to learning),

- their attitudes about the nature of knowledge and their role in constructing it (levels of intellectual development),
- competencies
- knowledge and skills related to the use of computers
- their age and their gender.

Personalized LOs should correspond to the parameters mentioned above, which define to a smaller or greater extent the presentation of the LO in order to lead to a more effective and efficient learning process.

On the contrary the design of LOs with only a universal type of learner in mind could end up in frustration of the learner and possible failure of the educational process (Martinez, 2000).

In a traditional class it is almost unachievable for the educator to balance all the individual needs of the learners relating to the content and the presentation of the educational material. In an E-Learning environment, tailoring the LOs according to the learners' profiles is a complex but feasible task. AHS are moving towards this direction although there is an ongoing discussion about their true potential (Hothi & Hall, 1998; Clarke, Wade, Conlan, & Dagger, 2003; Trandafir & Borozan, 2007). In the design of the ESG Framework this has been taken into consideration for future development.

In order to help realize the way in which the various parameters affect the presentation of LOs a key example has been chosen: the learning styles.

Educators as learners have different learning styles. Learning styles are "characteristic cognitive, affective and psychological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (Felder & Brent, 2005). The concept of learning styles has been applied to a wide variety of learners' attributes and differences.

Some learners are comfortable with theories and abstractions; others feel much more at home with facts and observable phenomena; some prefer active learning while others lean towards introspection; some prefer visual presentation of information, and others prefer verbal explanations. This has resulted to the development of various learning style models, the most important of which are:

- Kolb's model (1984) (converger, diverger, assimilator, accommodator learner),
- Fleming's VARK model (2001) (visual learners, auditory learners, read/write preference and kinesthetic learners)
- Felder and Silverman model (active/reflective, sensing/intuitive, visual/verbal, and sequential/global learners) (1988).

A goal of instruction should be to equip students with the skills associated with every learning style category, since they will need all of these skills and competencies to function effectively as professionals. No learning style is either preferable or inferior to another, but is simply different with different characteristics, strengths and weaknesses (Felder & Brent, 2005).

Since the framework is addressed to adults, age becomes a factor of increased importance, as educators of special groups are expected to differ much more in age than the students in a school grade class. According to Cranton (2000, pp.32-33) age when planning instruction is relevant in at least four ways, "First, age may give us a general idea about a person's assumptions, beliefs, or values. Although social norms change over time, people may retain the values imparted and accepted when they were growing up.....Second, age may tell us something about a person's previous educational experience. A person who learned history by rote under the direction of an autocratic teacher or mathematics by drill and practice in the 1950s will have different expectations of an educational setting from a person who participated in the open classrooms and the "schools without failure" movements of the early 1970s. Third, the older a person is, the more life experience she or he has. Increased life experience creates a richer resource upon which to draw when learning and also, in some cases, a stronger resistance to change. Fourth, older students often have different physical requirements and learning strategies". Age, on the other hand, should not lead to ageism and stereotypes.

Gender is another factor under consideration in instructional design as strong evidence suggests that women's developmental paths differ from those of men, which raises the possibility that women and men may learn differently (Caffarella & Olson, 1993; MacKeracher, 1996; Cranton, 2000; Newbill, 2005). Many feminist theories are based on women's preference for social interaction and interpersonal development. Many researchers recommend using group-based, collaborative, or cooperative learning in the classroom to make the classroom friendlier to women aligning to women's preference for social interaction and interpersonal development (Newbill 2005).

In an online learning environment another important factor for the presentation of LOs is the knowledge and skills of learners on using computers as well as their technical features, e.g the terminal device which they use. As we have already mentioned in the relevant section, interface- learner interaction affects the interaction between learner and content, learner and instructor and interaction with other learners (Hillman et al., 1994).

The main factors which affect presentation of a LO are depicted in figure 6.

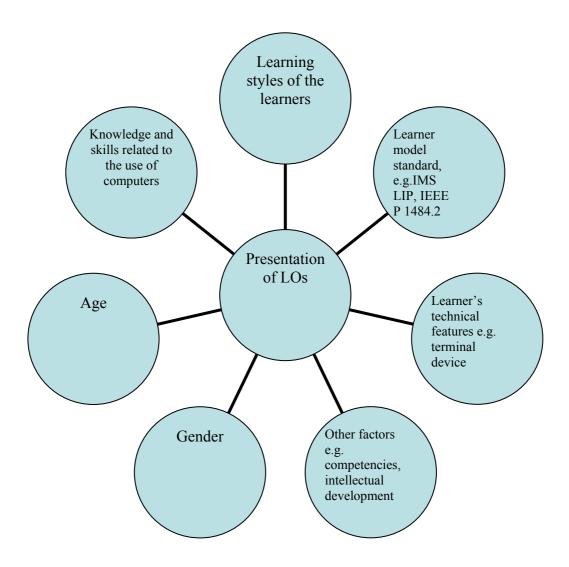


Figure 6. The factors which affect the presentation of the LOs

All the above factors synthesize the learners' (ESG) profile and contain information sourced directly from the learners (ESG) during the needs analysis phase through questionnaires or interviews.

Summing up, in our days it is evident more than ever, that in educational process, the single one-size-fits-all approach is dysfunctional and ineffective.

The use of learner models in order to set up the learner's (ESG) profile and to direct the learning process according to this profile is one of the main trends today (Wilson & Villa, 2002; Trandafir & Borozan, 2007). Personalized E-Learning is considered as a key element for next generation educational programmes (Brusilovsky, 2004),

aiming to maximize the potential of each learner. More specifically, it offers the vision (and the opportunity) of dynamically composed courses which are tailored to an individual's specific needs, prior knowledge, experience, computing environment, connectivity and communication preferences (Dagger, Conlan, & Wade, 2005).

In fact exploiting one of the existing learner model standards e.g. the IMS Learner Information Packaging, PAPI Learner (IEEE P 1484.2), or using one of the existing instruments as the Myers-Briggs Type Indicator® (MBTI), the Kolb Learning Style Inventory® (McBer and Company, Boston), or the Index of Learning Styles®(ILS) of Felder and Solomam (2008) can provide significant support for effective instructional design.

But attention should be paid, to make sure that the true objectives of personalized learning are served. The team that is engaged in the design and development of personalized LOs have to keep in mind that a balance must be kept between personalization and cost, as by each addition of a parameter affecting the presentation of LOs, the number of LOs in the system is increased exponentially.

Hierarchy and mapping between content and presentation in providing personalized LOs addressed to Educators of Special Groups (ESG)

As already stated, the key element for the personalization of LOs addressed to ESG is the compatibility between educator and learner, which dictates the content of the respective LOs. This also defines a strict hierarchy between content and presentation, where content is clearly dominant over presentation. In other words, LOs addressed to ESG must be primarily personalized in relation to the type and level of compatibility of the educator before any further personalization can be effected through presentation (Pavlis-Korres & García Barriocanal, 2008).

For example it is the LO created for ESG with low cultural compatibility that will be mapped with presentation parameters to create further personalized LOs matching the different learning styles of educators and not vice versa. Educators with the same level and type of compatibility would still benefit by using the same LO, even if they have quite different learning styles, while a LO matching perfectly the educator's learning style but not corresponding to his/her compatibility type and level would be quite useless. It is needless to say that this hierarchy does not undervalue at all the importance of presentation, as the LO matching both the educator's compatibility and learning style will greatly enhance the educational procedure.

Therefore, starting from a content repository, based on the type and the level of compatibility, a respective presentation repository of LOs will be created according to the factors which affect the presentation, in order to appeal to different learning style preferences, competencies, orientations, age, gender etc.

The instructional design theories in the ESG Framework

The e-education of educators of special group aims to the improvement of their compatibility with their learners through the development of the cognitive and the affective domain.

In the ESG Framework for the development of the cognitive domain the combination of the following instructional theories have been selected, as they seem to respond better to the objectives of educators' education as well as to the principles of adults' education:

- Gardner's "Multiple approaches to understanding"
- Jonassen's "Designing Constructivist Learning Environments"
- Nelson's "Collaborative Problem Solving"
- Bielaczyc and Collins's "Learning Communities in Classrooms"

Understanding the main notions of multicultural relations, prejudices, stereotypes and attitudes is of major importance on the part of the educators as well as the cultivation

of higher intellectual skills (analysis, synthesis, evaluation) in order educators to be able to encounter educational issues concerning special groups. On the other hand, the above theories meet the needs of adults' education taking into consideration the personal characteristics of the learners (ESG), promoting active, collaborative and exploratory learning, the use of communicative tools, interaction and the involvement the learners (ESG) in the learning process. Last but not least, these theories can be adapted in E-learning environments exploiting the possibilities that learning technology offers, resulting in a more efficient educational process.

For the purpose of the development of the affective domain as a base for the instructional design model the "Structured design for attitudinal instruction" of Kamradt and Kamradt has been selected as it goes hand in hand with transformative learning and has been adapted to the needs of E-learning instruction.

Additionally the instructional design model for the educators of special groups follows as much as possible the six guidelines of Simonson and Maushak. For the development of the cognitive element in the affective domain the design theories which we have been selected for the development of the cognitive domain itself shall be used, depending on the learning situation.

The ESG Instructional Design Model

The ESG Instructional Design Model aims to the improvement of compatibility between educators and learners which occurs as a result of the acquisition of knowledge and the development of higher intellectual and metacognitive skills, the awareness of educators concerning their own attitudes toward special groups and the change of these attitudes. An initial multimedia stimulus triggers the reconsidering and revising of prior knowledge and attitudes and promotes self-reflection and critical thinking. During each educational activity learners (ESG) are asked to keep a diary on concrete guidelines which the educator poses. After that, the discussion and discourse in the forum/electronic discussions groups where the learners (ESG) share and

exchange knowledge, experiences, assumptions, values, beliefs and feelings has the central role in the instructional process. As we have mentioned in the relevant section, discussion, discourse, and support from others (educators, colleagues) play a major role in transformative learning. After discussion and discourse, the educator provides feedback and support to learners (ESG).

The instructional process in the ESG Instructional Design Model

The ESG Instructional Design Model, as far as the cognitive domain is concerned uses elements of the Gardner's, Jonassen's, Nelson's and Bielaczyc and Collins's theories, while as far as the the affective domain is concerned is adapted from Kamradt and Kamradt theory, drawing elements from the theories on transformative learning and is aligned with the six guidelines of Simonson and Maushak.

When the instructional process is addressed to the cognitive domain only, in the beginning of the process the learner's (ESG) initial position on the knowledge continuum is corresponding to the type and the level of his compatibility with the special group. The educating goal for the learner (ESG) is to acquire new knowledge and develop higher intellectual and metacognitive skills, so that his position on the knowledge continuum will be shifted towards the desirable positive direction, which simply means that he will improve his compatibility with the special group. The instructional cycle during the cognitive development is presented in figure 7.

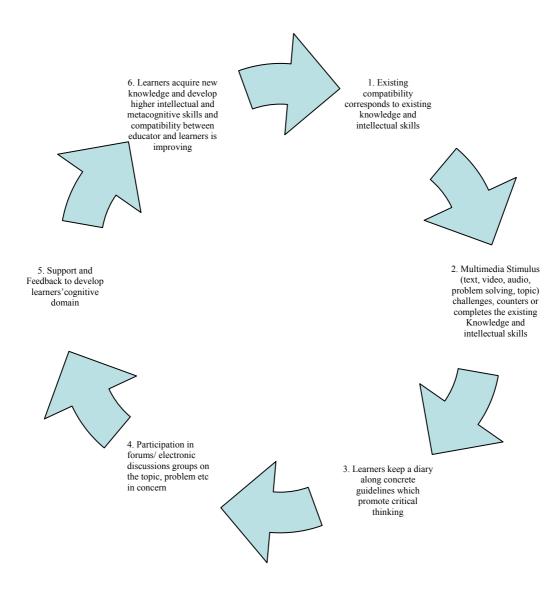


Figure 7. The instructional process in ESG Instructional Design Model for the development of the cognitive domain

At the end of the instructional cycle the learner (ESG) has moved to a new position in the knowledge continuum in relation to the target group which is towards the positive side of the axis. This new position is the starting point for a new instructional cycle.

In the development of the affective domain, each initial attitude, which is assessed through attitudinal needs analysis, corresponds to a type and level of compatibility between educator and learner and the educational goal is on the one hand to help the learner (ESG) become aware of his own attitudes and on the other hand to motivate the learner (ESG) to freely adopt an attitude that is nearer to the "positive" end of the attitude continuum. Each time the learner (ESG) adopts an improved attitude, he is shifting towards the positive direction on attitudes' continuum, which simply means

that his compatibility improves. The different initial position on the continuum of attitudes for each educator supports the need for personalized educational material.

The instructional cycle during the affective development is presented in figure 8.

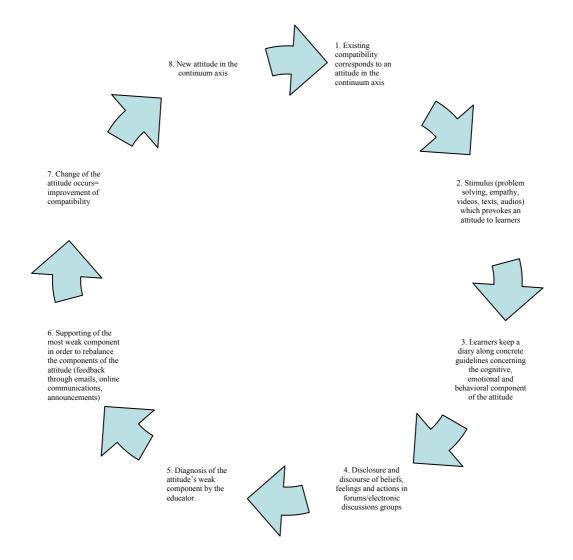


Figure 8. The instructional process in the ESG Instructional Design Model for the development of the affective domain

More analytically the instructional cycle for the development of the affective domain in the ESG Instructional Design Model includes:

- An assessment of the learner's (ESG) type and level of compatibility which corresponds to an attitude positioned in the attitudes' continuum.
- A multimedia stimulus is presented to the learners (ESG) in order to provoke response and activate an attitude. The stimulus could be a problem which

needs solution, a text to be read, a video to be watched, a topic which is proposed for discussion, etc. The stimulus is addressed to multiple intelligences of the learners (ESG) (Gardner's theory) and it could be a problem who needs solving (Jonassen's theory) individually or collaboratively with other learners (ESG) (Nelson's theory). In the whole educational process a creation and function of learning community is promoted (Bielaczyc and Collins's theory).

- The learners (ESG) are asked to keep a diary during each educational activity (reading, watching, listening, studying a topic or a problem etc). The learners (ESG) are asked to keep a diary on what they thought (cognitive) or already knew about the topic/problem, how they felt (emotional) about studying the topic or the problem, and what they thought they would do (behavioral) during the instructional activity. The diary is kept following the guidelines provided by the educator, using questions which trigger the critical self- reflection of the learners (ESG) and middle or higher order aptitudes are cultivated (application, analysis, synthesis and evaluation).
- The learners (ESG) disclose their beliefs, feeling and behaviors, which correspond to the three components of their attitude, in the forum/electronic discussion groups which play an important role in the instructional process. According to the transformative learning theory and the learning community theory the learner (ESG), being in a comfortable environment governed by respect for all participants' opinions, is encouraged to express his own beliefs, views, assumptions and feelings, to receive comments and support from the educator and the other learners (ESG), reflect on his own attitudes so that he can enter in the process of reconsideration without hesitating.
- The educator is in a position to diagnose the weak component (cognitive, affective, behavioral) in a learner's (ESG) attitude.
- Personalized feedback and support is provided to the learners (ESG) through
 mails, chat, forum, announcements, or next learning unit, in order to force the
 weak component and rebalance the three components. For example, if the
 weak component is a belief on some characteristics of the special groups, the

educator introduces the learner (ESG) to new information which will help change that belief.

- The three components are balanced and therefore a change of attitude is occurred, which means that compatibility between educator and learners is improved.
- At the end of the instructional cycle the learner (ESG) has moved to a new position towards the positive end in the attitudes' continuum. This new position will be the starting point for a new instructional cycle, aiming to shift the learner's (ESG) attitude further towards the positive end, thus improving his compatibility.

In table 4 the instructional process of the ESG model is going through a conformance test with Kamradt and Kamradt theory and Simonson and Maushak guidelines:

Table 4. Conformance test between instructional process of the ESG Model and Kamradt and Kamradt theory and Simonson and Maushak

ESG Instructional Model	Kamradt and Kamradt instructional Model	Simonson and Maushak guidelines
A stimulus is presented through multimedia in order to activate an attitude.	Presenting a problem which activates an attitude and creates dissonance.	Learners react favorably to mediated instruction that is realistic, relevant to them, and technically stimulating.
The learners (ESG) are asked to keep a diary during their educational activity and concrete axes are posed according with they have to express their feelings, thoughts and behaviors.	The learners are asked by the educator: 1. How did the situation make you feel? (affective) 2. What were you thinking? (cognitive) 3. Why did you do what you did? (behavioral)	Learners who are involved in the planning, production, or delivery of mediated instruction are likely to react favorably to the instructional activity and to message derived.

The learners (ESG) express their attitudes (with the three components including) in the forum/electronic discussions groups concerning the problem or the topic.	The learners are expected to defend their attitudes and express their objections.	Learners who participate in post instruction discussions and critiques are likely to develop favorable attitudes toward delivery method and content. Learners who experience a purposeful emotional involvement or arousal during instruction are likely to change their attitudes in the direction advocated in a mediated message.
Diagnosis of the dissonant component (cognitive, affective, behavioral).	Diagnosis of the dissonant component (cognitive, affective, behavioral).	
Feedback and support is provided to the learners (ESG) through mails, chat, forum, announcements, or next learning unit, in order to force the weak component and rebalance the three components. The three components are rebalanced and therefore a change of attitude is implemented. Consolidation of the attitude.	Instruction corresponding to the dissonant component. Consolidation of attitude.	Learners are persuaded, and react favorably, when mediated instruction includes the presentation of new information about the topic. Learners are positively affected when persuasive messages are presented in as credible a manner as possible. Learners who participate in post instruction discussions and critiques are likely to develop favorable attitudes toward delivery method and content. Learners who experience a purposeful emotional involvement or arousal during instruction are likely to change their attitudes in the direction advocated in a mediated message.

The ESG Instructional Design Model is also in line with the adults' education principles:

- The multimedia stimuli are learner (ESG) centered, as they have been chosen according to the learning styles, the interests, the needs, the experiences, the goals and the expectations of the learners (ESG). This goes hand in hand also with Gardner's Multiple Intelligences Theory.
- The active participation of the learners (ESG) runs through the whole framework (needs analysis, developing of curriculum, formative evaluation, arrangement of many practical issues as deadlines of assignments, time schedule of the meetings etc, summative evaluation). In the learning process active and communication educational practices and tools are used as forum, chat, mails, exercises, working in groups etc. Through these practices the development of higher-level skills, such as problem-solving skills, learning strategies, critical thinking skills, inquiry skills and metacognitive skills, is promoted via analysis, synthesis and evaluation. (Leshin, Pollock and Reigeluth 1994; Jonansen's theory 1989; Nelson's theory 1989; Belzacyc and Collins's theory 1989).
- The learning environment is based on communication, cooperation and mutual respect. The 3 types of interaction in distance education according to Moore's typology (1989) are promoted (interaction between the learner and the content, interaction between the learner and the expert who prepared the subject material, or some other expert acting as educator and interaction between one learner and other learners alone or in group settings, with or without the real-time presence of an instructor) as well as the fourth type of interaction which has been introduced by Hillman et al. (1994), "learner-interface interaction" (a process of manipulating tools to accomplish a task").

Integrating adults' characteristics and requirements for effective adult learning in the ESG Framework

In order to enhance adults' learning (Pavlis-Korres, Karalis, Leftheriotou, & García Barriocanal, 2009), the following points must be observed in the design and development of E-learning processes in the ESG Framework:

- Learners (ESG) must actively participate as much as possible through all the phases of the educational process (needs analysis, design, development, implementation, evaluation, maintenance of learning community network).
- The content of the education must be formed and adapted according to the
 needs analysis results. That means that the content will meet the expectations,
 needs and interests of the learners (ESG) and will correspond to the learners'
 (ESG) type and level of compatibility.
- The appropriate communication tools which learning technology offers in our days must be integrated in the E-learning environment, in order to promote interaction between educator and learner, between the learners, between learner and content and between learner and interface. Forums and threaded discussions have a central role in the educational process.
- Activities that promote and support
 - o higher-order thinking (analysis, synthesis, evaluation)
 - o critical thinking
 - collaborative work
 - problem-solving
 - o self-directed learning and learners' explorations

must be designed.

Design for supporting personalized learning must be implemented. The
content of the LOs must correspond to different types and levels of
compatibility while the presentation of the LOs must correspond to different
learning profiles of the learners (ESG).

- The course must be structured in a way that LOs will be adapted to the pace of learning and the specific needs of the learners (ESG).
- The counseling and facilitating dimensions of the educator's role must be strengthened. Less emphasis should be placed on transmitting information, and more emphasis should be placed on developing students' skills.
- The learners (ESG) must participate in the formative and summative evaluation of the program.
- The learners' (ESG) experience in using the Web as a learning environment should be considered in structuring the content and the presentation of the LOs.
- In the planning of the framework for e-educating educators of special groups instruction and exercises must be included that will provide learners (ESG) with the appropriate skills needed to participate in the electronic classroom.

Selecting a platform to be used for the e-education of educators of special groups using the ESG Framework

The choice of a LMS (Learning Management System), CMS (Course Management System) or VLE (Virtual Learning Environment) or the development of a new one depends on the needs to which it must correspond; how large is the organization who wants to use it and the organization's management strategy, tracking capabilities, what records must be kept and what report must be produced, how much and at what levels the content will be reused, how many courses, lessons, topics and media components must be created separately, how many authors and media specialists will contribute to the project, how divergent are the educational needs of learners (ESG), what kind of courses are preferred to be created – synchronous or asynchronous mode, what are the technical skills and professional flexibility of the staff who will be employed, and finally the budget which is to be spent (Horton & Horton, 2003).

The choice and use of an existing LMS or CMS or VLE should be based on a wide range of E-learning tools offered in order to provide the necessary infrastructure for an effective adult online learning environment, by creating and organizing interactive multimedia-rich educational content in an engaging manner. For the purpose of our research and in order to test our framework for the education of educators of special groups we chose Dokeos web-based E-learning system, which is open source software. We chose Dokeos (www.dokeos.com) among other platforms as it offers an efficient user friendly E-learning environment [both for educator and for learner (ESG)] with online content and assessment creation tools, collaboration tools, as well as tracking and reporting tools for monitoring user activity and progress. Dokeos offers many custom learning objects (folder, external link, uploaded files, learning paths, exercises, tests/quiz (evaluations, assessments), announcements, agenda, forum, chat, image gallery). The educator can create his own learning objects from scratch using a custom option or/and he can use external links to reach learning objects available from learning object repositories. It is important to note that most Learning Content Management Systems come with standard display templates that provide options for how learning objects will look on screen.

The structure of the course addressed to educators of special groups using Dokeos open source platform is depicted in figure 9.

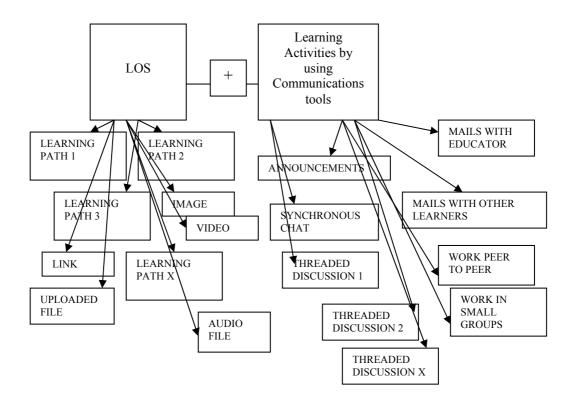


Figure 9. The structure of the course addressed to Educators of Special Groups using Dokeos open source platform

The learning objects (in the form of learning paths or not) could be images, videos, audio files, an image or audio resource and textual document containing information about the image or the audio, a news item with or without images, a textual document which imparts information about a particular topic, lecture notes with or without added resources, a practical exercise, a document that gives instructions on how to carry out a problem solving, a problem solving exercise, quizzes, assessments, links etc. It is important that each LO consists or is part of a specific educational objective. The learning activities by using communication tools could provide material in order to create new LOs as the archives of a threaded discussion which could be used as educational material in another course in the same LMS or in another LMS. Learning paths and learning activities could be directly interrelated and support each other, e.g a threaded discussion could rely on the content of a learning path, or a content of a learning path could be enriched by the contributions of the learners (ESG) in a discussion board.

Development

Following the Design phase the Development phase is proceeding in three stages. In the first stage a search of suitable learning objects for our educational purpose is conducted in learning objects repositories and other sources. Based on the outcome of the search new learning objects with the appropriate content and presentation are created. In the third stage the sequence of the learning objects in the program and the duration of the course are defined. This phase also includes the authoring, reviewing and editing of LOs metadata.

LOs in the ESG Instructional Model

Based on the instructional design model proposed LOs in the form of Learning Paths shall be created. A Learning Path is a structured instructional sequence divided into chapters, which are then further divided into steps. A learning path can be organized following the content's existing structure. Tests and discussions (forums) can also be combined in learning path sequences. The learner's (ESG) progress through a learning path's sequence can be controlled by prerequisites. This means that the learner (ESG) has to complete certain steps before moving on to others. The learning path sequence can be suggestive - showing the steps one after the other, and it is up to the learner (ESG) to follow the sequence; or binding - the learner (ESG) has to follow the steps in the order given. The learners (ESG), depending on the structure which the educator has chosen, either have the liberty to follow or are obliged to follow the sequence of a learning path. LOs in the form of learning paths could contain one or more images, videos, links, texts, exercises, quizzes, multimedia educational material, questionnaires, problem solving, keeping a diary on specific guidelines, case studies etc.

Chapter one

Step one: reading of texts

Step two: watching videos

Chapter two

Step one: keeping a diary

Step two: listening to audio files

Step three: keeping a diary

Chapter three

Step one: participation in a forum

Step two: quiz

Figure 10 depicts a possible structure of a learning path.

Figure 10. A possible structure of a Learning Path

Learning Paths offer the potential for creating a journey through a knowledge base that can include resources, tests, assignments, discussions, evaluation, experimentation, cross-examination.

Chapter five

The duration of the learning paths varies depending on the material (e.g. study of a scientific text needs more time than watching a video which lasts 1 minute), as well as on the pace of each learner (ESG).

The use of texts, videos and audio files in learning paths has the advantage that students can read, view or listen on their own at their own pace. They can also review the educational material partly or in whole and in whatever order they choose.

Educational material must be interesting and relevant and form the basis for discussions.

The use of photos, audio files and videos help bring otherwise inaccessible people and experiences in the classroom. Learners (ESG) could interact with these materials in their own pace. Music, anecdotes, interviews, documentaries, opinions of experts may be used as basis for discussion or problem solving.

The use of Internet allows access to an infinite array of materials on all topics. There are many online repositories from which LOs on relevant topics could be retrieved and used for the purpose of e-education of educators of special groups. Also, interactive internet materials are proposed to be included that learners (ESG) can take tests and receive personal summaries or profiles based on them. An example is the "Project Implicit" which blends basic research and educational outreach in a virtual laboratory at which visitors can examine their own hidden biases following an interactive procedure (https://implicit.harvard.edu/implicit/demo/takeatest.html).

In the LMS the LOs, alternatively to the form of Learning Paths could be separate links, images or uploaded files from one participant. The LMS should also contain learning activities by use of communication tools which promote interaction, collaboration και immediacy between all participants in the course. Such communications tools are e-mails with the educators, e-mails with the other members of the course, announcements, calendars, synchronous chat, forums, threaded discussions and work in smaller or larger groups.

Learning Objects should be created according to IMS (Instructional Management System) (2004), SCORM (2005) and IEEE LOM specifications so that the resulting LOs will not be restricted for use within one specific Learning Management System, but can be reused and shared between systems (Edwards et al., 2007; Polsani, 2003; Pickard, Fisher, & Jones, 2004).

Sequence of LOs in the ESG Framework

From all the approaches exposed in the relevant section concerning sequence of the educational materials/learning objects it is obvious that the sequence of LOs will be defined in line with the main instructional design principles, as these principles are adapted to adults' education. The sequencing strategies simple-to complex, easy —to difficult and familiar- to unfamiliar seem to be common in most approaches, while sequencing the educational material based on learners' (ESG) characteristics and needs will be based on the outcome of the needs analysis. There is not a fixed recipe that is identical for all learners (ESG) and in all situations.

This simply means that the developer and the educator of the educators of special groups should define the sequence of LOs at the beginning of the educational process, taking into account the learners' (ESG) characteristics and needs but the educator has the burden of redefining this sequence in the course of the program. The difficulty and complexity of both these tasks depends on the size of the learning group and the number of LOs available.

Learning Objects for the Educators of Special Groups (ESG) and their Metadata

In order for the LOs which form the educational material for the educators of special groups to be described properly, their important properties have to be linked with the existing IEEE LOM elements and a number of additional LOM elements must be defined and proposed as extensions.

Metadata systems allow for extensions so that particular needs of a given application can be accommodated (Duval et al., 2002). Such extensions may take the form of new

terms for existing vocabularies, new vocabularies for existing elements or new elements.

As Wason (2006) quotes Online education is still too much in its infancy to presume to create all necessary and adequate meta-data fields and vocabularies. Therefore, it is also possible to include concepts that are not included in the standard LOM. This is one of the intended purposes of Classification.

In the present application which is the development of educational material for the training of educators of special groups within an E-learning environment, we have to form new terms and taxonomies which specify further existing vocabularies (5.5.intended end user role) and create extensions in the form of taxonomies which indicate the educational objectives, and the new element of compatibility between educator and learner (9.1.classification.purpose). These taxonomies will provide the proper information pertaining to the particular domain of the training of educators of special groups under the broad term purpose.

As the notion of compatibility could not be presented in any of the existing purposes in classification category, a new purpose under the name "special attributes" is created in order to accommodate compatibility between educator and learner as well as provide space where any learning object with specific attributes can be accommodated under classification purpose.

More precisely:

a. Figure 11 is indicative of this proposal and presents a hierarchical taxonomy beginning with the broad term "intended end user role" and refining its vocabulary term "teacher" in LOM IEEE category 5.Educational, 5.5.Intended end user role:

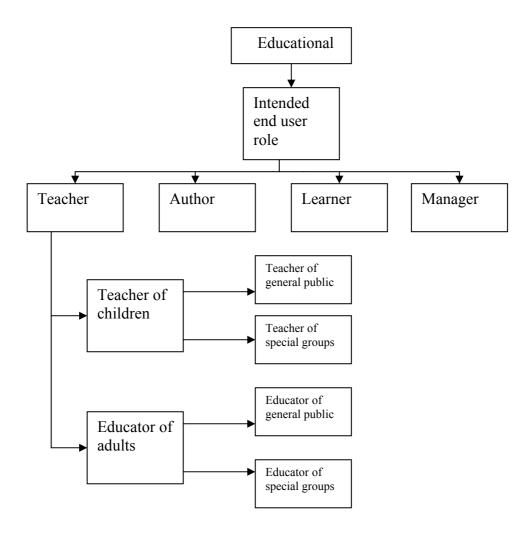


Figure 11. A new taxonomy refining the term "teacher" in LOM IEEE category 5. Educational, 5.5. Intended end user role

b. In category 9.1.Classification.Purpose existing taxonomies serving the description of the educational material are used and new taxonomies are created in order to provide the proper information pertaining to the particular domain of the education of teachers or educators of special groups.

The information about the educational domain in which a Learning Object belongs contained in standard classification schemes {i.e.LCC (Library of Congess Classification)} is either too general (i.e. LB 1705-2286: Education and training of teachers and administrators, LC212-212.863: The discrimination in education,) or too

specific (i.e. LC2667-2698: Latin Americans.Hispanic Americans, LC3503-3520: Romanies. Gypsies). Therefore, we can not properly and accurately classify our significant information (compatibility between educator and learner) in any of the existing categories.

In the following example existing taxonomies have been used under existing purposes, *discipline* and *educational objectives*, and a new purpose, *special attributes*, has been added with a new taxonomy under the broad term "compatibility between educator and learner".

- 9.1.Classification.Purpose.*Dicsipline* / taxonpath: LCC / taxon id: L / entry:education / taxon id: LC1390-5160.3 / entry: Education of special classes of persons / taxon id: LB1705-2286 / entry: Education and training of teachers and administrators.
- 9.1.Classification.Purpose.*Educational objectives* / taxonpath: "Bloom's learning taxonomy" [2] / "http://www.nwlink.com/~donclark/hrd/bloom.html / Cognitive objectives, Affective objectives.

The new purpose *special attributes* including compatibility is depicted in table 5:

Table 5. Classification. purpose. special attributes

No	Name	List of values
9.1.Classification	-	-
Purpose	Special attributes	Compatibility between educator and learner
-	-	Cultural
		Ethnic
		Social
		Linguistic
		Physical

In reference with the element compatibility, we must define the vocabulary to be used:

Social compatibility: It defines the level of knowledge, of positive attitude and acceptance of the social status of the special group by the educator.

Cultural compatibility: It describes the level of knowledge, of positive attitude and acceptance of the culture of the special group by the educator.

Ethnic compatibility: It describes the level of knowledge, of positive attitude and acceptance of the ethnic identity of the special group by the educator.

Linguistic compatibility: It describes the level of knowledge, positive attitude and acceptance of the linguistic identity and specialties of the special group by the educator.

Physical compatibility: It describes the level of knowledge, positive attitude and acceptance of the disabilities/impairments of the special group by the educator.

Values for all the above types of compatibility are: very low, low, medium, high, and very high.

It is obvious that without the new taxonomies for the extension of existing vocabularies and the new extensions created for the classification of the compatibility between educator and learner, a learning object dealing with these issues will be lacking the necessary metadata which would ensure its interoperability, retrieval and reusability.

Summing up we conclude that in order to enhance retrieval, interoperability, portability and reusability of Learning Objects for the education of educators of special groups their metadata have to be described and classified under IEEE LOM specifications with the appropriate extensions, vocabularies and taxonomies. Moreover, the additional purpose "special attributes" in classification catergory allows the proper description of any LO containing properties that could not be classified under IEEE LOM specification.

Implementation

When the learning objects and the structure of the course are in place the implementation of the educational program begins.

In this phase the familiarization of the learners (ESG) with the e-platform and the acquisition of the necessary skills for using it effectively is essential for the whole educational process (Hillman et al., 1994). This is more important for those learners (ESG) of older age, for whom it could be a crucial barrier in their education, as some of them may be illiterate in ITC or suffer from technophobia (Karalis & Koutsonikos, 2003).

The implementation of the educational program is based on the ESG Instructional Model as it is further analyzed later in the document.

Promoting interaction in the ESG Framework

In the case of the education of the educators of special groups the interactions among learner (ESG) and educator and between learners (ESG) are very important as we have to address to cognitive domain, promoting higher level skills to the learners (ESG) (analysis, synthesis, evaluation through critical thinking), as well as to the affective domain, assessing and improving learners' (ESG) attitudes. Interaction through communication tools among learners (ESG) and educator and among learners (ESG) play a vital role in effective education of educators of special groups.

According to Moore's (1989) categorization of interaction, LOs in the form of learning paths will promote the interaction between learner (ESG) and content and the learning activities within the learning path or existing in the platform (mail, forum, threaded discussions, chat) will promote interaction, immediacy, critical thinking and collaboration between educator and learners (ESG) as well as between learners (ESG) and learners (ESG). In both LOs and communication tools the fourth type of

interaction which has been added by Hillman et.al (1994), interaction between learner and interface, will occur as learners (ESG) use technologies to communicate with the content, ideas, and information about course content with the educator and other learners (ESG). Figures 12 and 13 depict all the types of interaction which occur during the educational process in an online course for educators of special groups: Interaction between learner (ESG) and educator, between learner (ESG) and learner (ESG), between learner (ESG) and content and between learner (ESG) and interface as well as interaction between educator and content. Interaction between learner and interface runs through the other 3 types of interaction as it occurs when a learner interact with content, with educator or with other learners. In our framework of education of special groups the type of interaction between educator and content is also apparent as new technologies enable educator to interact with the content easily and creatively. Interaction between educator and content occurs as the educational process is dynamic and educator has the opportunity to update or transform the content and the sequence of LOs during the educational period according to the needs of the learners (ESG).

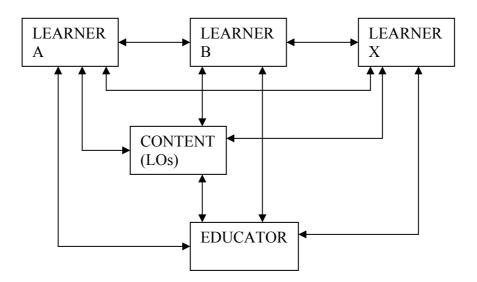


Figure 12. Types of interaction which occur in the online environment for the education of educators of special groups

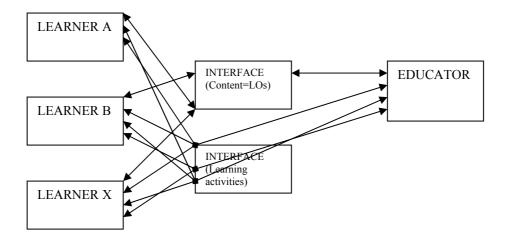


Figure 13. Interaction between learner and interface as well as interaction between educator and interface runs through the other 3 types of interaction

The role of the educator in the ESG Framework

The ideal role of the educator in the ESG Framework is the role of facilitator of learning. In this context, the educator's task is to promote active participation of learners (ESG), self-directed learning, collaborative learning, as well as to challenge, stimulate and provoke critical thinking, to create the appropriate learning environment of comfort and mutual respect, so that learners (ESG) shall express their beliefs, views, assumptions, feeling and considerations without hesitation.

By using the appropriate strategies, the educator should support the interaction with and between learners (ESG) as well as content and interfaces, promote immediacy, use the appropriate communication tools and seek solutions to any technical problems that might hinder communication.

By continuously monitoring learners' (ESG) interaction and progress the educator has the task of rearranging the content and sequence of the educational material and activities so that these correspond to the learners' (ESG) needs and interests, while providing feedback, supporting and evaluating continuously the learners' (ESG) performance and the development of the course.

Last but not least, the educator must encourage the creation of a learning community network and the maintenance of such a network after the end of the educational program.

The educator must also serve as a role model by himself, demonstrating a willingness to learn and change. The educator who is a co-learner is a participant in the process of learning-discovering, challenging and changing.

Evaluation

In our assessment strategy formative evaluation plays an important role in the improvement of the educational program along its duration. Formative evaluation is present in each phase of the learning design process, revealing weaknesses and providing ways of improvement through feedback, leading to changes necessary to support the instructional system (Reigeluth, 1996). Through Summative evaluation, which will be performed at the end of the course the educational outcome is measured while strengths and weaknesses in the course will be identified so that the program is improved for future use.

Maintenance of the Community Learning Network

In our framework which uses ADDIE model for ESD we have added an extra phase the "Maintenace of the Community Learning Network". This phase includes the maintenance of the learning community which has been established during the educational program after the end of it. Also, it includes the encouragement of learners (ESG) to create new learners' (ESG) networks after the end of the program.

During the course of the e-education of the educators a sense of community and connection is aimed to be developed through the forums which are taking place in an atmosphere of realness, acceptance and empathic understanding and most of the learners (ESG) want to continue their contact. Our learners are the educators of Roma and after the end of the program they could keep in touch and interact through a learners' (ESG) community network.

The Conceptual Framework for the E-education of Educators of Special Groups

The Conceptual Framework for the E-education of the Educators of Special Groups (ESG) is depicted in figure 14.

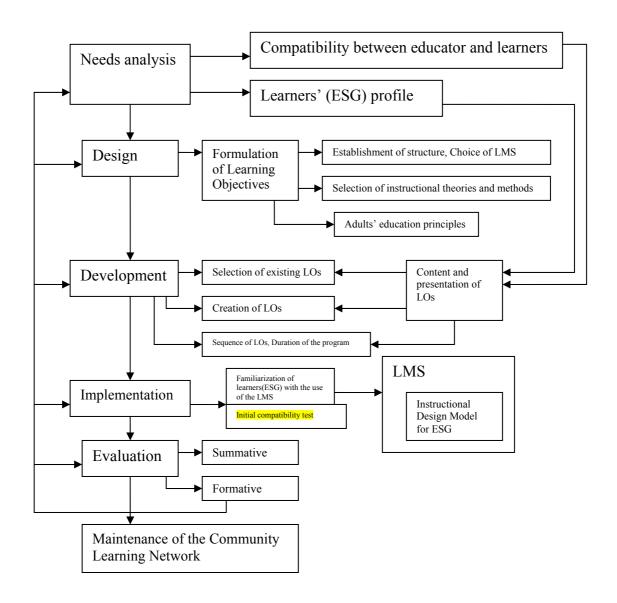


Figure 14. The Conceptual Framework for the E-Education of Educators of Special Groups (ESG)

Note: Fields highlighted yellow have been added after the test application.

Summing up the parameters which synthesize the ESG Educational Framework

Learning technology provides the media which are exploited in the education of the educators of special groups. LMS is the technological framework within which e-education of educators of special groups is implemented. Asynchronous learning mode has been chosen as is better suited to the characteristics and requirements for effective adults' learning.

The use of Learning Objects technology supports the reuse of learning units within the same LMS as well as promotes the interoperability among different LMS. Metadata according to IEEE LOM with the necessary extensions are used to describe the LOs in order to facilitate retrieval, reuse and exchange of the developed LOs.

A key notion which has been introduced in our framework is the notion of compatibility between educator and learners. With the term compatibility we refer to the level of knowledge and acceptance of, and positive attitude towards, the special group on the part of the educator. The assessment of compatibility and its improvement is the core of our approach concerning the framework of the e-education of educators of special groups. The content of LOs is dictated by the type and the level of compatibility between educator and learner in combination with the adults' education principles (exploitation of knowledge and experience of the learners (ESG), active involvement in the educational endeavor, cooperative learning).

As the instructional objectives of the education of educators are mainly related with the cognitive and affective domain, respective instructional design theories are used. For the cognitive domain, the instructional design theories used have been selected according to the educational objectives, the learners' (ESG) characteristics and the educational environment. Elements from Gardner's "Multiple approaches to understanding", Jonassen's "Designing Constructivist Learning Environments", Nelson's "Collaborative Problem Solving", as well as Bielaczyc and Collins's "Learning Communities in Classrooms" have been used, adapted to the educational

environment and within the constrains of time. For the affective domain the proposed instructional model is based on the Kamradt and Kamradt instructional design theory and is aligned with the theories of transformative learning, while following as much as possible the six guidelines of Simonson and Maushak for effective mediated instruction.

The presentation of LOs is developed according to the learners' (ESG) profiles and the requirements of effective adult learning (learner centered-education, active participation of the learners and creation of a learning environment based on communication, cooperation and mutual respect). Forum and electronic discussions groups play a vital role in the e-education of educators who address to special groups. The developed or the selected LOs as well as the use of communication tools will promote the interaction between learner (ESG) and content, learner (ESG) and educator, learner (ESG) and learner (ESG), learner (ESG) and interface as well as educator and content.

The ADDIE model has been used as basis for the development of the ESG Framework with an addition of an extra phase, the Maintenance of the Learning Community Network.

The ESG Framework provides clear but flexible guidelines to be followed by the designers, developers, administrators and instructors, optimizing the personalized elearning of the educators of special groups. The ESG e-framework contributes to the improvement of compatibility between educators of special groups and their learners, helping to overcome the barriers of time and space and reduce the cost of education for educators (Pavlis-Korres & García Barriocanal, 2010).

PRACTICAL PART

Testing the "ESG Framework"- Pilot application

"Men's activity consists of action and reflection: it is praxis; it is transformation of the world. And as praxis, it requires theory to illuminate it. Men's activity is theory and practice; it is reflection and action. It cannot be reduced to either verbalism or activism"

(Paulo Freire, 1970)

In order to test the "ESG Framework", a group of educators of Roma in Greece has been selected. All the phases of the "ESG Framework" have been followed, a pilot educational material -in the form of Learning Objects- has been designed and developed and a pilot implementation has been carried out using the web-based E-learning open source environment Dokeos. The qualitative analysis of the course as well as the formative and summative evaluations of the pilot application have provided valuable information for the weak and strong points of the framework so that remedies could be integrated in the final synthesis.

Due to the fact that the learners in the test application are in fact educators, in order to avoid confusion between the notions of "educator" and "learner", the terms educator and learner are followed by the term ESG in parenthesis whenever it has been considered necessary. On the other hand we have used the term "administrator" instead of "educator" wherever we refer to the educator of the course

Case study: The Greek Educators of Roma

"The future of Gypsy communities depends to a considerable extent upon the manner of their cildren's education. An active adaptation to their environment, both social and economic, appears to occur today through the acquisition of basic elements which enable the group and the individual to analyse a changing reality. In the cultural sphere, these same basic elements can serve as tools for those who wish to conserve, affirm, and develop an original identity"

.Jean-Pierre Liégois (1987)

The ESG Framework for the e-education of educators of special groups has been tested with a group of educators of Roma in Greece for the following reasons:

- Roma have more than one of the characteristics which define a special social group (Soulis, 1961; Pavlis-Korres & Sideri, 1990; Pavlis-Korres, Spanouli, & Kaloudi, 1991; Liegois, 1994; Fraser, 1995; Papakonstantinou, Pavlis-Korres, Vassiliadou, 1997-1999; Kenrick, 1998). These characteristics are:
 - their own oral language Romani
 - their own culture
 - common ethnic origin
 - their social and educational status in Greek society is primarily specified by social exclusion
 - the Greek society carries stereotypes and prejudices towards Roma
- The education of Roma is a critical issue because:
 - The vast majority of adults (around 65% of the total population) are illiterate. This percentage grows above to around 85% for semi-nomads and close to 100% for nomads and persons above 60 years old (Marselos & Pavlis-Korres, 1985; Papakonstantinou et al., 1997-1999).

- Education will play a crucial role to their social and vocational integration
 (Liegois, 1987; Vassiliadou & Pavlis-Korres, 1996; Vergidis 1997)
- The researcher has been working with Roma for over 25 years, her work including the education of educators of Roma.

Roma in Greece – Some sociological features

In order to better understand the context within which the education of Roma is taking place, the following important sociological features of Roma in Greece, as these have been derived from studies and research (Liegois, 1987; Pavlis-Korres & Sideri, 1990; Vassiliadou & Pavlis-Korres, 1996; Papakonstantinou et al., 1997-1999; G.S.A.E., 1999), are presented:

- Roma have all the characteristics which define a special social group as defined in this research.
- The extended family which is the core of the Roma social and economic life is highly valued by the traditional Roma.
- Both men and women often marry in very young age and virginity is essential in unmarried women.
- The socialization of the children takes place in the context of the family and the community.
- The concept of school does not exist in Roma society. Schools are institutions of gaje⁵, which promote different ideas, behaviors and values from their own, so they are not attractive to Roma.
- Teachers and other pupils are members of the gaje society, bearing stereotypes and prejudices towards them, therefore school is often a place where discrimination and racism appear.

⁵ The word 'Gajo', also pronounced as 'Gazho' (plural-'Gaje' or 'Gazhe') is used by the Roma people for a non-Rom (non-Gypsy)

- The vast majority of adults are illiterate (around 65% of the total population), a fact that plays crucial role in their social and vocational integration.
- Work patterns of Roma are self-employment and independence. All trades practiced by Roma consist, in one form or another, of selling goods or services to non-Roma.

Phases of the pilot application

"...in practice there is much working backwards and forward in a non-linear fashion, because work done at any one stage gives new insights into other stages.."

(Gagne and Briggs, 1979)

The pilot application program has followed all the phases of the "ESG Framework" (Analysis, Design, Development, Implementation, Evaluation and Maintenance of the Learning Community).

1. Needs Analysis

In needs analysis the compatibility of educators (ESG) with Roma learners has been assessed as well as the educators' learning profiles in order to define the content and presentation of the appropriate educational material which has been designed and developed intending to meet their needs and fill the gap between the current situation and the desired one, as well as the selection of the E-learning management system that will be used.

The content of the educational material has been based on the type and the level of the educators' compatibility with the special group of Roma. The presentation of the LOs has been based on the learning profiles of the educators of Roma which are composed by the learning styles, their age and gender, their knowledge and skills on using computers, their access to computers compatible with the technical infrastructure.

2. Design

In the phase of design the educational objectives have been specified and the concrete learning objectives have been formulated. The main educational objective has been the improvement of compatibility between educators and learners by fostering the cognitive and the affective domain.

The "ESG Instructional Design Model", as has been developed in the ESG Framework, has been selected, as it meets both the objectives specified and the principles of adult education.

The choice of the Dokeos learning platform for the pilot application has been selected.

3. Development

In this phase the search of existing LOs suitable for the learning objectives of the course as well as the creation of new ones has taken place. Following the development of LOs, their metadata have been described and the duration of the course and the sequence of the LOs have been decided.

4. Implementation.

Preparation of the learners (ESG). The first step in the phase of implementation has been the familiarization of the learners (ESG) with the Dokeos learning platform and the acquisition of the necessary skills for using it effectively.

Implementation of the course. The e-course has been running for 4 months. The learners (ESG) have accomplished 7 Learning Paths and various learning activities (self-presentations, group activities for the promotion of group cohesion, chat, forum, mail, upload files, links).

Live final meeting with the learners (ESG). The preservice educators have participated in a live meeting with the administrator of the course after the course was finished.

5. Evaluation.

Formative evaluation has been conducted in the middle of the course through a questionnaire as well as during the course, through chatting with the administrator of the course. Summative evaluation has been conducted at the end of the course through a final questionnaire and the analysis of the archives of the course. The formative and summative evaluation have provided valuable information on the outcome of the course as well as the content, the presentation, the procedures, the tools of the course and the role of the educator (administrator).

6. Maintenance of the learning community network.

After the end of the course the maintenance of the learning community network has been achieved through the use of the Face Book network.

Although the above phases followed a more or less linear pattern, there were occasions where the work in one phase has given new insight into other phases, so that some back and forth movement has been necessary in order to capitalize on positive or negative evaluation points in any of the phases.

In the following sections we shall analyze each phase in more detail.

Needs analysis

The needs analysis of educators for Roma in Greece was carried out in March 2008.

The focus, the method and the sample of the needs assessment

Needs assessment can take a variety of forms based on the set of specific purposes and in a specific context. According to Bohnen (1988) the following three variables must be defined in order to effectively conduct the needs assessment: the *focus*, the *method* and the *sample*.

The focus

In the case study of this research the *focus* was to define the type and the level of compatibility between educators (ESG) and learners (Roma), as well as their learning profiles which identify the educational needs of the educators in order to provide them with effective educational material for their e-education.

Compatibility between educators and learners

Elements that constitute the type and the level of compatibility between educators of Roma and Roma learners were assessed and measured through a questionnaire focusing on:

- Educators' (ESG) knowledge of the characteristics of the target group of Roma (ethnic, cultural, linguistic, social)
- The educators' (ESG) own stereotypes, prejudices and attitudes towards Roma and other special groups in Greece.

Learning profiles of the educators (ESG)

Elements that synthesize the learning profiles of the educators (ESG) were investigated through a questionnaire focusing on:

- The learning styles
- The learning approaches of the learners (ESG)
- The accessibility of the learners (ESG) to Personal Computers
- The computer skills of the learners (ESG)
- The learners' (ESG) familiarity with E-Learning
- The gender and the age of the learners (ESG)

As educators of Roma were adults, the needs assessment also focused on the educators' (ESG) preferences, knowledge and skills. The hypotheses were that:

- they prefer active learning(Knowles, 1984; Jarvis, 1995; Rogers, 2007)
- they prefer the outcome of the learning procedure would have a practical application (Knowles, 1984; Jarvis, 1995; Rogers, 2007)
- the collaborative learning tools which an E-Learning environment provides would be appropriate for their needs (Knowles, 1984; Jarvis, 1995; Rogers, 2007)
- the preservice educators, which are younger, are more familiar with modern technologies and E-Learning than inservice educators, as they belong to a computer oriented generation and they take courses in the university on using computer etc.

The method

The *method* which has been used for the collection of the information was a questionnaire which has been designed by the researcher and has been pre-tested in a small sample of educators (ESG) who had experience with Roma.

In the design of the questionnaire, many different techniques have been used. Compatibility issues were based on social relations research methods (Javeau, 1978; Kidder, 1981; Henerson et al., 1987; Bell, 1993; Cohen & Manion, 1994) such as Likert-type scale, Gutman's technique, Bogardus Social Distance Scale.

In order to identify the learning styles of the learners (ESG) and to structure an effective learning environment based on those styles, elements from more than one of the existing instruments have been combined. Kolb's (1976) categorization of learning styles (active learners, reflective learners, experimental learners and theorizing learners) and his Learning Style Inventory have been taken into account as well as Felder's and Soloman's categorization of learning styles (active and reflective learners, sensing and intuitive learners, visual and verbal learners and sequential and global learners) and their Index of Learning Styles (Felder & Brent, 2005).

The purpose of the questionnaire was also to measure knowledge and attitudes in a qualitative manner. As the educator's (ESG) knowledge of, and attitudes towards, special groups (specifically in relation to Roma) are interrelated, many questions were simultaneously estimating knowledge and attitudes. Closed and open-end questions were used, depending on the aim of each question.

The questionnaire was completed by the educators (ESG) during individual or group meetings with the researcher (Javeau, 1978; Henerson et al., 1987; Bell, 1993). The Statistical Package for Social Sciences has been used for the data analysis. The questionnaire is available in appendix 1.

The sample

The sample (information oriented selection) (Flyvbjerg, 2006) consisted of 30 educators (ESG), half of which would participate in the pilot application of the framework. The sample may seem limited at first sight, however it should be noted that the total number of educators of Roma in Greece is very small. At the time of the research there was only one national educating program run by the University of Thessaly, Greece (Integration of Gypsy children in School (2006-2008)) in 8 prefectures in Greece. Sixteen of the educators had already had some experience working with Roma and in this paper we shall refer to them as the *in-service* educators. Ten of our in-service respondents were the vast majority (10 out of 13) of the educators who participated in the above educational program in the prefecture of Attica. The other six in-service educators formed the whole staff who worked in a local program implemented in the Health Center for Roma in the Municipality of Tyrnavos in Thessaly. All of the in-service educators were selected as a representative sample of educators participating in national and local programs addressed to Roma, through which they were expected to be trained on Roma issues. The remaining 14 respondents are a typical sample of educators who do not have any special training or experience of working with Roma, but they are prospective educators who, upon qualification, could have Roma children among their pupils. We shall refer to them as the *pre-service* educators. All 14 of them are undergraduate students in the Department of Educational Science and Early Childhood Education, University of Patras, Greece. These students were chosen because they will staff the Nurseries Schools and they will be the first educators that the Roma children will come to contact with. It was also crucial to detect possible differences in educational needs between pre-service and in-service educators so that these could be taken into account in the design of the educational material.

Resutls of the needs assessment

A detailed analysis of the results of the needs assessment is presented in Appendix 2. The main findings on the two main aspects of the needs assessment, compatibility between educators (ESG) and Roma learners and the learners' (ESG) profiles, were:

a. Compatibility between educators and learners

The needs assessment has shown that:

- The compatibility level of the educators (ESG) with their Roma learners is very low to low in all compatibility types applicable.
- Educators' knowledge on the origins, language, living conditions, culture, customs and traditions of Roma are limited.
- The beliefs and attitudes of the educators towards Roma are dominated by stereotypes and prejudices.
- Educators believe that Roma in Greece face discrimination.
- No extremely adverse attitudes and beliefs have been traced, and a considerable number of educators have shown significant interest in learning more about Roma and their culture.
- The educators refer to the problems they face during the educational procedure with Roma children, without relating those problems to the way Roma teach their children, or to the fact that this way is obviously ignored by the official educational system.
- In a variant of Bogardus Social Distance Scale, which is an indication of how close the educators want to be with the social group of Roma, the answers reveal that although the educators accept Roma as citizens, as colleagues, as neighbors and as kinsmen, the greater their distance from Roma, the more comfortable they feel. It is important to note that no respondent wants Roma to be deported. A considerable number of respondents (one third of the

respondents) also claimed that they would allow their children to marry a Rom/Romni⁶, an act which consists of the closest relationship they could have with Roma, on the Bogardus scale.

- Another very interesting finding has been the reaction of the respondents when
 they have been asked to look at some photographs depicting the living
 conditions of semi-nomadic Roma in compounds and every day moments of
 joy and carelessness along with cultural aspects of Roma life and express the
 feelings they felt on seeing each photograph.
 - O The snapshots depicting the living conditions of semi nomadic Roma in compounds caused the majority of the respondents' negative feelings: sorrow and wrath prevailed among the answers. The picture that triggered negative feelings for most of the respondents (91%) is figure 15.

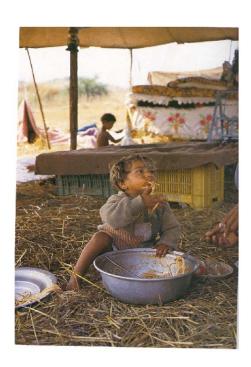


Figure 15. The picture that triggered negative feelings for the most of the respondents

 The photographs that do not focus on the difficulties of life but instead show everyday moments of joy and carelessness along with cultural aspects of Roma life (e.g. a Rom singer, women

⁶ Rom/Romni =man/woman in Romanes language

- dancing with bread on their heads, a mother braiding her daughter's hair, children swimming in the river) caused pleasant feelings to the majority of the respondents and excited their interest in Roma customs and traditions.
- The picture that provoked the most positive feelings (93.4% positive feelings against 6.6% negative ones) is figure 16, showing the dancing of the breads, a Roma wedding custom. It is indicative of the educators' lack of awareness of Roma culture that none of them knew anything about this custom, but it is optimistic that quite a few were eager to learn more about it.



Figure 16. The picture that provoked the most positive feelings to the respondents

With their comments, educators verbalized their need for social equality, and improvement of living conditions and chances, for all the groups present in a multicultural society.

• The needs assessment found that, surprisingly, there is no significant difference between the compatibility of in-service and pre-service educators

with their Roma learners, although the in-service have participated in national and local programs which have included special training on Roma issues. This poses a question on the efficiency and effectiveness of the existing educational programs.

The results of the needs assessment showed that the learners (ESG) have very low cultural, ethnical, social and linguistic compatibility with Roma. They lack vital knowledge about the Roma culture, a fact that influences the formation of their attitudes towards Roma. On the other hand, there are no extremely negative viewpoints or attitudes towards Roma. This means that there is room for improving compatibility between educators (ESG) and learners(Roma) through educating programs. To do this, it is necessary to foster the cognitive and affective domain through the design, development and implementation of E-learning material for the educators of Roma (Pavlis-Korres, García Barriocanal, & Leftheriotou, 2008).

b. Learning profiles of the learners (ESG)

The needs assessment has shown that:

- The learners (ESG) have sufficient access to computers [96.7% of the sample have access to Personal Computer (PC) and 83.3% have a PC at home].
- The learners (ESG) are familiar with computers and their use to a level that they can attend an E-Learning course for their e-education.
- The preservice educators are better familiarized with computers and have higher level skills than the inservice educators.
- The hypothesis that preservice educators which are younger than the inservice ones are more familiar with modern technologies and E-Learning than the inservice educators has been confirmed. It is notable that 46.7% of the sample actually the preservice educators has attended a demonstration of the Moodle E-Learning platform within a computer science course in the University.

- Although the majority of learners (ESG) have not attended any E-learning course (93.3%), they are strongly willing to attend (70%).
- The learners (ESG) have different learning styles but there are not any significant differences between preservice and inservice educators. There is a bias towards learning by reading and watching video.
- There is a slight overall preference of the sample working in a group but it is interesting to note the difference between the preferences of preservice and inservice educators in Figure 17.

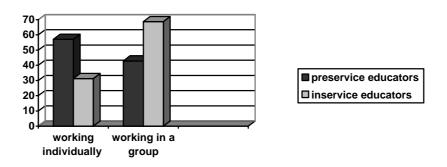


Figure 17. Preferences on working individually or in a group

- The vast majority of the sample (80%) prefers to study by guidance. This includes all the preservice educators who prefer to study by guidance, and this is justified by the fact that the preservice educators of the sample are students in the formal educational system which does not encourage self-directed learning.
- Learners (ESG) prefer active participation learning techniques, collaborative learning tools and they want their educational outcome to have practical application. These findings are in line with adults' education principles and provide a sound base for the development of an E-Learning environment.
- Regarding the learners' preferences on what an E-Learning environment should contain the most popular tools are e-mailing with the administrator, group activities and use of multimedia, as shown in table 6.

Table 6. Preferences on learning tools

What they like an E-Learning platform to	Percentage %
contain	
E-mail with the administrator	56.6%
Group activities	46.7%
Use of multimedia	46.7%
Participation in a restricted forum of 3-5	30%
persons	
Teleconferences	26.7%
Individual activities	26.7%
E-mail with other learners	26.7%
Forum with the whole group	16.7%

There is a significant divertification of preservice educators towards groups activities in an E-learning platform compare to their initial preference towards individual work.

This could be explained by the fact that in formal education younger preservice educators are mainly used to individual educational procedures while at the same time they use the internet mainly for entertainment through group activities (games, chat rooms) (The observatory for the Greek Information Society).

- 60% of the respondents favour E-Learning material containing theoretical data, while 83.4% favour practical applications of the theory.
- The learners (ESG) are very open to new forms of evaluation existing in an E-Learning platform but they still rate the asynchronous written exam, i.e. their familiar way of evaluation, as their first choice (30%).
- The vast majority of the sample were women (76.7%) and people aged 20-30 years old (73.3%) while no one was over 55 years old.

The results of the needs assessment show that learners (ESG) have sufficient access to computers and they are familiar with computers and their use to a level that they can attend an E-Learning course for their training. Although the majority of learners (ESG) have not attended e- learning, they are strongly willing to attend.

Learners (ESG) have different learning profiles which must be taken into account in the design and the development of the educational material as well as for the selection of the appropriate LMS for the implementation of an E-learning course.

All the learning styles will be considered without exception, as there is neither any totally rejected nor any exclusively preferred, although there will be a bias towards dominant learning preferences. Learning activities must combine individual and collaborative work as well as theoretical issues and practical applications.

The structure of the course must be based on study by guidance but also promote self-directed learning, active participation, and the use of communication learning tools. These are in line with adults' education principles and provide a sound base for the development of an effective E-Learning environment.

Design

Formulation of educational objectives

The main goal of the e-education of educators of Roma by using the ESG Framework has been *the improvement of the compatibility between educators and their Roma learners*. As the cultural, social, linguistic and ethnic compatibility of educators with Roma, as detected by the needs assessment has been very low the prime educational objective is to improve it.

The specific objectives through which the prime objective will be achieved are the *fostering of the cognitive and the affective domain*.

The specific objective regarding the cognitive domain, according to Krathwohl, Bloom and Masia (1973) taxonomy, is the cultivation of middle and higher order skills (comprehension, application, analysis, synthesis, evaluation). The learners (ESG) from comprehension eventually move into critical thinking where reconsideration, revision and transformation of his/her attitudes take place. More precisely, at the end of the course, the learners (ESG) are expected to know and

comprehend the characteristics of the Roma group, to use this knowledge in understanding their Roma learners and handle educational issues in relation to the Roma learners' culture, language, origin and customs, so that they will be aware of their own attitudes and they will be able to reconsider, revise and transform these attitudes towards the special group of Roma. They are also expected to be able to identify and understand the main notions of multicultural relations, prejudices, stereotypes and attitudes, recognize and interpret stereotyped behaviors and be aware of the formation of their own bias, stereotypes and prejudices towards "the different" in general and the special group of Roma in particular.

The specific objectives regarding the affective domain, according to Krathwohl, Bloom and Masia (1973) taxonomy, is the awareness and transformation of learners' (ESG) attitudes. Depending on the time available for the e-education of ESG, the administrator is working with the five levels in the affective domain moving from the lowest order processes to the highest: receiving, responding, valuing, organizing and finally characterizing. At the end of the educational course, the learners (ESG) are expected to be aware of and recognize their own stereotypes and prejudices towards "the different" in general and the special group of Roma in particular and change their attitudes towards the positive end in the continuum axis of attitudes.

Instructional theories

For the e-education of educators of Roma the "ESG Instructional Design Model", as has been developed in the ESG Framework, has been used.

The "ESG Instructional Design Model", as far as the cognitive domain is concerned is using elements of the Gardner's, Jonassen's, Nelson's and Bielaczyc and Collins theories, while as far as the affective domain is concerned it is formed by adapting Kamradt and Kamradt theory, drawing elements from the theories on transformative learning, while it is aligned with the six guidelines of Simonson and Maushak.

In the "ESG Instructional Design Model", both for the cognitive and the affective domain, the administrator assesses the level and the type of compatibility of the educators (ESG) with their Roma learners which is placing each educator in a position on the knowledge and attitudes continuum. The instructional cycle begins with an initial multimedia stimulus which triggers the reconsidering and revising of prior knowledge and attitudes and promotes self-reflection and critical thinking. During each educational activity the educators (ESG) are asked to keep a diary on concrete guidelines which the administrator poses. After that, the discussion and discourse in the forum/electronic discussions groups, where the educators (ESG) share and exchange knowledge, experiences, assumptions, values, beliefs and feelings, has the central role in the instructional process. Discussion, discourse, and support from others (administrator, colleagues) play a major role in transformative learning. After discussion and discourse, the administrator provides feedback and support to educators (ESG).

In the beginning of the instructional process the educator's (ESG) initial position on the knowledge and attitudes continuum is corresponding to the type and the level of his/her compatibility with the special group. The instructional goal for the educator (ESG) is to acquire new knowledge and develop higher intellectual and metacognitive skills, as well as to be aware of and change his/her attitudes towards the special group, so that his/her position on the knowledge and attitudes continuum will be shifted towards the desirable positive direction, which simply means that he/she will improve his compatibility with the special group. At the end of the instructional cycle the educator (ESG) is expected to have moved to a new position in the knowledge and attitudes continuum in relation to the target group, towards the positive side of the axis. This new position is the starting point for a new instructional cycle.

Adults' education

In the "Testing of the ESG Framework- Pilot application" the adults' characteristics and requirements for effective adult learning have been integrated, in the following way:

- The educators (ESG) active participation has been encouraged in all the
 phases of the educational process, directly (needs analysis, implementation,
 evaluation, maintenance of learning community network) or indirectly (design
 and development).
- The content of the course has been formed and adapted according to the needs analysis results, corresponding to the educators' (ESG) type and level of compatibility.
- The appropriate communication tools (e-mail, forum/electronic discussion groups, chat) have been integrated in the E-learning environment, in order to promote interaction between administrator and learner (ESG), between the learners (ESG), between learner (ESG) and content and between learner (ESG) and interface. Threaded discussions (forums/electronic discussion groups) have had a central role in the educational process as they promote active participation, immediacy and collaborative learning.
- Activities that promote and support
 - o higher-order thinking (analysis, synthesis, evaluation),
 - critical thinking
 - collaborative work
 - problem solving
 - o cohesion, group dynamic
 - o self-directed learning and learners' explorations

have been designed.

- The instructional course has been designed in a way supporting personalized learning. The content of the LOs corresponds to the required types and levels of compatibility while the presentation of the LOs corresponds to the different learning profiles of the educators (ESG).
- The course has been structured in a way that the LOs are adaptable to the pace of learning of each educator (ESG).

- The counseling and facilitating dimensions of the administrator has been strengthened. Less emphasis has been placed on transmitting information, and more emphasis has been placed on developing educators' (ESG) skills.
- The educators' (ESG) experience in using the web as a learning environment has been considered in structuring the content and the presentation of the LOs. Furthermore, a preparation phase, so that educators (ESG) could be familiarized with the platform and acquire the appropriate skills needed to participate in the electronic classroom has been included.

Selection of an e-platform

For the purpose of the e-education of educators of Roma in Greece the Dokeos webbased E-learning system has been chosen, which is an open source platform. Dokeos (www.dokeos.com) has been chosen among other platforms for the following reasons:

- it offers an efficient user friendly E-learning environment [both for the administrator and for the educators (ESG)]
- it has online tools for content creation and assessment
- it meets the needs for effective adults' education as it contains communication tools and collaboration tools (forum, chat, mail, announcements, work in groups) which promote active participation of the educators (ESG) and interaction among educators (ESG) and administrator as well as with the content and the interface.
- it has tracking and reporting tools for monitoring user activity and progress.
- it offers many custom tools (folder, external link, uploaded files, learning paths, exercises, tests/quiz (evaluations, assessments), announcements, agenda, forum, chat, image gallery). The designer, developer and administrator can create their own LOs from scratch using a custom option

or/and they can use external links to reach LOs available from learning object repositories.

Development

The Development phase is proceeding in three stages. In the first stage a search of suitable learning objects for our educational purpose is conducted in learning objects repositories and other sources. Based on the outcome of the search new learning objects with the appropriate content and presentation are created. In the third stage the sequence of the learning objects in the course and its duration are defined. This phase also includes the authoring, reviewing and editing of LOs metadata.

Selection of existing LOs

The main search for existing LOs was implemented in Learning Objects Repositiories (LOR). A further search was conducted through the web searching for material related to "Roma", "Gypsies", "prejudice", "stereotypes", "discrimination" and "multiculturalism".

The search in learning objects repositories produced a limited number of LOs matching the above key words.

As an example, the results of our search in MERLOT repository, using as key words the words, "prejudice", "stereotypes", "discrimination", "Roma", "Gypsies", "multiculturalism", are presented in table 7.

Table 7. Results for existing LOs in MERLOT repository related to our educational purposes

Matching categories	Results
Prejudice, stereotypes, discrimination,	Animation (2)
multiculturalism	Case study (1)
	Collection (2)
	Lecture/Presentation (3)
Gypsies	Simulation (1)

Most the existing LOs in the repositories were in English and some of them in French and other languages. This was a barrier for using them, as the course was in Greek.

The search in the most popular search engines, with key words prejudices, stereotypes, racism, Roma produced some very interesting articles and papers in Greek concerning Roma in Greece and we have used them as educational material.

Useful material was found searching for Roma, containing a lot of information on their history, culture and several educational programs.

The search on prejudice was also fruitful, as we found some sites which contain many free resources and activities and include interactive quizzes and activities for students to evaluate their own prejudices, extensive bibliography on related topics, links on various types of prejudice and organizations trying to combat them, sample syllabi and activities for college classrooms on prejudice. Indicatively we mention http://www.understandingprejudice.org/ and https://implicit.harvard.edu/implicit/. Some of these sites we had already found in LOR through the respective links.

A further search was conducted in youtube.com, a video sharing website, taking into account the study conducted by Simonson and his colleagues (1985) which was addressed to filmmakers about the techniques they used when they designed persuasive motion pictures. The definition of persuasive film used for this study was: "A persuasive film is training or educational film that has influencing, persuading, or

changing of attitudes as its primary purpose" (Simonson & Maushak, 1996, p.1006). The result of the study showed that an effective persuasive film was one that was believable and realistic, presented new information, was fun to watch, aroused and promoted in the viewer some action, either intellectual or behavioral, was more visual than verbal, and followed-up by discussions as outlined in a teacher's guide that should accompany the film.

The search in the youtube video sharing website produced videos on stereotypes, racism, prejudice and Roma. Most of them were in English, some in Romani, but also some in Greek. The search found some animation videos and music videos which are considered very useful as the language barrier is eliminated.

Creation of LOs

Taking into account the results of the needs assessment in order to serve the educational objectives, we have created seven LOs in the form of "Learning Paths" corresponding to very low level of social, cultural, ethnic and linguistic compatibility between educators (ESG) and Roma learners, as well as to different learning approaches and different learning styles.

As we have already mentioned in the relevant section of this research, a Learning Path is a structured instructional sequence divided into chapters, which are then further divided into steps. LOs in the form of learning paths could contain one or more images, videos, links, texts, exercises, quizzes, multimedia educational material, questionnaires, problem solving, keeping a diary on specific guidelines, case studies etc.

Besides the above "Learning Paths" there were other LOs created by the administrator out of photographs, uploaded files and videos, while links to other existing LOs have also been provided. The whole array of LOs has formed a basic repository, from which the administrator has been sourcing the appropriate ones at each stage of the course.

Each of the 7 Learning Paths of the course was developed using original material (audio files, texts, exercises, photographs) created by the author in combination with existing material from the web (text, audio files, photographs, videos, links, sites) in line and connected with our specific educational objectives.

Table 8 shows the educational objective which each learning path was aiming to as well as the selection of the presentation type.

Table 8. Educational objective and presentation type of the Learning Paths

Learning path	Educational objectives	Presentation type
1 st "Let's hear with their	Exercise of empathy which	Audio and text
ears and see with their	aiming to make learners	
eyes"	aware of the linguistic	
	problems which Roma	
	face in education and in	
	their daily life.	
2 nd "Stereotypes and	Understanding of the	Text and video
prejudices"	notions of prejudice,	
	stereotype, stigma and	
	discrimination and how the	
	special groups face and	
	experience prejudice,	
	stereotypes and stigma.	
	Experiential approach on	
	critical thinking, revision	
	and reconsideration of	
	existing beliefs, feelings	
	and behaviors.	
3 rd "Roma and education"	The acquisition of	Audio and text
	knowledge about	
	education in the Roma	
	society and understanding	
	Roma attitudes towards the	
	official school system.	

	Critical thinking, revision	
	and reconsideration of	
	existing beliefs, feelings	
	and behaviors.	
4 th "Free subject regarding	Promotion of self-directed	Text, photographs, audio
the Roma culture"	learning and collaborative	and video
	learning through	
	individual or collective	
	research of topics on	
	Roma culture.	
5 th "Stigma"	Further elaboration on the	Audio, video, text
	notion of stigma and how	
	Roma people experience	
	stigma in daily life.	
	Critical thinking, revision	
	and reconsideration of	
	existing beliefs, feelings	
	and behaviors.	
6 th "Let's laugh ha-ha-ha"	Awareness of how jokes	Audio and text
	are created from and	
	promote stereotypes,	
	prejudice and stigma.	
	Critical thinking, revision	
	and reconsideration of	
	existing beliefs, feelings	
	and behaviors.	
7 th "Problem solving"	Problem solving of Roma	Text, multiple choice
	problems in education by	exercise
	using the knowledge and	
	skills acquired in the	
	course. Critical thinking,	
	revision and	
	reconsideration of existing	

beliefs, feelings and	
behaviors.	

As indicated in the above table, all learning paths have been aiming to the development of both cognitive and affective domain. The presentation of the learning paths took into account different types of learning approaches as well as different learning styles. The educational material has been developed in line with the preferences of the educators (ESG) regarding the way of learning. All the learning styles have been considered without exception, as there was neither any totally rejected nor any exclusively preferred, although there were biases towards dominant learning preferences, which favored written and visual material. The formative evaluation has shown a strong preference for the audio files in the third Learning Path, which, however, is explained by the fact that this Learning Path contained attractive original sources with undisputable credibility.

The 1st learning path, which contained an empathy exercise, has been created with the cooperation of a Roma educator, who has narrated the instructions of the exercise in both Romani and Greek. The 3th and the 5th learning paths, which contained interviews of a Roma family (grandmother, father, mother and two children) on the problems, stereotypes, prejudices, stigma and discrimination Roma people face in school, in their social and daily life as well as on their approaches to education and other issues concerning the Roma culture, have been created with the cooperation of a Roma family. The 6th learning path which contained jokes for Roma has been created with the cooperation of the people who narrated the jokes. All the audio LOs were processed by a sound engineer to create the mp3 files that were uploaded in the Dokeos Platform.

The Learning Paths have been created using the Learning Path tool of Dokeos Platform.

Figure 18 shows the eight steps of the 1rst Learning Path at the left side of the screen and the instructions to complete its last step at the central page.

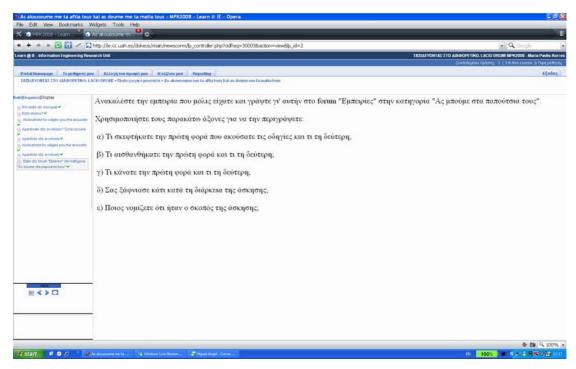


Figure 18. Learner's interface in the last step of the 1rst Learning Path

The full and detailed structure of each learning path is presented in Appendix 5.

Authoring metadata of LOs

In this phase authoring the metadata of LOs has taken place. As we have already mentioned LOs metadata are very important for faster, easier and more effective access to the learning resources. In order to describe sufficiently the educational material which is addressed to educators of special groups we have formed a metadata profile containing the important properties of the LOs, using the widely accepted IEEE LOM standard, enriched with the appropriate extensions and vocabularies which have been proposed and analyzed in the relevant section of this research.

In order to make the LOM profile for the LOs concerning educators of special groups understood in each detail, an example is provided, based on the 1st Learning Path.

The educators (ESG) implementing the first Learning Path are expected to be aware of, understand and recognize the problems and difficulties which Roma face in daily

life and in schools due to the fact that their maternal language is romani which is only oral, and most of them neither are fluent in Greek language nor can they read or write.

The first Learning Path consists of oral instructions in romanes (Roma language) to write some personal data on a paper. The instructions contain only some Greek words like "left", "right", "line". After the educators have listened the instructions once they have been asked to express what they have thought when they were listening the instructions, how they have felt and what they have done. After that they have been asked to follow the instructions again, which this second time were in Greek and write down what was requested. After that they have been asked the same questions as the the first time about their thoughts, feelings and actions. The exercise should be taken individually with a collective discussion following where each educator (ESG) could express his/her own experience. This LO is addressed to educators (ESG) with very low linguistic and cultural compatibility.

The proposed Metadata Profile for this LO, following the structure of IEEE LOM is presented in table 9.

Table 9. Example of a LO Metadata Profile in the ESG Framework application

1.GENERAL	
1.1. Identifier	URI, http://ie.cc.uah.es/dokeos
1.2.Title	Linguistic difficulties of Roma
1.3. Language	"el" "rom"
1.4. Description	Exercise of empathy aiming to make learners aware of
	the linguistic problems which Roma face in education
	and in their daily life
1.5. Keywords	Oral language, bilingualism, linguistic difficulties
1.6 Coverage	Greece, 21 th century
1.7.Structure	Collection
1.8 Aggregation level	2
2. LIFE-CYCLE	
2.1. Version	
2.2.Status	Final
2.3. Contribute	

3.META-METADATA	
3.1.Identifier	URI
3.2. 1.Role	Creator
3.3. Metadata schema	LOMv1.0
3.4. Language	en
4. TECHNICAL	
4.1. Format	Audio mp3 16/128 bps, Text, html
4.2. Size	235213
4.3. Location	http:// http://ie.cc.uah.es/dokeos
	/id
4.4. Requirements	Operating system: ms-windows, OS, any
	browser:mozilla,opera, netscape, explorer
4.6. Other platform requirements	
4.7. Duration	PT1M10S
5. EDUCATIONAL	
5.1. Interactivity type	Mixed
5.2. Learning resource type	Narrative, questionnaire
5.3. Interactivity Level	Medium
5.5. Intented end user role	Teacher/Adults/ Educator of Special Grpoups
	Teacher/Children/Teacher of Special Group
5.6. Context	Training, Continious professional development
5.7. Typical Age Range	Adults only
5.8 Difficulty	Easy
5.9. Typical learning time	PT20M
5.11. Language	"el"
6.RIGHTS	
6.1. Cost	no
6.2. Copyright and Other	yes
Restrictions	
6.3. Description	Use of this learning object is only permitted after
	communication with the author
7. RELATION	
7.1. Kind	Is part of
7.2. Resource	URI, http://ie.cc.uah.es/dokeos
8.ANNOTATION	

8.1. Entity						
8.2. Date						
8.3. Description						
8.4. Rating						
9. CLASSIFICATION						
9.1. Purpose. Discipline	LC 1390-5160.3 Education of special classes of					
	persons					
	LB 1705-2286 Education and training of teachers and					
	administrators					
9.1. Purpose.Educational	"Bloom's learning taxonomy",					
objectives	"http://www.nwlink.com/~donclark/hrd/bloom.html					
	Affective domain: Receiving phenomena, Responding to phenomena, Valuing, Organization					
	The learners are aware of, understand and recognize the problems and difficulties which Roma face in daily life and in schools due to the fact that most of them are fluent in Greek nor they can read and write					
9.1. Purpose.special attributes	Compatibility between educator and learner					
	Linguistic Very low					
	Cultural Very low					

Sequence of LOs

For the definition of sequence of the LOs the learners' (ESG) characteristics have been taken into account as well as that they attended the course in parallel with their university studies (preservice educators) and their professional life (inservise educators). That means that most of them had time for the course late in the evening after a heavy day and for this reason the educational material as well as the sequence of the LOs had to be light and attractive for them. The use of multimedia was a big

challenge for the author as it provided the opportunity to build a very attractive, light and interesting curriculum for the educators (ESG).

The sequencing strategies simple-to complex, easy - to difficult and familiar - to unfamiliar as well as thematic sequence have been followed at the beginning of the course. The dependence-to independence sequencing is also followed in order to move learners (ESG) towards independent and autonomous learning, accomplishing the common goal in adult education: the fostering of independence/autonomy or self-directed learning. In the middle of the course, the opportunity for exploration and independence has been provided in the 4th learning path, where the educators (ESG) were requested to choose, find and present a topic on Roma culture, using mainly web sources. In this path they have also been encouraged to work with other learners.

In parallel with the learning paths, group-building activities have been implemented which lead to the development of the learning community and promoted the collaborative learning.

During the course the reactive sequencing has been followed meaning that the administrator of the course was ready to respond to learners' needs and progress and re-sequence material. After the formative evaluation implemented in the middle of the course, the sequence of the Learning Paths has been changed, following the interests and needs of the learners (ESG). The initially planned sequence for the course was rearranged into a new sequence according to the learners' available time and other duties as well as their desire for different topics or more elaboration in existing ones.

Duration of the course

The scheduled duration of the course was 4 months and it has been defined by external factors, as the majority of the participants were preservice educators and the course had to coincide with their first semester in the University. This time constrain affected the selection of the educational material and the sequence and set limitations

on the techniques used, as some of them (working in small groups) would required more time.

The duration of 4 months is considered a limited time frame in relation to the subject of the course ie. the awareness and the transformation of attitudes, taking into consideration that the learners (ESG) were participating in an E-learning course for the first time. Nevertheless it has been adequate for the initial evaluation of the efficiency of the course in relation to its content, presentation and structure.

Implementation

The Participants' profile

From the 20 persons that signed up in the e-course (12 preservice and 8 inservice educators) 16 attended the whole course, as one of them could not meet the requirements of the course on computer skills (he didn't start), one had technical problems with her computer (she didn't start), one did not have access to PC at home and could not attend from another place (she didn't start) and the last one did not have access to PC at home and enough time at work to attend the course (she has attended the course for one month, implementing the introductory activity and the first two learning paths).

The 16 participants were more than sufficient for the implementation and evaluation of the course, as they developed strong relations both between themselves and with the administrator forming a proper learning community and provided adequate feedback on the strong and weak points of the course.

Ten of the 16 participants were preservice educators and they have all participated in the needs assessment. There were no participants from the 16 inservice educators who had taken part in the needs assessment, as they did not present any substantial difference compared to the preservice educators. Instead of these the group was

enhanced by six more experienced educators of Roma. The selected on purpose educators were from different towns in Greece and in Cyprus and the criterion for their participation was their experience with Roma education as well as their willingness to participate in the course. Although their compatibility with Roma was at a higher level compared to the preservice educators and the LOs were not actually addressed to them, their expected contribution on the evaluation of the educational material and the structure of the course as well the enrichment of the learning community with their knowledge and experience made their participation in the course an important asset.

One of these educators has been working in a school for Turkish Roma in Cyprus, three have been taking part in several programs for Roma in the prefecture of Larissa and Volos, one has been working in the General Secterarial of Adults' Education in Athens and has been working with Roma all over Greece, and one has been developing programs for Roma all over Greece for many years.

The preservice educators were all women, nine of which were 22 years old and one 26. The inservice educators were 3 women, aged 25 (one) and 49 (two) and 3 men aged 40, 45 and 47 years old.

Participants' preparation

In the beginning of the course it has been considered necessary to run a preparation stage to raise all participants to a similar level of familiarization with the Dokeos learning platform and its use. For this reason a manual of the Dokeos platform in Greek has been written by the author.

The preparation of the learners (ESG) for their participation in the e-educational course has been carried out individually or in groups depending on the participants' needs, skills and their territorial disperse as follows:

The preservice educators were all living in the town of Patras where they were studying in the University and it was easy to organize a live meeting with them.

They were also at an adequate level with the use of computers and the internet.

The inservice educators where geographically dispersed therefore their preparation was effected by telephone, e-mail or personally, wherever this was practical. Their competencies in computer use and the internet also varied a lot. Therefore each one had to be prepared individually.

Preparation of the preservice educators

A three hour face to face meeting of the author with the preservice educators took place in Patras. During this meeting:

- The group met with the author
- The objective of the course were discussed and the basic principles of the course were agreed
- The participants' needs and interests were discussed as well as their expectations from the course
- The greek manual of the Dokeos platform was delivered and explained step by step
- The potential of the Dokeos platform was demonstrated and the participants were familiarized with its use and functions.

Preparation of inservice educators.

During the private sessions with each one of the inservice educators:

- The content and the objectives of the program were discussed
- The participants' needs and interests were discussed as well as their expectations from the course
- The basic principles of the course were agreed
- The greek manual of the Dokeos platform was delivered by e-mail and explained step by step

• A familiarization session on the potential and the tools of Dokeos platform took place, where the author and the participants were simultaneusly connected to the platform.

The Greek manual for the use of Dokeos platform is in Appendix 2.

Description of the course

The educational objectives of the course were the acquirement of knowledge on Roma, the awareness of the educators (ESG) on their existing attitudes towards the different and more specifically the special group of Roma, as well as the transformation/change of these attitudes.

The title of the course was "A travel into the different. LACIO DROM!" Lacio drom in Romani language (maternal language of Roma people) is a wish for "happy journey". The title has been selected as a symbolism of the improvement of compatibility between educators (ESG) and Roma learners through a journey into the different.

The course began by entering the initial page in which a picture of the administrator of the course and a brief introduction, as well as the tool options (description of the course, learning paths, announcements, dropbox, chat, documents, links, formu, exercises) were presented, as shown in figure 19.



Figure 19. Learners' interface of the initial page of the course

The participants were prompted to follow the link "Course description" on the initial page and study carefully the description of the course. Figure 20 shows the description of the course as has been presented in the platform.

Course description

The course is addressed to educators (ESG) who are working with, or are about to work with Roma people, regardless of the subject they teach.

The duration of the course is approximately 4 months. On the Announcement Board you can see each week's activities. You may enter the platform any time you wish. This means that you may choose the time of the day and how much time you can spend on the course activities, but it is suggested to complete each activity by its expiry date, which will be determined jointly by the administrator and all the participants.

Objectives

The educational objective of the course is a different approach of the special social group of Roma by educators who going to teach Roma learners. The course aims to improve the compatibility between the educator and the Roma learners. By compatibility, we mean the level of knowledge and acceptance of, and positive attitude towards, the special group on the part of the educator.

Course contents

Assessment of the compatibility between the educator and the Roma group Aquiring knowledge regarding the Roma group in Greece

Awareness of the prejudices and present attitudes of the educators towards Roma people

Educational activities

Study and comment on texts and audiovisual material

Personal exercises

Keeping personal diaries

Participation in forums

Chatting with administrator and other participants

Uploading files in order to be shared with other participants

Work in small groups

Solving problems, case studies

Self-evaluation

Course-evaluation

Communication with administrator

Communication with other learners

The participants will be given the possibility to make proposals on the content and form of educational activities.

References

Internet sources

Literature

Human Resources

The person responsible for the creation and implementation of the course is Maria Pavlis Korres. You can contact her during the implementation of the course for any inquiry regarding the content of the procedure.

Assessment process

Your assessment will be based on:

Your participation (quantitative and qualitative) in the course activities

Your performance in tests

Your self-assessment

Your assessment by other participants

Learning how to learn

The course is aiming to help us learn how to handle various educational issues which we may encounter in classes attended by Roma people, through active participation and critical reflection. Therefore, problems solving and case studies will focus more on the procedure of solving, rather than on the problem itself.

Your participation in the course will help you obtain a different approach to various special social groups, appart from Roma people, which you may come in contact with during the educational process. Furthermore, participation in an E-learning course, will provide familiazation and experience in E-learning enhancing your learning capabilities and improving your learning horizon, by overcoming the barriers of space and time.

Figure 20. Course description in Dokeos platform

Educational material

The educational material of the course included:

- an initial compatibility test between educators and Roma learners
- two activities for the cohesion and promotion of the group dynamic (group development)
- seven learning paths
- an art gallery which contained photographs from Roma life and was enriched during the duration of the course
- links to sites which contain material for Roma
- links to videos which contain information, music etc for Roma
- links to sites and videos which contain material on prejudices, stereotypes,
 stigma, discrimination

The initial educational material, although primarily addressed to educators with very low cultural, social, ethnic and linguistic compatibility, following the results of the needs assessment, has been considered adequate for this test application, as it contained many and various LOs which, through the proper support and feedback from the administrator, could be individually upgraded and adapted for educators up to medium level of compatibility.

The two very experienced participants with very high level in most types of compatibility, although they knew from the beginning that the course was addressed to educators with lower compatibility, were nevertheless willing to participate in the course as they had never attended an E-learning course before and found the idea of contributing in the development of educational material very interesting.

The educational material of the course regarding its content, presentation and sequence has been adapted during the course, following discussions between the administrator and the participants, the formative evaluation which took place in the

middle of the course taking into consideration the views and the wish of the participants.

Communication tools used in the course

The communication tools provided in the Dokeos platform have been used throughout the course. These communication tools were:

- Announcements and Agenda
- E-mails
- Chat
- Forum
- Dropbox

Apart from the announcements and the Agenda which were only for the use of the administrator all other communication tools were bidirectional and were used by both the administrator and the participants in an interactive way.

Besides the above tools mobile phones have been used for direct communication beyond the limit of the platform, while a closed learning group created in the Face Book under the name "Lacio Drom" helped overcome a temporary technical problem in the platform during the Christmas Holidays.

Development of the learning group

The designer, the developer, the administrator and the educator, who for the purpose of this research was the same person, has followed the basic stages for the development of a learning group and has enriched the course with activities which have promoted and support the development of the learning group. In the first stage, the focus has been on identification and socialization with collegues, followed by exchange of knowledge and experience, leading to the application of metacognitive skills by group members, in the final stage.

The two activities which have been designed, developed and implemented at the early beginning of the program lead to the introduction and socialization of the participants. The first activity was the self-presentation of the learners. When this was completed and the participants had read the self-presentations, the second activity requested each participant to point out similarities and differences with all other participants. All the participants have implemented both the activities and the result was that participants and the administrator have identified with and related to one another, promoting their online socialization.

Mooving on in the course, through the accomplishment of the learning paths, the participants have been exchanging information and experiences between them in electronic discussion groups, promoting collaboration and critical thinking. Finally through feedback from the administrator and other members of the group, the participants have developed metacognitive skills, applicable in their daily and professional life.

Further reference to the above learning activities is made during evaluation, in the next section of this document.

Monitoring

The administrator's need to have access on individual learners' progress information was satisfied by the Dokeos platform tools, where each learner has a personal activity report as well as to all the archives of the chat room. Furthermore, in Dokeos platform every action is tagged with the person's photo and name, a fact that stresses the personal involvement and promotes understanding of each individual. This helps the administrator and the other participants to remember who they are communicating with.

In the learner's activity report the administrator was able to gather important information, such as to which stage the learner has completed each learning path, how much time he has spent in each step of a learning path, if he has participated to a threaded discussion, how many files he has downloaded, when was his last connection in the chat room, how many connections he has to the platform. Through the above information the administrator was in position to track each learner's progress, encourage him and give him personalized support.

Creation of a closed learning group in the Face Book

Due to technical problems in the University of Alcalá in Spain, the access of the Dokeos platform during the Christmas Holidays was impossible. As the course duration was only 4 months and the time was valuable, in order to exploit this period, a closed learning group in the Face Book has been created.

The preservice educators (ESG) were familiar with the Face Book, as most of them have their own personal pages and use it daily. The inservice educators as well as the administrator had to be familiarized with the Face Book and create their personal

pages in order to participate in the learning group. The name of the learning group was "Lacio Drom" and from the 16 educators 15 have signed up.

The Face Book has provided all the necessary communication tools necessary to the leanring group. The administrator as well as the participants have uploaded educational material in the form of text, photographs, links, videos and comments and have been chatting, promoting interaction between them. The use of the immediate chatting capability proved more efficient compared to the chat room of dokeos platform resulting a considerable increase in communication between participants themselves and between participants and administrator.

The creation of the learning group network in the Face Book has greatly helped the maintenance of the learning community during the Christmas Holidays and the participants have decided to maintain the "Lacio Drom" group beyond the end of the course, materializing the initial design of the ESG Framework, the final phase of which was the maintenance of the learning community network.

The course in a snapshot

Table 10 shows the chronological sequence of the learning paths, learning activities, the creation of the closed learning group in the Face Book as well as the completion of formative and summative evaluation.

Table 10. An overview of the course within its timeframe

Initial compati bility test	Self- presenta tion	1 st Learning Path	Commo ns and differen ces in the learning group	2 nd Learning Path	3 rd Learning Path	4 th Learni ng Path	Form ative evalu ation	Participa tion in LACIO DROM learning group in the face book	5 th Learni ng Path	6 th Learni ng Path	7 th Learni ngPat h	Summa tive evaluati on
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Final meeting

The preservice educators have asked for a final meeting in person after the end of the course. This final meeting was held at the University of Patras on May 15 and lasted 3.30 hours. Unfortunately only 8 of the participants managed to attend, as 2 of the preservice educators had already graduated and left for home, while 3 of the inservice educators could not attend, due to health problems and the other 3 due to distance and time barriers.

In this meeting several activities have been implemented, the more important of which were:

- Exercises on acceptance of the "different"
- Projection of videos on stereotypes in the kindergarden and ethnic stereotypes
- A total review and evaluation of the course
- Exercise on the most important miles stones in the course for each participant
- Discussion for the maintenance of the learning community network through the Face Book
- Exercise for the closure of the course and the future path of each participant titled «the group is over...and..." (To be completed by the participants).
- An exercise of self-awareness and encourangement.

The material of the final meeting is in appendix 9.

Evaluation

The evaluation of the course has been conducted in three main axes:

- the evaluation of the course structure, processes, tools and content towards the achievement of the educational objective
- the evaluation of the outcome, meaning whether the course achieved the educational aim for which it was designed, i.e.the improvement of learners' (ESG) compatibility with Roma
- the evaluation of the success of the E-learning framework compared to conventional educational methods.

For the evaluation of the above axes, formative and summative evaluation has been used.

Formative evaluation has been conducted in various stages of the course and its results have been taken into consideration for making changes in the course structure and educational material, aiming to the achievement of the educational objective and the improvement the course efficiency.

Summative evaluation has been conducted at the end of the course, assessing data from all possible sources, its results pertaining to the whole course and either confirming the successful elements or pointing out areas for improvement in future application.

Evaluation of the structure of the course

The course structure has been evaluated regarding its content, processes, procedures, communication tools and technical efficiency, as well as its efficiency in promoting learners' active participation, interaction and immediacy, the most important factors in both adults' education and online education.

Formative evaluation of the course structure

Formative evaluation of the structure commenced in a live meeting with the preservice educators before the beginning of the course, where the participants requested specific educational material related to Early Childhood Education. The request has been accepted and the course material was modified accordingly.

Additional minor changes concerning mainly the time for implementation of learning activities were effected, in response to suggestions by the participants proposed in the chat room or by e-mail.

The main formative evaluation of the course structure was carried out in the middle of the course by a questionnaire which was completed by all the learners. The questionnaire contained questions on the participants' satisfaction by the course structure, its content and the Dokeos platform, any difficulties they faced in the platform use, which elements of the course they liked and which they did not and on the participants' use of the communication tools. The participants were also prompted to make suggestions on desired changes on the content and the structure of the course. The questionnaire was processed with the SPSS program.

The most important findings of the formative evaluation of the course structure were:

- All the preservice educators who participated in the initial live meeting with the administrator found this meeting very useful.
- All the participants found the user manual prepared by the administrator very useful.
- On the platform use 43.8% of the participants stated that they faced minor technical problems, which all were overcome with the help of the administrator and the other participants. The main problems faced were the time for loading audio files and some word files, their own computer skills, the use of a browser incompatible with Greek language and the lack of computer at home.

- On easiness of the platform use, the participants, apart of one person that found it difficult, found the use of the platform practicable (25%), easy (25%) and very easy (43.8%).
- The content of the course was confirmed as fully corresponding to the interests of the participants, as half of them found it "quite interesting" and half of them "very interesting".
- The question which of the learning activities they liked most created an understandable confusion as most activities were new and attractive to the participants, resulting in most activities receiving preference from 81.3% to 100%. On the question which of the learning activities they found most helpful, the vast majority of the participants (80%) rated the audio files with the Roma interviews in the first place as these original material with the immediacy the speakers offered made them see things from the Roma point of view and empathize with them. Second (by 37.5% of the participants) came the study of scientific texts, as this offered valuable knowledge and information not known to them before. An 18.8% of the participants refered to the interaction capabilities offered by the forum.
- Of the three learning paths that have been completed by the time of the formative evaluation the participants preferred the 3rd one by 56.3%, the first one by 31.3% and the second one by 12.5%.
- Half of the learners have followed the learning paths without any particular problem while the rest of them have followed them easily. The 75% of the learners found the time given for the completion of the learning paths satisfactory, while only 2 learners found it short and 2 found it long or very long.
- None of the learners has had any problem understanding the language used in the course (in instructions, announcements, educational paths) and most of them (75%) found it understandable "to a great extent".
- All participants considered communication with the administrator more than satisfactory.

- According to the learners' opinions the "announcements" by the administrator contributed positively to the course and by the vast majority (81.3%) to a great extent.
- Ten of the 16 participants had used the chat room. Half of those found this a very good way of communication as it is "direct", "interactive", "creating personal relations" and "promoting exchange of knowledge". One of the more experienced participants stated "I like to exchange views with the younger participants and share my experiences with Roma".
- Half of the chat users would like a way of being notified when someone else is connected in the chat room or replied to a comment, similar to the Face Book, so that they could log in and chat.
- Half of the participants not having used the chat claimed they never coincided with the rest, one claimed he has never chatted before and the the rest that their access time was limited as they did have PC at home.
- All learners agreed on the request of a certain date and time for chatting. Half
 of them preferred weekdays, while the other half preferred the weekend. 75%
 of the participants preferred late afternoon or evening hours.
- On the question "What would you like to change in the course?" half of the learners replied that they did not want to change anything and they are very pleased with the structure and the content of the course. From the rest, two wanted better communication with the other learners and especially with the experienced ones, one requested more practical issues on Roma, another proposed a live meeting between all the participants, another asked for more time in order to complete the learning paths and one asked for smaller scientific texts.
- At the end of the questionnaire the learners were encouraged to make comments, suggestions or write anything they wanted about the course (content, procedures, activities, relationships etc) which was not included in the questions. Their replies were very encouraging with positive comments on the originality of the course, its efficiency for the awareness and transformation of prejudice and stereotypes, the importance of communication with people having experience with Roma, on the benefit of the asynchronous

mode of E-learning which blend easily with professional and social and personal life, on the self-development, on the awareness on important Roma issues and on the quality of design and presentation of the course.

The main suggestions of the participants were:

- To improve the communication between the participants by fixing a day and time for chatting
- That exercises on Roma life and culture would be assigned to them
- To organize a live meeting in order to exchange views
- That a visit to a school with Roma pupils could be arranged so that discussions with the teachers, Roma pupils and non Roma pupils could occur on the problems they face
- Problem solving activities on educational issues with Roma
- Extended material on Roma life and culture as well as the notion of the "different"

Taking into account the findings of the formative evaluation, along with the suggestions of the participants the following modifications in the course structure were implemented:

- The sequence of the Learning Paths has been changed and the 4th LP, which favoured self-directed learning, was brought forward. This was in line with the fact that this part of the course run during the Christmas Holidays.
- The material of the learning paths was enriched according to the interests, needs and suggestions of the participants. Extended material on Roma life and culture was provided in the context of the 4th Learning Path and more cases were added in the problem solving of the 7th Learning Path.
- Based on the high valuation of the Roma interviews by the participants, the
 educational material of the course was enriched with more Roma interviews in
 the stigma oriented 5th Learning Path.
- Fixed days and times for chatting were scheduled.

The suggestions of the participants for a live meeting, visits at schools with Roma etc have been considered very important and would have positively contributed to the course outcome, but the implementation of such activities would require a blended E-learning system which could not be materialized as there were time constraints, along with administrative and financial shortcomings.

The questionnaire of the formative evaluation can be found in Appendix 7.

Summative evaluation of the course structure

The summative evaluation of the course structure was conducted after the completion of the course. The participants were requested to complete a questionnaire (Appendix 8), the results of which, along with the analysis of data from all the archives of the course, have been assessed.

The questionnaire focused on the following items:

- The content
- The learning activities
- The duration of the course and the sequence of LOs
- The adoption of the asynchronous mode
- The use and efficiency of the communication tools
- The role of the administrator
- The weak and strong points of the course

The analysis of the archives provided data on:

- The learners' active participation
- The use and efficiency of the E-learning environment(the Dokeos platform, communication tools, technical issues)

The most important findings of the summative evaluation of the course structure were:

- The content of the course in general was positively appreciated by all the participants. The vast majority (75%) of the participants found the content interesting to a great extent. The participants would appreciate more practical applications on problem solving, as well as extended elaboration on Roma culture issues, such as marriage at a very early age.
- The participants' preference on the learning activities of the course has substantially changed and has become much clearer compared to the results of the formative evaluation in the middle of the course. This is understandable, as no one of the participants had had E-learning experience and all the vivid and colourful multimedia activities were new and attractive to them, to an extent that they could not define which they liked most. Upon completion of the course, the participants had developed a much more concrete preference of certain activities over others. The final preference of the learners (ESG) is displayed in table 11.

Table 11. Learners' preference on the learning activities of the course

Activity	Learners' preference in the summative evaluation
Audio-files	87.5%
Videos	81.3%
Suggested links	62.5%
Forum	62.5%
Text-study	56.3%
Chat	50%
Mail with administrator	37.5%
Mail with other learners	31.3%

• The parictipants showed a distinctive preference for the learning paths that contained practical applications (7th Learning Path), as well as the ones containg audio files with interviews with Roma people (3rd and 5th Learning Path), as shown in figure 21.

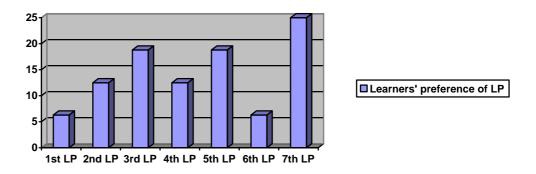


Figure 21. Learners' preference of Learning Paths

The learners' (ESG) preference for the 7th Learning Path is in line with the characteristics of adults as leaners. Problem based learning exercises are welcomed by adults as they build on prior experience and provide opportunity for practical application of materials/theories covered. As Merriam and Caffarella (1999, p. 272) point out "an adult is more problemcentered than subject-centered in learning".

- Regarding the duration of the course the majority of the participants (62.5%) rated it satisfactory, while 25% rated it short and 12.5% rated as adequate.
- There were only positive comments regarding the sequence of the LOs. One of
 the contributing factors was that the administrator was continuously
 monitoring the comments, wishes, interests, needs and the general ambience in
 the course effective changes whenever needed in line with the reactive
 sequencing practice.
- The asynchronous mode of communication was favoured by the majority of the participants (62%) as it offered a great deal of flexibility on time, location and pace of learning. It is important that there were not any negative comments on this issue.
- The participants have used the communication tools offered in the platform for three distinctive purposes: to participate in the threaded discussions following

each learning path (LP) or other learning activity, to communicate with the administrator and to communicate with each other. Regardless of the purpose, through the use of all communication tools, there has been a significant promotion of interaction and immediacy between participators and the administrator, the content and the interface, as well as between the participants themselves. Because of the significance of interaction both in online education and in adults' education, the findings on interaction achieved by the course are evaluated in more detail later in this section.

• Each tool offered in the course for the communication of the participants with the administrator has been exploited by the participants, as shown in table 12.

Table 12. Use of the communication tools between participants and administrator

Communication tool	Percentage %
E-mail	93.8%
Announcement board	75%
Forum	68,8%
Chat	62.5%
Telephone	50%
SMS	43.8%

The efficient communication with the administrator proved extremely important as it offered the possibility of handling various technical and educational issues in very short time and promoted the immediacy and interaction. 93.8% of the participants considered the communication with the administrator played an important role in solving administrative issues, 81.3% in solving technical problems, 87.5% in providing educational guidelines, 75% in providing support and feedback and 75% in creating an environment of mutual trust and respect.

All participants have valued the role of the administrator in the E-learning environment very highly. This attitude was also reflected in discussions during the final meeting with the preservice educators.

The learners' participation in the threaded discussions has been massive, as shown in table 13.

Table 13. Learners' participation in threaded discussions

Self- presentation	Threaded discussion after the 1 st LP	Commons and differenes in the learning group	Threade discussi the 2 nd I	on after	Threaded discussion after the 3 rd LP	Threaded discussion after the 4 th LP	Participation in LACIO DROM learning group in the Face Book	Threaded discussion after the 5 th LP	Threaded discussion after the 6 th LP
16	16	12	15	13	14	13	15	14	13

In the contrary, for the communication between themselves, the participants have mainly used the forum and the chat, but their involvement has not been consistent. In the informal forum titled "Cafeteria" I saw...and I heard ..."19 posts from 9 learners have been posted on two issues, while on the "heeeelp" forum on technical issues only 4 posts from 3 learners have been posted.

In the chat room of the Dokeos platform only half of the participants have had a consistent presence, as shown in table 14.

Table 14. Learners' participation in chat rooms

How many learners have participated in the chat room of Dokeos?	How many learners have chatted in Face Book?	How many learners have participated in the last week with fixed hours in Dokeos chat room?	Maximun number of learners using the Dokeos chat room at the same time?	Learners who have chatted only once or twice in Dokeos chat room	Learners who have chatted more than 6 times in Dokeos chat room
14	14	6	5	7	7

The inconcistency of learners' participation in the chat room of Dokeos is understandable, since the course has run in asynchronous mode and the participants were accessing the platform at different hours of the day. This was enhanced by the lack of a system displaying the names of persons logged in the chat room and announcing when a new person logs in.

Despite the fact that, following the requests made during formative evaluation, fixed days and times for chatting were defined, the response of the learners has been much less than expected.

• Interaction

All types of interaction, contained in Moore's (1989) initial model and the fourth type added by Hillman, Willis and Gunawardena (1994), have been sufficiently developed in the course, under the constrain of its limited duration (Pavlis-Korres, García Barriocanal, and Thanassis Karalis' 2010).

All the communication tools offered in the course have been proved both sufficient and efficient in their use. The contribution of each communication tool or learning activity in each type of interaction has been identified, judging by the extent of their use.

Teacher (administrator)-learner interaction has been promoted mainly through the announcement board, the agenda, the e-mail, the forum and the chat.

Learner-learner interaction has been promoted mainly through the forum/threaded discussions, chat and e-mail.

Learner-content interaction has been promoted mainly through the completion of learning paths.

Learner-interface interaction has been promoted through all kinds of learners' participation in the course.

The main type of interaction achieved in relation with the communication tool used or learning activity implemented, as found by analysis of the archives of the communication tools and learning activities is presented in table 15.

Table 15. Type of interaction in relation with communication tools and learning activities

Communication tool or learning activity Type of interaction	Announcement board and Agenda	E-Mail	SMS (Short Message Service) mobile telephones	Forum/ threaded discussions	Chat in Dokeos and Face Book	Face Book Wall	Face Book uploaded links (4 th LP)	Learning Paths in Dokeos platform
Educator(admin istrator)- learners (ESG) interaction	X	X	х	X	X	X	х	
Learners (ESG)- Learners (ESG) interaction		X	Х	X	X	Х	Х	
Learner (ESG)- content interaction							X	Х
Learner (ESG)- interface interaction	х	X		Х	X	X	X	X

Announcement board and Agenda

There have been two types of announcements: the introductory announcements, providing information on learning activities (dates etc) and/or technical solutions and the supportive announcements, providing feedback to learners. Some announcements corresponded to both types.

The administrator has uploaded 36 announcements in total during the course, which are analyzed by period and type in table 16.

Table 16. Announcements by administrator

Type of announcements	November	December	January	February
Introductory announcements	7		3	
Supportive announcements	1	6	4	2
Mixed announcements	1	8	3	1
Total announcements	9	14	10	3

The 70% of the purely introductory announcements have been made in the first month of the course. The majority of the remaining announcements contained administrator's advises, encouragements, support and feedback to learners according to their responses and participation in the course.

The agenda tool has been used by the administrator and has helped in the coordination of the course as the important dates of the course activities (beginning and end of learning paths, deadlines, dates for scheduled online chatting etc) were announced there.

E-Mail

The exchange of e-mail has been extensive from and to all directions between administrator and learners. The direction and the distribution of e-mails by frequency and content are presented in table 17.

Table 17. Direction and distribution of e-mails during the course

Direction of e-mails	Number of e-mails	Distribution by frequency	Distribution by content
Universal e-Mails from the administrator to all learners	15		Personal: 1 Relevant to the course:14
Individual e-Mails from administrator to a single learner	163	3-6 mails:6 learners 7-11 mails:6 learners 12-23 mails:4 learners	Personal: 10 e-mails Relevant to the course:153 e-mails
Total e-mails from the administrator to the learners	178		
E-Mails from individual learners to the administrator	117	3-6 mails: 9 learners 7-11mails: 6 learners 21 mails: 1 learner	Personal: 12 e-mails Relevant to the course: 105 e-mails
Total e-Mails exchanged between administrator and learners	293		

SMS (Short Message Service) through mobile telephones

This utility has been used by the administrator, mainly to inform the learners about emergency issues such as the date/time of breakdown and re-function of the Dokeos platform. Few learners have used SMS for wishes in holidays and some others have used this tool to ask about practical information e.g. the address of the course-site, or their password in the platform.

Table 18. Direction and distribution of SMS during the course

Direction of SMS	Number of SMS	Distribution by frequency	Distribution by content
Universal SMS from the administrator to all learners	3		Relevant to the course: 3 SMS
Individual SMS from administrator to a single learner	15	1 SMS: 10 learners 2-3 SMS: 2 learners	Personal: 3 SMS Relevant to the course :12 SMS
Total SMS from the administrator to the learners	18		
SMS from individual learners to the administrator	15	1 SMS: 10 learners 2-3 SMS: 2 learners	Personal: 3 SMS Relevant to the course: 12 SMS
Total SMS exchanged between administrator and learners	32		

Forum/threaded discussions

The forum/threaded discussion has been the most important tool for interaction on the educational issues of the course, promoting also immediacy, critical thinking and development of metacognitive skills. The learners' (ESG) participation in the forum/threaded discussions throughout the course is presented in table 19.

Table 19. Learners' participation in the Forum/threaded discussions throughout the course.

Forum "Self- presentation"	Forum of 1 st learning path	Forum "Commons and differences in the learning group"	Forus 2 nd learns		Forum of 3 rd learning path	Forum of 5 ^h learning path	Forum of 6 th learning path	Forum "cafeteria", I sawI heard		m hnical s" Help
16	16	12	15	13	14	14	13	9	9	3

According to the participants' statements, table 20 presents how they have been affected by the comments of the other participants in the forum.

Table 20. Learners' (ESG) affection by other learners' (ESG) comments in the forum

How learners have been affected by other learners' comments	Percentage % of learners
Gave them the opportunity to see different views on an issue	87.5%
Gave them the opportunity to see how different people experience the same issue	78.4%
Stimulated critical thinking	68.8%
Helped them to form their opinion on the topic	43.8%
Made them transform their views, attitudes, behaviors	18.8%

Face Book wall

During the period of Christmas Holidays, when the learning group "Lacio Drom" in the Face Book replaced the Dokeos platform, 15 out of the 16 learners have signed in. In this period the learners have posted 59 messages on the wall board of the learning group. Direct chatting in the Face Book further promoted interaction between learners as well as with the administrator.

Based on the above findings, it is considered that all the types of interaction, according to Moore's (1989) initial model and Hillman, Willis and Gunawardena (1994) addition of the foruth type, have been sufficently developed in the pilot application under the constrain of the limited duration of the course.

• The learners' active participation in all the stages of the course has been very high, in confirmation of the course structure success in attracting the learners' interest and attention towards the educational procedure.

Learners' active participation in all course activities is overviewed in the following table. Although all 16 learners participated in the seven learning paths, only the ones that have completed each path are shown in table 21.

Table 21. Learners' participation in the course's activities

Course Activity	Number of learners	Percentage %
Initial compatibility test	16	100%
Self-presentation	16	100%
1 st Leanring Path	16	100%
Commons and differences in the learning group	12	75%
2 nd LP 1 st part	15	93.7%
2 nd LP 2 nd part	13	81.2%
3 rd learning path	14	87.5%
Formative evaluation	16	100%
4 th learning path	13	81.2%
Participation in Lacio Drom learning group in the Face Book	15	93.7%
5 th Learning Path	14	87.5%
6 th Learning Path	13	81.2%
7 th Learning Path	16	100%
Cafeteria Forum	9	56.2%
Chat in Dokeos Platform	14	87.5%
Chat in Face Book	15	93.7%
Summative Evaluation	16	100%

• When prompted to write three elements of the course they liked and three they would like to change, the participants responded as shown in table 22.

Table 22. Learners' (ESG) favoured elements of the course

Favoured elements	Number of
	Learners
The educational material, which was rich and very interesting	15
(audio files, videos)	
The Forum	7
The communication and interaction with educator(administrator)	5
and other learners	
The originality, the structure and the content of the course	4
The texts	3
The collaborative learning	2
The exercises	2
The administrator's knowledge on the subject	2
The advantages of asynchroous learning	1
The learning activities related with the educational process	1

Most learners (ESG) have made positive comments on the way the educational material has been selected and presented, the use of multimedia stimuli and on how it can be interesting, attractive, entertaining and educational at the same time. Some of the learners' comments were:

"To begin with, I would like to point out that the way Maria chose the videos is very important, educational and entertaining. I believe that they get many messages through, have an aesthetic opinion and make us think. I watched them very carefully and with a lot of interest."

"The videos have provoked feelings of joy, satisfaction, others laughter, but also disappointment. The videos about stereotypes were very correctly chosen. I liked some of them because they made me laugh and others because they made me happy, satisfied, or disappointed."

"The videos were marvellous and they made me laugh a lot."

"This is a multidimensional issue. We consider that the videos we watched, regardless of their context and of the fact that we might not approve and support certain points of them, are samples of a well elaborated project, as far

as the calibre of the presentation is concerned, which makes them pleasant and not boring."

"I would say that the videos chosen are indeed very interesting and very carefully selected."

"A very nice activity. I guess I am the one who came in late! I watched all videos very carefully. The first comment I must make, is that most were fun, they didn't make me tired and I was anxiously waiting for one to finish, in order to carry on to the next ones."

"The videos at youtube were very pleasant and to be honest, I didn't expect that there would be such videos, like the one showing a research about the social role of the two sexes."

Nine out of 16 participants stated that they were pleased with the course structure and they would not change a thing. The elements the remaining seven participants would change are presented in table 23.

Table 23. Elements of the course the participants would like to change

Elements for eventual change	Number of the	
	Learners	
The chat system should be more advanced and there should be	5	
more online meetings		
Various technical issues	4	
Live meeting with the educator(administrator) and seminars	2	
Longer duration of the course	2	
Smaller texts	1	
More activities related with the educational process	1	

- The efficiency of the E-learning environment of the course, in relation with the Dokeos platform and various technical issues have been examined from two points of view:
 - How these have affected the access to and participation in the platform by the learners

- Which were the weak points from the technical side, in order for these to be rectified or avoided in the future
- The appreciation of the user manual for Dokeos transalated in Greek showed that this was a necessity, as it helped learners understand and familiarize with the functions of the platform. This minimized the difficulties encountered by the participants, which were all handled successfully through the efficient communication with the administrator.
- Not all browsers were compatible with the Greek language, therefore the use of the Opera browser was suggested.
- A technical problem encountered with the server supporting the course on the
 Dokeos platform, led to the creation of a closed learning group in the Face
 Book. Although the Face Book was insuffient as an educational platform,
 since it did not provide learners' personal activity reports or other archives, its
 communication capabilities have proved adequate.
- Audio files proved more difficult to handle, as the participants' computers were not at the same level on hardware and software terms.
- Some key functions of the Dokeos platform had not been activated (e.g. the survey tool), resulting in more time and effort spent by the administrator on the formative and summative evaluation.
- The notification on any new course activity upon reentry to the platform proved very helpful.
- The existing Greek translation of titles and headlines in the platform was incomplete and the platform did not accept Greek characters in some sections.
- The uploading of the educational material was made difficult and time consuming by malfunctions of the platform options for moving items or inserting images.

Based on the above findings the structure of the course is considered successful and the main suggestions for improvement in future applications are:

- As 20% of the entrants in the course could not attend due to limited access on a PC (one of them did not even have the skills required), it is very important that this prerequisite is made clear to all candidates and verified in any course.
- In case the participants' language is different than the platform language, it is important that the user manual of the educational platform is translated accordingly and the platform, as well as the browsers used by the participants are checked for compatibility with the participants' language alphabet.
- A blended E-learning environment should be considered when the learners participate in E-learning for the first time, if the participants and the course administrators are located at the same area.
- In case technical malfunctions of the platform are expected, an alternative platform or the use of web based applications (MSN, Face Book etc) should be considered.
- A chat system which facilates the communication of learners by displaying the
 names of persons log in the chat and announcing when a new person logs in or
 replies to a comment will be very helpful in promoting effective interaction
 between participants.

Evaluation of the outcome of the course

The outcome of the course has been evaluated on the achievement of its prime educational objective, which was the improvement of compatibility between educators (ESG) and their Roma learners. The development of a successful learning group has also been observed.

The evaluation of the outcome has been effected through qualitative and quantitative analysis of all the archives of the course, the initial compatibility test and the questionnaires conducted in the middle and at the end of the course. The final live meeting with the preservice educators has also provided valuable data on the outcome of the course.

Following the definition of compatibility provided in the theoretical part of this research (p.44), the evaluation of the outcome has been carried out by assessing:

- The improvement of the participants' knowledge on the Roma special social group
- The participants' awareness of their own stereotypes, prejudices and attitudes towards Roma and the "different" in general
- The transformation of the above steretotypes, prejudices and attitudes

Types of compatibility have been defined according to the vocabulary developed in the relevant section. The types of compatibility met in the test application are:

- Social compatibility: reflects the level of knowledge, of positive attitude and acceptance of the social status of the special group by the educator.
- Cultural compatibility: reflects the level of knowledge, of positive attitude and acceptance of the culture of the special group by the educator
- Ethnic compatibility: reflects the level of knowledge, of positive attitude and acceptance of the ethnic identity of the special group by the educator
- Linguistic compatibility: reflects the level of knowledge, positive attitude and acceptance of the language and linguistic identity of the special group by the educator.

The values attributed in each type of compatibility are: very low, low, medium, high and very high.

In order to assess the level of compatibility of each participant in the various types of compatibility applicable in the course and monitor any improvement, we have developed a scale from 0-10 which corresponds to the values of compatibility as shown in table 24.

Table 24. Scale of compatibility values

0-2=very low compatibility

2-4=low compatibility

4-6=medium compatibility

6-8=high compatibility

8-10=very high compatibility

Formative evaluation of the outcome

The formative evaluation of the outcome of the course has been conducted with the single scope of ascertaining that the whole educational procedure was moving to the desired direction. The assessment of the participants' progress by the administrator has been taking place throughout the whole course, enriching the content of the LOs, redefining their order, as well as providing the appropriate feedback to each learner individually.

The questionnaire run in the middle of the course contained questions aiming to assess the learners' point of view on their own progress in order to evaluate the efficiency of the learning activities already implemented and make the best out of the remaining period of the course.

The most important findings of the formative evaluation on the participants' self-assessment were:

- The course has met the expectations of the large majority of the learners (ESG). Half of the participants have stated "to a great extent" and 43.8% of the participants have stated "a lot".
- In the learners' answers to the question «Have your thoughts, and your views regarding Roma people changed after participating in the course» a general reservation has been prominent, as it has been expected in such a short period in the course.

Table 25. Change of learners' thoughts and beliefs regarding Roma people

	Frequency	Percentage%
Not at all	0	00.0
Somewhat	3	18.8
Moderately	6	37.5
A lot	5	31.3
To a great extent	2	12.5
Total	16	100.0

• The learners' response to the question "Have your feelings towards Roma people changed after participating in the course?" have been even more conservative.

Table 26. Change of learners' feelings towards Roma people

	Frequency	Percentage%
Not at all	1	6.3
Somewhat	2	12.5
Moderately	9	56.3
A lot	3	18.8
To a great extent	1	6.3
Total	16	100.0

 On the contrary the participants' response to the question "Has your attitude towards "different" groups of people changed after participating in the course?" has been more encouraging.

Table 27. Change of learners' attitudes towards the "different"

	Frequency	Percentage%
Not at all	0	00.0
Somewhat	3	18.8
Moderately	5	31.3
A lot	8	50.0
To a great extent	0	00.0
Total	16	100.0

The above findings have been in line with the content of the first three Leanring Paths (LPs) completed before the formative evaluation questionnaire, as these LPs had to do more with the general notion of the different and with stigma and less with Roma people.

Summative evaluation of the outcome of the course

The summative evaluation of the course has been conducted after the completion of the course, the prime objective of this evaluation being the improvement of compatibility between educators and Roma people.

As compatibility is referring to the level of knowledge and acceptance of, and positive attitude towards the special group on the part of the educator, the improvement of compatibility has been assessed using techniques such as rating scales (Likert type scales, Bogardus scale), questionnaires, as well as a qualitative analysis of the writings in the threaded discussions, the chat logs, the mails with the administrator, and the outcome of the last live meeting. Another valuable source for the measurement of the achievement of the goal of the course has been the self-assessment of the participants. The participants' initial beliefs, feelings and behaviors, as these have emerged from the initial compatibility test have been compared to those assessed at the end of the e-course.

The variety of the methods for the assessment of the participants' compatibility and the sources from which data have been gathered allowed the verification of the outcome by triangulation, this approach also facilitating the combination of qualitative and quantitative data.

The outcome of the course, in brief, has been satisfactory. Regardless of the constrains of time and the various problems encountered, there has been a considerable improvement of the participants' compatibility in all compatibility types applicable, the participants' familiarization with E-learning has been promoted to an acceptable level and the participants have formed a learning group with strong ties between its members, a fact which led in the maintenance of the learning community network.

The most important findings in each stage of the summative evaluation were:

The initial compatibility test

The educators' (ESG) initial compatibility with Roma has been assessed in the beginning of the course through a brief compatibility test on educators' (ESG) knowledge on Roma culture, conditions of life and beliefs, as well as on their assumptions and attitudes towards Roma people, providing data that have been analyzed in comparison with the data on participants' compatibility at the end of the course. The initial compatibility test can be found in Appendix 3.

The initial compatibility test has shown that 12 out of 16 of the educators (ESG) had very low linguistic compatibility with Roma, while more than half of them had very low cultural, social, and ethnic compatibility. All of the preservice educators had very low compatibility in all types applicable, while the inservice educators were found to have medium cultural, ethnic and social compatibility with Roma, with only two of them having very high cultural, social and ethnic compatibility.

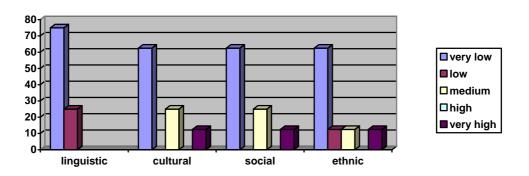


Figure 22. Participants' initial compatibility with Roma

Although the inservice educators had higher cultural, social, ethnic and linguistic compatibility with Roma, it was found that they also needed to acquire more knowledge and transform their attitudes towards Roma.

The participants with lower compatibility appear to have some difficulty in comprehending the problems Roma people are facing in their daily life and tend to shift the responsibility for these problems to the Roma, while the participants with higher compatibility have a much better understanding of the same problems and have

a more balanced view on responsibility for the creation of the problems. The same differences between these groups of participants are also prominent in each group's proposals on problem solving. Both groups of participants have been using negative stereotype expressions for the Roma in their daily life, reflecting the level of internalization of the stereotypes existing in the Greek society.

The desired social distance of the participants with the social group of Roma has been measured through a Bogardus scale, the results of which are presented in comparison with the respective results of the summative evaluation questionnaire at the relative section (p. 268).

The analysis of the course archives

The key source for the assessment of the participants' attitudes and their transformation in relation with the course content has been the archives of the threaded discussions following the completion of each learning path.

Additional information has been sourced from the chat logs, the e-mails and the contributions of the participants in the various learning activities.

Due to the fact that the nature of the above data dictates a qualitative, rather, than quantitative evaluation and in order to present the key elements on which improvement of compatibility has been assessed, each learning path with its specific objective and few of the participants' most significant reactions is displayed separately here below:

1st Learning Path

Educational objectives: Exercise of empathy aiming to make learners aware of the linguistic problems which Roma face in education and in their daily life.

Title: "Let's hear with their ears and see with their eyes"

Description: The learners are asked to follow the steps of the learning path, leading them to listen an audio file containing instructions in Romani language with only some randomly dispersed Greek words, such as "pen", "underline", "beneath", "name", which did not enable them to understand the full context of the instructions. Then they have been asked to anwer questions on their thoughs, feelings and describe their actions. In the next step, they have been asked to listen to the same instructions, this time in Greek and answer the same questions. Finally the learners have been asked to go to the "Experiences forum", under the category "Let's get in their shoes", recall their experiences, write about them using concrete guidelines and share them with the other participants.

Learners' reactions

The learners' reactions when they heard the instructions in romani language contained anxiety, uncertainty, disapointment, even the impression there was something wrong with the sound.

The learners wrote:

"I felt confused and disappointed, as I couldn't follow and do something about it. I was trying more and more to concentrate and understand better, but it was in vain."

"I felt disappointed and rather inconvenient, exactly as when someone is trying to understand someone initiating conversation in an unknown language."

"I felt stressed and extremely insecure, because I realised that I couldn't follow the instructions..."

"When the recorded message started playing, I thought that it was a mistake! My second thought was that there was some kind of a problem and I couldn't hear well. It took me more than a moment to realise that there was no mistake at all and I was hearing perfectly. I felt really embarrassed and I was overtaken by a feeling of confusion. I repeated the procedure twice..."

The learners' reactions when they heard the same instructions in Greek contained relief, security, happiness and balance.

The learners wrote:

"When I listened to it in Greek, it was unbelievable that it was saying so simple things... Thank God, this time I understood... I felt relaxed because I could at last understand what I was being told. I followed all instructions."

"When I listened to the second set of instructions ... I felt comfortable and relieved "coming back" to normal..."

"I felt relieved, happy and secure..."

"This time, I felt a sort of relief and joy, because I was finally able to meet the expectations of the exercise and produce a perfect result..."

In relation to the participants' awareness of the linguistic problems of Roma in daily life and in education, the learners wrote:

"It is almost a tragedy not being able to fully understand what you are being told. Especially when you realise that it is something easy (when it comes to your language, and your standards). Is this is how they feel, when they hear us speaking? It was really an experience which made us think and provoked mixed feelings! We still have a long way to go."

"I consider that it was a very clever way to get us into the Roma people's shoes, because all of us can easily very well say "I understand you". I wonder how easy it is to understand others after all, when we have experienced nothing of the thinks they are dealings with. Through this project, I believe that I received a good lesson. That is, I understood the efforts and the bad feelings experienced by those trying to follow some instructions while listening to a language which is relatively unknown to them."

"The goal of this exercise was to show that when people from a foreign country hear something unfamiliar to them – like Greek for example-, they feel insecure and inconvenient, as if all those they were hearing did not

concern them. This is exactly how I felt when I listened to the instructions and it is indeed a very bad incident."

"I think that the goal of this exercise was exactly the one described in its title: To make us hear with their ears... I felt like being in a world full of Roma people, who speak a language which I have not learned at home. I think that this is how the Roma children around us feel and since they can't understand our language, they feel alien and unprotected..."

The intense feelings provoked by this learning path triggered the first interaction between the participants in the forum.

2nd Learning Path

Educational objectives: Understanding of the notions of prejudice, stereotype, stigma and discrimination and how the special groups face and experience prejudice, stereotypes and stigma. Experiential approach on critical thinking, revision and reconsideration of existing beliefs, feelings and behaviors.

Title: "Stereotypes and prejudices"

Description: Three scientific educational and psychological texts on the formation of prejudices and stereotypes have been given to the learners for studying. After that, the learners have been asked to go to the "Experiences forum", under the category "With our own eyes" and reveal their personal reflections on the following outlines:

- Write about three stereotypes you used to have, but you don't have any more
- Write about three stereotypes you have
- Write about three stereotypes that others have attributed to you

In the next step of the path learners were prompted to watch 8 videos on stereotypes and prejudices related to gender roles, ethnic groups, homosexuals, blondes, Muslims. After that the learners have been asked to go back to the forum "with our own eyes" and comment on what they have seen, laughed at, thought, wondered or troubled with.

Learners' reactions

1st part

On the first part of the learning path, the most important result was the way the learners opened and shared their thoughts and beliefs between themselves.

On the stereotypes they used to have but not have any more, the learners' statements spread to a great breath and variety of stereotypes towards all kinds of groups of people.

The learners wrote:

"I was disgusted when homeless people who smelled bad passed by me, or touched me"

"I couldn't cooperate and discuss with people who didn't have the same political thought with me...I couldn't have contact with people who had something to do with psychoanalysis...Now that I am writing, I have no stereotypes whatsoever about the things I mentioned above...."

"I used to believe that handicapped people are depressive and miserable...I considered most coloured people ugly. I suppose that the different colour kept me from distinguishing their beautiful characteristics...I used to believe that men who had long hair and ear rings were all tramps."

"From my early childhood, I had the impression that all Turks were evil and hateful people... Another stereotype I used to have, was against boys who wore earrings... When I heard about Iranians and Iraqis, I used to think that they were all dangerous and terrorists."

"I always used to think that Roma people don't get educated, they have nothing to do with school and that they send their children to work at a young age. I used to think that handicapped people are unhappy..."

"That Jews were avaricious...That schizophrenics were dangerous...That homosexuals belonged to a social group with divergent behaviour."

"In elementary school, I used to believe that boys were worse students that girls! (And I would say openly it at every opportunity given)...that old people don't have the "same" rights as younger people...that uneducated people don't have many things to offer (a big mistake of mine!)."

Equally important has been the effect of the interaction in the forum, where many learners have identified their own stereotypes through the eyes of the others.

The variety of the stereotypes the learners still have is even greater, extending to:

"Fascists are evil... North Europeans are disciplined... monks are twisted...Cypriots are localists, rich and very smart ... men are afraid of being compared to women in any field... most Greeks are lazy ... Albanians and especially men are sly and ruthless ...homosexuals are perverse and insane...most poor Roma people are filthy and illiterate.."

The stereotypes attributed to the learners by other are related mainly to their way of dressing, origin, social status, gender, profession.

2nd Part

After personalizing the notion of stereotype and prejudice in the first part, the learners have proceeded to critical thinking and reflection on a macro-social level regarding these issues, how these have been formed, how deep are their roots and they increased their awareness of their own stereotypes and prejudices, now feeling uncomfortable about them.

The learners (ESG) wrote:

"I hadn't realised that these stereotypes will always be passed on to children and we will always be living in a world where people will believe what they hear about others..."

"Should we try thinking in a different way? It is inconceivable that people consider all Muslims and Arabs being terrorists!!! It is a fact that there are some Arab terrorists, but this doesn't mean that all Arabs are terrorists..."

"My own conclusion is that racism does not discriminate and it has started becoming a great social issue."

"I liked the video with small children expressing their love for the whole world, keeping themselves away from any stereotypes and prejudices! ... Let's hope that the world will evolve and peace will prevail everywhere, as well as the acceptance of being different!"

"We are living in a society based on stereotypes where each and every one of us has specific roles, belongs to a certain group, etc.... We are scared of differences and we label them... I don't believe that we can't deal with it...."

"... everyone can be the way they wish, up to the point where they don't affect and oppress other people's rights."

"... as far as the videos with Muslims, coloured people, Mexicans, Asians, homosexuals are concerned, they really made me think that these people are being seriously punished for their differences. Sincerely, by watching these videos, I felt guilt and discomfort, because I though that I myself am one of the persons who don't easily accept differences. ..Finally, I realise that stereotypes are deeply rooted in us..."

Referring to their role as teachers/educators the learners (ESG) wrote:

- "... we are teaching children from a young age to have prejudices about sexes by believing that there are male or female professions and things only a man or a woman should be doing."
- "...Children are not passive receivers. ...you can see clearly how adult's prejudices are passed on to children and this is certainly something that should trouble all of us."

"The way we pass on to children, consciously or subconsciously various stereotypes, such as those regarding sexes and the way they consolidate them at such a young age, is indeed very interesting. I personally believe that I would try not to pass on to children the idea that mum is the only one doing

household work, or looks after children, even though this depends on how open minded her companion is."

3rd Learning Path

Educational objectives: The acquisition of knowledge about education in the Roma society and understanding Roma attitude towards the official school system. Critical thinking, revision and reconsideration of existing beliefs, feelings and behaviors.

Title: "Roma and education"

Description: The first step of the learning path required the study of four texts about the way Roma educate their children, the educational situation of Roma in Greece and multicultural kindergarten.

At the second step of the learning path the learners have been guided to listen to audio files, containg interviews of three Roma generations (grandmother, father - mother and children), concerning their educational experiences (The audio files of the interviews can be found in Appendix 11).

The next step of the learning path required writing in the "Experiences forum" → "Let's get in their shoes"→ "Roma and school" on changes of their thoughts, feelings and behavior about Roma and their education after following the educational path.

Learners' reactions

The learners' response in this learning path has been overwhelming.

By reading the texts, their horizon on multicultural education and the education of Roma in particular has been broadened. By listening, however, to live Roma people speaking about their personal experience and views on education and the school and realizing the quality of their speach and the clarity of their thoughts, they have been really moved and have reconsidered their attitudes towards "uneducated Gypsies".

Following this learning path, learners have looked into the issue of education more deeply and in a wider dimension, realizing that education is a part of society, within which all Roma and non-Roma cultural issues and social relations are reflected. This has triggerd critical thinking to all learners, on their present or future role as educators of Roma.

The learners (ESG) wrote:

"After reading the texts and listening to the interviews, I started seeing things from a different point of view and not as superficially as before."

"I must confess that I am sorry that I have never thought of things in this way."

"Yes, I really feel different now and I think I would also act different, now that I understood even to a small extent the way they see school and they feel when they are being faced in this way. Both the texts and the interviews contributed to changing my views."

"I would face Roma children in a different way at school, compared to how I would have faced them before following the educational path, because by doing so, I learned a lot of things about Roma people and most important of all, it taught me not to be an ostrich."

"Listening to and reading the material of the 3rd educational path, I thought that our society has not given sufficient care to such issues and I would say that I was stressed by this."

"Children want to go to school and many of their parents agree, but they are scared of the possibility of school alienating them from their culture. They think that they protect their culture in this way, because school does not welcome their children. It tries to assimilate them in the whole, without taking into consideration their particularities and their specific needs."

"The best path!!! The teachers and the future teachers participating in the programme had a very important opportunity to receive some knowledge about Roma people and school."

"We must get to know them. Know them, know their world, so that we can free ourselves from prejudices and stop belonging to groups..."

"These people have a History the same way we do and it would be fair, given the fact that we coexist in school classes, if they were taught their History too, so that we wouldn't feel like Mrs. Maria who was learning about the lives of others."

"What I really consider important, is the education of teachers and their effort to make them learn and be really interested for the children and the parents they are facing."

"... School should welcome everyone and it must be an institution open for all.... Obviously, when we say equal rights to education, we don't mean a universal analytical schedule, but a flexible analytical schedule, which will take into consideration whichever particularities of the students and have properly trained teachers who will have the ability of adjusting to the conditions of each class. A very nice work, very useful information and stimulation for thought."

"...It is important that educators should promote equal opportunities between students, as their role is decisive...We should begin the educational procedure by changing our beliefs and reading about the culture of our students, treating them with respect...."

"I felt lucky listening to these people and their experiences."

"...knowing some things about the issue from primary sources, I am now in a position to evaluate some things better, which I perhaps couldn't have in the past."

"I must say that I was deeply impressed by the interviews and especially the one of the grandmother, whose speech was so refined despite the fact that she hadn't been to school, that she made me wonder if she was really "uneducated" compared to others who have the impression that they are "educated". No one has the right to deprive others of knowledge..."

"By listening to the interviews I felt touched by the way parents, as well as children expressed themselves about school. They recognise how important it is and they mainly point out its social aspect. I was especially impressed by the piece with the grandmother, who although she hadn't been to school, had a really composite speech. The father mentions that school taught him how to behave in general and to accept others."

"By listening to these people speaking, one thinks he is dealing with non Roma people, who are in fact more educated and serious than many others. These children are so smart and have such a will power, that I wonder if I could find such maturity in a non Roma child. These interviews really changed me!"

4th Learning Path

Educational objectives: Promotion of self-directed learning and collaborative learning through individual or collective research of topics on Roma culture.

Title: "Free subject regarding the Roma culture"

Description: In this learning path the learners had to choose a subject about Roma culture, find recources on this and present it with any way they wish (drawing, photographs, texts, poetry, music, singing, fairy-tales, video). It could be something they have found, something they have created or a combination of both. The learners have been encouranged to work collaboratively with other learners.

Links with related sites, videos and photos have been provided to the learners in order to give them ideas.

Learners' reactions

The outcome of the learners' efforts has been satisfactory. A team of three inservice educators from Volos, Skopelos and Cyprus have exchanged, compared and presented Roma fairytales from Greece and Cyprus. Another team of two preservice educators worked together and presented two links to videos about Roma life in Greece with their own comments.

Two individual learners have presented excellent essays on Roma life and culture combining web and literature sources. The remaing learners have also worked individually, searching for, finding, evaluating and presenting mostly videos and links, referring to the Roma history and culture, their persecutions, their problems, their daily life, their professions, their customs, songs and dances.

It is important that, in this learning path, learners have been providing educational material to others not limited to their own experiences.

It is also important that the material uploaded by the learners has been studied by the vast majority (93.8%) of the learners.

The learners' comments on that were:

- "...very interesting material, I learned a lot about the Roma life and culture and their beliefs which I did not know and made me form a different attitude towards them..."
- "...every material contributed has been useful, I was mainly helped by texts and comments of the other participants..."
- "...the findings of the other participants were very interesting and made me have new thoughts..."
- "..I liked that we have approached the Roma culture from different points of view..." "...I liked the photographs uploaded by colleagues having experience with Roma..."

The learners who worked collaboratively have stated that "it was very creative and pleasant to work together using multimedia". The learners who worked individually have stated that this was mainly due to the limited free time available that could not be easily combined with others.

5th Learning Path

Educational objectives: Further elaboration on the notion of stigma and how Roma people experience stigma in daily life. Critical thinking, revision and reconsideration of existing beliefs, feelings and behaviors.

Title: "Stigma"

Description: In the first step of the learning path the learners have been asked to share their thoughts and feelings on the reactions of stigmatized persons, including themselves, following concrete guidelines.

In the second step of the learning path the learners have wacthed a video on stigma and have listened to audio files containg interviews of the female members of the Roma family on their stigma experiences in their lives (The audio files of the Roma interviews can be found in Appendix 11).

In the last step of the learning path the learners have been asked to go to the "Experiences forum", under the category "Let's get in their shoes" and write about their thoughts, feelings and reactions before, during and after the first two steps.

Learners' reactions

Very few of the learners have come up with a personal stigma they were clearly aware of. Most learners have denied being stigmatized, at least consciously, although some have been annoyed by other people's comments.

Following this learning path learners have been critically reflecting on stigma and the behavior of both stigmatized persons and the others against them.

The effect of this learning path has been stronger on learners that had never before come in touch with stigmatized persons, helping them increase their awareness and revised their attitude. Learners with previous experience with special groups had already developed positive attitudes through respect for difference, which remained unchanged.

The learners wrote:

"...I felt inferior to the children of the city, as they considered me inferior because I came from a village.... the word "villager" being used in a negative sense. Later on, at the age of 18 in France, I received more or less the same attitude from the French because I was a foreigner. In both cases, the "stigma" worked creatively for me, through a lot of thought, concern, questioning and sorrow."

"When I watched the videos and listened to the audio files, I felt bad and melancholic I would say... I have been stigmatised because of my origin and there were many people who didn't treat me well. It is harsh having to face racist attitudes by others, especially when you are a small child and you can't understand why. Luckily for me, the people who had this so narrow-minded attitude against me and simply labelled me (the Albanian kid), were far fewer than those who accepted me, without taking my origin into consideration."

"I have never been in the position of being stigmatised for something. Or even if I have been, I haven't realised it so far."

"I don't remember ever being stigmatised and perhaps this is the reason I developed some stereotypes for "others", because now that I think about it, I do have some."

"We treat others bad and we put them under categories because someone else has done the same to us and we don't care if others get hurt. What impressed me was that the little girl didn't say she was a Roma and yes, I also think that the behaviour of others towards her would have changed completely if they found out. But isn't it awful not being able to say "this is who I am and I don't need to apologise to anyone about it?"

"...Many times during my childhood, I was afraid to tell my friends that I was from Northern Epirus, because I was afraid I would lose them... I never felt embarrassed for my origin, but there were moments when I simply wanted to disappear."

"The school I am working at is a multicultural school. The students are mainly Greek and Turkish speaking. In this environment, it is natural to have children -both Turkish and Greek speaking-, with stereotypes and prejudices. There are moments when some Turkish children feel bad about being filthy. Yesterday, a child (a Turkish child) felt very bad, because the children of his class (some Greeks) were making fun of him for stinking and having lice. He felt so uncomfortable, that he cried and tried to leave school. It is really a pity seeing such things happening at schools and governments and ministries doing nothing about it!"

"After finishing the 5th educational path, I consider that nothing has changed inside me. I have always believed in the equality of people and I always will!!!"

"Yes, I would change my behaviour because I thought about how I would feel if I were in their position."

"I believe that my entire course in the programme changed me, made me better and that from now on, I will never judge anyone before getting to know him well. Because although I have never been stigmatised, through the programme I understood some things I didn't want to understand before, because this was simply the way it suited me."

"By walking this path, I managed to express and share with you some personal feelings, experiences and views about stigma. And at the end of the path I realised that everything I mentioned before has made me more tolerant, open, and respectful for others, to think out and understand behaviours (even aggressive ones) and to reform my attitudes and views as a result of that."

"In my opinion, the essence of the whole procedure is to try and get empathy. By this, I mean that you must get into the other person's position every time and try to explain his behaviour and the way he reacts... given that you were bred since your birth with stereotypes and prejudices against specific social groups."

6th Learning Path

Educational objectives: Awareness of how jokes are created from and promote stereotypes, prejudice and stigma. Critical thinking, revision and reconsideration of existing beliefs, feelings and behaviors.

Title: "Let's laugh ha-ha-ha"

Description: In the first step of the path the learners have been asked to think critically on humor and jokes and to recall if they knew any jokes concerning specific groups as Christians, Muslims, Jews, Roma, homosexuals, coloured people, blondes, mothers-in-law.

In the second step the learners have watched a video-joke about blondes and they have listened to 13 audio recorded jokes on Roma (The audio files of jokes on Roma can be found in Appendix 11).

In the last step of the path the learners have been asked to go to "Experiences forum", under the category "With our own eyes" and write about their experiences on jokes about the mentioned groups, what makes them laugh at a special group, which stereotypes they have been reproducing through the jokes on Roma and, finally, post other jokes they knew about Roma or other special groups.

Learners' reactions

Learners realized that they all have laughed with jokes based on stereotypes towards special social groups and especially Roma, spotting out successfully the social function of jokes, where they come from and the way jokes reproduce stereotypes by causing laughter.

In total, the learners at the forum posted 14 jokes with stereotypes related to various social groups. More specifically, they wrote 5 about blondes, 4 about Roma people, 1 about Jews, 1 about mother-in-laws, 1 about Greeks, 1 about old ladies and 1 about people from the Black Sea.

The learners wrote:

"Ha ha ha. Nice jokes... As all of us, I also laugh with jokes referring to various social groups."

"I know jokes about most groups, which are referring to coloured people, blondes, people from the Black Sea, homosexuals, Roma people, mothers in law, Greeks."

"What makes us laugh, are the differences related to the stereotypes concerning the group in question. And of course, we do laugh with them, because they are stereotypes that do not concern us, are not attributed to us, since we feel that we are "better"."

"In the jokes which concern social groups, we laugh with the differences of these groups, because we think that some habits and thoughts are funny and strange."

"I laugh with the way the stereotypes concerning a social group are satirised, because as it is normal, all jokes exaggerate in order to become funny. The bad thing about jokes though, is that they reach general conclusions"

"We laugh about things that we think that are typical for the specific group and we make a satire of these things with the worst way possible, such as that Roma people are filthy for example, or that people from the Black Sea are stupid, things that are not true, but are reproduced with various means through jokes."

"In these jokes about Roma people, there is a satire about their accent, illiteracy, about them being dirty, their lower social position (the second joke for example) and that they have many children without caring about them."

"I think that filth is one of the greatest stereotypes of Greek society towards the Roma community and for this reason, there are several jokes about filth and embellishment."

7th Learning Path

Educational objectives: Problem solving of Roma problems in education by using the knowledge and skills acquired in the course. Critical thinking, revision and reconsideration of existing beliefs, feelings and behaviors on multicultural education.

Title: "Problem solving"

Description: In this path, ten cases of Roma people, which the learners could face in their career as a teacher, have been described.

On each of the ten problems the learners had to check answers in the form of multiple choices under certain categories concerning their thoughts, feelings and actions. The learners were allowed to propose other solutions than the existing in the multiple choice answers.

The ten problems asking for solution were:

Problem 1

"At your school, Maria, a 14 year old Roma who is a good student, tells you that she is not coming to school tomorrow because she is getting married.

Among the following answers, choose those which correspond to your thoughts, feelings and actions in this case."

Problem 2

A Roma mother comes to your school and announces to you that her child will not be coming to school because of the bad attitude of non Roma children against it.

Problem 3

A Roma father comes to your school and declares that his children will not be coming to school from tomorrow on, because they are about to leave for Pelloponese to harvest oranges.

Problem 4

At your school, the headmaster refuses to accept Roma children in the school, because he has been told by the cleaning lady that they don't use the toilets correctly and that they foul them, a fact which is true.

Problem 5

Parents of non-Roma children come to the school and complain about the coexistence of Roma children with their own children, in the same desks and classrooms.

Problem 6

The Roma children of your school make many mistakes at the use of articles, i.e. "a orange", instead of "an orange". They also make mistakes in pronunciation.

Problem 7

The Roma children cannot stay put at their desks for a long time and they want to regularly stand up and move about.

Problem 8

The Roma children at the school cannot hold a pencil properly and they crease their exercise-book and make it dirty.

Problem 9

The Roma children at the school don't come to class on time and their parents are not consistent at their meetings with the teacher.

Problem 10

The Roma children coming to school are very dirty.

Learners' reactions

The learners' reactions in this learning path clearly show that hey have been feeling their obligation as teachers to take action and not remain passive watchers and they have developed satisfactory metacognitive skills throughout the course, in a way that:

- They have been handling each educational problem by placing the problem within the wider context (social, cultural, linguistic, financial etc) within which it has been created
- They have been researching and exploiting the available sources in order to understand the problem
- They have been combining multiple actions in order to reach an effective solution

As there were more than one selectable answers in the multiple choice questions on each problem, the learners' responses are presented along the three axes common on all problems (what they thought, how they felt, how they would act), focusing either on views shared by a majority of learners or on single views that have been considered important.

On the first problem

The learners thought:

- that Roma marry at a young age and that this is a part of their culture (100%)
- that it is unacceptable in the 21st century, that young girls marry (18.8%)

The learners felt

- sorrow that the girl will not continue studying (68.8%)
- bothered about the fact that the girl will have to take up responsibilities so early (62.5%)
- respect about the girl keeping the traditions of her culture (37.5%)
- anger about the fact that a 14 year old girl is getting married (12.5%)
- happy about the girl getting married (6.3%)

The learners would

• try to point out, by discussing with the family and the girl, the benefits of education and to motivate them to combine the girl's marriage with education (93.8%)

- go to the wedding (62.5%)
- try discussing it with the girl and the parents, in order to understand the reasons of the marriage (31.3%)
- try to convince the family (25%)
- accept the fact and do nothing (25%)

The learners seem to be more tolerant to the fact of marriage in such a young age as a part of Roma culture, because of the aquired knowledge on Roma culture during the course as well as the respect and acceptance of the different. Although they felt sorrow and bothered from the fact, few learners would try to convince the family to the opposite and is remarkable that no one would try to convince the girl not to get married.

Some of the learners' statements were: "I shall discuss with the girl and her family without insulting their culture, telling them that if she will try to combine both I'll support her", "every person does his own choices which we must respect. In a creative discussion I shall try to present my opinion on the topic", while another has tried to intrerpret the fact "Roma try to marry their women very early in order to remain pure and not have intermarriage with members of the dominant society".

On the second problem

The learners thought:

- that the Roma mother is trying to protect her child by taking it away from school (87.5%)
- that stereotypes and prejudices are passed on to children and that they affect their behaviour (81.3%)
- that our society has been left far behind modern multicultural societies as far as intercultural relations are concerned (75%)
- that the mother is right about not wanting to send her child to school under these circumstances (43.8%)
- that Roma find reasons not to send their children to school in order to maintain their social coherence (31.3%)

• Roma don't like school and they are looking for reasons no to send their children to it (12.5%)

The learners felt:

- that it is necessary to find ways to deal with the problem and to keep the child in the school (100%)
- they were capable of dealing with the issue (75%)
- embarrassed about not having diagnosed the problem the Roma child was facing (56.3%)
- angry about the non-Roma children behaving in this manner (37.5%)
- sympathetic with the Roma children facing this kind of problems because of the other children (31.3%)

The learners would:

- talk to the Roma mother in order to understand the problem and its full extent (93.8%)
- discuss the issue with specialists (93.8%)
- address the Parent's Association to discuss the issue (93.8%)
- search literature concerning multicultural education and related subjects such as relations between social groups, racism, stigma etc (87.5%)
- talk to the child which is facing the problem (87.5%)
- discuss the issue with their colleagues (81.3%)
- set it as a subject of discussion among all the children of the class (81.3%)

The learners were interpreting the problem mainly through placing it within the context of the existing steretotypes and prejudices in the relations between Roma and non-Roma, as well as in the defensive mechanisms of Roma towards the dominant non-Roma society. All the learners were feeling that it was their obligation to solve the problem and try to solve it by searching for the appropriate sources and by taking into account all the people enganged, Roma and non-Roma parents and children, as well as the staff of the school.

It is remarkable that no one felt that the mother was trying to deceive them and there was not really a problem, no one felt indifferent about the issue, and no one felt in favour of the non-Roma children attitude towards Roma children.

Some of the learners' statements were: "I shall discuss with the mother to find out the extent of the problem, I shall discuss with the headmaster, the staff and the students because we all have responsibility, we are a chain...", "the children's attitudes are rooted in their families. I would implement a program for the kids", "when there is a problem we all have to find a solution together and not set it aside or cover it, because the problem will grow bigger". An inservise educator stated that "this kind of problems is very common in schools with Roma. The solution lies on an honest discussion with all parts enganged".

On the third problem

The learners thought:

- that it is difficult for a Roma parent to combine school and nomadic labour for his children (81.3%)
- that the existing educational system does not bear in mind the needs of different groups of the population (75%)
- that it is sensible that a parent wants to keep his children with him while he moves, in order to maintain social and family coherence (75%)
- that it is necessary to create educational infrastructure for nomads (i.e. mobile school, student card) (68.8%)

The learners felt:

- that it was necessary and that they wish to find ways for the child to keep contact with the school (87.5%)
- that it was necessary to take action towards better educational conditions which would deal with this kind of situations in the best possible way (87.5%)
- understanding for the Roma parent who wants to keep his family together, given the fact that he is about to move for a long period of time (81.3%)

• embarrassed about the parent's attitude to take the child away from school (25%)

The learners would:

- discuss with the father the possibility of the child continuing school in their new place of residence (87.5%)
- exploit the possibilities of cooperation between educational structures (student card), in order to give the child the chance to continue school in its new place of residence (87.5%)
- discuss with the father the possibility of leaving the child behind with some members of the family, in order to give it the chance to continue school (75%)
- intensely tell the father that he is forced by law to send the child to school until the end of high-school (12.5%)

The learners understood the problem which the father faces and are reflecting critically on the structure and philosophy of the existing educational system and how school could be more flexible in order to meet the needs of different social groups and nomads. No one was indifferent about the issue and most of them felt that there must be an institutional solution to the problem.

Some of the learners' statements were: "I shall not passively accept the decision of the family. I shall explain to them that the child can attend school in their new place of residence", "I feel angry that the child will drop out of school, I shall help them to continue in their new place", "I understand the father who wants to maintain the social cohesion, but I'll propose that the child stays with an adult if it is possible."

On the fourth problem

The learners thought:

- that the headmaster will agree to deal with the problem (68.8%)
- that Roma do not have toilets at their residences and that it is expected that children do not know how to use them (62.5%)
- that filth is a characteristic element of Roma culture (31.3%)

The learners felt:

- the need and the wish to find a solution to the problem (93.8%)
- understanding about the Roma different living conditions (56.3%)
- bad about the headmaster's unjust behaviour towards the children (50%)
- bad about the fact that there are still people in the 21st century who do not know how to use a toilet (25%)
- understanding and supporting the headmaster, because this behaviour of students is not appropriate in our days (12.5%)
- anger about the cleaning lady not doing her work correctly (12.5%)

The learners would:

- try to explain to the headmaster the reasons the children are not using the toilet correctly and try to find a solution together (81.3%)
- have a meeting with the Roma children's parents to discuss the issue (81.3%)
- go to the place Roma live, to see their living conditions and discuss the issue with the parents (68.8%)
- try discussing the issue and cooperating with all the school staff (headmaster, colleagues, cleaning lady, keeper) to find a solution (62.5%)
- cooperate with the appropriate public services which could make a positive intervention for solving the problem (62.5%)
- discretely teach the Roma children how to use the toilets (62.5%)
- clean the toilets in order to avoid problems between the cleaning lady and the headmaster (31.3%)

The learners have linked the problem with the living conditions of Roma people, but there is a remarkable percentage who considers that filth is a characheristic of Roma culture. The vast majority of learners felt the need to find a solution to the problem, through understanding of the different living conditions of Roma, cooperating with the headmaster, the staff, the children's parents and the social service.

Not one learner considered that this could be a reason for Roma children not attending school and all the learners would try to explain to the headmaster the causes of the problem. They would teach children discretely how to use the toilets and they would visit the place of residence of Roma to gain personal experience on their living conditions.

Some of the learners' statements were:

"I would discuss with the children issues on hygienic rules and cleanliness, as well as the use of toilets on a daily basis. The children are most understanding", "this is not an issue on which to stop Roma children coming to school. I would teach them discretely how to use the toilets", "we can find a solution on any problem if we really want to."

On the fifth problem

The learners thought:

- that the parent's prejudices and stereotypes affect the relations between children at school (100%)
- that parents have a racist attitude against Roma people (81.3%)

The learners felt:

- uncomfortable about the fact that there are still bad relationships of coexistence between people of different groups in the 21st century (68.8%)
- surprised about parents making an issue on the problem of coexistence of children in class, when they have not realized the existence of such a problem (43.8%)
- embarrassed about not diagnosing the issue themselves, or about diagnosing it but not solving it (if they have considered that an issue between the children does in fact exist) (37.5%)
- sympathising with the Roma children being treated in a racist way by non-Roma children (37.5%)

• the need to take action to resolve the issue, so that the children (Roma and non-Roma) can coexist in the school in harmony (37.5%)

The learners would:

- summon a meeting of the parents who expressed the complaints in order to try to understand their point of view (93.8%)
- search in related literature to see how they could face the issue (87.5%)
- ask for the help of specialists (counsellors etc) (87.5%)
- organise some common events for Roma and non-Roma, to exchange cultural elements (music, dance, history, cooking etc) (87.5%)
- discuss the issue with the Parent's Association (81.3%)
- summon a meeting of the Roma parents, and discuss it, in order to inform them (81.3%)
- discuss the issue with the Headmaster and the rest of the staff and cooperate with them to find a solution (68.8%)

The learners were aware that the problem is rooted in the relation between different cultures as well as in the existing stereotypes and prejudices in the dominant society towards Roma. They would seek solutions through the parents' assossiations, the headmaster, the staff and specialists and they would be looking in the relevant literature for facing such kind of problems. They propose separate meetings with the Roma and non Roma parents, as well as common meetings with all parties engaged. All the learners believe that non Roma parents are wrong and they do not think that Roma children should be in separate schools in order to avoid such issues.

Some of the learners' statements were: "I would try to find the intersecting points of the two groups in order to hold a creative discussion", "in the handling of such a serious problem all parts should participate. I would invite all people in events on the cultural differences", "I would speak to both sides and I would implement activities with all the children showing that we are all equal, besides our differences".

On the sixth problem

The learners thought:

- that it is natural for bilingual children to face problems with their second language (87.5%)
- that special care should be taken and special classes should be held to help Roma children, whose mother tongue is not that of the school (75%)
- that it is a lingual and cultural issue (68.8%)
- that it is a result of their attitude as teachers (37.5%)

The learners felt:

• the necessity to learn more about romani language, in order to be able to help the children (81.3%)

The learners would:

- discuss the issue with the headmaster and the rest of the staff, in order to exchange views and experiences (81.3%)
- ask the children's parents to teach them some Romani words and try to comprehend the basic principles and structure of Roma language (81.3%)
- search language related literature to see how one could understand the issue (75%)
- ask the children to teach them some Romani words and use them in class (56.3%)

The learners have placed the problem in the context of billingualism and no one has thought that this has been a learning problem of the children, or that there should be special schools for Roma children. They felt the need to learn more about the maternal language of their students, through the children, their parents, or the relevant literature in order to incorporate basic elements of romani language in their teaching. Most of the learners argued in favour of the existance of special care for the Roma children because of their maternal language being so different from the official language of the school system.

Some of the learners' statements were: "there should be special introductory classes for Roma pupils and the teacher must possess elements of their language in order to adapt his teaching to his pupils' needs", "I would try to help solve this natural problem through the help of specialists and more linguistic activities", "the issue of bilingualism is very prominent and requests immediate actions by our society".

On the seventh problem

The learners thought:

- that school classroom, as an institution (in the sense of a restricted space and the rules which have to be abided by), is completely alien to Roma children (93.8%)
- that Roma children are not accustomed to sit on chairs (68.8 %)
- that Roma children are not accustomed to being disciplined (56.3%)
- that Roma children are hyperkinetic (12.5%)

The learners felt:

- understanding about the fact that children are in a new and alien environment (87.5%)
- not disturbed by the fact, because they were expecting it (43.8%)
- puzzled and confused about how they could handle the issue (18.8%)
- anger about the parents not teaching the children to be disciplined (6.3%)

The learners would:

- create more kinetic activities, to allow the children to move more (100%)
- often take "breaks" between the activities, in order to allow the children to stand up and move (18.8%)
- summon their parents and tell them that there is a problem of incorporating the children in the class (18.8%)
- punish each child that stands up (6.3%)

The learners have placed the problem in the broader context of Roma difficulty of adjustment to a new and alien environment. They would try to solve the problem by adjusting their teaching to the children's needs, by incorporating more kinetic activities or frequent breaks in their teaching.

On the eighth problem

The learners thought:

- that the children are not familiar with the basic tools needed for writing (pencils and exercise-books), as their language is only verbal (87.5%)
- that they should make exercises for the children, to familiarize them with the writing tools (87.5%)
- that some things we take for granted for non-Roma children such as writing and drawing at home before they go to school, don't apply to Roma children (75%)
- it is natural, given the fact that they have barely seen a pencil and an exercise book in their family (37.5%)

The learners felt:

- that they should help them with a variety of ways to familiarize themselves with writing tools (93.8%)
- understanding about the difficulties Roma children are facing in school (87.5%)

The learners would:

- start exercises of body orientation, laterality, and graphical exercises which prepare the field for the discovery of letters (87.5%)
- search in related literature and look for other colleagues with similar experiences in order to exchange views on how to handle the issue (87.5%)
- create and develop children's skills with drawing and handicraft, as a preparation for writing (81.3%)

- hold activities which would help the children familiarize themselves with writing tools (75%)
- discuss it with the headmaster (62.5%)

The learners understand the problem which the children face and they place it in the broader context of the Roma oral language and lack of familiarity with the writing tools. They suggest pre-writing and writing activities which will help the children familiarize with the writing tools and they would seek information and knowledge through the relative literature.

On the ninth problem

The learners thought:

- that Roma are not familiar with procedures which are strict in sense of time (68.8%)
- that Roma have a different relationship with time in their culture (62.5%)
- that Roma students should be coming on time in order not to interrupt the continuity of the class (43.8%)

The learners felt:

- that they should do something in order not to interrupt the class (50%)
- understanding about the fact, since Roma do not have strict rules of time in their culture (37.5%)
- anger about them disturbing the continuity of the class by interrupting each time they enter (6.3%)

The learners would:

- discuss it with the parents and ask them to prepare their children for school in time (100%)
- make exercises in order to help them understand the meaning of time and to develop time awareness (before, now, after etc) (75%)

• discuss the issue with the headmaster and the rest of the staff to find a solution (68.8%)

The learners realize the problem created in the classroom function and feel they have to do something about it. They believe that this is a conscequence of the different relation Roma have with time, combined with the strict rules of school operation. All learners would discuss the problem with the parents and the headmaster and implement exercises with the children for the development of time awareness.

Some of the learners' statements were: "I shall try to deal with the problem, explaining to the parents how important is for them to be on time in their appointments and for the children to be on time in school", "all must comply with the rules of the school and not interrupt and distract the other children in class".

On the tenth problem

The learners thought:

- that they should do something for the children to be clean (56.3%)
- that the Roma living conditions must be very bad, otherwise the children wouldn't be in this condition (56.3%)
- that filth is characteristic of Roma culture (31.3%)

The learners felt:

- that they should do something to deal with the issue (62.5%)
- understanding about the Roma's difficult living conditions (56.3%)
- sorrow about the children being dirty (25%)
- ashamed of the fact that these children are dirty in the 21st century (18.8%)
- anger about the parents not teaching the children to wash themselves and not washing them (6.3%)

The learners would:

• hold cleanliness-related activities in the class (87.5%)

- project videos to the children about sanitation and find material from magazines, books and the internet to work with (81.3%)
- discuss the issue with the Headmaster and the rest of the staff (68.8%)
- talk to the Roma children's parents in order to establish the extent of the problem (68.8%)
- cooperate with the appropriate public services which could help with this issue (i.e. Municipality, Social Service, Health Centre) (68.8%)
- discuss the issue with Parent's Association (62.5%)
- go to the place where Roma live, discuss the issue with the parents and realize the extent of it (56.3%)
- do nothing because they don't want to intervene in their culture (6.3%)

Most of the learners believe that the problem is related to the living conditions of Roma, while a remarkable percentage considers filth a characteristic of Roma culture. Most of them understand the difficult living conditions and feel they have to do something about it, suggesting activities (videos etc) on sanitation in cooperation with the headmaster, the staff, the parent's association and public service authorities. The majority of learners would visit Roma living quarters.

The participants' view of the course and their self-assessment

In the summative evaluation questionnaire the participants were prompted through specific questions to provide their own view on the course as one complete educational experience and a self-assessment of changes in their personal beliefs, feelings and behaviors towards Roma and other special groups.

Regarding the evaluation of the course, all participants have stated that the course met their expectations to "a great extent" (62.5%) or "a lot" (37.5%). This is a significant

improvement over the results of the formative evaluation on the same subject, where the respective values were 50% and 43.7%, while a 6.3% had stated "moderately".

In addition, the learners have considered that their participation in the course has contributed positively on:

- o their professional life (87.5%)
- o their personal development (75%)
- o their own awareness of their their prejudices/stereotypes (81.3%)
- on their own awareness of their attitudes towards special groups
 (68.8%)
- o their own awareness of their attitudes towards the different (75%)
- o their awareness of their attitudes towards Roma people (68.8%)

On their self-assessment of changes effected in their personal attitude, the participants have been asked on the effect of the course on the way they would face Roma students and members of other special groups and its effect on the various elements which form an attitude (beliefs, feelings and behavior). All of the participants have stated that the course had a positive effect on both the above aspects. As expected, the course has affected more the cognitive and affective elements of attitude and less the behavioral element.

The participants' response to the above questions is analyzed in tables 28, 29 and 30.

Table 28. Change of learners' (ESG) attitudes towards their Roma students

Change	Frequency	Percentage %
Not at all	0	00.0
Somewhat	3	18.8
Moderately	6	37.5
A lot	5	31.3
To a great extent	2	12.5
Total	16	100.0

Table 29. Change of learners' (ESG) attitudes towards members of special groups

Change	Frequency	Percentage %
Not at all	0	00.0
Somewhat	4	25.0
Moderately	6	37.5
A lot	5	31.3
To a great extent	1	6.3
Total	16	100.0

Table 30. Change of learners' (ESG) beliefs, feelings and behaviors

Change of	Percentage %
Beliefs regarding Roma people	75%
Beliefs regarding the "different"	75%
Feelings towards Roma	43.8%
Feelings about the "different"	62.5%
Behaviors towards Roma	37.5%
Behaviors about the "different"	56.3%
	100.00

Some of the learners' (ESG) free statements were: "The course helped me as educator and I have met very worthy and interesting people", "a very important experience both on its E-learning and its educational subject. It helped me to be aware of my thinking and how to face Roma students", "very important experience in exploring the possibilities which learning technologies provide today, as well as thematically", "I feel sorry that it has finished so soon. Let's maintain the group through the face book in order to be able to exchange views and experiences", "it was very important experience, containing theoretical and practical part. I have been aware of my own prejudices and stereotypes and if they have not been changed completely I think that I have done the first step forward", "It has been a very pleasant experience", "If a similar course will be held in the future, I would participate with joy and pleasure", "Congratulations to the administrator, to the participants and to Roma who have given the stimulus for the creation of such a work. Thank you from the deepest part of my heart".

Measuring the improvement of compatibility

Measuring the improvement of the participants' compatibility is a difficult task, as the available data of the course are mainly qualitative. For this reason we have created the scale from 0-10 presented in page 218 on which the participants have been positioned by the expert judgment of the administrator based on the data provided in the various stages of the course. A question on social distance, using the Bogardus scale technique has also been included in both the initial compatibility test and in the summative evaluation questionnaire, providing comparable data.

The development of each participant's compatibility on the types of compatibility applicable is presented in table 31, in which each learner's compatibility level at the beginning and at the end of the course is indicated. The tables provide the improvement of each learner observing even the small improvements within each of the 5 basic values of compatibility (for example, improving from 1 to 2 but still remaining with very low compatibility). The initial compatibility of each learner has been highlithed red while any improvement of compatibility in his/her final table has been highlithed green.

Table 31. Compatibility of each learner (ESG) at the beginning and at the end of the course

LEARNER 1 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

Compatibility at the end of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low	Low		Medium		High		
Linguistic		2								
Cultural			3							
Social			3							
Ethnic			3							

LEARNER 2 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very lov	Very low		Low		Medium		High		1
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low	Very low		Low		Medium		High		1
type/level										
Linguistic		2								
Cultural				4						
Social				4						
Ethnic			3							

LEARNER 3
Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low	1	Medium	1	High	1	Very high	
Linguistic		2								
Cultural				4						
Social				4						
Ethnic			3							

LEARNER 4
Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low	Very low		Low		Medium			Very high	
type/level										
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low		Medium		High		Very high	
type/level										
Linguistic		2								
Cultural			3							
Social			3							
Ethnic		2								

LEARNER 5 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low	ı	Low		Medium	l	High		Very high	l
Linguistic		2								
Cultural				4						
Social				4						
Ethnic			3							

LEARNER 6 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low	Very low		Low		Medium			Very high	
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low		Medium		High		Very high	1
type/level										
Linguistic		2								
Cultural				<mark>4</mark>						
Social				4						
Ethnic				4						

LEARNER 7
Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	l
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	l
Linguistic		2								
Cultural				4						
Social				4						
Ethnic			3							

LEARNER 8 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low	1	Medium		High		Very high	1
type/level	 				1			T		Т
Linguistic		2								
Cultural			3							
Social			<mark>3</mark>							
Ethnic			3							

LEARNER 9
Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low	•	Low		Medium	•	High	•	Very high	l
type/level										
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	1									

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	l
Linguistic		2								
Cultural			3							
Social			3							
Ethnic		2								

LEARNER 10 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low		Medium		High		Very high	1
type/level										
Linguistic	1									
Cultural	1									
Social	1									
Ethnic	<u>I</u>									

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low	•	Mediun	ı	High	•	Very hig	h
Linguistic		2								
Cultural		2								
Social		2								
Ethnic	1									

LEARNER 11 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low		Medium		High		Very high	1
type/level	1									
Linguistic		2								
Cultural	1									
Social	1									
Ethnic	1									

Compatibility at the end of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic				<mark>4</mark>						
Cultural					5					
Social					5					
Ethnic					5					

LEARNER 12 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low		Medium		High	•	Very high	ì
type/level										
Linguistic			3							
Cultural					5					
Social					5					
Ethnic					5					

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low		Medium		High		Very high	
type/level										
Linguistic				<mark>4</mark>						
Cultural						<mark>6</mark>				
Social						<mark>6</mark>				
Ethnic						6				

LEARNER 13 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic			2							
Cultural			-		5					
Social					5					
Ethnic					5					

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic			3							
Cultural						<mark>6</mark>				
Social						6				
Ethnic					5					

LEARNER 14 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	i
Linguistic			4							
Cultural									9	
Social									9	
Ethnic									9	

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low	Very low		•	Medium		High	•	Very high	ì
type/level										
Linguistic					5					
Cultural										10
Social										10
Ethnic									9	

LEARNER 15 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low		Low	•	Medium	•	High	•	Very high	l
type/level										
Linguistic			3							
Cultural						6				
Social						6				
Ethnic						6				

	1	2	3	4	5	6	7	8	9	10
Compatibility type/level	Very low		Low		Medium		High		Very high	
Linguistic			4							
Cultural							<mark>7</mark>			
Social							<mark>7</mark>			
Ethnic							<mark>7</mark>			

LEARNER 16 Compatibility at the begining of the course

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low	Very low			Medium		High		Very high	
type/level										
Linguistic				4						
Cultural										10
Social										10
Ethnic									9	

	1	2	3	4	5	6	7	8	9	10
Compatibility	Very low	Very low		•	Medium	•	High	•	Very high	1
type/level										
Linguistic					5					
Cultural										10
Social										10
Ethnic										10

The initial compatibility of the whole learners' (ESG) group comparing with their compatibility at the end of the course shows an improvement in all types. The initial compatibility of the learners in the beginning of the course is presented in figure 23 and their compatibility at the end of the course is presented in figure 24.

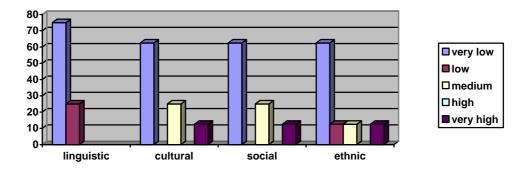


Figure 23. Participants' initial compatibility with Roma

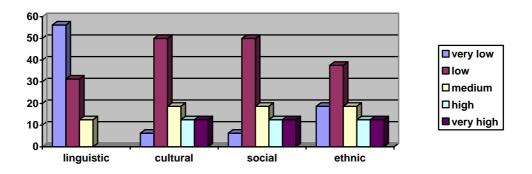


Figure 24. Participants' final compatibility with Roma

The improvement of compatibility of the participants with Roma is also evident in the measurement of their tolerable social distance from Roma, which has been tested in the beginning and the end of the course using a variant of the Bogardus social distance scale.

The participants have been asked to declare how comfortable they would feel with their social distance from Roma people in a scale ranging form Roma being expelled from the country down to a Roma becoming a relative. The participants' responses at the end of the course, compared to those provided in the initial compatibility test, have shown that after the course the learners felt much more comfortable with closer relations with Roma.

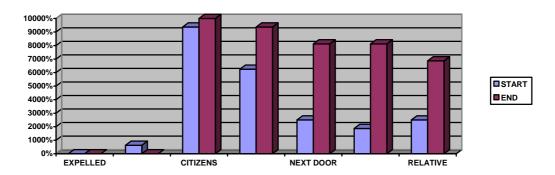


Figure 25. Total differentiation of learners' (ESG) attitudes towards Roma between the beginning and the end of the course

The total learners' change of attitude towards the Roma group is presented in table 32, while the personal change of attitude of each learner is presented in the table that follows, where the improvement of learners' attitudes has been highlighted in green and negative changes in red.

Table 32. The differentiation of each learner's (ESG) attitude towards Roma between the beginning and the end of the course

т	Expelle	Expe	Just	Just	Citize	Citize	Collea	Collea	Living	Living	Best	Best	Rela	Relativ
Learner	d	lled	Visito	visitor	ns	ns	gues	gues	next	next door	friend	Friend	tives	es End
	Beginn	End	rs	s End	Bigin	End	Begin	end	door	End	Begin	End	S	CS LIIU
	ing	Liid	Begin	3 End	ning	Liid	ning	Cild	Begin	Liid	ning	Liid	Begi	
	8		ning		g		8		ning		g		nnin	
									8				g	
Learner 1	NO	NO	NO	NO	NO	YES	NO	NO	YES	NO	NO	YES	NO	NO
Learner 2	NO	NO	NO	NO	YES	YES	NO	YES	NO	YES	NO	YES	NO	YES
Learner 3	NO	NO	NO	NO	YES	YES	YES	YES	NO	YES	NO	YES	NO	YES
Learner 4	NO	NO	NO	NO	YES	YES	NO	YES	NO	YES	NO	YES	NO	NO
Learner 5	NO	NO	NO	NO	YES	YES	NO	YES	NO	YES	NO	NO	NO	YES
Learner 6	NO	NO	NO	NO	YES	YES	YES	YES	NO	YES	NO	YES	NO	YES
Learner 7	NO	NO	NO	NO	YES	YES	NO	YES	NO	YES	NO	YES	NO	YES
Learner 8	NO	NO	NO	NO	YES	YES	YES	YES	NO	YES	NO	NO	NO	NO
Learner 9	NO	NO	NO	NO	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES
Learner	NO	NO	YES	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
10														
Learner	NO	NO	NO	NO	YES	YES	NO	YES	NO	YES	NO	YES	NO	NO
11														
Learner	NO	NO	NO	NO	YES	YES	YES	YES	NO	YES	NO	YES	NO	YES
12														
Learner	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
13														

Learner	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
14														
Learner	NO	NO	NO	NO	YES	YES	YES	YES	NO	NO	NO	YES	NO	YES
15														
Learner	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
16														
	100%	100%	93,7%	100%	93,7%	100%	62,5%	93,7%	25%	81,2%	18,7%	81,2 %	25%	68,7%

The development of the learning group

The development of the learning group has been effected through a series of activities incorporated in the course. Beginning with the "self-presentation" activity, followed by the "commons and differences among the members of the learning group" one, the participants have created and established between them the desired relations, which have been strengthened through the exchange of views and experiences during the educational activities of the course.

Once the required social bond has been formed, the participants have been more and more interactive with the administrator and each other, gradually opening up in expressing their personal views and experiences and participating actively in the various learning activities, promoting collaborative working.

The "self-presentation" activity

The "self-presentation" of the learners was prompted by the administrator who has presented herself at the beginning of the course with reference to her studies, expectations of the course, personal data and interests, hobbies and some weak points of her personality such as that she enjoys delicacies and always tries to maintain her weight. To the administrator's example, all learners have responded positively by incorporating in their self-presentations their personal and social profile, along with their professional profile.

The "commons and differences among the members of the learning group" activity

Having read the participants' self-presentations, each one of them was prompted to find and write commons and differences between himself and the other participants, an exercise through which administrator and participants began to identify with and relate to one another, a fact which promoted their online socialization.

This first interaction of the learners (ESG) with the learning group produced some very interesting statements and comments, few of which are presented below (more can be found in Appendix 6):

"Like Mrs. Korre, Maria, and Stergiani, I enjoy cooking and inviting my friends to my house to have fun and drink some wine! (I am also glutton and I can't hide it! I wouldn't say that physical exercise is one of my strong points, but I am trying to make up for this situation by dancing, which I love). I really like reading and I absolutely agree with Katerina and Eliana who relax by listening to the music they like."

"Each person is unique and it is marvellous getting to know him! But at the same time, we are all so much alike, that we haven't ever really imagined it. From the presentations, we saw how much alike we are (common wishes and interests), something that we think has created a positive field for cooperation, diminishing natural distances and the distances created between strangers."

"I would like to say to Anastasia, that when we all have our diploma in our hands, we will have the same anxiety for the future. That's something in common! In contrary to Anastasia, I really like computers.... I agree with Sophia that every obstacle we encounter in our lives turns out well at the end and that if we are well in our health, we can achieve everything... There are many differences between us, like the courses of our careers. My career and those of my fellow students, are still beginning, and despite our differences, there is something common among us. This is the effort for a good cooperation and the exchanges of views which will make us think and become better."

"I must point out that all of us who are participating in this programme have something in common and this is our interest for a specific social group, the Roma... I have many differences with other members. For example, I don't

have the knowledge, the experience and the studies, some other members of the programme have. I also have different preferences and interests."

The success of the initial stages in the development of the learning group has contributed significantly in the creation of an excellent collaborative environment, where mutual respect and trust coexisted with openness and friendliness, promoting immediacy and facilitating interaction, as it is clearly shown by the frequency and quality of communication exchanged between all the members of the learning group, confirming the positive outcome of the course in this issue.

Furthermore, all the participants declared that they would like to maintain the communication of the group through the Face Book.

Evaluation of the E-learning vs conventional educational methods

Apart from the obvious benefits of E-learning compared to the classroom concerning the cost savings on travel and accommodation, as well as the overcoming of time and space barriers, it has been considered important to investigate how the participants evaluated the apparently new to them educational method of E-learning against the traditional face to face method they already knew.

For this reason specific questions have been included in the summative evaluation questionnaire, asking the participants:

- "Do you think that the subjects included in the course would be analysed and elaborated better in a face-to-face education?"
- "Do you consider that in a face-to-face discussion you could have expressed your thoughts, feelings and attitudes better than through the possibility given to you by the course?"

In the first question only three (18.8%) out of 16 participants replied "yes", claiming that "communication would be more direct" and "I am in favour of personal contact".

All of the remaining 13 participants (81.2%) have supported the E-learning method, upholding that it facilitates everyone to express oneself better, providing more time and allowing deeper thinking, while the asynchronous mode provides the possibility to adapt learning to each one's personal schedule.

Some of the individual remarks of the E-learning advocates were:

- "...one may express oneself better when there is no time pressure and everyone is encouraged to express oneself, not only the extroversive personalities, as it often happens in face to face learning."
- "...the course provided time and freedom of thought and speech..."
- "...I favour the E-learning mode, as this way everyone could speak about one's own prejudices without embarrassment or time pressure..."
- "...this mode favoured more learning styles and communications modes, forum, chat, e-mail, each one could choose what suits him and makes him comfortable..."
- "...in a face to face method we would not have the time to appreciate and take in all this excellent educational material..."

In the second question only four (25%) out of 16 participants replied "yes", one of them relating the easiness of expressing himself to the personalities of his correspondants. The remaing 12 (75%) of the participants felt comfortable in expressing their views and feelings in a climate of trust and mutual respect, created by the positive attitude of the administrator, the common aim and interest on the course and the absence of competition.

Some of the participants' remarks were:

- "...I felt that my views were important and welcomed by the others, so I expressed them freely..."
- "...we were a group with common goal, without competition or criticism..."

"...the joyful, sincere and discrete attitude of the administrator made me feel comfortable to speak about my personal and professional matters..."

"I am now thinking, that the way to communicate through a "platform" without having visual contact, not only makes it easier -as you say- for us express ourselves "freely", but it also makes us pay more attention to the self presentations and the thoughts of the other members of our group."

Regardless of the participants comparative evalution of E-learning against face to face method, they all declared satisfied by their participation in this course, 93.7% of them "to a great extent" or "a lot" and all of them (100%) would like to participate again in E-learning courses.

Evaluation of the course in the final meeting

In the final meeting of the administrator with 8 preservice educators (ESG), which took place in the University of Patras on 15 May 2009, there has been a retrospective evaluation of the whole course at personal and team level.

This evaluation, which is considered very important, as it took place two and a half months after the completion of the course, has been effected through discussions and exercises, the outcome of which has strengthened the results of the summative evaluation on both its primary and secondary objectives.

The most significant parts and conclusions of the discussions held and the exercises performed during the final meeting were:

The participants stated that they feel much more aware and ready to deal with
the problems arising in the educational procedure when children of special
social groups are involved and that now they can respond better to the
educational needs of these children.

- The participants rated the educational experience they had in the course as "the best thing that has happened to them in the educational system, both in its content and in the way it has been structured".
- The participants praised the benefits of the asynchronous learning mode compared to the burden of their compulsory educational program, as well as their different personal pace and needs.
- The participants underlined the important role of the administrator in the creation of the appropriate educational atmosphere, the establishment of trust, comfort and respect between participants in an online learning environment, diminishing the distance and increasing immediacy.
- The participants requested the maintenance of the learning community through the Face Book, as they considered this very useful in order to exchange views and experiences or seek help on matters similar to the ones encountered in the course or simply communicate with each other.
- In one of the exercises, each participant has been requested to make a drawing representing the course and mark on it whatever each one considered as a personal milestone. All participants valued the course as a very positive educational experience. Two representative drawings are presented in figures 26 and 27.

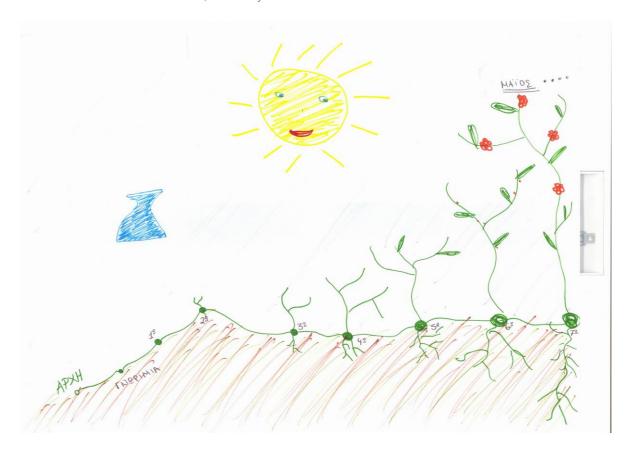


Figure 26. Drawing 1: A plant is seeded at the beginning of the course, growing as the course proceeds and flowers in the end

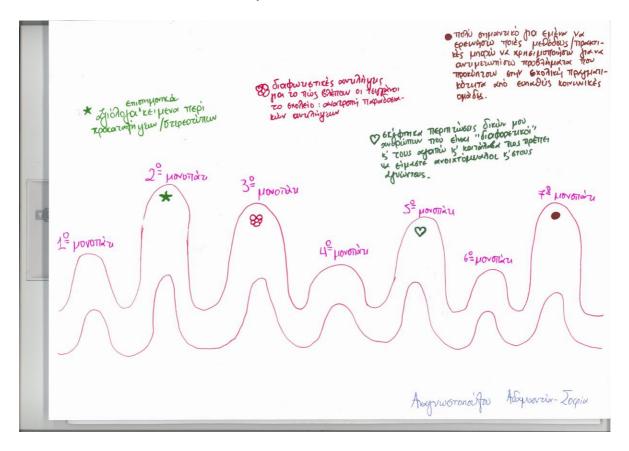


Figure 27. Drawing 2: The path of the course pictured as a series of bends, like a river, each bend corresponding to a learning path with the ones favoured by the learner (ESG) standing higher and carrying comments

The comments wrote:

- 2nd Learning Path: remarkable scientific texts on prejudices and stereotypes.
- 3rd Learning Path: Enlighting views on how Roma face school; Subversion of traditional views
- 5th Learning Path: I have thought about people of mine who are "different" and I love them and I understood that we must be openminded even towards strangers.
- 7th Learning Path: Very important for me to investigate the methods/practices I can use to deal with problems of vulnerable social groups arising in school reality.
 - In another exercise the participants were requested to express their view on the closure of the group by completing the phrase "the group is over…and…" whichever way they wanted. Some of the participants' contributions were:

"The group is over ...and...

"something new will begin..."

"the experience stays deeply carved in our minds and our souls. The prompts are many and so are the feelings. The acquentance of new persons eager to offer knowledge and experience a treasure! Thank you very much!"

"I can't wait to make Roma children feel "special" (in the good sense) this time."

"I feel very happy for working together and all the things I learned through the paths. I am sorry it ends and I hope we don't loose touch, maintaining the group through the Face Book. I had a great time and I learned a lot."

"I feel lucky for experiencing the educational experience we are all etitled to in our times, making the best of new technologies in such an effective way."

On top of the joyful and outword attitude of the participants in the final meeting a concrete transformation of their attitudes towards the "different", as well as their professional way of dealing with matters relating to special social groups has been evident, judging by the way they have been reacting to the various discussions and video projections taking place in the duration of the meeting.

Maintenance of the Learning Community Network

The learning group that has been established during the course has been very successful in creating strong personal and educational relations between all its members, creating a proper learning community network. Throughout the course and in the final meeting there have been intense requests by the vast majority of the participants to maintain the contact already established between them and with the administrator in the future.

Following this positive attitude, it has been decided to maintain the learning community network by continuing the function of the closed group "Lacio Drom" in the social networking website of the Face Book, which has been the communication channel favoured by most of the participants.

In the period from the end of the course till the final meeting there have been 11 comments posted on the wall of "Lacio Drom", while the uploading of exercise results and photographs of the final meeting by the administrator produced 54 interactive comments within a period of one month.

The above results in maintaining the learning community network are considered sufficient, taking into consideration that the participants did not have a common professional background on which to interact, therefore their communication has been mainly related to the existence of an issue of common interest (i.e. the photographs of the final meeting) and the availability of free time (i.e. when most have finished their semester exams).

The maintenance of the learning community network, as implemented by the course participants, shows the strong dynamic of this phase in an Educational Design System and supports the decision to include this phase in the initial design of the test application.

Conclusions and Future work

By providing the answers to the key questions emerging from the problem statement of the research, has led into the development of the ESG Framework for the education of Educators of Special Groups (ESG). The Instructional Design System (IDS) that has been developed following the ADDIE+M model has been put to test in a practical application in which the improvement of compatibility of educators of Roma in Greece has been the prime objective.

Through the practical testing of the theoretical structure we have come to the general conclusion that the ESG Framework is both functional and efficient for the improvement of compatibility between educators (ESG) and learners.

A reflection of the initial objectives of our research in direct comparison with the achieved results, and pointing out areas for future work can be found in table 33 at the end of this section.

Our main observations and conclusions on the strengths and weaknesses of the ESG Framework, as pointed out by the practical application, as well as the areas for improvement or further research, are summarized as follows:

- The incorporation of the requirements for effective adults' education (i.e. active participation, interaction, collaborative learning, self-directed learning, purpose-oriented learning, life-centered learning etc) in combination with the advantages of learning technology (i.e. multimedia, communication tools, LMS) has resulted in increasing significantly both the learners' interest to participate and be involved, as well as the educational outcome.
- The instructional theories chosen (as these have been adapted) for the
 development of the ESG Instructional Model have been proved appropriate, as
 the content of the LOs developed using the respective methods and techniques
 has triggered the attitude awareness and transformation process and has
 promoted the educational objective. A full scale implementation will provide

- future researchers with more concrete data for the evaluation of each theory adopted and the adaptations made, or the eventual adoption of other theories.
- The ESG Framework conceptual development, taking into consideration the particularities of the test application and the constraints of limited time, did not present any major fault or discontinuity. The fact that the learners' (ESG) group was different than the group participating in the needs assessment has resulted in the addition of an initial compatibility test in the phase of implementation, which appears necessary in any similar situation or in cases where the beginning of the course is much later than the needs analysis. A full scale implementation may indicate more areas for refinement or expansion.
- The importance of the needs analysis phase for the assessment of the educators' needs has been confirmed, as the type and level of the learners' (ESG) compatibility defines the content of the educational material, while their learning profiles define the presentation.
- The development of ontologies expressed in a formal language prepared for reuse, such as OWL, on the educational procedure (content, roles, activities, method) of the ESG Framework as well as on each of the phases of the ESG Framework, has not been considered necessary, as it would not affect the validity of the research or its results, however it should be considered for the proper development of the framework in the future.
- One of the most decisive factors for the achievement of the educational goal
 has been the choise of the LMS platform, as it provides the tools for both the
 incorporation of effective adult education requirements and the successful
 monitoring and evaluation of the learners' (ESG) progress and the efficiency
 of the educational material. Most modern LMS meet the requirements of the
 framework for the appropriate platform.
- Of all the tools offered by LMS platforms, the provision of efficient and user
 friendly communication tools that promote immediacy and interaction
 between the learners themselves, as well as between the learners and the
 administrator is the most important. Within the ESG Framework and the ESG
 Instructional Design Model the use of the appropriate communication tools
 and the efficiency of the instructor result in the development of all types of

interaction contained in Moore's (1989) initial model plus the fourth type added by Hillman, Willis and Gunawardena (1994) to a surprisingly high level.

- Compatibility tests should be effected at least in the beginning and the end of the course and intermediately whenever it is considered necessary. Compatibility tests must be designed in a way that qualititative data provided by the learners are converted to quantitative data, in order to yield measurable and comparable results, allowing the measurement of any compatibility improvement in a more objective manner and facilitating the evaluation by the administrator. In this direction a more detailed scale for the measurement of compatibility improvement within the same level of compatibility has been developed and implemented in the test application. Future research may provide more elaborate scales, either for universal application or customized to different special groups.
- The research for existing LOs revealed a rather poor library in the available repositories, therefore the development of specific LOs corresponding to the educational needs (type and level of compatibility) of educators of various special groups is a prime requirement. In this direction the efficiency of the LOs developed in the test application in improving the compatibility between educators and learners supports the standarization of the extensions for LO Metadata in the IEEE LOM specifications proposed in the ESG Framework.
- The use of multimedia within the educational material has resulted in richness, attractiveness and variety of this material, a fact which has been appreciated by the adult learners (ESG) to a great extent, therefore it is suggested in future applications as much as possible.
- The importance of source credibility and attractiveness of educational material as a factor in attitude change has been proved by the use of original sources from the special group of Roma (i.e. interviews, videos).
- The incorporation of life-centered (or task-centered or problem-centered) activities has provided the vital link between what adult learners (ESG) are learning and how it will apply to their life situation.

- Sequencing strategies that allow the administrator to respond to the learners'
 needs and progress and re-sequence material during the course have proved
 very important, while the eventual application of dependence-to independence
 sequencing is also suggested in order to move learners (ESG) towards
 independent and autonomous learning.
- The duration of a course for the improvement of compatibility of educators of special groups must take into consideration that the change of attitude is one the most time consuming educational procedures, while the development of collaborative ways of learning and the journey to self-directed learning also take considerable time.
- The importance of the administrator's role in ensuring the success of the online course, both in facilitating learning and overcoming the barriers, mainly the isolation of learners and the lack of immediacy, has been clearly established, along with the administrator's contribution in the creation and maintenance of a climate based on communication, collaboration and mutual respect and trust and the development of a cohesive learning group.
- The familiarization of the learners (ESG) with the e-platform and the acquisition of the necessary skills for using it effectively have proved essential for the whole educational process. The time frame for this stage should be adjusted accordingly in cases of learners illiterate in ITC or suffering from technophobia.
- As it has been found that technical problems may hinder the progress of a
 course or discourage learners from participation, an efficient way of handling
 these problems must be provided.
- The collaboration between different persons responsible for the design, development, implementation and administration of a course must be established at a considerable level and be maintained throughout the course.
- Formative evaluation has contributed considerably in deciding the modifications effected thoughout the course.
- The maintenance of the learning community network, as implemented by the course participants, has shown the dynamic potential of this phase in an

Instructional Design System and supports the decision to include this phase in the initial design of the ESG Framework.

 The exploitation of existing social networking websites may prove very helpful for both the maintenance of the learning community network and as substitute communication environment in case of failure of the LMS platform.

Considering the above conclusions we feel comfortable to claim that our main goal in developing a flexible e-framework for the improvement of compatibility between educators of special groups and their learners, helping to overcome the barriers of time and space and reduce the cost of education for educators, facts that are more than ever needed in a multicultural society, has been mainly achieved.

This is also reflected in table 33, where a review of the initial objectives directly compared with the results achieved and the areas for future development is attempted.

Table 33. Objectives of our research against results and areas for future work

Objectives	Results	Future work
To define the phases of an e- educational framework under macro perspective (IDS)	Development of the ESG Framework	Application of the ESG Framework and customization in each special group
To develop a conceptual framework concerning the educational process	Development of the ESG Conceptual Framework	Development of the relative ontology expressed in OWL formal language
To develop interrelation modules within the phases of the framework	Development of needs analysis taxonomy and educational objectives taxonomy	Development of the relative ontologies expressed in OWL formal language
To define the content of the LOs to be used in the framework according to the compatibility between educator and learner	Definition of the content of LOs in the ESG Framework based on compatibility between educator and learner	Creation of a LOs repository based on content according to each type and level of compatibility customized in
To define the presentation of the LOs to be used in the framework according to the learners' profile	Definition of the presentation of LOs in the ESG Framework based on learners' profile	each special group Creation of a LOs repository based on presentation according to learners' profile

To incorporate the requirements	Incorporation of the	Further elaboration on this
for the effective adult learning	requirements for the effective	matter
in the framework	adult learning in the ESG	
	Framework	
To develop/tailor existing	Development of the ESG	Application and further
instructional design models and	Instructional Design Model	development of the ESG
methods to the particularities of		Instructional Design Model in
education of the educators of		future implementations
special groups		
To accurately describe the LOs	Refinement of existing terms in	Further refinement and proposal
using IEEE Metadata	IEEE Metadata and proposal of	of extensions for specific special
	new extentions	groups
		Development of customized
		compatibility tests for various
		special groups

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Appendixes

Appendix 1: Questionnaire of the needs assessment

Appendix 2: Detailed results of the needs assessment

Appendix 3: Greek manual for the use of Dokeos platform

Appendix 4: Initial compatibility test between educators and Roma learners which has

been used at the beginning of the program

Appendix 5: Description of the seven Learning Paths and the two learning activities

for the development of the learning group

Appendix 6: Responses of the learners (ESG) in learning paths and the "commons and

differences among the members of the learning group" activity

Appendix 7: Questionnaire of the Formative Evaluation

Appendix 8: Questionnaire of the Summative Evaluation

Appendix 9: Material of the final meeting

Appendix 10: Photographs with Roma during the preparation of the educational

material.

Appendix 11: Audio files of interviews with Roma

Appendix 1

Questionnaire of the needs assessment

Question 1
Gender
□Male
□ Female
Question 2
Age □ 20-25 □ 26-30 □ 31-35 □ 36-40 □ 41-45 □ 46-50 □ 51-55 □ 56-60 □ over 60
Question 3
Educational Level
□ College degree Subject
Question 4
Training on adults' education □ Yes □ No
L 110

Question 4.a
If yes, how obtained? □ Day events
□ Seminars
□ Self-training
□ Other
Question 4. b
Please report in a few lines the most important factors which make it easier for an adult to learn. Answer according to your own experience as an adult learner and/or as an educator of adults
Question 5
Tarining and income and in the second
Training on issues concerning special groups:
Question 5.a
If yes, how obtained?
□ Day events □ Seminars
□ Self-training
□ Other
Question 6
Have you ever worked with a special group as educator/trainer?
□ Yes □ No
□ NO

Question 6.a
If the answer is yes, with which group/groups?
Question 6.b For how long?
☐ Less than one semester
☐ Up to one year
☐ Two years
☐ More than two years
Question 6.c Which were the three major problems you encountered? 1
3
Question 6.d Which were the three best things you have experienced?
12
3
Question 7
Do you have access to a personal computer?
☐ Yes
□ No

If yes, where? At home In the office Other Question 8 What is the level of your skills with the following software: Word processing None Low Medium High Very high Instant messaging/Chat None Low Medium High Very high Web browsers None Low Medium High Very high Spread sheets (e.g. excel) None Low Medium High Very high	Question 7.a
□ In the office □ Other Ouestion 8	If yes, where?
Question 8 What is the level of your skills with the following software: • Word processing None Low Medium High Very high • Email None Low Medium High Very high • Instant messaging/Chat None Low Medium High Very high • Web browsers None Low Medium High Very high • Spread sheets (e.g. excel) None Low Medium High Very high	☐ At home
Question 8 What is the level of your skills with the following software: • Word processing None Low Medium High Very high • Email None Low Medium High Very high • Instant messaging/Chat None Low Medium High Very high • Web browsers None Low Medium High Very high • Spread sheets (e.g. excel) None Low Medium High Very high	\Box In the office
What is the level of your skills with the following software: • Word processing None Low Medium High Very high • Email None Low Medium High Very high • Instant messaging/Chat None Low Medium High Very high • Web browsers None Low Medium High Very high • Spread sheets (e.g. excel) None Low Medium High Very high	□ Other
What is the level of your skills with the following software: • Word processing None Low Medium High Very high • Email None Low Medium High Very high • Instant messaging/Chat None Low Medium High Very high • Web browsers None Low Medium High Very high • Spread sheets (e.g. excel) None Low Medium High Very high	
 Word processing None □Low □Medium □High □Very high Email None □Low □Medium □High □Very high Instant messaging/Chat None □Low □Medium □High □Very high Web browsers □None □Low □Medium □High □Very high Spread sheets (e.g. excel) □None □Low □Medium □High □Very high 	Question 8
Word processing None	-
Email None	
□None □Low □Medium □High □Very high • Instant messaging/Chat □None □Low □Medium □High □Very high • Web browsers □None □Low □Medium □High □Very high • Spread sheets (e.g. excel) □None □Low □Medium □High □Very high	□None □Low □Medium □High □Very high
□None □Low □Medium □High □Very high • Instant messaging/Chat □None □Low □Medium □High □Very high • Web browsers □None □Low □Medium □High □Very high • Spread sheets (e.g. excel) □None □Low □Medium □High □Very high	• Email
 Instant messaging/Chat None	
□None □Low □Medium □High □Very high • Web browsers □None □Low □Medium □High □Very high • Spread sheets (e.g. excel) □None □Low □Medium □High □Very high	•
Web browsers □None □Low □Medium □High □Very high Spread sheets (e.g. excel) □None □Low □Medium □High □Very high	Instant messaging/Chat
 None □Low □Medium □High □Very high • Spread sheets (e.g. excel) □None □Low □Medium □High □Very high 	□None □Low □Medium □High □Very high
• Spread sheets (e.g. excel) □None □Low □Medium □High □Very high	Web browsers
□None □Low □Medium □High □Very high	□None □Low □Medium □High □Very high
□None □Low □Medium □High □Very high	
Question 9	□None □Low □Medium □High □Very high
Question 9	Quartier 0
Have you ever attended distance learning programs?	
□ Yes	
□ No	□ No

Question 9.a
If yes, what kind of distance learning education you have attended?
☐ By correspondence
☐ By correspondence in combination with live meetings
☐ By computer
☐ By computer in combination with live meetings
Question 9.b If you have attended by computer, do you have any experience with the following elearning platforms?
☐ Moodle (Open Source Course Management System
☐ Dokeos (elearning and course management web application
☐ ATutor (Open Source Web-based Learning Content Management System
☐ ILIAS (Open Source Learning Management System)
☐ OLAT (Online Learning And Training
□ Other
□ I don't know
Question 9.c Please rate your experience with the e-learning platform you have used from 1-5, (1=strongly disappointed, 5=fully pleased)
1 2 3 4 5
Question 9 d.
Would you like to attend e-learning cources?
□ Yes
□ No
□ Other

In question 10 you can tick more than one answer but in this case you must rate your preference (e.g. 1 for your first preference, 2 for your second one etc)

Question 10
Which way do you learn more effectively?
☐ By listening
☐ By reading
□ Visually
☐ By writing
Question 10.b
Do you prefer to study:
☐ By guidance from your supervisor/educator
☐ Picking your own learning path
Treking your own rearming paur
Question 10.c
Do you prefer as teaching method:
☐ Face to face
□ E-learning
☐ The combination of the above two
Question 10.d
What do you like an e-learning platform to contain?
☐ Individual activities
☐ Group activities
☐ Participation in a restrict forum (3-5 persons)
Participation in a forum with the whole group
☐ Participation in teleconferences
☐ E-mail with the educator
☐ E-mail with the other learners
☐ Use of multimedia

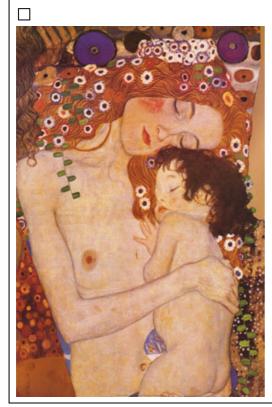
Question 10.e
What do you like an e-learning material to contain?
☐ Theoretical data on the subject (e archives, websites, links)
\square Practical application s of the theory (e case studies, examples)
☐ Interactive activities, (e.g. quizzes, tests)
☐ Individual essays
☐ Group essays
Question 10.f
Supposing you are participating in an e-learning educational platform on a subject for a certain time period (e 3 months) what would you prefer?
☐ Elaborate on a certain parameter
☐ Get involved whit more tan one parameters
☐ Focus mainly on theoretical data
☐ Focus mainly on practical applications
Question 10.g
What kind of evaluation of the educational outcome would you like an e-learning material to contain?
☐ Asynchronous written exam (e.g. completion of a test through e-mail
☐ On-line exams by using instant messaging services
☐ On-line exams by using multimedia
☐ Evaluation through essays
☐ Quantitive and qualitive evaluation of the use of the platform means during the educational period (e.g. use of e-mail, participation in the forums)

Question 11

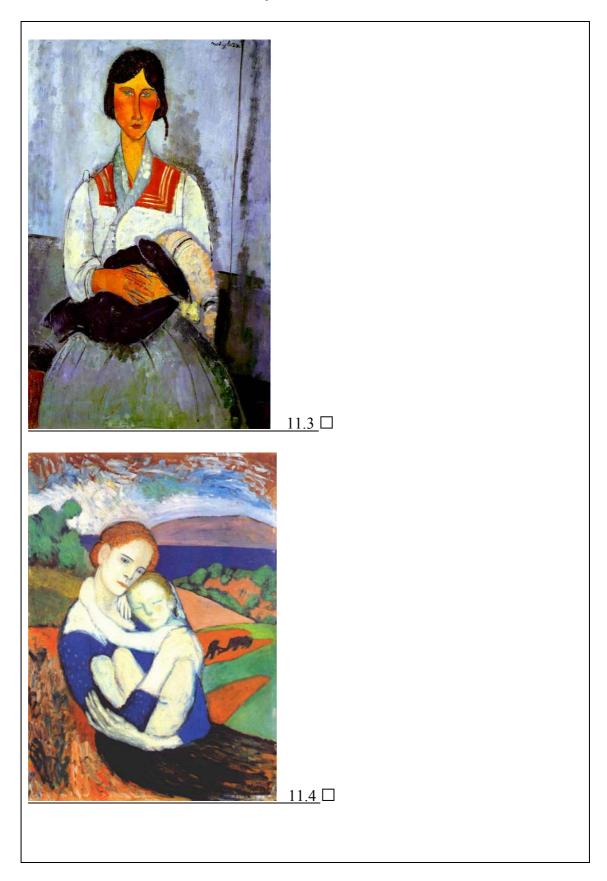
Which of the following paintings correspond to the title "Romni with her child"? (you can tick more than one)

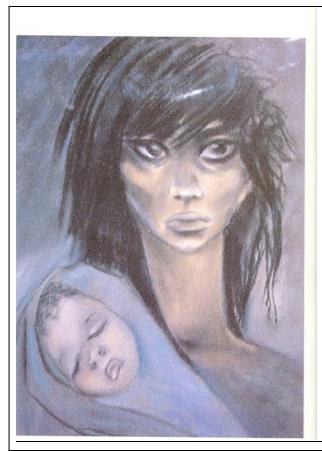


11.1 🗆



11.2 □





<u>11.5</u> \Box

Question 12
Roma originate from:
□ India
□ Egypt
□ Russia
☐ Hungary
□ Servia
□ Other
□ I don't know

Question 13
How much do you like or dislike the following groups?
Rate your feelings in the scale 0-10, where 0= I totally dislike and 10=I fully like
□ Ex convicts 012345678910 □ Muslims 012345678910 □ Homosexuals 012345678910
□ Armenians 012345678910
□ Prostitutes 012345678910
□ Disabled persons 012345678910 □ Jewish 012345678910
□ Roma 012345678810
□ Potiticians 012345678910
□ People from the Black Sea 012345678910
□ Albanians 012345678910
□ Pollacks 012345678910
□ Drug addicts 012345678910

Question 14				
To which degree do y	ou agree or disa	ngree with the fo	llowing stat	ements?
Roma are: Dirty				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Nomads				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Original				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Family oriented				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Mercenary				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Aggressive				
☐Strongly disagree	□Disagree	☐No aspect	□Agree	□Fully Agree
Thieves				

☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Artists				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Beautiful				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Good				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Uneducated				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Merchants				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Magicians				
☐Strongly disagree	□Disagree	□No aspect	□Agree	□Fully Agree
Question 15				
How much of the racial tension that exist in Greece today do you think Roma are responsible for creating?				
☐ All of it				
□ Most				
□ Some				
□ No	t much at all			

Question 16
How much discrimination against Roma do you feel there is in Greece today?
□ A lot
□ Some
□ Just a little
□ None at all
Question 17
A 14 teen year old Gypsy girl, student announces in school that she will stop the school because she is getting married. How do you think that educators should react? (You can tick more than one answers)
☐ To wish her happiness
☐ To go to the wedding
☐ Advise her to combine education and family
☐ Try to persuade her family not allow the marriage
☐ Try to persuade the girl not to marry
\square To discuss in the class the topic of marriage in very young age
☐ Other (Specify)
Question 18
Which of the following statements do you believe that are corresponding to the greek reality?
Roma have:
☐ Their own folkways and traditions
☐ Their own language
☐ Their own social structure
☐ Their own associations

☐ Their own king
☐ Their own leaders
☐ Many children
Question 19
Tick with which of the following statements you agree or disagree:
Roma are getting married very young
☐ I disagree☐ No aspect☐ I agree
Roma are very good dancers
☐ I disagree☐ No aspect☐ I agree
Roma do not love their children
☐ I disagree☐ No aspect☐ I agree
Roma do not attend school
☐ I disagree☐ No aspect☐ I agree
Roma do not join the army
☐ I disagree☐ No aspect☐ I agree
Roma must be assimilated in greek society
☐ I disagree☐ No aspect☐ I agree
Roma must be educated
☐ I disagree☐ No aspect☐ I agree
Roma are very good musicians
☐ I disagree☐ No aspect☐ I agree
Gypsy children must attend greek schools
☐ I disagree☐ No aspect☐ I agree
Roma are ought to to speak and write greek
☐ I disagree☐ No aspect☐ I agree
Roma are dressed in colorful clothes
☐ I disagree☐ No aspect☐ I agree

Roma do not want to live in houses
☐ I disagree☐ No aspect☐ I agree
Roma are very good merchants
☐ I disagree☐ No aspect☐ I agree
Roma are dirty by their nature
☐ I disagree☐ No aspect☐ I agree
Gypsy marriages last many days with big celebrations
☐ I disagree☐ No aspect☐ I agree
Roma have many children
☐ I disagree☐ No aspect☐ I agree
Roma are religious
☐ I disagree☐ No aspect☐ I agree
Roma listen to music very loudly
☐ I disagree☐ No aspect☐ I agree
Roma do not want to change their way of life
☐ I disagree ☐ No aspect ☐ I agree
Question 20
Which of the following expressions have you used?
☐ The Gypsy rejoiced when he saw his clan
☐ You act like a gypsy
☐ You are posing like a gypsy hack
☐ Don't be a gypsy
Question 21
How do Roma call the non- Roma in Greece? (tick as many as you consider correct)
□ Balamo

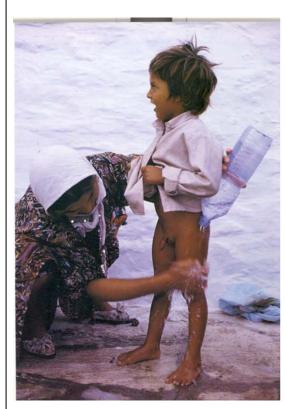
The ESG Framework
PhD Thesis of Maria Pavlis-Korres, University of Alcalá

□ Laikos
□ Greek
Question 22
Do you know what the following expressions mean? (Write the meaning next to each expression)
☐ Lachikirat
☐ Lacio drom
☐ Lachi bach
☐ So keres.
☐ Penem mange Maria
☐ Kazome bresenki san
☐ Katar san
Question 23
Do you agree or disagree with the following definitions concerning prejudice?
"Prejudice is a hostile and negative attitude towards someone"
□ I disagree □ No aspect □ I agree
"Prejudice is a feeling, favorable or unfavorable, toward a person or thing prior to, or not based on, actual experience"
□ I disagree □ No aspect□ I agree
Question 24
Question 24
Do you agree or disagree with the following definition concerning discrimination?
"Discrimination is intentionally treating someone less favorably than another person because of an attribute (such as race, color, religion, sex, national origin, sexual orientation, age, disability status, or military status), compared with someone without that attribute in the same circumstances" I disagree

Question 25
Do you agree or disagree with the following definitions concerning racism?
"Racism is the belief that a certain race is better than another"
□ I disagree□ No aspect□ I agree
"Racism is feelings or actions of hatred and discrimination toward a person or persons because of their race"
□ I disagree□ No aspect□ I agree
Question 26
Question 20
Do you agree or disagree with the following definition concerning stereotypes?
"Stereotypes are generalizations (usually they are negative) about groups and individual members thereof, based primarily on membership in that group"
□ I disagree□ No aspect□ I agree
Question 27
Question 27
Which of the following groups face discrimination in Greek society? (you can tick more than one group)
☐ Ex-convicts
☐ Homosexuals
☐ Prostitutes
☐ Disabled persons
□ Roma
☐ People from the Black Sea
☐ People from the Black Sea☐ Muslims
☐ Muslims

Question 28

Using a single word (noun, verb or adjective) express your predominant feeling when you see each one of the following pictures and justify your feeling in one short sentence.



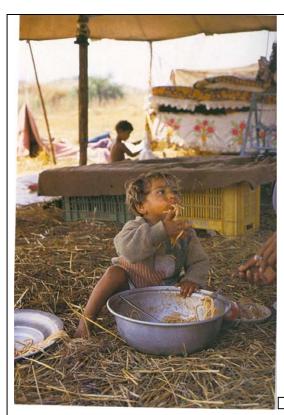
□ photo no 28.1



photo no 28.2



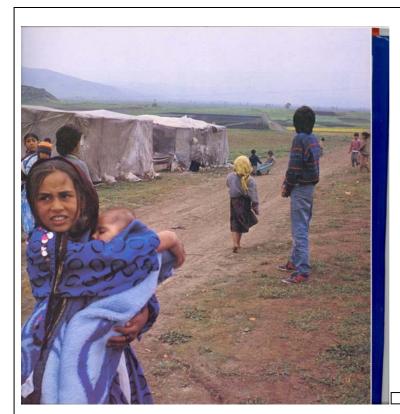
□ photo no 28.3



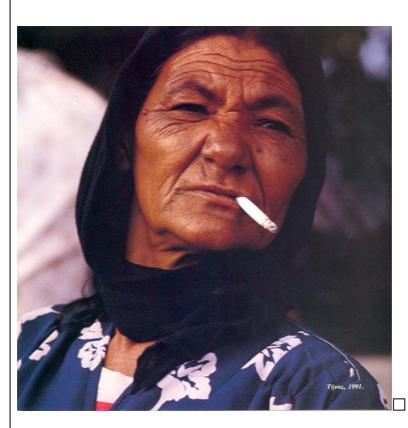
□ photo no 28.4



photo no 28.5



□□ photo no 28.6



▶□ photo no 28.7

Ouestion 29

<u>Instructions</u>: Circle a number from one to ten according to how much each statement is expressing your own view (One=It does not express my own view at all, Ten=It is fully expressing my own view)

I would allow a child of mine to marry a Rom

$$1...2...3...4...5...6...7...8...9...10$$

My best friend could be a Rom

I would be comfortable with a Rom colleague

I would be comfortable if a Rom family moved next door to me

$$1...2...3...4...5...6...7...8...9...10$$

It would be fine with me if Roma moved onto my block

$$1...2...3...4...5...6...7...8...9...10$$

I would be comfortable with Roma living into my community

It would be fine if Roma were deported from Greece

Tick whether you agree or disagree with the following statements (questions 30-34)

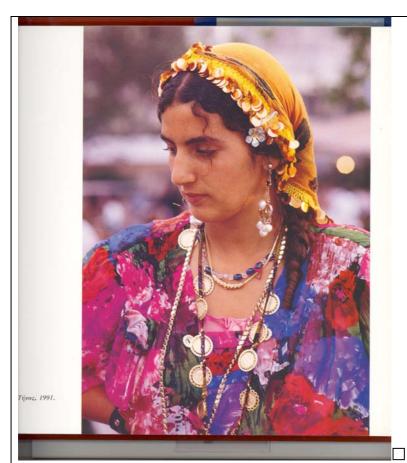
Question 30

"It would be best to keep foreing races in their own disctricts and schools in order to prevent too much contact with them"

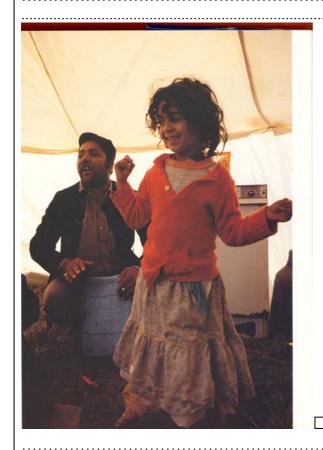
□ Strongly disagree...□ Disagree...□ No aspect...□ Agree...□ Fully Agree

Question 31
"Roma are worth as citizens as any other group"
□ Strongly disagree□ Disagree□ No aspect□ Agree□ Fully Agree
Question 32
"In multicultural societies each group could make a unique contribution to the
society"
□ Strongly disagree□ Disagree□ No aspect□ Agree□ Fully Agree
Question 33
"A 1::- 1 - 6 :- 1 di:: 1 di: 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
"Any kind of racial discrimination should be illegal and subject to heavy penalties"
Strongly disagree Disagree - No agreet - Agree - Eully Agree
□ Strongly disagree□ Disagree□ No aspect□ Agree□ Fully Agree
Question 34
Question 34
"Inter-racial marriage do not succeed"
inter racial marriage do not succeed
□ Strongly disagree□ Disagree□ No aspect□ Agree□ Fully Agree
Question 35

Using a single word (noun, verb or adjective) express your predominant feeling when
you see each one of the following pictures and justify your feeling in one short
sentence



□ photo no 35.1



□ photo no 35.2



□ photo no 35.3

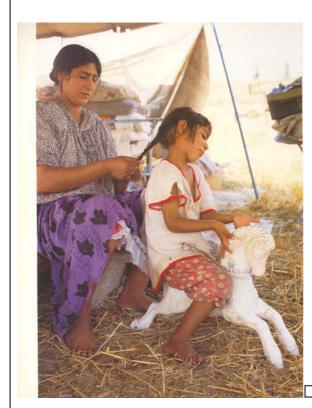
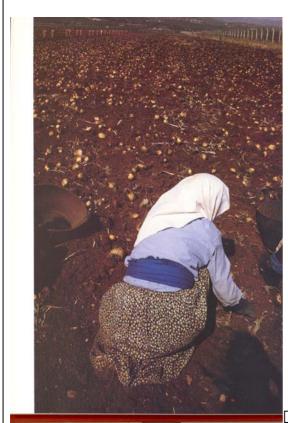
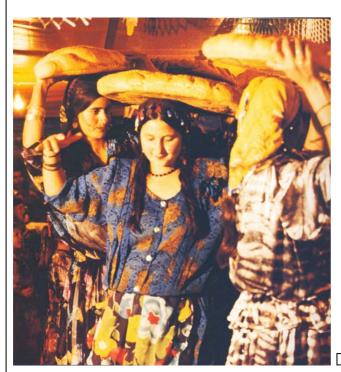


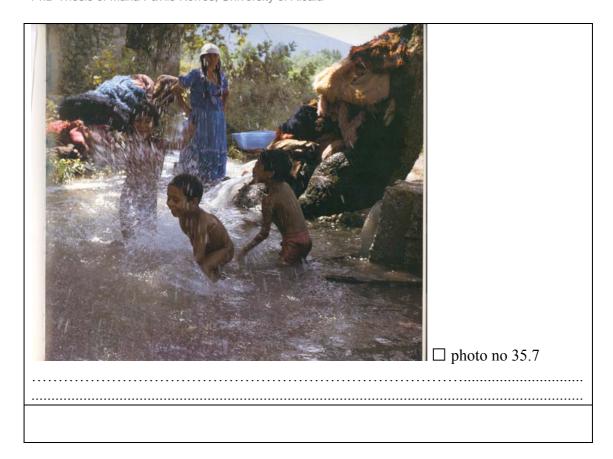
photo no 35.4



□ photo no 35.5



□ photo no 35.6



Appendix 2

Detailed results of the needs assessment

Compatibility between educators and learners

The needs assessment has shown that:

- The compatibility level of the educators with their Roma learners is very low in all compatibility types applicable.
- Educators' knowledge on the origins, language, living conditions, culture, customs and traditions of Roma are limited. Regarding the origins of Roma, only 40% of the sample knew that they come from India (Liegois, 1994; Fraser, 1995), while the rest 60% was divided between ignorance (26.7% answered they just do not know) and confusion as to the place of origin (33.3% think Roma came from Egypt, Spain, Hungary, Serbia etc). Although all of the respondents knew about the existence of the language of Roma (romani) and half of them were working with Roma, when they were asked if they knew of any daily romani expressions, the vast majority did not, and could not, understand simple romani words and expressions such as *goodnight* and *how are you*.
- The beliefs and attitudes of the educators towards Roma are dominated by stereotypes and prejudices. The table 1 shows the beliefs of the respondents about Roma (favorable and unfavorable), which in most cases coincide with positive or negative stereotypes towards Roma.

Table 1. Educators' beliefs concerning Roma in Greece

Beliefs of educators concerning Roma	Percentage %
Roma are merchants	96.6%
Roma are getting married very young	93.3%
Roma have many children	90%
Roma are beautiful	73.4%
Roma are dressed in colorful clothes	73.3%
Roma are artists	73.3%
Roma are nomads	70%
Roma are very good musicians	70%
Roma are very good merchants	70%
Roma are very good dancers	66.7%
Roma are original	63%
Roma are uneducated	60%
Roma are dirty	56.7%
Roma are mercenaries	50%
Roma are religious	30%
Roma are thieves	23.3%
Roma are dirty by nature	13.3%

Interestingly enough, there are quite a few respondents that do not express an opinion on many questions such as if Roma are thieves (36.6%), if they are religious (60%), or if Roma are dirty by nature (20%).

Educators believe that Roma in Greece face discrimination. In the table
 2 it is obvious that most educators believe that Roma actually face
 discrimination in Greece.

Table 2. Educators' beliefs concerning the existence of discrimination against Roma in Greece

Existence of discrimination	Percentage %
against Roma in Greece	
Some discrimination	43.3%
A lot of discrimination	36.7%
Just a little discrimination	10%
No discrimination at all	10%

- It is hopeful that no extremely adverse attitudes and beliefs have been traced, and a considerable number of educators show significant interest in learning more about Roma and their culture.
- To the question "Are Roma family oriented?" 40% of the sample answered positively, 20% negatively and 40% did not express an opinion on the matter. According to many studies and researches implemented in Greece (Pavlis-Korres and Sideri 1990; Vassiliadou and Pavlis-Korres 1996; Papakonstantinoy et al. 1997-1999) the extended family is the core of the Roma social and economic life and is highly valued by Roma. The socialization and education of children takes place in the context of the family and the community. Therefore, it is very important for the educators to be aware of the significant role of the family in Roma communities and in children's education and socialization (Gustaffsson 1973; Liegois 1987).

- Those of the educators that have had teaching experience with Roma, state that the main problems they faced while teaching were: disobedience, irregular attendance, children and parents alike having negative attitudes towards school, insufficient children's knowledge and experiences, lack of interest in learning, absence of parental support with homework, inexistence of appropriate teaching material and, finally, teachers' incomprehension of the students' vernacular. Furthermore, some educators reported that they had not been trained to deal with this specific group, and found this to be a major problem. On the other hand, teachers thought they benefited by teaching Roma students because it "changed their attitudes towards this special group", Roma people eventually "treated them wholeheartedly, with love and respect", they "felt they contributed", Roma were "straightforward to them", they had "good cooperation with Roma adults", and considered "Roma children to be far more mature than non-Roma children of the same age".
- The educators refer to the problems they face during the educational procedure with Roma children, without relating those problems to the way Roma teach their children, or to the fact that this way is obviously ignored by the official educational system (Smith 1997). Therefore, it is essential for the educators to study the way knowledge is passed on in Roma communities, as well as what school means and represents to Roma people, so that they are able to better understand their pupils.

 This would reduce the likelihood of them considering their pupils to be

- culturally and socially handicapped and, simultaneously, to realize their own prejudices, stereotypes and attitudes towards Roma.
- In a variant of Bogardus Social Distance Scale, which is an indication of how close the educators want to be with the social group of Roma, the answers reveal that although the educators accept Roma as citizens, as colleagues, as neighbors and as kinsmen, the greater their distance from Roma, the more comfortable they feel. It is important to note that no respondent wants Roma to be deported. A considerable number of respondents (33.4%) also claimed that they would allow their children to marry a Rom/Romni¹, an act which consists of the closest relationship they could have with Roma, on the Bogardus scale.

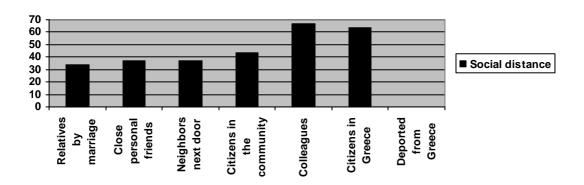


Figure 1. Social distance between educators and Roma

The replies to this question confirm that the educators are against any institutionalized form of discrimination: they do not think that it would be fine if Roma were expelled from Greece; actually. It is also noteworthy that quite a few respondents would feel at ease with Roma colleagues, a thing easily explained by the fact that when educators have a Rom as a mediator to the Roma community their work becomes

easier (G.S.A.E. 1999). There was no statistically significant difference between the answers given by the in-service and the pre-service educators.

• The questionnaire also contained paintings and photographs that educators were asked to look at, and express their thoughts and feelings upon. The respondents were asked to express with a single word (verb, exclamation, noun or adverb) the emotion they felt on seeing each photograph and briefly justify their feeling. For the evaluation of these answers the feeling vocabulary of M. Rosenberg (2003) was utilized.

The snapshots depicting the living conditions of semi nomadic Roma in compounds caused the majority of the respondents (60-91% of the sample) negative feelings: sorrow and wrath prevailed among the answers. The picture that triggered negative feelings for most of the respondents (91%) was the following:

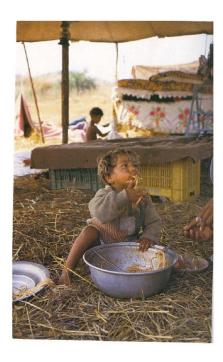


Figure 2. The picture that triggered negative feelings for the most of the respondents

More specifically, 91% of the educators declared that they felt sadness, disgust and anger for the miserable existence of the child, while 9% expressed tenderness for it. With their comments, educators verbalized their need for social equality, and improvement of living conditions and chances, for all the groups present in a multicultural society (Rosenberg 2003).

The photographs that do not focus on the difficulties of life but instead show everyday moments of joy and carelessness along with cultural aspects of Roma life (e.g. a Rom singer, women dancing with bread on their heads, a mother braiding her daughter's hair, children swimming in the river) caused pleasant feelings to the respondents (66.7-93.4%) and excited their interest in Roma customs and traditions.

The picture that provoked the most positive feelings (93.4% positive feelings against 6.6% negative ones) is the one below, showing the *dancing of the breads*, a Roma wedding custom. It is indicative of the educators' lack of awareness of Roma culture that none of them knew anything about this custom, but it is optimistic that quite a few were eager to learn more about it.

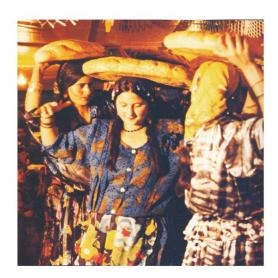


Figure 3. The picture that provoked the most positive feelings to the respondents

• The needs assessment found that, surprisingly, there is no significant difference between the compatibility of in-service and pre-service educators with their Roma learners, although the in-service have participated in national and local programs which have included

special training on Roma issues. This poses a question on the efficiency and effectiveness of the existing educational programs.

The results of the survey show that the educators have low cultural, ethnical, social and linguistic compatibility with Roma. They lack vital knowledge about the Roma culture, a fact that influences the formation of their attitudes towards Roma. On the other hand, there are no extremely negative viewpoints or attitudes towards Roma. This means that there is room for improving compatibility between educators and learners through educating programs. To do this, it is necessary to foster the cognitive and affective domain through the design, development and implementation of E-learning material for the educators of Roma.

Learning profiles of the educators

- The needs assessment has shown that educators have sufficient access to computers (96.7% of the sample have access to Personal Computer (PC) and 83.3% have a PC at home. 30% of the sample have also access to computers at work, while 33.3% stated that have access elsewhere too).
- The educators are familiar with computers and their use to a level that they can attend an e-Learning course for their e-education.
- Concerning their computer skills the majority of the sample is familiarized with computer software as Microsoft Word (73%) although the 46% do not know of or have low level skills concerning spread sheets. 86.6% have adequate skills in using e-mail and 93.3% in using web browsers. The use of instant messaging services is adequate up to 53.3%.
- More precisely the analysis among preservice and inservice educators shows that preservice educators are more familiarized with computers and have higher level skills than the inservice educators with the

exception of their skills in spread sheets as it is shown in Fig.4. According to the study of "The observatory for the Greek Information Society" the highest rates for PC and Internet usage are noted among people in the age group of 16-24. The following Fig.4 is indicative:

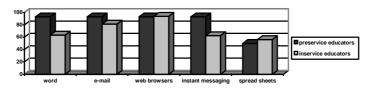


Fig.4. Educators' efficiency in computer skills

These data confirms the hypothesis that preservice educators which are younger than the inservice ones are more familiar with modern technologies and e-Learning than the inservice educators, as they take courses in the university on using computer etc. It is notable that 46.7% of the sample - actually the preservice educators - has attended a demonstration of the Moodle e-Learning platform in the frame of a computer science course in the University.

- Although the majority of educators have not attended any e-learning course (93.3%), they are strongly willing to attend (70%).
- Educators have different learning styles but there are not any significant differences between preservice and inservice educators. 50% of the sample stated as first choice that they learn better by reading, 23.3% by writing, 16.7% visually and 10% learn better by listening. As second preferable choice of way of learning 36.7% learn better visually, 20% by listening, 13.3% by reading and 13.3% by writing. The above preferences of way of learning as first and second choices are depicted in Figure.5:

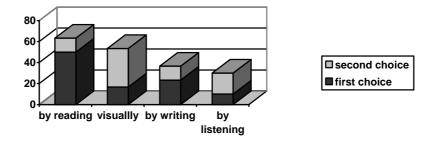


Fig. 5. Preferences on way of learning

• 56.7% of the sample prefers working in a group, while 43.3% prefers working individually. It is interesting to note the difference between the preferences of preservice and inservice educators in Fig.4 below: 31.3% of the inservice educators prefers to work individually while 68.7% prefers working in a group. 57% of the preservice educators prefers to work individually while 42.9% prefers to work in a group.

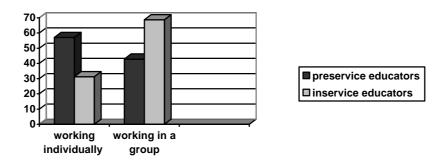


Fig. 4. Preferences on working individually or in a group

- The vast majority of the sample (80%) prefers to study by guidance. All of the preservice educators prefer to study by guidance, and this could be justified by the fact that the preservice educators of the sample are students in the formal educational system which does not encourage self-directed learning.
- Educators prefer active participation learning techniques, collaborative
 learning tools and they want their educational outcome to have practical
 application. These are in line with adults' education principles as well as
 with the demands of the e-Learning design based on the needs assessment
 of the learners and provide a sound base for the development of an eLearning environment.
- Regarding the educators' preferences on what an e-Learning environment should contain the most popular tools are e-mailing with the administrator, group activities and use of multimedia. The following table shows in detail which learning tools they prefer to use in an e-Learning platform.

Table 3. Preferences on learning tools

What they like an e-Learning	Percentage %
platform to contain	
E-mail with the administrator	56.6%
Group activities	46.7%
Use of multimedia	46.7%
Participation in a restricted	30 %
forum of 3-5 persons	
Teleconferences	26.7%
Individual activities	26.7%
E-mail with other learners	26.7%
Forum with the whole group	16.7%

An interesting fact is that although preservice educators have previously stated that 57.1% of them prefer to work individually and 42.9% in groups, in the questions related to the e-Learning platform activities they state that they prefer more group activities by a significant majority (42.9%) compared to individual activities (21.4%). This could be explained by the fact that in formal education younger preservice educators are mainly used to individual educational procedures while at the same time they use the internet mainly for entertainment through group activities (games, chat rooms) (The observatory for the Greek Information Society).

- The survey showed that 60% of the respondents favor e-Learning material to contain theoretical data, while 83.4% favor practical applications of the theory. In a relevant question aiming to assess the participants approach on the mode they would like to study participating in an e-Learning platform for a certain time period (3 months), 36.7% would prefer to elaborate on a certain parameter, 26.7% would prefer to get involved with more than one parameters, 23.3% would prefer to focus mainly on theoretical data while 80% would focus mainly on practical applications.
- As evaluation is very important in education and more precisely in adult education (Rogers 2007) in the questionnaire were some questions

concerning the type of evaluation which the educators prefer to be included in an e-Learning platform.

Furthermore the first choice of the educators concerning their evaluation type was:

Table 4. First choice of evaluation type

First choice of the educators for evaluation	Percentage %
method	
Asynchronous written exam	30 %
Quantitative and qualitative evaluation of the	23.3%
use of the platform means (e.g. e-mail,	
participation in the forums)	
On-line exam by using multimedia	20 %
Evaluation through essays	16.7%
On-line exams by using instant messaging	6.7%
services	

As shown in the table 4, educators are very open to new forms of evaluation existing in an e-Learning platform but they still rate the asynchronous written exam, i.e. their familiar way of evaluation, as their first choice.

• The vast majority of the sample were women (76.7%) and people aged 20-30 years old (73.3%) while no one was over 55 years old.

Appendix 3

Greek manual for the use of Dokeos platform

ΟΔΗΓΙΕΣ ΓΙΑ ΤΗ ΧΡΗΣΗ ΤΗΣ ΠΛΑΤΦΟΡΜΑΣ DOKEOS ΣΤΟ ΠΡΟΓΡΑΜΜΑ «ΤΑΞΙΔΕΥΟΝΤΑΣ ΣΤΟ ΔΙΑΦΟΡΕΤΙΚΟ. LACIO DROM!»

1. Στη γραμμή διευθύνσεων του browser σας πληκτρολογήστε την ηλεκτρονική διεύθυνση της πλατφόρμας Dokeos:

http://ie.cc.uah.es/dokeos

[Σημείωση ή προειδοποίηση:

Κάποιες οδηγίες που είναι browser-specific έχουν γραφτεί βάσει του browser mozilla firefox. Στην περίπτωση που χρησιμοποιείτε άλλον browser, εννοείται ότι ψάχνετε για παρόμοια επιλογή στις ρυθμίσεις του.]

2. Στο παράθυρο που υπάρχει στην κεντρική σελίδα επιλέξτε γλώσσα «greek».

Για να έχουμε τη δυνατότητα να χρησιμοποιούμε τα ελληνικά ως γλώσσα στην πλατφόρμα θα υποστούμε λίγη ταλαιπωρία, καθώς θα πρέπει να αλλάζετε τη γλώσσα σε ελληνικά, κάθε φορά που αλλάζετε σελίδα. Για να γίνει αυτό πηγαίνετε στο "view" (προβολή) → "character encoding" (κωδικοποίηση χαρακτήρων) και εκεί επιλέγετε "Greek ISO-8859-7" (Ελληνική ISO-8859-7).

Εισάγετε στο κουτί εισαγωγής κειμένου «Όνομα χρήστη» το username σας και στο κουτί εισαγωγής κειμένου «Συνθηματικό» το password που έχετε επιλέξει. Μετά πατήστε το κουμπί «επικύρωση» για να μπείτε στο πρόγραμμα.



Το πρόγραμμά μας ονομάζεται «ΤΑΞΙΔΕΥΟΝΤΑΣ ΣΤΟ ΔΙΑΦΟΡΕΤΙΚΟ. LACIO DROM!"



Πατήστε το σύνδεσμο "ΤΑΞΙΔΕΥΟΝΤΑΣ ΣΤΟ ΔΙΑΦΟΡΕΤΙΚΟ. LACIO DROM!" για να μπείτε στην κεντρική σελίδα του προγράμματος.

Στο πάνω μέρος της κεντρικής σελίδας του προγράμματος θα δείτε τις ταμπέλες



Η ταμπέλα "Portal Homepage" σας βγάζει στην αρχική σελίδα της πλατφόρμας.

Η ταμπέλα «Τα μαθήματά μου» θα σας βγάζει στο πρόγραμμα «Ταξιδεύοντας στο διαφορετικό. Lacio drom!»

Η ταμπέλα «Αλλαγή του προφίλ μου» σας βγάζει στα στοιχεία του προφίλ σας. Μπορείτε να αλλάξετε κάποιο από τα στοιχεία σας στο προφίλ αν το θελήσετε π.χ. το e-mail σας ή το password σας και επίσης μπορείτε να προσθέσετε και μια φωτογραφία σας, αφού την βρείτε στον υπολογιστή σας, με το κουμπί "browse" πατάτε το κουμπί «open» . Η φωτογραφία σας θα εισαχθεί στο προφίλ σας.

Η ταμπέλα «Η ατζέντα μου» σας βγάζει σε ημερολογιακή ατζέντα ημέρας, εβδομάδας και μήνα στην οποία θα αναγράφονται σημαντικές ημερομηνίες σε σχέση με το πρόγραμμα.

Στην ταμπέλα "My Progress" μπορείτε να δείτε την πρόοδο σας κατά τη διαδικασία του προγράμματος.

Στο κάτω μέρος της κεντρικής σελίδας θα βρείτε τους συνδέσμους-εργαλεία του προγράμματος



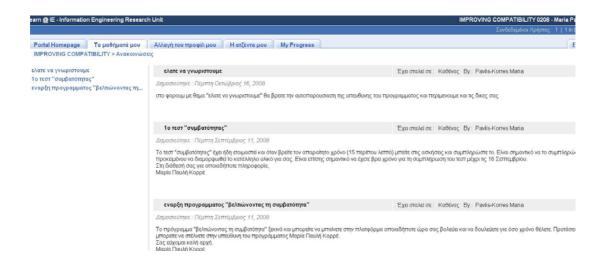
Στο σύνδεσμο «Περιγραφή Μαθήματος» θα βρείτε πληροφορίες που αφορούν στο πρόγραμμα σε σχέση με τους στόχους του, τις διαδικασίες του προγράμματος και το ανθρώπινο δυναμικό του.

Το πρώτο που θα πρέπει να κοιτάτε μπαίνοντας στο πρόγραμμα είναι ο σύνδεσμος «Ανακοινώσεις». Εκεί θα βλέπετε με τι θα ασχολούμαστε κάθε εβδομάδα.

Ανακοινώσεις

Κάνοντας κλικ στο σύνδεσμο «Ανακοινώσεις» θα εμφανίζεται η σελίδα των ανακοινώσεων, όπου μπορείτε να τις διαβάσετε με χρονολογική σειρά.

Στην αριστερά πλευρά της οθόνης θα βλέπετε τον τίτλο κάθε ανακοίνωσης και στη δεξιά πλευρά μπορείτε να τις διαβάζετε ολόκληρες. Μπορείτε να κάνετε κλικ στον τίτλο κάθε ανακοίνωσης προκειμένου να την διαβάσετε στη δεξιά πλευρά της οθόνης. Διαβάζοντας τον πίνακα ανακοινώσεων θα ενημερώνεστε π.χ. αν υπάρχει κάποιο καινούργιο θέμα στα forum για να δείτε και να απαντήσετε, αν έχει δημιουργηθεί καινούργιο παιδαγωγικό μονοπάτι, τι ώρα έχει προγραμματισθεί συνάντηση online ώστε να μπορείτε να συμμετέχετε αν το θελήσετε, αν έχουν προστεθεί καινούργια έγγραφα, αν υπάρχει κάποιος καινούργιος σύνδεσμος (link) κλπ.



Παιδαγωγικό μονοπάτι

Το παιδαγωγικό μονοπάτι είναι δομημένη σειρά εκπαιδευτικών βημάτων που θα ακολουθείτε, ανοίγοντας κάθε αρχείο με τη σειρά. Θα σας δίνονται οδηγίες για κάθε αρχείο.

Πατώντας το σύνδεσμο «Παιδαγωγικό μονοπάτι» θα εμφανιστεί οθόνη με κατάλογο των παιδαγωγικών μονοπατιών. Πατήστε στο όνομα του μονοπατιού που θέλετε να ακολουθήσετε. Οι τίτλοι των παιδαγωγικών μονοπατιών θα είναι σε greeklish επειδή το σύστημα δεν δέχεται ελληνικά σε αυτό το σημείο, όπως μπορείτε να διαπιστώσετε και στο παρακάτω παράδειγμα που ό,τι γράφτηκε στα ελληνικά εμφανίζεται με ακατάληπτους χαρακτήρες.

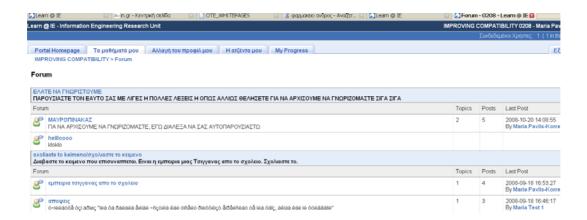


Ανοίγοντας το παιδαγωγικό μονοπάτι που θέλετε, θα εμφανιστεί σελίδα που θα περιλαμβάνει όλα τα βήματα του μονοπατιού που θα ακολουθήσετε. Ακολουθήστε με τη σειρά ένα-ένα τα βήματα του μονοπατιού, όπως εμφανίζονται στη σελίδα.



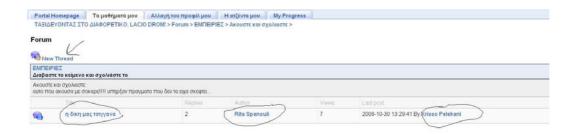
Forum

Το Forum αποτελεί τόπο ανταλλαγής απόψεων και εμπειριών.. Πατώντας το σύνδεσμο «Forum» εμφανίζεται ένας κατάλογος με τις ονομασίες των forum που υπάρχουν στο πρόγραμμα.

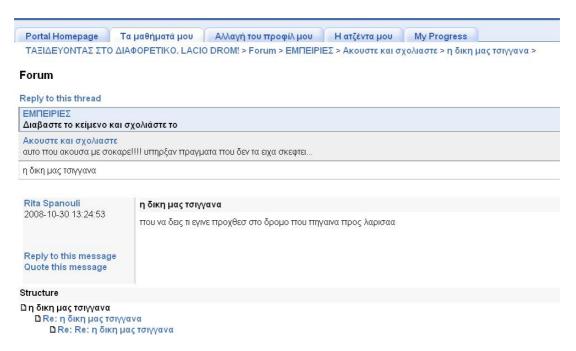


Στην σελίδα αυτή βλέπετε πόσα θέματα υπάρχουν σε κάθε κατηγορία forum και πόσα σχόλια έχουν γίνει.

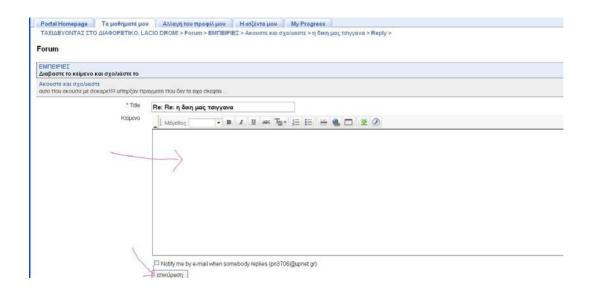
Πατώντας το σύνδεσμο με το όνομα του forum που θέλετε θα ανοίξει μια σελίδα με το συγκεκριμένο forum.



Στη σελίδα βλέπετε ότι υπάρχει ένα σχόλιο που έχει γραφτεί από τη Rita Spanouli, υπάρχουν δύο απαντήσεις σε αυτό το σχόλιο και η τελευταία απάντηση έχει γραφτεί από τη Xrisso Pelekani. Κάνοντας κλικ στον τίτλο του σχολίου θα ανοίξει η παρακάτω σελίδα:



Στο κάτω αριστερό μέρος της οθόνης βλέπετε το μήνυμα και τις δύο απαντήσεις σε αυτό. Κάνοντας κλικ σε κάποιον από τους συνδέσμους αυτούς διαβάζετε τα μηνύματα. Κάνετε κλικ στους συνδέσμους «Reply to this thread» ή «Reply to this message» ανάλογα με το αν θέλετε να απαντήσετε στο thread ή στο συγκεκριμένο μήνυμα αντίστοιχα. Στο παράδειγμα που ακολουθεί πατήθηκε ο σύνδεσμος «Reply to this message» και εμφανίστηκε η παρακάτω σελίδα:

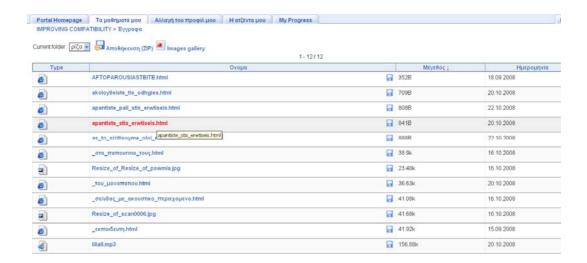


Στο κουτί εισαγωγής κειμένου που θα ανοίξει μπορείτε να πληκτρολογήσετε το κείμενο που θέλετε. Στο πάνω μέρος του κουτιού εισαγωγής υπάρχει μια μπάρα εργαλείων που σας δίνει πολλές δυνατότητες για να χρησιμοποιήσετε στο κείμενο

σας. Πατάτε το κουμπί «επικύρωση» για να ολοκληρώσετε την εισαγωγή του σχολίου σας στο φόρουμ.

Έγγραφα

Κάνετε κλικ στο σύνδεσμο « Έγγραφα» και μπαίνετε στη σελίδα που βλέπετε ποια αρχεία έχουν αναρτηθεί, τι είδος αρχείου είναι στην αριστερή στήλη «Τype» (word, audio κλπ), το όνομα του στη στήλη « Όνομα», τι μέγεθος έχει στη στήλη «Μέγεθος» και ποια ημερομηνία αναρτήθηκε στη στήλη «Ημερομηνία».



Για να δείτε ένα αρχείο κάντε κλικ πάνω στο όνομά του.

Στην ίδια σελίδα υπάρχει και ο σύνδεσμος «images gallery» όπου αναρτώνται φωτογραφίες. Πατώντας στο σύνδεσμο «image gallery» εμφανίζεται η πρώτη από τις υπάρχουσες φωτογραφίες και πατώντας τους συνδέσμους «next» ή «previous» μπορείτε να περιηγηθείτε στις υπάρχουσες φωτογραφίες, ενώ με την επιλογή «thumbnails» μπορείτε να τις δείτε όλες μαζί.

Ασκήσεις

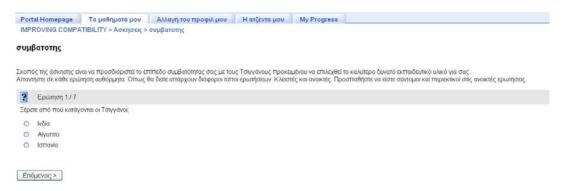
Κάνοντας κλικ στο σύνδεσμο «Ασκήσεις» εμφανίζεται η σελίδα με τον κατάλογο των ασκήσεων που υπάρχουν. Στη στήλη «Όνομα Άσκησης» θα δείτε το όνομα κάθε συγκεκριμένης άσκησης, στη στήλη «Περιγραφή» θα δείτε πόσες ερωτήσεις περιέχει

η κάθε άσκηση και στη στήλη «State» θα δείτε σε ποια κατάσταση είστε σε σχέση με την άσκηση, αν την έχετε κάνει ή όχι και τι βαθμολογία έχετε πάρει.



Κάνοντας κλικ πάνω στο όνομα της άσκησης που θέλετε να κάνετε εμφανίζεται η πρώτη σελίδα της συγκεκριμένης άσκησης. Ακολουθείτε τις οδηγίες της κάθε σελίδας και όταν τελειώσετε πατάτε το κουμπί «Επόμενος» για να πάτε στην επόμενη σελίδα. Στην άσκηση μπορεί να υπάρχουν διαφορετικοί τύποι ερωτήσεων, κλειστές, πολλαπλής επιλογής, συμπλήρωσης κενών, αντιστοίχησης και ανοικτές ερωτήσεις. Στις ερωτήσεις πολλαπλών επιλογών μπορείτε να επιλέξετε πάνω από μια απαντήσεις. Οι οδηγίες για το πώς θα απαντήσετε βρίσκονται στο πάνω μέρος της σελίδας στην οποία υπάρχει η ερώτηση.

Παράδειγμα τύπου άσκησης είναι το παρακάτω:



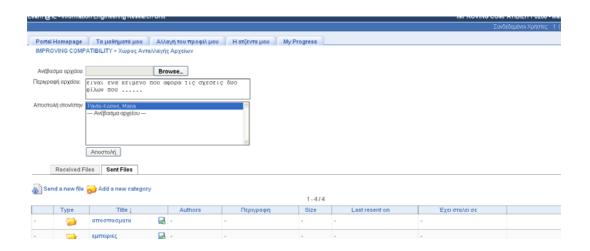
Κιβώτιο διανομής

Μέσα από το «κιβώτιο διανομής» μπορείτε να αναρτάτε και να στέλνετε τα δικά σας έγγραφα και να τα διανέμετε είτε μόνο προς τον εκπαιδευτή, είτε προς μερικούς από τους χρήστες, είτε προς όλους τους χρήστες. Πατώντας το σύνδεσμο «Κιβώτιο

διανομής» εμφανίζονται στην οθόνη σας δύο σύνδεσμοι «Received files» και «Sent files». Αν θέλετε να στείλετε κάποιο αρχείο πατήστε το σύνδεσμο «Sent files» και θα εμφανιστούν δύο σύνδεσμοι «Send a new file» και «Add a new category».



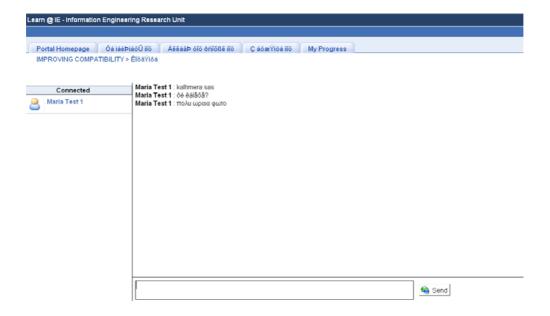
Πατώντας το σύνδεσμο «Send a new file» θα εμφανιστεί η παρακάτω οθόνη:



Πηγαίνετε στο κουτί επιλογής Ανέβασμα αρχείου και με το κουμπί επιλογής «Browse» βρίσκετε στον υπολογιστή σας το αρχείο που θέλετε . Για να το ανεβάσετε, το επιλέγετε και πατάτε «open» στο παράθυρο που θα ανοίξει. Αυτό θα ενεργοποιήσει το ανέβασμα του αρχείου σας στην πλατφόρμα του Dokeos. Στο κουτί εισαγωγής κειμένου «Περιγραφή αρχείου» γράφετε τι αφορά το αρχείο. Στο κουτί επιλογής «Αποστολή στον/στην» επιλέγετε σε ποιον/ποιους θέλετε να σταλεί το αρχείο και μετά πατάτε το κουμπί «Αποστολή». Το αρχείο που θα στείλετε μπορεί να είναι τύπου doc,rtf, PDF, jpg ή mp3.

Κουβέντα

Κάνοντας κλικ στο σύνδεσμο «Κουβέντα», βλέπετε στην αριστερή πλευρά της οθόνης πόσοι και ποιοι χρήστες είναι εκείνη την στιγμή online στο σύστημα. Στο κάτω μέρος της σελίδας υπάρχει ένα κουτί εισαγωγής κειμένου μέσα στο οποίο πληκτρολογείτε το κείμενο που θέλετε να στείλετε και πατάτε το κουμπί «Send». Στην οθόνη σας θα βλέπετε την εξέλιξη της συνομιλίας σας.



Σύνδεσμοι

Κάνοντας κλικ στο σύνδεσμο «Σύνδεσμοι» θα εμφανίζεται η σελίδα που θα περιέχει χρήσιμους συνδέσμους για όλα τα θέματα που θα μας απασχολούν στο πρόγραμμα. Κάνοντας κλικ πάνω σε κάθε υπάρχοντα σύνδεσμο, θα συνδέεστε με τη σελίδα που προτείνει. Στον πίνακα ανακοινώσεων θα γνωστοποιείται πότε καταχωρείται στη σελίδα των συνδέσμων ένας καινούργιος σύνδεσμος και σε τι αφορά.

Appendix 4

Initial compatibility test between educators and Roma learners which has been used at the beginning of the course

The objective of this exercise is to determine the level of your compatibility to Roma people, in order to make the selection of the best educational material for you possible.

Answer each question spontaneously. As you will see below, there are various types of questions: open and closed. Try to be brief and comprehensive in the open questions.

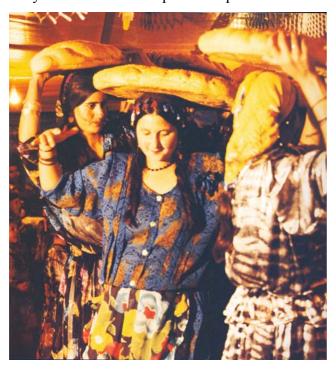
Question 1

of questions: open and closed. Try to be brief and comprehensive in the open		
questions.		
Question 1		
Do you know	where Roma people originate from?	
	Egypt	
	India	
	Spain	
Question 2		
Why don't Ro	oma people send their children to school?	
Question 3		
Would you fe	el comfortable and well if Roma people:	
	Were expelled from your country	
	Were only visitors to your country	
	Were citizens of your country	
	Were your colleagues	
	Came to live next door to you	
	Were your best friend	

Albanian people are Filthy
People from the Black Sea are Dumb
Jews are thieves
Roma people are Niggard

Question 7

Do you know what this picture depicts?



Question 8

How would you handle the following case:

You school has Roma and non-Roma students. Non-Roma parents come up to you and demand that their children should not have common activities with the Roma children.

children's parents to discuss the issue.

$\hfill\square$ You don't know how to handle the issue, and thus you do nothing.
$\hfill \square$ You ask for the help of the headmaster or a counsellor.
$\hfill \square$ You hold a meeting with the non-Roma children's parents to discuss
the issue.
$\hfill \square$ You hold a meeting with the Roma children's parents to discuss the
issue.
\square You hold a meeting with both the Roma and the non-Roma

☐ You prepare and organise a day devoted to Roma culture and invite all the parents. ☐ You do something else that is not mentioned in the choices given above. Question 9 What other actions would you take? If to the previous question you answered that you would do something different than the choices given, describe briefly what this/these action(s) would be. If you haven't answered otherwise and you wish to do so now, fill in your answer, or otherwise you may proceed to the next question. Question 10 In your opinion Roma people are: □ Filthy □ Uncivilised □ Uneducated □ Illiterate □ Genuine □ Hospitable □ Beautiful □ Thieves □ Poor □ Happy ☐ Suffering from hardships □ Stigmatised

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PND Thesis of M	ana Paviis-Korres, University of Alcaia
Question 11	
Does the exist	tence of a different language hinder the communication between Roma
and non-Rom	a people?
	□ Yes
	□ No
	☐ I don't know
Question 12	
The language	of the Roma people in Greece:
	☐ Is only oral
	☐ Is oral and written
	☐ Has a different accent that Greek language
Question 13	
Roma people	in Greece are being treated with discrimination:
	☐ At school
	☐ In public services
	☐ In their daily lives
	□ By Mass Media

Question 14

Have you ever used these or similar expressions?

 $\ \square$ By the Health system

☐ Don't behave like a Gyps	y
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☐ He is such a Gypsy

Question 15

Fill in the gaps in the following text

Roma people originate from []. The reasons which forced them leave India
are unknown. The first accounts of Roma people in the Byzantine empire under the
name [] date back to the [] century. In Crete, Simon Simeonidis
mentions the existence of a Group of Roma people in 1322 and about 1360, an
independent feud of [] in [] is mentioned. It is estimated that the
population of Roma people around the world is at least [] million, despite the
fact that the exact estimation of their population is very difficult, due to the fact that
they very often do not state their identity at censuses, fearing [] treatment.
They have faced and are still facing many problems, as permanently settled
populations face them with [] and distrust. During the Nazi era, it is estimated
that about [] Roma people had been subject to [] treatment. Greeks
have [] and prejudices against Roma people. In Greece Roma people are
considered as being nice people and different from [
All Roma groups in Greece accept the name [] for themselves and call non-
Roma people. [] has an important role in organising Roma people. The
language of Roma people is [] and is passed on from generation to generation. It
is called [] and has [] genders.

Appendix 5

Description of the seven Learning Paths and the two learning activities for the development of the learning group

A. LEARNING PATHS

First Learning path. "Let's hear with their ears and see with their eyes"

Step one

Open a word processing document on your PC and write down your answers to the questions addressed to you in the steps of the learning path.

It is important to write your answers as soon as the questions are addressed, and not afterwards, at the end of the process!!!

For this exercise, you will need a pen and a piece of paper and about 20 minutes (including the time it will take you to answer the questions).

Step two

Open your word processing document and make sure you have a piece of paper and a pen nearby.

When you are ready, proceed to the next step! The next file is an audio recording and you may have to wait for a few moments until it opens.

Step three

Follow the instructions you will hear.

(The Instructions have been given in Romanes. Among the instructions were some randomly dispersed English words, such as "pen", "underline", "beneath", "name", which will not however enable learners to understand the full context of the instructions).

Step four

Answer the questions (answer in the word processing document you opened previously):

- What did you think, when you heard the instructions?
- What did you feel, when you heard the instructions?
- What did you do, when you heard the instructions?

Step five

Have you answered the questions? Let's proceed...

After you have answered the questions.... you are ready, proceed to the next step. Open the next file and follow the instructions given.

Step six

Follow the instructions you will hear.

(The learners heard the same instructions but this time in Greek)

Step seven

Answer the questions

Go back to the word processing document and answer the following questions:

- What did you think, when you heard the instructions this time?
- What did you feel, when you heard the instructions this time?
- What did you do, when you heard the instructions this time?

Step eight

Come to the "Experiences forum", under the category "Let's get in their shoes"

Recall the experience you just had and write about it in the "Experiences forum",
under the category "Let's get in their shoes"

Use the following outlines to describe it:

- a) What did you think, the first and the second time you heard the instructions?
- b) What did you feel, the first and the second time?
- c) What did you do, the first and the second time?

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d) Were you surprised by something during the exercise?

e) Which do you think was the purpose of the exercise?

Second learning path "Stereotypes and prejudices"

Chapter one

Theoretical approach

Step one

Study the texts you will find in the next step of the learning path.

In the next steps of the learning path you will find three texts referring to stereotypes and prejudices.

The fist one consists of abstracts selected from the book "Prejudices and stereotypes" by Azizi - Kalatzi, A. Zoniou - Sideri A. Vlahou. The selected chapters refer to the basic terms and the formation of stereotypes and prejudices, the second one, written by Th. Dragona "Education of Muslim Children 2002-2004" refers to the basic terms and the formation of stereotypes and prejudices.

The third one was written by B. Pavlopoulos, from the Psychology faculty of the University of Athens, and it is a slide show referring to stereotypes and prejudices. It is written briefly due to its slide show format and it also sets the basic questions and answers regarding stereotypes and prejudices.

Step two: the first text

Step three: the second text

Step four: the third text

Step five

Let's discuss it at the forum.

Enter the "Experiences forum", under the category "With our own eyes"

From the programme's Home page, enter the forum link under the thread "Three stereotypes..." and write following these outlines:

• Write about three stereotypes you used to have, but you don't have any more

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The ESG Framework

PhD Thesis of Maria Pavlis-Korres, University of Alcalá

• Write about three stereotypes you have

Write about three stereotypes that others have attributed to you

Chapter two

Watch some videos

Step one

From the Programme's Home page open "Links" and click on the category "Videos on stereotypes and prejudices" to see the link which corresponds to each video. Wait for

the video to load and start playing.

Step two

Let's comment on it at the forum.

Did you see? Did you laugh? Did you think? Did you wonder? Were you troubled?

Whatever happened to you while watching the videos (whether you laughed, you were troubled, you wondered, you were angry, sad etc.), you can share it at forum with the rest of us if you wish, under the category "EXPERIENCES" →"With our

own eyes", at the thread "VIDEO - STEREOTYPES".

Third learning path: Roma and education

Chapter one

Study the following texts. Four texts about Roma and education.

Step one

Four texts have been selected, referring to education and Roma.

The first one is an abstract from a book by M. Vasiliadou - M. Pavlis

"KON ZANEL BUT, BUT CRDEL, AMA EM KON CRDEL BUT, BUT

ZANEL" (He who knows much, goes through a lot, but also he who goes

through a lot, knows much) G.G.L.E. Publishing, 1996. From this book,

we have selected the chapter referring to education in Roma society. The

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way in which Roma educate their children and the analysis about what the existing school means and represents to them, sheds light on the way Roma people face school.

- The second and third texts are suggestions by kindergarten teachers which
 refer to the Roma's educational situation in Greece and set the basic issues
 faced by a teacher who has Roma children as students.
- The fourth text doesn't refer exclusively to Roma, but it has to do instead, with the multicultural kindergarten and the stereotypes and prejudices.

Step two: the first text

Step three: the second text

Step four: the third text

Step five: the fourth text

Chapter two

Listen to their experience

Step one

The following audio files record the experiences of three Roma generations (grandmother, father - mother and children), as far as school is concerned.

- The grandmother (Mrs. Eleni), aged 59, has not been to school
- The father, aged 37 (Giannis) has been to fourth grade of the elementary school
- The mother, aged 37 (Maria, the daughter of Mrs. Eleni), has finished the lycée and a social work school and is working with the University of Ioannina
- The children (Thanos and Elena) are High school and Elementary school students respectively.

The family that assisted us in producing the audio material you are about to hear, has grown up and lived in Saint Varvara, in Attica. The Roma of Saint Varvara have been permanently settled here for many years, they have created the fist Roma association and they are more assimilated You will hear the experiences of the best cases one could possibly meet in Greece, as far as educational experiences are concerned.

(You will hear the audio recordings with the interviews of the Roma people on their experiences at school)

<u>Step two</u>: the first interview <u>Step three</u>: the second interview

Step four: the third interview Step five: the fourth interview

Step six: the fifth interview

Chapter three

Let's all discuss it

Step one

Come to the "Experiences forum", \rightarrow "Let's get in their shoes" \rightarrow "Roma and school" and write according to the following outline:

- Has something of what you thought about "Why Roma don't go to school?" before following the educational path changed? If yes, what was that?
- Do you have different feelings about Roma and their education, compared to those you had before following the path? If yes, what has changed in your feelings?
- Would you face Roma children in a different way than you would before following the educational path?
- If something of the above has changed, what was that sparked this change? Something in the texts? Something in the audio recordings you heard? Both combined?

Fourth, Christmas learning path: Free subject regarding the Roma culture

Step one

What would you think of working in groups of two (and more if you wish) in this educational path? Until the beginning of next year (we put it in this way to make you

feel that you have plenty of time ahead), you will present something that has to do with Roma culture. Chose any subject you want about Roma culture and any way you wish to present it: drawing, photographs, texts, poetry, music, singing, fairy-tales, video, or anything else you could possibly think of. It can be something you will find, something you will create, or a combination of both. The extent of your presentation is of your choice, i.e. a drawing, a brief or long text, a photograph, or a photograph album. You can display it here, or send it by e-mail to the programme administrator. Chose the person you want to work with (you may of course work on your own if you wish), contact him/her and prepare your presentation. If you need help contacting the other participants, ask the programme administrator. Under the group's links you will find some videos about Roma people, which may give you some ideas, as well as photographs of Greek Roma people. We wish you a nice trip (lacio drom) in any presentation course you chose:)

Step two

Links with related videos

Go to "links" and under the "4th educational path" category you will find links with videos about Roma culture.

Step three

Photographs of Roma people

Go to "documents" and by clicking on the "image gallery" link, you will see photographs of Roma people.

Fifth learning path: "Stigma"

Step one

• Have you ever been in the place of a person stigmatised in any way(by behaviour, clothing, language, preferences, ideas etc.)? If yes, how did you feel and how did/do you behave to those who don't accept you?

- Think of how a socially stigmatised person thinks and reacts (you can also consult the texts you read in the second educational path referring to stigma, or the discussions written at the café, the forum, or elsewhere).
- If you wish, you can make notes in a word processing document.

Step two

- Watch the video you will find at "links" > "5th educational path" > "video" > "stigma"
- Listen to the audio recordings you will find at "links" > "5th educational path" > "video" > "stigma"
- When you click on the "stigma" > "Roma" link, a dialogue box will appear, prompting you to download the files from the system to your computer. Select "save". The download will approximately require 1 minute. Due to the fact that the files are compressed, after finishing the download, you will have to right-click on them and select "extract here". The files will be extracted and you will be able to listen to them. There are 3 audio files. If you face any problems, don't hesitate to contact the programme administrator (+306944692905)

Step three

- Enter the "Experiences forum", under the category "Let's get in their shoes" at the "5th educational path" thread and write about the experiences you had in this educational path according to the following outline:
- What did you think and what did you feel when you watched the video?
- What did you think and what did you feel when you listened to the audio files?
- Has anything of the things you thought and felt, before watching and hearing the files of this path, changed?
- Has anything in the way you would have reacted to behaviours of stigmatised persons changed after following this path?
- If something of the above has changed, what was that sparked this change?

Sixth learning path: "Let's laugh hahaha"

Step one

- Have you ever thought how often we laugh our heads of with jokes about "different" groups?
- Do you in fact know any jokes about the following groups?
- 1. Christians
- 2. Muslims
- 3. Jews
- 4. Coloured people
- 5. Blondes
- 6. People from the Black Sea
- 7. Homosexuals
- 8. Roma
- 9. Mothers-in-law
- 10. Greeks

Step two

- Watch the video-joke about blondes, at "links" > "6th educational path" > "video"
- Listen to the audio recordings about Roma people, at "links" > "6th educational path" > "audio files" > "Roma jokes".

When you click on the "Roma jokes" link, a dialogue box will appear, prompting you to download the files from the system to your computer. Select "save", so that you will have the opportunity to listen to them later if you want. The download will approximately require 1 minute. Due to the fact that the files are compressed, after finishing the download, you will have to right-click on them and select "extract here". The files will be extracted and you will be able to listen to them. There are 13 audio files. If you face any problems, don't hesitate to contact the programme administrator (+306944692915)

Step three

- Did you laugh?
- Enter the "Experiences forum", under the category "With our own eyes" at the "6th educational path" thread and write about the experiences you had in this educational path according to the following outline:

A. About how many of the ten groups mentioned in the path (Christians, Muslims, Jews, Coloured people, Blondes, People from the Black Sea. Homosexuals, Roma, Mothers-in-law, Greeks) do you know jokes?

- B. What makes us laugh when we hear jokes about a social group?
- C. Which aspects of Roma people were subject to satire in the jokes you heard?
- D. Do you know any other Roma jokes? If yes, write one of them at the forum.
- E. If you wish, you can write a joke which satirises a stereotype of an other group, except Roma people.

Seventh learning path: "Problem solving"

Step one

What we will see in this path

In this path, we describe ten cases you could face in your career as a teacher, of people belonging to special social groups.

Within the framework of the "A travel into the different. LACIO DROM!" programme, we have chosen cases which refer to Roma people.

It is important to focus on the procedure and the methodology to be followed in order to face any issues we might encounter, not only as far as Roma are concerned, but also about any other socially sensitive group you may meet during your educational process.

To deal with each case, the following steps must be followed:

- 1. Under which wider context does this issue (social, cultural, lingual, financial etc.) belong? What is it caused by?
- 2. Which sources can you find for your information and understanding of the issue?
- 3. What kind of feelings does it evoke you, how do you feel about the issue which arises?
- 4. What actions can you take do deal with it?

Step two

Where to go to start the path

To follow this path, you must open the programme's home page and click on the "tests" link.

At "tests", open the "7th Educational Path" link, and take the multiple choice test (you can choose more that one answers), having also the possibility of writing something different from the given answers in an open answer format.

Step three

Problem 1

At your school, Maria, a 14 year old Roma who is a good student, tells you that she is not coming to school tomorrow because she is getting married.

Among the following answers, choose those which correspond to your thoughts, feelings and actions in this case. (You may choose more than one of the answers, under all the categories of answers "think", "feel", "do").

	You think that Roma marry at a young age and that this is a
	part of their culture.
	You think that it is unacceptable in the 21st century, that young
	girls marry.
	You think that her parents want to send her away from home.
	You think that she will not have the opportunity to enjoy her
	childhood and adolescence and that she will be unhappy.
П	You think something else

	You feel sorrow that the girl will not continue studying.
	You feel bothered about the fact that the girl will have to take
	up responsibilities so early.
	You feel anger about the fact that a 14 year old girl is getting
	married.
	You feel happy about the girl getting married.
	You feel respect about the girl keeping the traditions of her
	culture.
	You feel indifferent about the fact.
	You feel something else.
	You try discussing it with the girl and the parents, in order to
	understand the reasons of the marriage.
	You try to convince the girl not to get married.
	You try to convince the family not to make her get married.
	By discussing with the family and the girl, you try to point out
	the benefits of education and to motivate them to combine the
	girl's marriage with education.
	You accept the fact and do nothing.
	You go to the wedding.
	You do something else
If to the previous que	stion you answered that you would think, feel, or do something
-	ices given, describe what that would be.
	pose "something else" in the previous question, you can still
-	nt to complement your answers.
write here, ir you war	it to complement your answers.
Problem 2	
A Roma mother come	es to your school and announces to you that her child will not be
coming to school because	ause of the bad attitude of non Roma children against it.
	You think that Roma don't like school and they are looking for
	reasons not to send their children to it.

You think that stereotypes and prejudices are passed on to
children and that they affect their behaviour.
You think that the Roma mother is trying to protect her child by
taking it away from school.
You think that Roma find reasons not to send their children to
school in order to maintain their social coherence.
You think that the Roma mother is right about not wanting to
send her child to school under these circumstances.
You think that our society has been left far behind modern
multicultural societies as far as intercultural relations are
concerned
You think something else.
You feel embarrassed about not having diagnosed the problem
the Roma child was facing.
You feel that the mother is trying to deceive you and that there
is not really a problem.
You feel angry about the non-Roma children behaving in this
manner.
You feel indifferent about the issue.
You feel that it is necessary to find ways to deal with the
problem and to keep the child in the school.
You feel that it is your obligation to solve the problem.
You feel that you are capable of dealing with the issue.
You feel that you sympathise with the Roma children facing
this kind of problems because of the other children.
You feel in favour of the non-Roma children attitude towards
Roma children.
You feel that you understand the behaviour of the non-Roma
children.
You feel something else.
You talk to the Roma mother in order to understand the
problem and its full extent.
You discuss the issue with your colleagues.
You discuss the issue with specialists.

		You search literature concerning multicultural education and
		related subjects such as relations between social groups, racism
		stigma etc.
		You are indifferent about the issue and you allow the Roma
		mother to take her child away from school.
		You address the Parent's Association to discuss the issue.
		You talk to the child which is facing the problem.
		You set it as a subject of discussion among all the children of
		the class.
		You do something else
If to the previous	ques	stion you answered that you would think, feel, or do something
different than the	cho	ices given, describe what that would be.
Even if you didn't	cho	oose "something else" in the previous question, you can still
write here, if you	wan	nt to complement your answers.
Problem 3		
A Roma father con	mes	to your school and declares that his children will not be coming
to school from ton	nori	row on, because they are about to leave for Pelloponese to
harvest oranges.		
		You think that Roma will never get educated.
		You think that it is difficult for a Roma parent to combine
		school and nomadic labour for his children.
		You think that it is necessary to create educational
		infrastructure for nomads (i.e. mobile school, student card).
		You think that the existing educational system does not bear in
		mind the needs of different groups of the population.
		You think that it is sensible that a parent wants to keep his
		children with him while he moves, in order to maintain social
		and family coherence.
		You think something else.
		You feel embarrassed about the parent's attitude to take the
		child away from school.

write here, if you want to complement your answers.

	You feel anger about the parent's attitude to take the child away
	from school.
	You feel understanding for the Roma parent who wants to keep
	his family together, given the fact that he is about to move for a
	long period of time.
	You feel indifferent about the fact. Students come and go.
	You feel that it is necessary and that you wish to find ways for
	the child to keep contact with the school.
	You feel that you don't have the power to react and intervene.
	You feel that it is necessary to take action towards better
	educational conditions which would deal with this kind of
	situations in the best possible way.
	You feel something else.
	You discuss with the father the possibility of leaving the child
	behind with some members of the family, in order to give it the
	chance to continue school.
	You discuss with the father the possibility of the child
	continuing school in their new place of residence.
	You exploit the possibilities of cooperation between
	educational structures (student card), in order to give the child
	the chance to continue school in its new place of residence.
	You intensely tell the father that he is forced by law to send the
	child to school until the end of high-school.
	You remain indifferent about the fact and do nothing.
	You do nothing at all because you consider that your
	intervention would have a violent effect on the functions of a
	different culture.
	You do something else
If to the previous que	stion you answered that you would think, feel, or do something
different than the cho	ices given, describe what that would be.
Even if you didn't cho	oose "something else" in the previous question, you can still

Problem 4

At your school, the headmaster refuses to accept Roma children in the school, because he has been told by the cleaning lady that they don't use the toilets correctly and that they foul them, a fact which is true.

You think that Roma will never become "human beings".
You think that filth is a characteristic element of Roma culture.
You think that Roma don't have toilets at their residences and
that it is expected that children don't know how to use them.
You think that it is better if Roma children stop school, since
they don't know how to use a toilet.
You think that the headmaster will refuse to face the issue
positively.
You think that the headmaster will agree to deal with the
problem.
You think that the charwoman is not doing her work correctly.
You think something else.
You feel bad about the fact that there are still people in the 21st
century who don't use a toilet.
You feel indifferent about the fact.
You feel understanding about the Roma's different living
conditions.
You feel bad about the headmaster's unjust behaviour towards
the children.
You feel that you understand and support the headmaster,
because this behaviour of students is not appropriate in our
days.
You feel the need and the wish to find a solution to the
problem.
You feel anger about the charwoman not doing her work
correctly.
You feel something else.

	You clean the toilets in order to avoid problems between the
	charwoman and the headmaster.
	You discretely teach the Roma children how to use the toilets.
	You are indifferent about the issue and you allow the children
	to leave school.
	You agree with the headmaster that it is better not to accept
	these children in the school, since they don't know how to use a
	toilet.
	You try to explain to the headmaster the reasons the children
	are not using the toilet correctly and try to find a solution
	together.
	You try discussing the issue and cooperating with all the school
	staff (headmaster, colleagues, charwoman, keeper, refreshment
	room) to find a solution.
	You have a meeting with the Roma children's parents to discuss
	the issue.
	You go to the place Roma live, to see their living conditions
	and discuss the issue with the parents.
	You cooperate with the appropriate public services which could
	make a positive intervention for solving the problem.
	You do something else
If to the previous qu	estion you answered that you would think, feel, or do something
different than the ch	oices given, describe what that would be.
Even if you didn't cl	noose "something else" in the previous question, you can still
write here, if you w	ant to complement your answers.
Problem 5	
D (D	
	a children come to the school and complain about the coexistence
of Roma children w	ith their own children, in the same desks and classrooms.
	You think that the parents are right.
	children, in order to avoid such issues.
	omitation, in order to avoid such issues.

You think that the parent's prejudices and stereotypes affect the
relations between children at school.
You think that parents have a racist attitude against Roma
people.
You think that at last some parents understand what you are
going through with Roma children at school.
You think something else.
You feel uncomfortable about the fact that there are still bad
relationships of coexistence between people of different groups
in the 21 st century.
You feel indifferent about the fact.
You feel embarrassed about not diagnosing the issue yourself,
or about diagnosing it but not solving it (if you consider that an
issue between the children does in fact exist).
You feel surprised about parents making an issue on the
problem of coexistence of children in class, when you have not
realized the existence of such a problem
You feel understanding about the parents facing such problems.
You feel sympathising with the Roma children being treated in
a racist way by non-Roma children.
You feel that you need to take action to resolve the issue, so
that the children (Roma and non-Roma) can coexist in the
school in harmony.
You feel something else.
You do nothing and presume that the parents will calm down
with time and the problem will not resume.
You discuss the issue with the Parent's Association.
You discuss the issue with the Headmaster and the rest of the
staff and you cooperate with them to find a solution.
You search related literature to see how you could face the
issue.
You ask for the help of specialists (counsellors etc.)
You summon a meeting of the parents who expressed the
complaints in order to try to understand their point of view

	You summon a meeting of the Roma parents, and discuss it, in
	order to inform them.
	You organise some common events for Roma and non-Roma,
	to exchange cultural elements (music, dance, history, cooking
	etc.)
	You do something else
If to the previous que	stion you answered that you would think, feel, or do something
different than the cho	ices given, describe what that would be.
Even if you didn't cho	oose "something else" in the previous question, you can still
write here, if you war	nt to complement your answers.
Problem 6	
The Roma children or	f your school make mistakes at the use of articles, i.e. "a
orange", instead of "a	n orange". They also make mistakes in pronunciation.
	You think that it is a learning problem of the children.
	You think that it is a lingual and cultural issue.
	You think that it is a result of your attitude as a teacher.
	You think that it is natural that bilingual children face problems
	with their second language.
	You think that there should be special schools for Roma
	children.
	You think that special care should be taken and special classes
	should be held to help Roma children, whose mother tongue is
	not that of the school.
	You think something else.
	You feel the necessity to learn more about their language, in
	order to be able to help the children.
	You feel that you are incapable of dealing with such issues.
	You feel exhausted by the multiple learning problems Roma
	children are facing.
	You feel something else.

	You search language related literature to see how you could
	understand the issue.
	You discuss the issue with the headmaster and the rest of the
	staff, in order to exchange views and experiences.
	You do nothing, thinking that the children will work it out by
	themselves.
	You ask the children to teach you some Romani words and you
	use them in class.
	You ask the children's parents to teach you some Romani
	words and you try to comprehend the basic principles and
	structure of their language.
	You do something els
If to the previous qu	estion you answered that you would think, feel, or do something
different than the ch	oices given, describe what that would be.
Even if you didn't ch	noose "something else" in the previous question, you can still
write here, if you wa	ant to complement your answers.
Problem 7	
The Roma children	cannot stay put at their desks for a long time and they want to
regularly stand up ar	nd move about.
	You think that the children are hyperkinetic.
	You think that the children are not accustomed to being
	disciplined.
	You think that Roma children are not accustomed to sit on
	chairs.
	You think that school classroom, as an institution (in the sense
	of a restricted space and the rules which have to be abided by)
	is completely alien to Roma children.
	You think that if they are unable to learn the basic principles
	they will never get educated!
	You think something else.

	You feel embarrassed about not being able to handle the
	problem.
	You are not disturbed by the fact, because you were expecting
	it.
	You feel anger about the parents not teaching the children to be
	disciplined.
	You feel understanding about the fact that children are in an
	alien and new environment.
	You feel puzzled and confused about how you could handle the
	issue.
	You feel something else.
	You often take "breaks" between the activities, in order to
	allow the children to stand up and move.
	You create more kinetic activities, to allow the children to
	move more.
	You call the headmaster to tell them that they must leave
	school if they don't abide.
	You summon their parents and tell them that there is a problem
	of incorporating the children in the class.
	You do nothing and you think that if they don't like things the
	way they are, they can leave school. You have had to much of
	them!
	You punish each child that stands up.
	You do something else
aue	stion you answered that you would think, feel, or do something

If to the previous question you answered that you would think, feel, or do something different than the choices given, describe what that would be.

Even if you didn't choose "something else" in the previous question, you can still write here, if you want to complement your answers.

Problem 8

The Roma children at the school cannot hold a pencil properly and they crease their exercise-book and make it dirty.

You think that this was expected. What could one expect from
Roma children?
You think that the children are not familiar with the basic tools
needed for writing (pencils and exercise-books), as their
language is only verbal.
You think that you should make exercises for the children, to
familiarise them with the writing tools.
You think that some things we take for granted for non-Roma
children such as writing and drawing at home before they go to
school, don't apply to Roma children.
You think it is natural, given the fact that they have barely seen
a pencil and an exercise book in their family.
You think something else.
You feel understanding about the difficulties Roma children are
facing in school.
You feel indifferent about the fact.
You feel that you should help them with a variety of ways to
familiarise themselves with writing tools.
You feel puzzled about the fact that although Roma have been
living in Greece for so many years, they have still not learned
how to handle the Greek language (read and write).
You feel something else.
You start exercises of body orientation, laterality, and graphical
exercises which prepare the field for the discovery of letters.
You hold activities which would help the children familiarise
themselves with writing tools.
You create and develop skills with drawing and handicraft, as a
preparation for writing.
You discuss it with the headmaster.
You search related literature and look for other colleagues with
similar experiences in order the exchange views on how to
handle the issue.
You do something else

If to the previous question you answered that you would think, feel, or do something different than the choices given, describe what that would be.

Even if you didn't choose "something else" in the previous question, you can still write here, if you want to complement your answers.

Problem 9

The Roma children at the school don't come to class on time and their parents are not consistent at their meetings with the teacher.

You think that they should be coming on time in order not to
interrupt the continuity of the class.
You think that if they don't come on time, it would be better if
they didn't come at all.
You think that Roma have a different relationship with time in
their culture.
You think that Roma are not familiar with procedures which
are strict in sense of time.
You think that you should make related exercises in order to
help them understand the meaning of time.
You think something else.
You feel indifferent. These things happen everywhere. You
think that if someone is capable of adapting, he will adapt
anyway.
You feel anger about them disturbing the continuity of the class
by interrupting each time they enter.
You feel that you should do something in order not to interrupt
the class.
You feel understanding about the fact, since they don't have
strict rules of time in their culture.
You feel something else.
You discuss the issue with the Headmaster and the rest of the
staff to find a solution.

	You discuss it with their parents and ask them to prepare their
	children for school in time.
	You make exercises in order to help them understand the
	meaning of time and to develop time awareness (before, now,
	after etc.)
	You do something else
If to the previous que	stion you answered that you would think, feel, or do something
different than the cho	ices given, describe what that would be.
Even if you didn't cho	pose "something else" in the previous question, you can still
write here, if you wan	nt to complement your answers.
Problem 10	
The Roma children co	oming to school are very dirty.
	You think that filth is characteristic of Roma culture.
	You think that you should do something for the children to be
	clean.
	You think that the Roma's living conditions must be very bad,
	otherwise the children wouldn't be in this condition.
	You think something else.
	You feel indifferent about the fact.
	You feel ashamed of the fact that these children are dirty in the
	21st century.
	You feel anger about the parents not teaching the children to
	wash themselves and not washing them.
	You feel understanding about the Roma's difficult living
	conditions.
	You feel that you should do something to deal with the
	problem.
	You feel sorrow about the children being dirty.
	You feel something else.
	You discuss the issue with the Headmaster and the rest of the
	staff.

	You hold cleanliness-related activities in the class.
	You discuss the issue with Parent's Association.
	You talk to the Roma children's parents in order to establish the
	extent of the problem.
	You go to the place where Roma live, to discuss the issue with
	the parents and realize the extent of it.
	You project videos to the children about sanitation and you find
	material from magazines, books and the internet and work with
	this material.
	You cooperate with the appropriate public services which could
	help with this issue (i.e. Municipality, Social Service, Health
	Centre).
	You do nothing because you don't want to intervene in their
	culture.
	You do something else
f to the previous que	stion you answered that you would think, feel, or do something

If different than the choices given, describe what that would be.

Even if you didn't choose "something else" in the previous question, you can still write here, if you want to complement your answers.

B. THE TWO LEARNING ACTIVITIES FOR THE DEVELOPMENT OF THE LEARNING GROUP

1st Activity

LET'S GET STARTED! LACIO DROM...

that is, in Romanes, "Have a nice trip!" This week, starting on Friday, November 7, enter the forum "Let's Introduce Ourselves", and present yourself in anyway you wish, so we can start getting to know each other.

From Monday, November 11, enter the exercises and fill in the 1st exercise, so we can choose the most appropriate material to be used in the programme.

And of course, if you want, you can enter the "CAFÉ" forum and write and comment on anything you wish, even if it's irrelevant to the programme!"

2nd Activity

WE ARE BOTH SIMILAR AND DIFFERENT

By reading your self-presentations and those of others sent to the forum, as well as the self-presentations of the administrators, find the points you have in common with others and the ways in which you believe you differ from others. Write about any of them you wish in the forum "We are both similar and different"

Appendix 6

Responses of the learners (ESG) in learning paths and the "Commons and differences among the members of the learning group" activity

Responses of the learners in the forum/threaded discussion for each Learning Path

1st learning path

"I thought that it was very "confusing" that I understood some words of the instructions given, but not the full meaning which would enable me to carry them out. I felt confused and disappointed, as I couldn't follow and do something about it. I was trying more and more to concentrate and understand better, but it was in vain. The second time, I thought that it was nice being able to understand and do what I was being asked to. I was relieved, as the first time I couldn't achieve what I wanted, while now I understood what I was being asked to do and I achieved it by experiencing a feeling of satisfaction... The goal of this exercise was to "get into the shoes" of our students and all those, who are in an environment in which they are using a foreign language and are required to watch and follow certain instructions. It is indeed difficult and it burdens us with negative feelings, as no matter how hard we try, we can't follow the instructions. Furthermore, if this happened repeatedly, it could have caused me to stop trying."

"I felt disappointed and rather inconvenient, exactly as when someone is trying to understand someone initiating conversation in an unknown language.... The second time I listened to the instructions, I thought: "That's it! Now I know what I have to do, because the language I am hearing is familiar to me." This time, I felt a sort of relief and joy, because I was finally able to meet the expectations of the exercise and produce a perfect result... I do believe, that the goal of the exercise was to get us into the Roma people's position and make us see things from their point of view: when we didn't know their language, we felt disappointed by the annulment of our learning

expectations, our self-confidence was reduced and we didn't have the same will to participate in the learning process, in contrary to the second time, when knowing the language we felt satisfied, happy, confident and keen to learn. I suppose that this is exactly how Roma students feel, when they are required to elaborate projects with a narrow framework of support and they are being discouraged from approaching knowledge."

"Why do I not understand? Obviously, because I've never heard something similar...

It is almost a tragedy not being able to fully understand what you are being told.

Especially when you realise that it is something easy (when it comes to your language and your standards). Is this is how they feel, when they hear us speaking? It was really an experience which made us think and provoked mixed feelings! We still have a long way to go."

"The first time I listened to the instructions I thought: What am I hearing? I can't make a meaning out of this. I was listening to a foreign language with some scattered Greek words in it. It was thus a reasonable consequence that I felt stressed and extremely insecure, because I realised that I couldn't follow the instructions... The second time I listened to the instructions I thought: OK. Now I am able to follow the instructions and I successfully did so, because the Greek language I was hearing enabled me to do so. I felt relieved, happy and secure... I consider that it was a very clever way to get us into the Roma people's shoes, because all of us can easily very well say "I understand you". I wonder how easy it is to understand others after all, when we have experienced nothing of the thinks they are dealings with. Through this project, I believe that I received a good lesson. That is, I understood the efforts and the bad feelings experienced by those trying to follow some instructions while listening to a language which is relatively unknown to them."

"When I first heard the instructions, I thought: What are they saying right now? I felt inconvenient, because I couldn't understand what they were saying and I thought that there might have been some mistake happening... The goal of this exercise was to show that when people from a foreign country hear something unfamiliar to them – like Greek for example-, they feel insecure and inconvenient, as if all those they were hearing did not concern them. This is exactly how I felt when I listened to the instructions and it is indeed a very bad incident."

"I initially felt that something happened to me and I couldn't understand what I was hearing... When I listened to the second set of instructions, I thought that my piece of paper would at last be filled. I felt comfortable and relieved "coming back" to normal... I think that the goal of this exercise was exactly the one described in its title: To make us hear with their ears... I felt like being in a world full of Roma people, who speak a language which I have not learned at home. I think that this is how the Roma children around us feel and since they can't understand our language, they feel alien and unprotected..."

"When I initially tried to listen to the audio, the software stalled and I had to reconnect. (I was worried for a moment, because I thought that my pc would not open the programme. Finally, I did it)... I think that the main thing this exercise wanted to point out, was the feeling of being in a strange/alien place, not understanding the instructions and being disappointed by not being able to do as instructed."

"When the recorded message started playing, I thought that it was a mistake! My second thought was that there was some kind of a problem and I couldn't hear well. It took me more than a moment to realise that there was no mistake at all and I was hearing perfectly. I felt really embarrassed and I was overtaken by a feeling of confusion. I repeated the procedure twice..."

"I listened to the instructions and understood a few Greek words, but the rest of the audio was in Romani. When Roma people don't have a word in their own language, they use the word in the language of the country they are living in. If I were somewhere and I were spoken to in a language of which I only understood a few words, I would feel bad and it would be difficult for me to integrate. This is how I felt when I first went to France to study. In the second set of instructions I understood everything, but they spoke a bit too fast. How I felt? Nothing special, since everything was comprehensible. Perhaps satisfaction. The goal? To get into the position of others being taught in a language other that their mother tongue. To understand the place different people are in and respect it."

"All right then... I haven't understood a thing... What are they talking about? I can't understand anything... only left, right. What should I do? What is it saying... I felt embarrassed and void. I tried to concentrate and I initially achieved something, but

then I couldn't understand anything and I burst into laughter, as it seemed to me like Chinese... as a result, I followed no instructions at all. When I listened to it in Greek, it was unbelievable that it was saying so simple things... Thank God, this time I understood... I felt relaxed because I could at last understand what I was being told. I followed all instructions."

"And after, I heard my own language and I could finally follow the instructions. As soon as I finished the exercise, a lot of things came to my mind and I randomly wrote them down: when I was at school and there were times when we had an unexpected maths test but I hadn't studied at all – I study theoretical sciences, with all the known consequences – and I thought that the equation was in Chinese. When I was learning a new language, I wasn't able to remember new words. When I made a trip to Prague a few years ago and I decided to take a walk without a guide, I almost lost the way, because I couldn't understand what the signs were saying and I didn't know how to ask... And even more recently, now that I am studying for my Ph.D. and sometimes the texts in foreign languages are so "grumpy", with many unknown words and the moment you are feeling that you are getting to understand the meaning you don't eventually make a meaning out of it, it's like standing thirsty next to the spring and not being able to reach the water. And furthermore, how often do we hear the sentence: "You just don't understand" from people who speak the same language as us. It is difficult to "get in their shoes" when you think that you understand, that you are "managing" the prejudices and the things you admit to yourself, they return when you are not expecting them and the road is always endless (as Maria X. says in her description of her experiences from the exercise)."

"The goal of the exercise in my opinion: To make us feel for a moment, how it is to live in a world without being a part of its culture, as language is certainly a part and a dimension of culture. It would be very good, to sometimes try and get into the position of others and try to interpret the world through their point of view. I consider, that in this manner, we could communicate better as far as transactions and relationships of friendship are concerned, as more favourable circumstances would be created for understanding others better, because they certainly deserve a better treatment, with more understanding."

"The goal was perhaps to understand the "fear for the unknown". The differences between something that is very usual and everyday to us and something that is strange. What would it be like, to live in a society in which we would belong to a minority which would be the only one we could understand?"

2nd Learning Path

First Part of the Learning Path.

"Stereotypes and prejudices, don't we all have some???"

"Stereotypes that I used to have and I don't have any more and I am proud of it! When I was in high school, I used to mistrust certain people, which were attributed by the greatest part of the society I was living in -Farsala, with 11.000 inhabitants – with names such as "tramps" etc., and this created me a bad impression about children I hardly knew and the things I heard about them made them seem invisible to me. In First grade, I happened to be classmates with a girl who didn't have the best reputation and we got to know each other. She was superficially a tough girl, but also a very sensitive person with perhaps a bit extreme views on some things. It is easy to label things, to adopt the views of others without giving people a chance and indirectly lead them with our behaviour to becoming the people we though they were. I was disgusted when homeless people who smelled bad passed by me, or touched me. And I am really embarrassed for having previously felt like this, even if it was for a short period of time. I don't feel pity, I am compassionate and I try to help them in every way I can. As far as Turks are concerned, I always felt some anger, as all Greeks have at a certain age. I don't want to disclaim my responsibility, but haven't my History teachers and the Mass Media affected my stereotypes? When I see drug addicts, I literally change my way. I also had a bad experience with someone who tried to steal my handbag and I ran into a video club to seek refuge, because that was where I was heading anyway. I was so scared, that I waited at the video club for my best friend to come and pick me up. On the other hand, there were others here in Patras, who didn't

scare me. I don't have prejudices against groups of people, but I think that you certainly can't consider that everyone is the same. I disagree with labelling people without knowing them. Now, I couldn't tell you what stereotypes have been attributed to me. I don't know whether this counts or not, but many people comment on the way I dress and the fact that I was an average student places me in a certain group. Isn't that racist? You automatically miss out on some opportunities, isn't that unfair? I don't know."

"1) I couldn't cooperate and discuss with people who didn't have the same political thought with me. 2) I couldn't have contact with people who had something to do with psychoanalysis. 3) I couldn't have contact with people who I considered that were not mentally refined. Now that I am writing, I have no stereotypes whatsoever about the things I mentioned above. But I worked very hard to accomplish this tolerance against people, things and situations. With my studies, my profession, psychoanalysis, political thought, my personality, my family, my life philosophy..."

"Three stereotypes I used to have and I don't any more, are the following: 1) I used to believe that handicapped people are depressive and miserable. 2) I considered most coloured people ugly. I suppose that the different colour kept me from distinguishing their beautiful characteristics 3) I used to believe that men who had long lair and ear rings were all tramps. Perhaps I used to believe this because I grew up in a very conservative society, where such an appearance was reprehensible. Three stereotypes I have are the following: 1) I am suspicious of Albanians and especially men. I consider most of them sly and ruthless people. 2) I think that homosexuals are perverse and insane. 3) I believe that most poor Roma people are filthy and illiterate. Three stereotypes which have been attributed to me are: 1) Most of my friends say that I am selfish. 2) Another stereotype which me and all kindergarten teachers are facing, is that we are not doing anything. All of them consider that it is the easiest and most relaxed profession. 3) Finally, another stereotype attributed to me, is that being a woman, I can't drive well."

"The stereotypes I still have are the following: 1) I attribute characteristics to a certain group of people according to the sign of the zodiac they belong to. This is the sign of Gemini. I don't know whether it's correct or not, because I have had bad experiences with all the Gemini I have met so far and I think they are duplicitous (as we all know).

2) I believe that the appearance of a person affects his character. For example, I think that most good looking persons are egocentric and arrogant towards all others, while people who are not so good looking are kinder, and don't care so much about themselves and their own satisfaction... Finally, the stereotypes that are usually attributed to me by others are: 1) I am not trying hard enough to obtain my diploma from the Faculty for the Sciences of Pre-school Learning and Education of Patras, as it is considered that the profession of kindergarten teachers is the easiest of all and it only has to do with painting, music and meaningless games. 2) It has to do again with signs of the zodiac. I am a Scorpio, and when people find out, they immediately think and express at the same time, that I am an erotic person. You are all aware of this well known characteristic."

"Stereotypes and prejudices. As I have mentioned in my self presentation, I am a child of refugees, which means that I have experienced some things in a different way than others who have only heard a about them. My parents tried to nurture us (me, my twin sister Maria and my older sister Elena) in a way in which we wouldn't be deprived of anything. They would very often deprive themselves of things, in order to be able to satisfy us. 1a) After this experience of being a refugee, some stereotype and prejudices against Turks were developed in me, without me really wanting that to happen. From my early childhood, I had the impression that all Turks were evil and hateful people and that they were conquerors. When I was given the chance to get to know these people, I was initially very precautious (as my parents were of course). I insisted to learn the history, the culture and the language of these people, regardless of my prejudices. My parents initially told me to study something else, since I had the opportunities and I was smart enough. I insisted on doing my own thing and I haven't regretted it ever since. I have been occupied for the past ten years mainly with things which concern Turks... I associate with them and I have conversations with them every day. I have managed to make the hatred I had against them disappeared. I could also say that I managed to change some of my parent's views. Only when one leaves himself to act and behave freely, can he see others from a different point of view with a clear mind. b) Another stereotype I used to have, was against boys who wore earrings. I used to have a bad impression of these people, because of my father. He always used to tell me, that if I brought someone home who wore an earring, I would get it. This "threat" initially scared me, but when I got to meet such people later on,

the fear of different and strange had disappeared. We are all humans and because of this we shouldn't judge or be judged based upon the way we dress or look. c) When I heard about Iranians and Iraqis, I used to think that they were all dangerous and terrorists. Ever since I have been learning their language and I have been associating with them, I have stopped being scared and believing that they are uncivilised. On the contrary, by learning their language, I have learned a lot about their culture and civilisation. Finally, I understood that my strict criticism of them was not appropriate and thus, my criticism against them is now only positive. 2a) The stereotypes I still have, mainly concern Russians. Even though I have lived in Russia and I have had contact with them, I still think that they are very cold people. There are of course some exceptions to the rule, but I still believe it is true... This doesn't reverse the things I said before, but this is a different case. The case of Russians... b) Furthermore, when I see handicapped people, I feel pity and sorrow for them... c) And when I see people on the street who need transportation, I don't stop because I have learned not to stop for strangers, because I don't know what is going to happen to me!"

"My stereotypes... It quite difficult for me to think of stereotypes I used to have and I don't any more and whether I changed my opinion on some things in my life, but I can mention as an example an incident with a good friend of mine, whom I met at school and made me think to myself: Where is this situation heading? She was really provocative and eccentric and she did this because she liked it, knowing herself that she would make people comment on her. We became very good friends with this girl and I didn't hesitate telling her later on, about my first impression of her. We laughed and she also shared her first impression with me, which was rather bad I would say. I didn't mind people asking how I could possibly be friends with her. I knew she was far more genuine than other friends I used to have. Certainly, appearance is the first thing people notice, but it also shouldn't be the last one... Stereotypes I have are that Cypriots are localists, rich and very smart and I don't know why, but I still believe it. Second, that men a afraid of being compared to women in any field, because they are insecure and third, that most Greeks are lazy and they only wish they would have a job as civil servants, so that they wouldn't have to do anything. Well, we shouldn't only speak about others..."

"Realising our stereotypes. Hello from me too... Three stereotypes I used to have and I don't any more, are the following: 1) I always used to think that Roma people don't get educated, they have nothing to do with school and that they send their children to work at a young age. In the past three years, I have seen Roma children in my neighbourhood (there is is a Roma settlement near my house) going to school and it is a pleasure seeing most of them participate in class. 2) I used to think that handicapped people are unhappy and I felt sorry for them, but this changed when my grandmother had an accident and she couldn't walk properly ever since. She proved to me, that they can do everything and be fine, as long as we don't make their lives difficult by parking on pavements for example. 3) All doctors will only give you attention if you if you hand them a small envelope of bribery (we all consider doing that), but there are many who have proven me the opposite, although I still maintain some precautions... but this doesn't mean we should put everyone under the same category!!! Because I said in my self presentation, I am a child of immigrants (from Northern Epirus) the first prejudice I was a subject to, was not only me being a foreigner, but also an Albanian (I am not saying this to underestimate Albanians, but imagine that I only know a few Albanian words). This mainly happened in elementary school. These days, I am not being faced in this way. Another prejudice people have against me, is that I am a kindergarten teacher and what I am going to do? Am I going to sit around? Am I going to work (when they say work, they mean that you will be playing drums, painting, etc.) for just four hours, have Christmas, Easter, summer and holiday vacations. It is hard to convince people that this is not exactly the way things are... The last prejudice, is that everyone thinks I am very sensitive... They are not exactly wrong about this, but it really affects their behaviour towards me..."

"Well, things are quite difficult!!!" Stereotypes I don't have any more: a) When I was at elementary school, I used to believe that al people had the same religion. That all are orthodox Christians. If I heard about something different, I would be scared and I would say that it didn't make sense that such a thing was happening. I would think that they are bad and leading a wrong life. My point of view changed after the first classes of high school, when I went to a catholic school. There, I met some classmates of mine who followed other religions, I discussed with them, I read and I reviewed many of the things I believed up to then. b) I used to believe until recently, that children of wealthy families are spoiled and rude. This opinion of mine changed,

when I met people who made me understand that one's finances are not so important in forming his character, as his education from home and school is. c) When I heard that a child happened to lose one of its parents, I felt sorry for it and I thought that it was somehow disadvantaged (not compared to me, but within the society in general) and that it couldn't safely carry on with its life. This view of mine changed, when my best friend lost her father and this made me understand that I shouldn't feel pity for her and that she is not disadvantaged, but in the contrary, she is much stronger than me. Stereotypes I have are: a) My fellow students who are participating in the programme might get angry, but as many people, I also think that kindergarten teachers don't work enough and they are very advantaged compared to what they offer to society (but don't be upset. It's up to our hand to change this stereotype that we have ourselves too). b) I am very affected by the way others look, and although I don't like being judged about it, I avoid getting into relationships with people who have a different aesthetic point of view than mine (isn't that quite controversial?). c) I believe that people with lower incomes are not working hard enough and are not trying to achieve something better. The hardest part of this activity: Stereotypes attributed to me by others: a) I come from Mani in Laconia and to many, this means that I insist a lot on my opinions and I am not very social. b) Some think that I like to have a leading role and like to accumulate authority and control everything. c) Finally, some people consider that I like organising things too much (something that I don't believe, it could be that I am just a little more than them), to an extent though, where I become miserable."

"A) Three stereotypes I used to have in the past: 1) That Jews were avaricious, 2) That schizophrenics were dangerous, 3) That homosexuals belonged to a social group with divergent behaviour. B) Three stereotypes I have now: 1) That fascists are evil, 2) That North Europeans are disciplined, 3) That monks are twisted. C) Stereotypes attributed to me by others: I am often judged for my intense views against stereotypes."

"Many times in my life, I have formed wrong impressions of certain persons, but this doesn't mean they were stereotypes. Some things which I would call stereotypes are:

1) In elementary school, I used to believe that boys were worse students that girls!

(and I would say openly it at every opportunity given), 2) That old people don't have

the "same" rights as younger people, 3) That uneducated people don't have many things to offer (a big mistake of mine!). The stereotypes I have now are that I am suspicious of people I don't know well (regardless of their social or racial group). I don't think I have any other stereotypes. Three things others believe about me is that I am a quite hard person and I have a strange "style", but this is not the way things are. Furthermore, men think that as a woman I am good at cooking, but not at driving (I have a proverb about this: It's sour grapes!). Finally, the way I express my feelings makes people around me precautious."

"To begin with, I would like to point out that reading the extracts was very interesting and informative, as I noticed several things about myself, within them. It happens often that I have prejudices which I might have not realised how deep they are, such as those that are latent within my lingual choices. Personally, I would say I had stereotypes which were solidified in my mind, concerning: 1) Mentally ill people, whom I used to avoid in general, until a relative of me got ill and I changed my attitude ever since and became more condescending. 2) Albanians, with whom I had no contact whatsoever until a few years ago, when some Albanians happened to work at my house and we are now friends. Thanks to them, I started seeing Albanians more positively (instead of a judging them negatively in the first place). 3) Turks, with whom it is being declared that we enemy nations, until I met a Turkish girl who not only she didn't consider me an enemy, but I would say that she is one of the most sentimentally offering people I have ever met and she made me see Turks from a different point of view. As far as the stereotypes I still have, are concerned: 1) Roma people, 2) Elderly people. In these categories, I have met people who made me have some doubts about my prejudices against them, but I think that my attitude towards them is rather negative. 3) My origin. I feel proud of being Greek, regardless of the positive or negative designations it comes with.

"Stereotypes I used to have: My impression at the first appearance of a person determined my opinion about him to a great extent. This still happens to me, but not as much and not as often as it used to. Stereotypes that have been attributed to me by others but I don't have, is that because I behave well, I am stupid."

Second Part of the Learning Path

"To begin with, I would like to point out that the way Maria chose the videos is very important, educational and entertaining. I believe that they get many messages through, have an aesthetic opinion and make us think. I watched them very carefully and with a lot of interest. What I liked the most, was the video with the rectangle and the circle (man and woman), combined with the video added after Chryso's comment about reversing the roles of man and woman. I am excited by the fact that the programme has a lot of potentials and I wonder how many of us make use of these potentials and Maria's will to evolve it to a great extent."

"Hello again! The videos I liked and made me laugh, regardless of the fact that their contexts had to do with stereotypes, were the animations of women and men and Italians and Europeans. I do think that we Greeks are very much like Italians. Don't you think so? The other funny thing was the song with blondes. But I don't agree with the lyrics. I think that it's exaggerated and most important, it contains a stereotype which shouldn't exist in my opinion. As far as the other videos; are concerned, the ones that have to do with interviews of children and people who are "protesting" against labels attributed to them and the unfair attribution of characteristics, they initially made me troubled, because I hadn't realised that these stereotypes will always be passed on to children and we will always be living in a world where people will believe what they hear about others. They are giving me the impression that people, even us who are participating in a programme to abolish prejudices, don't think with criticism any more and will always adopt every prejudice without much though, because they want to live better with their absolutely normal selves. And the people I am talking about are those who do not belong to socially vulnerable groups. After all, foreigners, handicapped people, Roma people, Muslims, coloured people and other socially vulnerable groups of people, should be proud of what they are and be happy about the fact that they are not like us "superior" people, who accept whatever we hear, as if we were animals under training. I might be talking too hard for a beginning, but I think you will all agree with me! Thank you! Good progress!"

"The videos have provoked feelings of joy, satisfaction, others laughter, but also disappointment. The videos about stereotypes were very correctly chosen. I liked

some of them because they made me laugh and others because they made me happy, satisfied, or disappointed. The truth is that I really laughed with the videos concerning women and men, and those about Italians... These things are in fact happening every day. Women with handbags and lipsticks. Men having different preferences than women, for example about the choice of films (there are exceptions of course, but I think they are few). Women can't restrict themselves when it comes to shopping or food. In this video, I got the impression that there was an intense criticism of women, even if it was a comedy (with animations). Yes, I agree that women mostly react and behave in a different way than men, but what do men do in other cases, compared to women? Could Bruno Pozzeto for example have a woman doing chores and a man drinking beer outside with his friends, or being at home lying and watching football? The next time it will be directed by a woman, it could be somewhat different. What do you think? As far as the video about Italians is concerned, I have the impression that it happens that Greeks and Cypriots do the same things as Italians. We still have a long way to go for becoming "Europeans" and we can't expect having everything at once. The video which disappointed me was the one with Muslims. I get pissed of that many people think that all Muslims are the same. That for them, Arabs, Persians, Turks etc., are all the same and all of them are terrorists and violent because of their religion. I get pissed of and disappointed when others say that these people do not have a culture and are uncivilised! Remember? These are the labels we were talking about. I agree with the girl in the video who said that not all Arabs are Muslims, as not all Muslims are Arabs! Finally, I liked the video with small children expressing their love for the whole world, keeping themselves away from any stereotypes and prejudices! A feeling of joy and satisfaction has overwhelmed me, seeing children accepting differences at such a young age... Let's hope that the world will evolve and peace will prevail everywhere, as well as the acceptance of being different!"

"I am late, but I am here too!!! The videos were marvellous and they made me laugh a lot. I mostly liked the videos with the animations (they gave a pleasant touch), the differences between men and women are incredibly many, but the director over reacted a bit (I think). When I saw the video with Italians and Europeans, I thought that Italians are much like Greeks... As far as the little song about blondes is concerned, it did make me laugh, but I am a blonde myself and I don't agree at all with the lyrics. All videos made me think and especially those with children. We are

living in a society based on stereotypes where each and every one of us has specific roles, belongs to a certain group, etc. I know that it is very difficult to reject this way of "thinking". We are scared of differences and we label them... I don't believe that we can't deal with it. My profession gives me a great hope and by teaching children to accept differences at a young age, I believe that they will later have the ability of critical thought which would allow them to decide for themselves whether they will accept the things they hear about others, or not... The fact that grown ups label certain groups of people doesn't mean that children will do the same."

"This is a multidimensional issue. We consider that the videos we watched, regardless of their context and of the fact that we might not approve and support certain points of them, are samples of a well elaborated project, as far as the calibre of the presentation is concerned, which makes them pleasant and not boring. The first video is an expression of a very usual and elaborated issue, by researcher educators. As far as the second video is concerned, we consider that the colour of hair does not imply beauty or intelligence. As far as the third video is concerned, we consider that 1) the fact that a part of the group is like this, doesn't mean that all members of the group will be the same, 2) everyone can be the way they wish, up to the point where they don't affect and oppress other people's rights. As far as the fourth video is concerned, we would like to say that it reflects things that sometimes really happen but sometimes there is a great distance from the thing that is really happening. From a presentation point of view, it is really pleasant. As far as videos 5,6,7,8 are concerned, they are expressions of very usual and issues, with which a lot of work has already been done."

"I would say that the videos chosen are indeed very interesting and very carefully selected. I would like to begin with the first thing that makes me unhappy as an educator, as we are teaching children from a young age to have prejudices about sexes by believing that there are male or female professions and things only a man or a woman should be doing. In the second video, I think that the lady with blonde hair wasn't really troubled about being considered stupid, I would say that she was actually rather enjoying it. The third video made me think, because it is indeed very unfair to be stigmatised, when people don't even know you. Being told that you are this or that. Why? Because I was born a coloured person, Asian, blond, gay, or whatever. The video with the rectangle and the circle was very funny, although it was exaggerated. I

also agree with Katerina and Chryso, that Italians are an exact copy of Greeks and the director could have as well changed the title and the flag and nobody would have understood for which of the two the video was meant to. There is indeed a great deal of misunderstanding about Muslims and I believe it would be difficult for them to change this view. I didn't understand what the video with the title Yakitate Japan wanted to show. The last video confirms again the thing I said in the beginning, that when you are being faced by a society in this way, and there are things you can't do because of your sex, the existence of unjust discriminations makes sense and it is expected."

"The only thing for sure, is that I have been troubled by all the videos. Watching the video with the very young children, I thought that the prejudices they have about the two sexes are completely normal. Children are not passive receivers. The stimuli they receive daily from their family, television and school itself, are those which help them create their own cultural actions. In the first video, you can see clearly how adult's prejudices are passed on to children and this is certainly something that should trouble all of us. I thought that the song about blondes was funny. OK, it's not really true, I guess that this myth about blondes began from some films where where the role of the dumb one was mainly played by blonde actresses. The animations of women and men and Italian (Greeks) and Europeans were also very entertaining. Although they were exaggerated at certain points, they did have a point. The bad thing about these videos was that they reach a general conclusion and put people and situations in groups and besides, this is more or less the way stereotypes are born. Now, as far as the videos with Muslims, coloured people, Mexicans, Asians, homosexuals are concerned, they really made me think that these people are being seriously punished for their differences. Sincerely, by watching these videos, I felt guilt and discomfort, because I though that I myself am one of the persons who don't easily accept differences. The last video with the reversal of roles seemed really strange to me. Finally, I realise that stereotypes are deeply rooted in us..."

"I am studying to become a kindergarten teacher, but my courses are not only about music and games. I laughed, I was troubled and I disagreed. When Muslims don't recognise women as human entities and when in many Muslim societies there are still "crimes of honour", doesn't the Koran and their religion indirectly lead them to

violence? Of course, all Muslims are not the same and there are also other factors, such as the country they are living in for example, but I think that their religion is a negative factor to a great extent. The children are just so sweet! Children form raw models from a very young age and we have to be very careful with which we want these to be. It is a bad thing to judge based on appearance, but honestly, aren't we all doing that? Not always, but we all have on some occasions. When someone is good looking, we are shocked when he is also nice and not snob. Let's give people a chance by getting to know them before putting them under a "category".

"A very nice activity. I guess I am the one who came in late! I watched all videos very carefully. The first comment I must make, is that most were fun, they didn't make me tired and I was anxiously waiting for one to finish, in order to carry on to the next ones. I have to disagree with the participants who mentioned that the director of the animation with the circle (woman) and the rectangle (man) has a positive prejudice towards men. I believe it is a satire and that it locates in a pleasant way, stereotypes all of us more or less have. Don't many of us think that this is the role of women, that this is the way they function (this is what they are destined for), and the same goes for men. As far as the video with Italians and Europeans is concerned, I don't agree completely, I would say that the director (I think he is Italian) is too "strict". My recent trip to Italy made me think that Italians are far more "Europeans" (stereotype?) than us (Greeks). The first video I watched was the one with the experiment with little children and dolls. How can it be possible that children of kindergarten age have so specific and definite views about the role of the two sexes? The video with Muslim children gives a beautiful message. I absolutely agreed with everything mentioned. However, what would our view be, if the protagonists of this video were not little children with cute faces, but grown ups who to some may seem "ugly"? Does appearance make us preoccupied after all? Finally, I didn't like the video which focuses one the reversal of roles. It had an aesthetic approach that didn't suit me for some reason. It was however a good effort in commenting on this specific issue."

"The videos at YouTube were very pleasant and to be honest, I didn't expect that there would be such videos, like the one showing a research about the social role of the two sexes. The way we pass on to children, consciously or subconsciously various stereotypes, such as those regarding sexes and the way they consolidate them at such

a young age, is indeed very interesting. I personally believe that I would try not to pass on to children the idea that mum is the only one doing household work, or looks after children, even though this depends on how open minded her companion is. I also liked the video with Muslims because it personally touched me, as we have family friends who are Muslims from Jordan. Even though I haven't seen them for 20 years, I always had deep feelings for them, because my parents always spoke with love about our distant friends and their faith in a different religion never caused any conflicts. The video I really loved and made me laugh a lot, was the one about how Italians are similar to the other Europeans. As we all understand of course, I thought it was incredibly funny because in the place of Italians I put Greeks (and I do wonder why it wasn't about Greeks on the first place!), and I recalled everyday moments that confirm those mentioned in the video. I also enjoyed the other video of Bruno Bozzetto about the differences between men and women, as I also have some of these stereotypes regarding the two sexes."

"Should we try thinking in a different way? It is inconceivable that people consider all Muslims and Arabs being terrorists!!! It is a fact that there are some Arab terrorists, but this doesn't mean that all Arabs are terrorists. People in general have the habit of reaching general conclusions about certain situations and putting people in groups according to their interests and in many cases, based on their ignorance. This usual occurrence creates some sorts of racism and prejudices. Now, as far as Muslim women and their education is concerned, it is widely know that they are inferior to women in the rest of the world and that they devote themselves more to their families! This doesn't make them less special, or more "stupid". From the videos I watched though, and from some articles I found while browsing the internet, I was deeply impressed by the fact that many of these women are educated and well positioned in some big corporations. Read the following and you will understand. She is ambitious, educated, beautiful yet, single and unemployed it's the story of 30-year-old Shabnam who stays in a society where it is a trend to suppress women. And, "if any of the victims revolts everybody points at her", says Sufia her younger sister, who is herself struggling. She knows that studies and education would not take her too far, as it happened to her older sister, Shabnam, who was not permitted to work, not because she didn't get a job; but she was not allowed to be for 9 to 5 working hours away from home.' This is the description of a Muslim woman by an American journalist. I would

finally like to say that there were several videos and all of them contained an element of racism concerning Asians, blonds, gay men or women, Greeks, Italians, Europeans and many others. My own conclusion is that racism does not discriminate and it has started becoming a great social issue."

3rd Learning Path

"The texts chosen in this educational path are very enlightening for making us understand the reality regarding Roma people and school. Roma people have been an inseparable part of Greek society in a wider sense, for a the past 10 centuries and they have a very important contribution to our country (music, iron working, basket weaving, travelling trade, divinations, therapeutic and practician knowledge, seasonal and agricultural labour) They are however still not accepted by the majority of the members of the society and the state they are living in. Stereotypes and prejudices isolate them and deprive them of goods which are common to everyone and don't allow them to express their rich culture. Maria's interviews with the Roma family from Saint Barbara showed clearly the problem created to the Roma community by the stereotype and negative attitude of their non Roma fellow citizens. My personal experience and contact with Roma people taught me as many things as university did. The thing I basically learned was the way I could get to love my culture and my personal history by understanding and respecting a different culture. I believe that Maria's current work is outstanding and that her participation helps us reach the goal which is the abolishment of stereotypes and prejudices, the respect of differences and the peaceful and beautiful coexistence of all human beings. And that all people wishing to learn are entitled to knowledge. And that EVERYONE has a right to live."

"It's all a matter of good will... Let's start with the first question. As far as I remember, to the question of why Roma people don't send their children to school, I answered that first they consider that their children don't need it and that it is meaningless for them to follow this road, because they are going to get married and follow their traditional professions, for which they don't need school education and second, that they are afraid of their children being cut off by teachers and the bad behaviour of non

Roma children. I don't think any more that the first part of the answer is always true. As far as I understood from the interviews, children usually want to go to school and they think, the same way as their parents do, that it's something useful and fun. On the other hand, as far as the second part is concerned, it is very often true and it certainly troubles children and parents intensely, but the truth is, that Roma people have now found a way to deal with the fact of them being "different" than non Roma people and they can bear any bad behaviours of others. For the second question, I would like to say that I now feel that when Roma children want to go to school and succeed, they will make it no matter what happens. Despite any objections by the parents and the prejudices of non Roma children or classmates, these children can work miracles, even if this is a surprise to some. Now, regarding the third question, I want to point out that I didn't face my Roma classmates at school in a different way and I even used to hang out a lot with a Roma girl. Of course, the path would have helped me to face my Roma classmates in an even warmer way, as mainly from the interviews (and I thus reply to the last question too) I understood that there is actually no difference between us who are not Roma, and Roma people. By listening to these people speaking, one thinks he is dealing with non Roma people, who are in fact more educated and serious than many others. These children are so smart and have such a will power, that I wonder if I could find such maturity in a non Roma child. These interviews really changed me!"

"A hidden civilisation. To begin with the first question: I always thought that Roma people didn't consider school an important part of their everyday lives and their culture, that they married at a young age and are were forced to work from early on and all the knowledge they acquired was practical. By reading these texts, I reached the conclusion that that school and teachers play an important role. Although many Roma children want to go to school, the attitude of children often discourages them (disappoints them) and makes them quit school, so that grown ups force them to work. There are exceptions though, where many children, despite the difficulties they might be facing (from their family, society), carry on with their studies. As far as the second question is concerned, I was informed about the way Roma people face other Roma people who are studying. I never thought that some people (because I am sure that not all people have the same opinion) would put "obstacles" in front of someone who is studying and I can't believe that this is still happening in our days. For the third

question, I want to mention that I never had Roma classmates, but I used to hang out with Roma people living in my neighbourhood. I don't think I would face them in a different way, as the educational path gave me more clear view about the attitude of Roma people towards school institutions and about how schools are facing Roma people. I must say that I was deeply impressed by the interviews and especially the one of the grandmother, whose speech was so refined despite the fact that she hadn't been to school, that she made me wonder if she was really "uneducated" compared to others who have the impression that they are "educated". No one has the right to deprive others of knowledge..."

"We must get to know them. Know them, know their world, so that we can free ourselves from prejudices and stop belonging to groups. These people have a History the same way we do and it would be fair, given the fact that we coexist in school classes, if they were taught their History too, so that we wouldn't feel like Mrs. Maria who was learning about the lives of others. This would give them another reason to go to school and perhaps it would make their older relatives understand them better and motivate them to go to school instead of teasing them. Mrs. Maria is right saying that our times are more difficult and have more prejudices. People belong to social classes which are far apart from each other and they are interested in things they didn't notice in the past. Poverty used to unite them and now it separates them. Children have started judging harsh and losing their innocence. I felt lucky listening to these people and their experiences. I have a question: Do you believe that the fact that Mrs. Maria was educated played a part in the good attitude she received and still receives from Thanos' teachers? A very nice job. Congratulations to Mrs. Korre."

"I must confess that I am sorry that I have never thought of things in this way. I considered that Roma people didn't go to school because they wanted to work in trade and literacy would be unnecessary for them and because they marry at a young age and they consider it pointless. I have never thought that school could be a threat to their culture. Furthermore, it is impossible for them wishing to come to a school which doesn't accept them, has no respect for their language and civilisation. Yes, I really feel different now and I think I would also act different, now that I understood even to a small extent the way they see school and they feel when they are being faced in this way. Both the texts and the interviews contributed to changing my views.

The texts made me think about the different language and the uniform analytical schedule which addresses children who are totally different between one another. What I really consider important, is the education of teachers and their effort to make them learn and be really interested for the children and the parents they are facing. The interviews were really interesting and I was very impressed with what Giannis said about school teaching him how to behave to others, although he had only been to fourth grade of the elementary school, a fact that shows how important the experience of school has been to him. On the other hand, I was impressed by Maria saying that she was nowhere to be found in books and her story about the incident with the religion teacher. That is, I wanted to ask: Is it only us Greeks who can communicate with God? Where should the others turn to? It is a shame and even more because it was said by a teachers and a delegate of God to the world. I want to add that at the kindergarten where I am doing my traineeship, there are 21 children registered, but only 14 are attending. During a discussion with the kindergarten teacher, she told me that 5 of the children not attending were Roma children and they were registered from the beginning of the school year but were not attending, a fact which she considered normal. I don't know whether as a teacher I will handle all situations the way I should, but something I would never wish, is a child telling me that I had been unfair towards him, when he meets me on the street years on. You know, they feel and remember injustices far more intensely and for a longer time than adults do and this is perhaps the most important reason Roma children have a negative attitude towards school from the beginning."

"To the question whether something has changed after completing the educational path, regarding the way I thought or felt about the question "Why don't Roma people go to school?" the answer is perhaps somewhat different than a merely positive or negative justification. I mean that the path's specific route contributed to further confirming my views on the subject negotiated and the attitude itself would remain the same, as a basic principle of attitude."

"The best path!!! The teachers and the future teachers participating in the course had a very important opportunity to receive some knowledge about Roma people and school. I always used to believe that Roma people didn't go to school because they didn't have such an institution in their culture. That in their civilisation, children were

destined to work and make a family at an early stage of their lives and that school was too demanding for them and they preferred to play and walk around. The thing I understood after reading the texts and listening to the interviews, is that what I believed is superficial. It's what people who haven't seriously dealt with the issue believe. Children want to go to school and many of their parents agree, but they are scared of the possibility of school alienating them from their culture. They think that they protect their culture in this way, because school does not welcome their children. It tries to assimilate them in the whole, without taking into consideration their particularities and their specific needs. Initially, while reading the texts, I was troubled about the way some measures related to the uneventful integration of Roma children can be applied. For example, it's mentioned that next to the teachers, there could be adults properly trained as teaching assistants, who would contribute to overcoming the lingual restrictions. (???) By listening to the interviews I felt touched by the way parents, as well as children expressed themselves about school. They recognise how important it is and they mainly point out its social aspect. I was especially impressed by the piece with the grandmother, who although she hadn't been to school, had a really composite speech. The father mentions that school taught him how to behave in general and to accept others. I felt strange about the fact that while children claimed that they were not facing problems of bad behaviour from other children, the mother mentioned that today the problem of racism at school is far more intense, attributing the fact to the financial differences between the families. Listening to and reading the material of the 3rd educational path. I thought that our society has not given sufficient care to such issues and I would say that I was stressed by this. I have personally never gotten into this issue, I have never had Roma classmates and when I had foreign classmates at school (only at elementary school), I never realised whether they were having difficulties getting integrated to the school's environment or not. I believe we should all try harder and take measures for this specific issue. School should welcome everyone and it must be an institution open for all. This assumes however that many things will be reviewed and a lot of work will be done. Obviously, when we say equal rights to education, we don't mean a universal analytical schedule, but a flexible analytical schedule, which will take into consideration whichever particularities of the students and have properly trained teachers who will have the ability of adjusting to the conditions of each class. A very nice work, very useful information and stimulation for thought."

"As far as the first question is concerned, I used to believe that Roma people don't go to school because of the racism they are facing. I didn't know about the pressure from their environment, nor about the fact that school is an institution unknown to them. I consider that Roma people have every reason for not wanting to go to school, since they are not being motivated to do so. After reading the texts and listening to the interviews, I started seeing things from a different point of view and not as superficially as before. At this point, I would like to mention something that happened to me last year at the kindergarten where I was doing my traineeship. One day, I was having a conversation with the kindergarten teacher about various subjects, when at a certain point she said the following to me:" Thank God we don't have any gipsy kids in our school this year." When I asked why she said so, she replied that they stink and that she feels disgusted when she has to come close to them. She also said that they are filthy by their nature and that even when they gave them clothes, they either didn't wear them, or they wore them the whole time without ever washing them. At the time, I could say that I agreed with her and I didn't trouble at all to think how these children are growing up and whether they are being cared about. Now, as far as the last question is concerned, I believe that I would face Roma children in a different way at school, compared to how I would have faced them before following the educational path, because by doing so, I learned a lot of things about Roma people and most important of all, it taught me not to be an ostrich."

"I don't know what kind of an error caused my answer to this specific question in the first educational path not to be registered. However, nothing of what I am thinking now and what I was thinking at the time has changed. I used to have and I still have the same impression about Roma people and school. To Roma people, school represents something "different". To them, school is like a prison... They are "forced" to enter the classroom, sit down behind a desk, be quiet and maintain order in general. To them, all these things are unknown and meaningless, since they don't learn through theory, but through practice. 1.2 Parents themselves prefer not to send their children to school, in order to maintain their tradition and culture. They rather take their children (mainly the boys) with them to their jobs, to have some helping hands. They leave the girls home after a certain age, so that they can take care of their younger siblings. Recent research has shown that in the past years, the number of Roma students has risen. Some older views about school have changed a little and some

Roma children prefer to go to school because as they say, they feel more comfortable and familiar with the notion of "school". This fact leads the Ministry of Education to change its educational programmes, taking into consideration the regular accession of Roma children to school. Despite this fact though, it should further continue its efforts, by informing the school and the teachers about the issue of Roma students and by providing them with material which is appropriate for their education. In general, it should not stick to theory, because theory is only good when it turns into actions."

"Today's multicultural society. Now I have a better and more objective impression of the issue in question. As far as the question whether I would face Roma children in a different way than I would have before following the educational path, is concerned, I would give a negative answer, because I have always considered it and I still consider it a part of multicultural civilisation. But knowing some things about the issue from primary sources, I am now in a position to evaluate some things better, which I perhaps couldn't have in the past."

"...It is important that educators should promote equal opportunities between students, as their role is decisive...We should begin the educational procedure by changing our beliefs and reading about the culture of our students, treating them with respect...."

5th Learning Path

"I would like to share with you something that has been mentioned in the path's first step and that is whether I have been in the position of a stigmatised person. An important reason of me studying anthropology, were my intense feelings at the age of 12 to 18, of me living in a city alone, without a family, since my family was living in a village and I was forced to go to the city to continue school. I felt inferior to the children of the city, as they considered me inferior because I came from a village. During the time of the urban pull, people in cities often faced people from villages as inferiors and even today, the word "villager" is being used in a negative sense. Later on, at the age of 18 in France, I received more or less the same attitude from the

French because I was a foreigner. In both cases, the "stigma" worked creatively for me, through a lot of thought, concern, questioning and sorrow. Watching the video, I thought that people easily stigmatise others and behave towards them without processing their thoughts and feelings at all. From the stigmatised point of view, they very often consciously cause this situation with their behaviour, by defending themselves against the negative attitude of others towards them. I remembered that in the French suburb of Bron (near Lyon), where I used to live in 1982 and was inhabited by Arabs, coloured people and lower social classes, the youths of these groups used to burn the cars of people who didn't belong to these groups! The reason? According to a study by the group of the university of Lyon2, in which I participated "broader French society called them thieves, losers and criminals, even before they started demonstrating this offensive behaviour." By listening to the audio files I noticed, that although this is the best case of Roma people I have heard of so far, problems of stigma and racism still exist to a great degree even in our days. I generally think that in modern Greek society, racism, stigma, prejudices and stereotypes play an important role which determines human relations at all levels. By walking this path, I managed to express and share with you some personal feelings, experiences and views about stigma. And at the end of the path I realised that everything I mentioned before has made me more tolerant, open, and respectful for others, to think out and understand behaviours (even aggressive ones) and to reform my attitudes and views as a result of that."

"I have never been in the position of being stigmatised for something. Or even if I have been, I haven't realised it so far. I always used to think that others considered my views strict and rather conservative (mainly regarding ethical issues), and by trying to impose them, I used to become aggressive. I don't believe that this was the reason they weren't accepting me. Perhaps they sometimes didn't feel like arguing and supporting their own opinions. I simply agree with the video I watched. As harsh as it may seem, this is our attitude and our behaviour towards certain people. It's almost a tragedy to see this being reproduced and agree that this is our attitude, or to know people who react in this way. Mrs Korre's interviews with Roma people were very well aimed and they made me think a lot about how these people may be feeling. Why doesn't the young girl admit its origin and keeps it a secret, fearing rejection by her classmates? Shouldn't she be proud of it, as we all are our about our own origins?

Furthermore, it is shocking to hear a child referring to racism and even experiencing it to a certain degree. Maria mentions that she was accepted by the members of the university's community, but teachers became misgiving when they found out where she came from. How is it possible for people whose profession is to teach children and other people, to be misgiving of certain social groups? Is it possible, that our attitude towards other people doesn't have to do exclusively with our education? Isn't it correct within society itself to distinguish between "us" and "them"? Finally, we all have the same rights for education, health and all aspects of our social life. It can't be happening, that some are privileged, while others have to "beg" - as the grandmother says- for things which are taken for granted by others."

"I don't remember ever being stigmatised and perhaps this is the reason I developed some stereotypes for "others", because now that I think about it, I do have some. Until the age of 10, I used to have friends of other religions, foreigners, with a different skin colour, Roma children, and because when I was child, I didn't care about these things and I didn't even notice them. It is unbelievable how stereotypes are created... When I watched the video, I thought that it is very unfair to judge people without even knowing them. I felt grief and perhaps a little embarrassed, because I used to judge people too without knowing them, only because they would be Albanians for example, or by their appearance. Now, as far as the audio files are concerned, little Elena reminded me of the situation at my own school and the worst thing is that we were the oldest children, but we still had the same thoughts. When I was in the first grade of upper secondary school, a girl from Albania came to our school and she couldn't hide even if she wanted to. We could easily tell from her last name and I remember that no one wanted to sit next to her, so I sat next to her and we became friends. When I started losing my friends and asked for the reason they were avoiding me, they said I should go and hang out with my Albanian friend. So I think, that except being influenced by others, we also adopt stereotypes because we want to be accepted, we are afraid and we become selfish. The truth is, that school didn't help us a great deal to face our prejudices and as I have heard from Elena, this is still going on. I wish that all teachers see the problem some time and deal with it and I am referring to teachers because I am sure they can. I believe that my entire course in the programme changed me, made me better and that from now on, I will never judge anyone before getting to know him well. Because although I have never been

stigmatised, through the programme I understood some things I didn't want to understand before, because this was simply the way it suited me."

"I think I have never been in the position of being stigmatised, unless I was but I didn't realise it. But what I noticed is that in contrary to some people or groups of people, I have different views and ideas regarding certain people and specifically Muslims. They think it is strange and unusual to have Muslim friends and to be learning their language. I am trying to explain them that it's not correct to label people and have stereotypes and prejudices for all people, like for example that blondes are stupid, Muslims are bad and dangerous, handicapped people unhappy etc... We must accept the culture and the language of others without being racist and without judging people we don't know. And even if we get to know them, we shouldn't put all under the same category! In the texts "stereotypes and prejudices", Th. Dragona mentions that stereotypes are learned at a very small age, before the child has a clear idea about the group they are referring to. Already by the age of 3, children in multicultural societies are conscious of the social structure of their community and realise the relationships of authority between the majority and the minority. At my school there are Christians and Muslims. The school I am working at is a multicultural school. The students are mainly Greek and Turkish speaking. In this environment, it is natural to have children -both Turkish and Greek speaking-, with stereotypes and prejudices. There are moments when some Turkish children feel bad about being filthy. Yesterday, a child (a Turkish child) felt very bad, because the children of his class (some Greeks) were making fun of him for stinking and having lice. He felt so uncomfortable, that he cried and tried to leave school. It is really a pity seeing such things happening at schools and governments and ministries doing nothing about it! This incident with the blonde and the handbag occurs very often (it has happened to me too). When we see someone and we think he might be dangerous, we start getting scared and we do whatever we can to protect ourselves. What I realised from the audio files while listening to them, was that Roma people are proud for being Roma, but they are hurt by the fact that there still is racism against them. My feelings towards Roma people have not changed before and after the path. In general, through this programme I started realising some things better and specifically about the issues of racism, social exclusion, stereotypes and prejudices."

"I don't recall ever being a victim of stigma. The only similar thing I can think of, is that I sometimes chose a way of dressing, speaking, or behaving, which some close relatives or friends didn't like. In these cases, my usual reaction is either becoming obviously frustrated, keeping my feelings inside and feeling sorry, or being unconcerned because I happened to like that way of dressing and I didn't care about the opinion of others. I think that any stigmatised person would react in the same way when others make him feel different. While watching the videos and listening to the audio files, I was trying to guess what the people being interviewed would reply before the actually did and I would say that I mostly guessed correctly. This makes sense, as I am also living in the society described by the three Roma ladies and I see the attitude of others towards them every day (and I am sure it doesn't differ from how they are describing it). In my opinion, the essence of the whole procedure is to try and get empathy. By this, I mean that you must get into the other person's position every time and try to explain his behaviour and the way he reacts, by having first examined his motives. This might however be the most difficult thing, that is to really see from other people's point of view, given that you were bred since your birth with stereotypes and prejudices against specific social groups. But if you bear in mind situations of yourself being stigmatised for perhaps unimportant reasons, or isolated cases, then you can explain why a person who has been stigmatised for life and his whole life has been changed by this, reacts in this way."

"Hello and happy new year to everyone. To begin with, I would like to mention that I have never been stigmatised. I feel happy about this, despite the fact that if I had been in this situation, I could have learned some things and become a better person.

Watching the video, I saw the usual image of a racist person and a person who has been unjustly stigmatised. I felt that it is really unfair that this thing is happening to stigmatised persons and in this specific situation to coloured people, since they are completely normal. I personally used to be somewhat afraid of different people, but that was probably because I was young. Now though, I think (and excuse me for using this expression) that it is at least stupid to be afraid when a Roma person, a Pakistani, a coloured person or anybody else who is different, approaches me. As far as the video is concerned, I was surprised by how much Roma people can be ashamed of what they are! This can't be possible! Isn't it horrible to be ashamed of what you are, your own self? Aren't we harming these people so much? As I mentioned before, I

don't generally think that I have a different attitude towards Roma or coloured people, especially after the activities we did in this exercise. So, I don't believe that something changed inside me. I wish this goes for all and for ever."

"A happy new year with good health and a lot of success!!! When I watched the videos and listened to the audio files, I felt bad and melancholic I would say... I have been stigmatised because of my origin and there were many people who didn't treat me well. It is harsh having to face racist attitudes by others, especially when you are a small child and you can't understand why. Luckily for me, the people who had this so narrow-minded attitude against me and simply labelled me (the Albanian kid), were far fewer than those who accepted me, without taking my origin into consideration. When I watched the video, I wasn't surprised at all. It's something I have gotten used to. A racist, and an unjustly stigmatised person. The fear of some people towards different is something incomprehensible to me, we are all different after all. Each person is different; Greeks, Roma and Albanians can not be all the same. It can't be that some stigmatise an entire group of people as thieves, dirty etc. The first audio file I listened to with the interview of Mrs. Maria, took me several years back, to when we first came to Greece and my parents were looking for a flat and no one would let them one because they had come from Albania (I don't think there are any comments needed on this). The little girl in the interview said it all... Many times during my childhood, I was afraid to tell my friends that I was from Northern Epirus, because I was afraid I would lose them... I never felt embarrassed for my origin, but there were moments when I simply wanted to disappear. Now their comments don't affect me any more... As far as I am concerned, they can't understand and I simply feel sorry for them. I will never forget those people (and especially the teachers) and I will always remember their words, their actions so that I will never become one of them... After finishing the 5th educational path, I consider that nothing has changed inside me. I have always believed in the equality of people and I always will!!!"

"When I watched the video, I thought that I also used to grab my bag when someone who seemed dangerous approached me and mainly when a foreigner was standing next to me. It's a habit I am trying to quit, because I noticed that I have been doing it too and it's stupid. I know that these people notice it and they feel bad. (Of course, I have been doing this lately because there are many immigrants in our city who are

living under miserable conditions). When I saw the video and listened to the audio files, I though that we are talking the whole time about human rights and racism, but this (racism) is as if we had it in our DNA. We treat others bad and we put them under categories because someone else has done the same to us and we don't care if others get hurt. What impressed me was that the little girl didn't say she was a Roma and yes, I also think that the behaviour of others towards her would have changed completely if they found out. But isn't it awful not being able to say "this is who I am and I don't need to apologise to anyone about it"? Yes, I would change my behaviour because I thought about how I would feel if I were in their position. About whether I have ever been in this position, I would say that when I was younger there were people who commented, on my weight (I used to have a few extra kilos and I still have) and with a rather good intention I would say, I sincerely don't know why they thought it was of their business. I wouldn't say I was stigmatised, but I was rather annoyed by this."

"Let's get to know each other. I am not meaning to flatter you, but I sincerely thank you for sharing your experiences with us. I receive so many things from a conversation that I never imagine I would be so touched. I like the fact that I am beginning to know these people from their words and not from comments I hear in my everyday life and to reach my own conclusions. I admire Mrs. Maria and the things she has achieved and I feel some guilt for sometimes being somewhat afraid of people who are from a foreign country. I am frustrated by the curse of the old lady on the bus and by the other lady who wasted her words by saying something evil. What kind of people are there? I wonder! We are not helping them and perhaps they are not helping us either to get to know them. As far as the photos and the image of the small girl getting married are concerned; It is an element of their culture, but I strongly disagree. Child rights? I think we should discuss with them and talk about these things. I am not expecting them to change a part of the civilisation they have had for years, in a single day but to understand with time, that children must be given the time to grow up and mature so that they can make some decisions for themselves. Thank you for the valuable experience you have offered us."

"A thinker. About the question of whether I am stigmatised, I would say no. I would say that the material shown to us was interesting, something we were expecting and something we were not, something acceptable and not acceptable. I think that the

basic cause of stigma is the following: A lack of proper boundaries in human communication (too close, which produces frictions, versus fear of differences, which causes alienation and rejection). Boundaries are thin, we must be careful! For the education, a teacher who is a thinker and for society, a man who is a thinker. All in good measure..."

"It is very bad for someone to be socially stigmatised and having everyone staring at him, and isolating him with their behaviour. I haven't been in the position of a socially stigmatised person, so I can't really know how they feel, but I am sure they will react and behave in a bad way because they will feel bad themselves without being able to express it. They get locked up in themselves because they are afraid of others and they are in some case forced to pretend, like little Eleni, whom we heard in an audio file saying that she used to say that she wasn't a Roma so that she wouldn't lose her friends. The way this child spoke about its experience showed us that she was very strong and knew the consequences of the lies she told, very well. But at the same time, she accepts herself and I am sure that she later told her friends the whole truth about her origin and that they didn't have a problem with that. The first step for solving such a person's problem, is to find himself and see who he really is and to overcome his own obsessions with his supposed problem. From the 3 interviews I heard, I felt somewhat uncomfortable with the last one with Maria speaking. I don't know why, but I was myself embarrassed for the people who called her "lass" after finding out she was a Roma."

6th Learning Path

"A). I now and then hear and laugh with jokes about all the groups mentioned. From all the groups mentioned, I have heard most jokes about people from the Black sea, Jews, blondes, coloured people, Roma people and quite a few about handicapped people. B). What makes us laugh, are the differences related to the stereotypes concerning the group in question. And of course, we do laugh with them, because they are stereotypes that do not concern us, are not attributed to us, since we feel that we are "better". C). Before talking about the content of the jokes, I would like to point

out that we also laugh with the way the jokes are being told, by making a satire out of Roma people's accent in Greek. This is of course a basic stereotype we have against Roma people, that is that they don't use the Greek language well. And this is exactly were the joke with the Datsun car's colour is based. I think that filth is one of the greatest stereotypes of Greek society towards the Roma community and for this reason, there are several jokes about filth and embellishment. Non Roma people, by believing that they are better parents themselves, consider that the Roma don't love their children, they sell them, they let them die and they beat them up. One can see this stereotype in many jokes, which have been created of course by non Roma people. I would like to point out however, that several jokes show the flexibility of Roma people in handling various situations and surviving them."

"Funny??? Well...

I have heard some jokes about social groups (Jews, blondes, people from the Black Sea, Roma people). But I rarely laugh and this is probably due to the fact that they are either not telling them well, or I am not a cool person. I didn't laugh with the jokes this time either. OK, I must confess that some of them made a good point about stereotypes we have for Roma people, but I thought that some were vulgar and not pleasant at all. If I heard them live in a friends circle, I might have felt inconvenient. I think that what make us laugh are the stereotypes being presented. The fact that we are in a position of power (they are not referring to us). If I heard a joke about me, making a satire of my big ears for example, I wouldn't like it at all. The jokes we heard make a satire of the Roma people's accent, the fact that we think they are filthy, that they are not good parents and other elements of the stereotypes we have for their civilisation. I don't know any jokes and I am sure I can't tell them well, but I found one which concerns Roma people..."

"A) I know jokes about most groups, which are referring to coloured people, blondes, people from the Black Sea, homosexuals, Roma people, mothers in law, Greeks. B) I laugh with the way the stereotypes concerning a social group are satirised, because as it is normal, all jokes exaggerate in order to become funny. The bad thing about jokes though, is that they reach general conclusions. C) The jokes I heard about Roma people mainly satirise their naiveness and simple mind, the filth, their bad accent in Greek and finally, the way they raise their children and the way they talk to them..."

"The jokes we heard were funny and some of them were really good. I have heard jokes about Jews, Roma people, people form the Black Sea, blondes, Greeks, Christians and Muslims. We laugh about things that we think that are typical for the specific group and we make a satire of these things with the worst way possible, such as that Roma people are filthy for example, or that people from the Black Sea are stupid, things that are not true, but are reproduced with various means through jokes. In these jokes about Roma people, there is a satire about their accent, illiteracy, about them being dirty, their lower social position (the second joke for example) and that they have many children without caring about them."

"And yes, I did laugh. As it is natural, jokes are meant to make us laugh and I, like others, laughed with jokes referring to social groups. As Mrs. Rita said, what makes us laugh is not only the content of the joke, but also the way they are being told. I have heard many such jokes referring to coloured people, blondes, people from the Black Sea, homosexuals, Roma people, mothers in law and Greeks. And I will once again agree with Mrs. Rita about the second question. In these jokes we laugh with the differences of some groups which are different than us, which we think they are funny and not normal, without considering that the each person's living conditions affect his own life. The jokes we heard about Roma people, make a satire of their accent, their indifference for their children and the shamelessness which some people think is typical of them."

"Ha ha ha. Nice jokes... As all of us, I also laugh with jokes referring to various social groups. I think that the way someone tells a joke plays a very important role. I have heard many jokes about blondes, people from the Black Sea, Jews, Roma people, mother in laws, coloured people and Greeks. In the jokes which concern social groups, we laugh with the differences of these groups, because we think that some habits and thoughts are funny and strange. The jokes I heard about Roma people were of course about filth, the way they speak and use Greek incorrectly, the way they raise their children (they don't care if something happens to one of them, they will just have another one...) and the way they manage to survive."

"There are indeed many jokes about all groups of people. I have personally heard many jokes which concerned all groups, but I unfortunately can't remember anything unless it really impresses me. I wouldn't say of course, that any ff those I heard in the

6th educational path really made me laugh. But I did like some of them. I liked the most the one with the Gipsy on the bus, the one with the shoes and the fingernails and the last one with the banana. The thing I noticed though, was that all were carefully selected. All these jokes demonstrated characteristics of the Roma people. For example filth, ugliness, etc. The truth is, that I don't usually laugh with these jokes, only sometimes when they are really funny. I usually laugh with those about people from the Black Sea, or blondes."

"An image is worth a thousand words! I don't really like jokes. Most I have heard are about Tom at school. I have often laughed with jokes but I have often felt disgusted. I didn't know the jokes which were a part of the programme's material and I think that they more or less touch the prevailing views of our time. A joke is worth a thousand images and perceptions on how we see life and how we interact among us as a whole, by creating a past, present and future seen through a key hole. Very often truths, very often lies, but usually the original truth and reality lie somewhere in between."

"We should see our own mess and laugh about it. a) I have heard jokes about all groups mentioned, except homosexuals. b) When we hear a joke which concerns a specific social group, we usually laugh with the stereotypes of the group that are being the subject of its satire. This means, that we have formed (or even solidified) from before an impression in our minds about the characteristics of this group and we make fun of them with jokes. We try to mark the "difference" and reproduce it through jokes. c) In the jokes we heard, there is a satire of the obsession with Datsun cars, the "peculiar" accent in Greek, filth, washing in the river, having many children (without thinking about whether another child should really be born)..."

"I know a proverb which says that "we can see a piece of dust in another person's eye and we can't see a stone in our own eye." This proverb is characteristic, when we make fun of some people, or we make negative comments about them. I have many times heard jokes about all social groups mentioned here and the ones told most often are those about people from the Black Sea and blondes. I sometimes laugh, not so much with the joke itself, but with the way it is being presented. Usually, this kind of jokes is made after isolated incidents, which do however "mark" entire social groups. For Roma people, jokes are usually about the filth and thefts."

"A) I have now and then heard jokes about all groups. B) With the funny references to stereotypes of these groups. C) With the stereotype characteristics of the Roma way of life."

Responses of the learners in the "Common and differences among the members of the learning group" activity

"How many things do we have in common? I agree with the girls that we have a lot in common... I think that the most important thing is that we all love children and we want to do our best for our profession... One of the things I have in common with Maria is driving, only that I don't race and I don't drive a car (even though I do have a license), but a motorbike instead (a have put a lot of effort in convincing my parents to buy it for me and especially my mother). Another thing in common is kittens. I have four and not only those, but I also have a puppy like Sophia and chicken, geese, rabbits and other animals (we have a big estate). And best of all, I am very glutton!!! I would like to be in Mrs. Rita's position and get to go to an island of the Ionian Sea, or Rhodes where I have been and fallen in love with!!! I also have a brother who is a year younger, like Mrs. Maria M, who is studying Civil Engineering in Patras. Like Sophia and Maria K, I live with my family, which I adore!!! With Mrs. Piera we have the sea in common (I feel calm only by staring at it, it really relaxes me...). With Katerina we have the most things in common; after all she is my best friend!!! We spend so much time together!!! On the phone, msn and of course at the university (we have almost the same courses) and on Saturday nights... We also have many things in common in our characters!!!"

I believe that I have most things in common with Mrs. Maria. I like going to the cinema and the theatre and I love entertaining my friends by inviting them over for food. I love driving, especially travelling with my car, but not racing!!! A thing I have in common with Eliana and Katerina, is that we are studying English for our proficiency degree, as well as with Sophia, Maria M., Ioanna and Stergiani, with whom we are fellow students. Furthermore, one of the dreams I have for my life, is the way and part of Rita's life!!! I am not specifically thinking of Scopelos, but an

island with peace and quiet, but also cosmopolitan life! As far as the differences between me and the other members of the group are concerned, I don't have any children, I still don't have a diploma and I haven't worked in a class, so I don't have the extra experience to contribute more views to this issue!!!

"Like Mrs. Korre, Maria, and Stergiani, I enjoy cooking and inviting my friends to my house to have fun and drink some wine! (I am also glutton and I can't hide it! I wouldn't say that physical exercise is one of my strong points, but I am trying to make up for this situation by dancing, which I love). I really like reading and I absolutely agree with Katerina and Eliana who relax by listening to the music they like. I am fond of pets, but mine is a Griffon Terrier, for which we are still in the search of a mate! I also speak a lot, as you might have noticed, and I thus certainly understand Mrs. Piera, although I am probably going to need some help from her, because I am quite afraid of the sea and my swimming capabilities are rather ridiculous! My character has many things in common with Gianna, Maria M and Stergiani, because I am daily experiencing these girls and we are having a good time. As far as my career is concerned, I am definitely hoping to have a course similar to the "elders" of our circle and to specialise on issues of the education of sensitive social groups..."

"In my everyday life, I spend a lot of time spin biking and kick boxing. In this, I am similar to Stergiani. Furthermore, in my spare time, I read books (like Maria K and Rita S) and mainly Greek and foreign literature (crime fiction like Rita S). On the other hand, I am not into painting, nor do I play a musical instrument (unfortunately, because I really like it and it is one of my future plans), like Maria P. I also don't cook a lot, because I am bored to... Also like to travel (like Fassa and Sophia), and if I had the opportunity and the money, I would travel more often. I really like being challenged, the same way as Maria and that's the reason I initially studied Turkish culture, despite the objections of my parents and others. I like doing different and unusual things, not what all common people do... About my career, I am also into adult education, like Maria and Piera..."

"I would like to say to Anastasia, that when we all have our diploma in our hands, we will have the same anxiety for the future. That's something in common! In contrary to Anastasia, I really like computers. I also like to travel, like Mr. P, but I don't know how safe hitch hiking would be in our days, as a mean of transportation, although I

was really impressed! I agree with Sophia that every obstacle we encounter in our lives turns out well at the end and that if we are well in our health, we can achieve everything... I like cinema and theatre, like Mrs. Maria does. There are many differences between us, like the courses of our careers. My career and those of my fellow students are still beginning, and despite our differences, there is something common among us. This is the effort for a good cooperation and the exchange of views which will make us think and become better."

"The things I am interested in, are somewhat alike those of the "elders" of our circle. Of course, most of them have a professional experience, something that I don't have so far. Some of the participants have previous experience on issues concerning vulnerable social groups and specifically Roma people, while for most students, this is their first contact with such issues. Finally, the thing in common for most, are the reasons they participated in the programme: to overcome our prejudices, learn more about the Roma people and become better human beings."

"I must point out that all of us who are participating in this programme have something in common and this is our interest for a specific social group, the Roma... I have many differences with other members. For example, I don't have the knowledge, the experience and the studies, some other members of the programme have. I also have different preferences and interests. For example, in contrary to Mrs. Korre, I don't like speed at all. When I am in a car that is going fast, I get really scared. For a conclusion, I think that we are all both "same" and "different", as we are alike in certain things, and different in others."

"I am now thinking, that the way to communicate through a "platform" without having visual contact, not only makes it easier -as you say- for us express ourselves "freely", but it also makes us pay more attention to the self presentations and the thoughts of the other members of our group. On the other hand, if we did in fact have visual contact, perhaps Mrs. Piera would have become plainly "Piera"!!! Because: to begin with, the difference of age makes Maria, Rita and Me "Mrs." (so, here it is. The stereotype of age! I am joking of course!)."

"We are all of us here, trying to learn from each other by improving ourselves and our relations with others, because we do care after all and I think that this is our basic

thing in common. I want to share two more phrases with you, which come from the field of systematic psychology and I think they reflect the whole thing we are experiencing here in our company. The first is that "difference determines the meaning" and the second, that within a group the "promotion of independence can be achieved, even through interdependency."

"I see that Mrs. Korre, Maria P, Mrs. Piera and Ioanna love cinema, theatre, or both. Although I don't like television, I love films and theatre stuns me! Of course, music is my greatest love, as of Maria M, Eliana and Shasha and my love for singing and dancing is even greater, as with Sophia. After finishing my studies, I am planning to attend dancing and singing classes. I am so fond of singing, that I have recorded an old song of Eleni Kokkinou in an amateur studio. Finally, because as you have realised I am of an artistic nature, I really like painting and I have been painting since I was a child, everything from landscapes to religious paintings of saints, as Maria P and Stergiani have. I also love to travel and I grab every opportunity of leaving, as I imagine that Nikos and Sophia do. The most pleasant trip for me is a boat trip, because I adore the sea, as I come from an island, beautiful Santorini (another thing in common with Piera). As far as my character is concerned, I think that I am totally optimistic like Sophia, and I am very glutton like Mrs. Korre. I want to point out, that I am the same sign of zodiac as Ioanna and she is only 5 days older that me. With Maria K we have two things in common, the first is that we both want to obtain our proficiency degree like Eliana and we want to learn Spanish, which I personally love to hear. Finally, I am not forgetting my favourite friend Eliana, as she mentioned herself, our student lives don't differ much and we are intending to take the proficiency exams."

"Each person is unique and it is marvellous getting to know him! But at the same time, we are all so much alike, that we haven't ever really imagined it. From the presentations, we saw how much alike we are (common wishes and interests), something that we think has created a positive field for cooperation, diminishing natural distances and the distances created between strangers."

Questionnaire of the Formative Evaluation

We are somewhere.... in the middle of the course...

How did we do so far? What could we do in order to do better?

Fill in the following questions, reflecting your experiences from the educational procedure we have followed so far and suggest whatever you think that could improve the procedure for all of us by the end of the course.

1. To what extent do you feel pleased by your educational experience at the "A travel			
into the different Lacio drom" course, so far?			
□ Not at all			
□ Somewhat			
□ Moderately			
□ A lot			
□ To a great extent			
2. Have you experienced problems while using the platform?			
□ Not at all			
□ Moderately			
□ A lot			
□ To a great extent			

3. If you have experienced problems while using the platform, which were these				
problems and how did you overcome them?				
4. Was your first briefing session with the administrators useful for the course's course				
(to be answered only by kindergarten teachers from Patras, who participated in the				
meeting)?				
□ Yes				
□ No				
□ Other				
5. What do you think about the procedure of using the platform?				
□ Very difficult				
□ Difficult				
□ Easy				
□ Very easy				
6. Did you find the user manual prepared by the course administrators for the use of				
the platform useful?				
□ Not at all				
□ Somewhat				
□ Moderately				
□ A lot				
□ To a great extent				

7. Which activities of the course did you like the most (you can fill in more than one.):				
□ Study of texts				
□ Forum				
□ Chat				
□ E-mail communication with the course administrators				
□ Audio files				
□ Videos				
□ Suggested links				
□ Exercises				
8. Have you used the "chat" option at the platform's chat room?				
□ Yes				
□ No				
9. If you have used "chat", what do you think of this option? If not, why didn't you use				
it?				
10. Would you like to set a specific time and day on weekdays, at which we could				
meet on-line at the platform's chat room?				
□ Yes				

11. If you answered "yes" to the previous question, which day of the week would you		
prefer to do this? (you may fill in more that one days)		
□ Monday		
□ Tuesday		
□ Wednesday		
□ Thursday		
□ Friday		
□ Saturday		
□ Sunday		
12. What time would you like to hold the on-line meeting? (define a range of 2-3		
hours, that would suit you)		
☐ In the morning		
□ At noon		
☐ In the afternoon		
☐ In the evening		
13. Which one of all activities in the course has helped you / helps you educationally		
and why?		
14. Would you like to suggest any further activities for the remaining duration of the		
course?		

15. Does the course meet your expectations?				
□ Not at all				
□ Somewhat				
□ Moderately				
□ A lot				
□ To a great extent				
16. Which educational path, of those you have followed so far, did you like the most?				
□ First Learning Path				
□ Second Learning Path				
□ Third Learning Path				
17. Is the language used in the course comprehendible (in instructions,				
announcements and educational paths)?				
□ Not at all				
□ Somewhat				
□ Moderately				
□ A lot				
□ To a great extent				
18. Do the "announcements" by the course administrators contribute positively to the				
course?				
□ Not at all				
□ Somewhat				
□ Moderately				
□ A lot				
□ To a great extent				

19. You follow the educational paths:					
15. Tou follow the educational paths.					
XX7.41					
□ With great difficulty					
□ With difficulty					
□ Without any particular problems					
□ Easily					
20. The time given to complete the activities of the course is:					
□ Very short					
□ Short					
□ Satisfactory					
□ Very long					
You think that the course's content is:					
Tou think that the course's content is.					
Not interesting at all					
□ Not interesting at all					
□ Somewhat interesting					
□ Interesting					
□ Quite interesting					
□ Very interesting					
22. Would you like to suggest some subjects, which should be included in the course					
before its end?					

23. How would you evaluate the communication with the course administrators?				
□ Non-existent				
□ Insufficient				
□ Satisfactory				
□ Good				
□ Very good				
24. What would you like to change in the course?				
25. Have your thoughts, and your views regarding Roma people changed after				
participating in the course?				
□ Not at all				
□ Moderately				
□ To a great extent				
26. Have your feelings towards Roma people changed after participating in the				
course?				
□ Not at all				
□ Moderately				
□ A lot				
□ To a great extent				

27. Has your attitude towards "different" groups of people changed after participating
in the course?
□ Not at all
□ Somewhat
□ Moderately
□ A lot
□ To a great extent
28. Make comments, suggestions, write anything you wish about the course (contents,
procedure, activities, relationships) and is not included in the questions above:

Questionnaire of the Summative Evaluation

Having walked together on the road of "different" for 4 months, I would like to thank you for your participation in the "A TRAVEL INTO THE DIFFERENT, LACIO DROM!" course. For me, it has probably been the best, most pleasant and creative phase of my course in the composition of my thesis up to today, since I have applied in practice all of my theoretical thoughts, by working with you. Your active participation, your experience, your feelings, your thoughts and reflections, have sometimes confirmed, cancelled, or differentiated, but always contributed creatively to the shaping of the final material, which will be proposed as a model for the training of teachers who will address themselves to special social groups (Roma, immigrants, refugees, imprisoned etc.). Reaching the end of the course, I will ask you kindly to answer the following questions, expressing your own experience from the "A TRAVEL INTO THE DIFFERENT. LACIO DROM!" educational course and your proposals for its improvement. I thank you again. You make a great team!

Question 1: Has this been the first time you participated in an e-learning course?	
□ Yes	
□ No	
Question 2: If no, what kind of a course have you participated in?	
Question 3: What were your expectations from this course?	

□ Not at all
□ Somewhat
□ Moderately
□ A lot
□ To a great extent
Question 6: Was there another subject, which you wanted to be included in the
course?
□ Yes
□ No
Question 7: If to the previous question you answered with a "Yes", which
subject/subjects would you want to have been included in the course?
Question 8: Do you consider that the duration of the educational course was:
m 1
□ Too short
□ Short
□ Satisfactory
□ Adequate
□ Too long

Question 4: To what extent has this course corresponded to your expectations?

Question 9: Which of the course's activities did you like the most?

(You may choose more than one answers)

□ Study of texts
□ Audio files

□ Forums

□ Videos

□ Suggested links

□ Chat

☐ Mailing the course administrators

☐ Mailing the other trainees

Question 10: Which learning path did you like the most and why?

1st learning path (with instructions in Romanic and Greek languages)

2nd learning path (with texts and videos about stereotypes and prejudices)

3rd learning path (with texts and interviews of Roma people about education and school)

4th learning path (the free subject about Roma culture)

5th learning path (Roma interviews regarding stigma)

6th learning path (audio files and humour videos)

7th learning path (dealing with problems which could arise during the educational process)

Question 11: Rank on a scale of importance according to your preferences, the educational paths you have taken:

Match the first column (educational paths) to the second column (your preferences). For the path you liked the most, chose the 1^{st} preference from the second column, for the next one chose the 2^{nd} and so on.

• 1st educational path

A. 1st preference

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•	2 nd educational path	B. 2 nd preference		
•	3 rd educational path	C. 3 rd preference		
•	4 th educational path	D. 4 th preference		
•	5 th educational path	E. 5 th preference		
•	6 th educational path	F. 6 th preference		
•	7 th educational path	G. 7 th preference		
Question 12: In the 4 th educational path you were given the possibility to work in groups. Did you do so?				
□ Yes				
□ No				
2110				
Question 13:	If you did work in groups in the 4 th ed	ucational path, how was your		
	f you didn't work in groups, why not?			
Question 14:	Do you consider that your participatio	n in the course will contribute		
positively to (you may choose more than one answe	ers):		
□ You	r professional life			
☐ To your personal development				
☐ To realising your prejudices and stereotypes				
☐ Your attitude towards special social groups				
□ Your attitude towards different				
☐ Your attitude towards Roma people				
□ Not	hing			
□ Som	nething else			

Question 15: If to the previous question you answered "something else", please define
what that would be.
Question 16: Write down three elements of the course you liked and three you would like to change.
Question 17: Have you realised through the course, the stereotypes and prejudices you had?
□ Yes
□ No
Question 18: If to the previous question you replied with a "Yes", what helped you
the most in realising your stereotypes and prejudices?
(You may choose more than one answers)
☐ The theoretical texts
□ The videos
☐ The Roma people's interviews
☐ The first educational path
☐ The texts you read at the forum
☐ The discussion with the course's administrator
☐ The discussion with the course's other trainees
☐ The texts you wrote about the forum
□ Something else

Question 19: If to the previous question you answered "something else", please define what that would be
Question 20: The comments of the other participants in the forum
(You may choose more than one answers)
☐ Stimulate critical thinking
☐ Helped you to form your opinion
☐ Made you transform your own views, attitudes, behaviours,
☐ Gave you the opportunity to see different views on an issue
☐ Gave you the opportunity to see how different people experience the same issue
☐ Have not affected you in any manner
□ Something else
Question 21: If to the previous question you answered "something else", define what
that would be
Question 22: Do you think that the subjects included in the course would be analysed
and elaborated better in a face-to-face education?
□ Yes
□ No
□ Something else

Question 23: If to the previous question you replied "something else", justify your
answer
Question 24: Did the possibility of walking the educational paths, by taking your time
and the room you needed, ease you?
and the room you needed, ease you:
□ Not at all
□ A little
□ Sufficiently
□ Quite
□ A lot
Question 25: Do you consider that in a face-to-face discussion you could have
expressed your thoughts, feelings and attitudes better than through the possibility
given to you by the course?
□ Yes
□ No
□ Something else
Question 26: If to the provious question you answered "semathing alse" define what
Question 26: If to the previous question you answered "something else", define what that would be.
that would be.

Question 27: Do you consider that within the framework of the course there has been
a feeling of confidence and mutual respect, allowing you to freely express your
thoughts and feelings?
□ Not at all
□ A little
□ Sufficiently
□ Quite
□ A lot
Question 28: Whether you answered positively or negatively to the previous question,
what do you think contributed to this feeling?
Question 29: Did you keep contact with the course administrator by (you may chose
more than one answers):
□ Announcements
□ Mailing
☐ Chats (in Dokeos or in the Facebook)
□ SMS
□ Forums
□ Telephone
□ Other
Question 30: Did the communication with the course administrator play an important
role (you may choose more than one answers)
☐ In solving procedural problems (dates of delivery, on-line meetings)

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☐ In solving technical issues
☐ In the directives of the educational procedure
☐ In understanding educational issues
☐ In resupplying you in regard to the course's issues
☐ In creating a feeling of confidence
□ Other
Question 31: If to the previous question you answered "other", define what that would be
Question 32: How important do you consider the role of an e-learning course's administrator is?
□ Not at all
□ A little
□ Sufficiently
□ Quite
□ Very
Question 33: Do you think that after your participation in the course you will face Roma students in your educational procedure differently than you would if you hadn't participated in it?
□ Not at all
□ Somewhat
□ Moderately
□ A lot
□ To a great extent

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students who are members of special groups differently than you would if you hadn't
participated in it?
□ Not at all
□ Somewhat
□ Moderately
□ A lot
□ To a great extent
Question 35: What do you think that changed by taking part in the course? (You may
choose more than one answers).
☐ Your beliefs regarding Roma people
☐ Your feelings towards Roma people
☐ Your behaviour to Roma people
□ Your views/beliefs on "different"
□ Your feelings about "different"
☐ Your behaviour to "different"
Question 36: Would you feel comfortable and well if people from the Black Sea (you
may choose more than one answers):
□ Were expelled from your country
□ Were only visitors to your country
□ Were citizens of your country
□ Were your colleagues
□ Came to live next door to you
□ Were your best friend
□ Were your relatives

Question 34: Do you think that after your participation in the course you will face

Question 37: Would you feel comfortable and well if Homosexuals (you may choose
more than one answers):
□ Were expelled from your country
□ Were only visitors to your country
□ Were citizens of your country
□ Were your colleagues
□ Came to live next door to you
□ Were your best friend
□ Were your relatives
Question 38: Would you feel comfortable and well if Roma people (you may choose
more than one answers):
 □ Were expelled from your country □ Were only visitors to your country □ Were citizens of your country □ Were your colleagues □ Came to live next door to you □ Were your best friend □ Were your relatives
Question 39: Would you feel comfortable and well if Muslims (you may choose more
than one answers):
□ Were expelled from your country
□ Were only visitors to your country
□ Were citizens of your country
□ Were your colleagues
□ Came to live next door to you
□ Were your best friend
□ Were your relatives

more than one answers):
□ Were expelled from your country
□ Were only visitors to your country
□ Were citizens of your country
□ Were your colleagues
□ Came to live next door to you
□ Were your best friend
□ Were your relatives
Question 41: Would you feel comfortable and well if drug-addicts (you may choose
more than one answers):
□ Were expelled from your country
□ Were only visitors to your country
□ Were citizens of your country
□ Were your colleagues
□ Came to live next door to you
□ Were your best friend
□ Were your relatives
Question 42: Your communication with the rest of the course's trainees was:
□ Non-existent
□ Minor
□ Satisfactory
\Box Good
□ Very good

Question 40: Would you feel comfortable and well if Armenians (you may choose

Question 43: How was your communication with those who had experience with
Roma people and participated in the course (did communication exist, in which ways
was it done, how frequent was it, how was it)?
Question 44: Did you see, study, and reflect upon the material sent by the other
participants in the 4 th educational path?
□ Yes
\square No
Question 45: If to the previous question you answered with a yes, would you like to
make a comment on it? If you answered with a "no", would you like to comment on
the reason?
O
Question 46: Were you overall satisfied with your educational experience from the "A
TRAVEL INTO THE DIFFERENT, LACIO DROM!" course?
□ Not at all
□ Somewhat
□ Moderately
□ Moderatery □ A lot
□ To a great extent

Question 47: Would you like to take part in an e-learning course again?
□ Yes
□ No
□ Other
Question 48: If to the previous question you answered "other", define it
Question 49: Would you like to maintain the Lacio Drom group in Face Book, to have
the possibility of discussing various issues that concern you regarding Roma people
and multinational education after the course's end?
□ Yes
□ No
□ Other
Question 50: If to the previous question you answered "no", why? If you answered
"other", define what that would be.

□ Not at all
□ Somewhat
□ Moderately
□ A lot
□ To a great extent
Question 52: Comment on anything else you would like, that concerns the course and
is not included in the questions.

Question 51: Did you participate in decisions that were important for the educational

Material of the final meeting

Exercise of self-awareness and encouragement:

Every member of the group carried a piece of paper on her back, where every other member of the group wrote her positive thoughts on her personality. At the end each participant could see how her self-perception compared to what the others see in her.





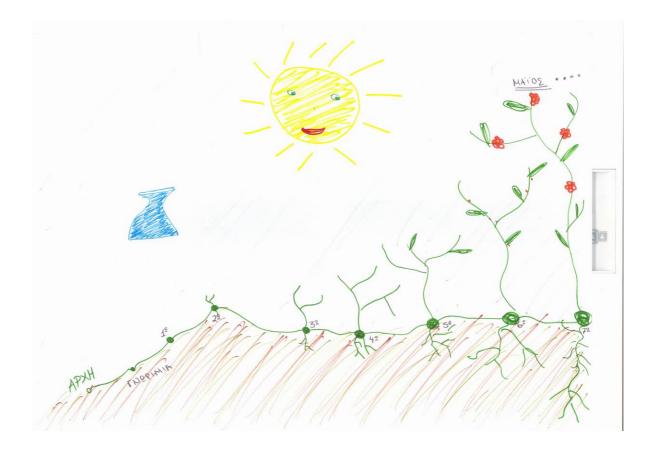
Exercise on the most important milestones in the course:

Each participant has been requested to make a drawing representing the course and mark on it whatever each one considered as a personal milestone.

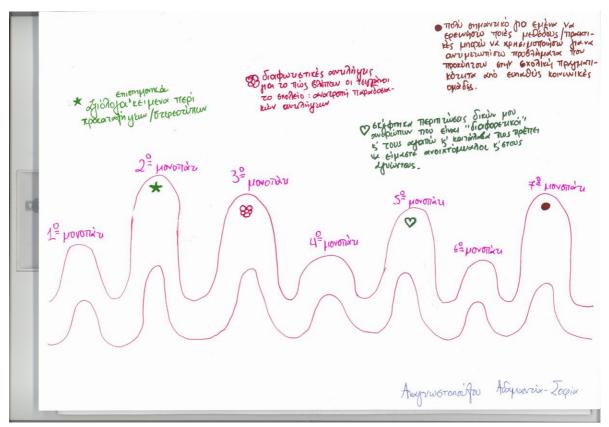


Some of the learners' drawings in this exercise were:

Drawing 1: A plant is seeded at the beginning of the course, growing as the course proceeds and flowers in the end.



Drawing 2: The path of the course has been pictured as a series of bends, like a river, each bend corresponding to a learning path with the ones favoured by the learner (ESG) standing higher and carrying comments.



The comments wrote:

2nd Learning Path: remarkable scientific texts on prejudices and stereotypes.

3rd Learning Path: Enlighting views on how Roma face school; Subversion of traditional views

5th Learning Path: I have thought about people of mine who are "different" and I love them and I understood that we must be openminded even towards strangers.

7th Learning Path: Very important for me to investigate the methods/practices I can use to deal with problems of vulnerable social groups arising in school reality.

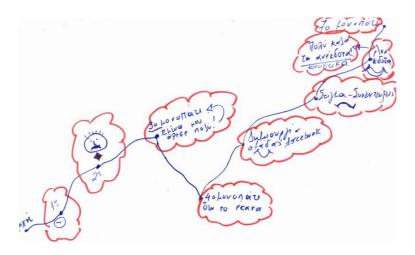
Drawing 3: A road marked with joyful designs (flowers, trees, apples etc) and comments ranging from confusion to laughter.



Drawing 4: A passage through a blossomed field, divided in seven sections, each one containing a reference to sentiments like perplexity, interest and query, surprise, anger.



Drawing 5: An itinerary connecting clouds or balloons with emoticons and comments.



Exercise "The group is over...and..."

In another exercise the participants were requested to express their view on the closure of the group by completing the phrase "the group is over...and..." whichever way they wanted. The participants' contributions were:

"something new will begin..."

"the experience stays deeply carved in our minds and our souls. The prompts are many and so are the feelings. The acquentance of new persons eager to offer knowledge and experience a treasure! Thank you very much!"

"I can't wait to make Roma children feel "special" (in the good sense) this time."

"I feel very happy for working together and all the things I learned through the paths. I am sorry it ends and I hope we don't loose touch, maintaining the group through the Face Book. I had a great time and I learned a lot."

"I feel lucky for experiencing the educational experience we are all etitled to in our times, making the best of new technologies in such an effective way."

"I have been motivated, touched and I shall try to stir the water in the swamp of the educational reality"

"Lots of beautiful images, many new dimensions have been revealed on the issues of the course and new expectations have been born"

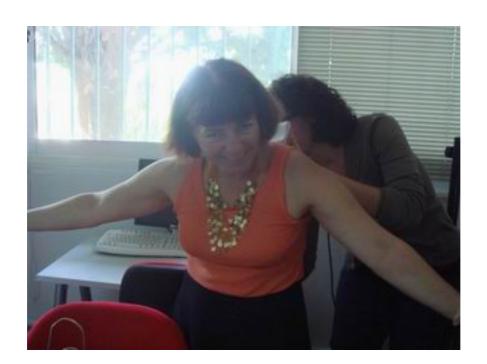
"I wish the group to would continue with the same or different subject"

Photographs of the final meeting



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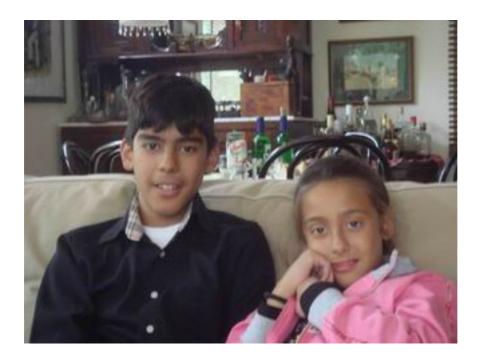




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Photographs with Roma during the preparation of the educational material



The children of the family, Elena and Thanos



The father of the family, Giannis with his children



Maria Pavlis-Korres with grandmother Eleni



Maria Pavlis-Korres with the mother of the family, Maria



Informal conversation before the interviews



Interviewing the father Giannis



Little Elena looks very comfortable and enjoys the whole procedure



Interviewing the mother of the family, Maria



Maria has also helped, speaking in Romanes for the first Learning Path



Grandmother Eleni is smoking a cigarette during the interview

Audio files

Interviews with Roma (in Greek)

Audio file 1: Grandmother on educational experience

Audio file 2: Mother on educational experience

Audio file 3: Father on educational experience

Audio file 4: Boy on educational experience

Audio file 5: Girl on educational experience

Audio file 6: Grandmother on stigma

Audio file 7: Mother on stigma

Audio file 8: Girl on stigma

Jokes on Roma (in Greek)

Audio file 9: Joke1

Audio file 10: Joke2

Audio file 11: Joke3

Audio file 12: Joke4

Audio file 13: Joke5

Audio file 14: Joke6

Audio file 15: Joke7

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Audio file 16: Joke9

Audio file 17: Joke10

Audio file 18: Joke11

Audio file 19: Joke12

Audio file 20: Joke 13