

Adult Education and Lifelong Learning: A Greek Case Study.

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Abstract—The participation rates in adult education in Greece are low in comparison to other European countries. Within the framework of the current research, an effort has been undertaken in order to evaluate the program of training instructors of adults through a distance learning educational program hosted by the GSAE (General Secretary for Adult Education) and the ICAE (Institute for the Continuing Adult Education) in Greece. Among the most important outcomes of this research is considered to be the participants' positive attitude concerning the program in general, as well as the electronic educational material distributed. Furthermore, the hybrid educational process selected for use by the program was thought to be particularly flexible. Regarding the negative aspects of the program, the main problems noted were the fact that certain trainees had to commute from far away in order to participate in person during the scheduled meetings, as well as the technical issues that arose within the e-learning environment.

Index Terms—Adult Education, Evaluation, Hybrid Learning.

I. INTRODUCTION – THEORETICAL BACKGROUND

Nowadays, lifelong learning, adult education and open and distance learning are intertwined. However, few texts attempt to integrate these fields [4], [6], [7]. We understand learning in terms of three basic dimensions: cognition, emotion and environment and we argue that we must take into account the individual and the circumstances at the same time. Learning is a personal acquisition process both cognitively and emotionally and it can also be perceived as a process of interaction between the individual and the environment.

A. Lifelong learning

Nowadays, it is admissible that lifelong learning refers to all types of teaching and includes every kind of learning activity undertaken throughout a person's lifetime. The importance of lifelong learning has been recognized as affecting social and economic issues in Greece [2], [9]. The term "lifelong learning," is used by various supranationally, since the 1960s. Danish adult education, Professor Knud Illeris [14], succinctly summarizes that the term "lifelong learning" reflects the neoliberal economics, political and cultural ideology of economic development, with little attention to the world's inequality, overly exploited natural resources, environmental degradation and health concerns.

According to civil texts lifelong learning mainly refers to activities performed beyond one's compulsory education and has been connected to the need for constant knowledge updating and new knowledge acquisition [2]. As Walters [24] points out, the notion of lifelong learning fits more closely with the market-driven approach to adult education and training that is mainly concerned with economic development. Learning on demand represents the next generation web based oriented virtual learning environment where learning material, which is broken up into specified learning objects, is initially distributed online for regular educational tracks [25].

B. Adult Education

The emerging theories of how adults learn (opposed to how children learn) were subsumed into the term "andragogy" by Knowles [15]. The term refers to the principles of adult learning, in contrast to the term "pedagogy"; which describes the principles of child or adolescent learning [17]. Learning can be beneficial and encourage the involvement of the individual in society. For Illeris, by addressing the issues of inequality, promoting social cohesion through lifelong learning has been an essential subject of inquiry for adult educators.

In 1929, Harvard professor, Alfred North Whitehead, wrote a series of papers highlighting that traditional methods of higher education, such as lectures and readings, are ineffective in teaching a person what to do, how to do it, and when to do it [3]. Knowles [15] mentioned that adults are intrinsically motivated towards learning, but their motivation derives from their need to learn given material related to their adult roles; learning that is imposed on adults will be met with resentment and is minimally effective.

The concept of adult education is more restrained than that of lifelong learning [9]. The main characteristic of groups of adult trainees is that they are not homogeneous in terms of their acquired experience reserves, their personal needs and expectations, their financial and cultural background, their already shaped personality, their interests, but also in terms of capability and learning manners [1], [15]. Many adults have demanding professional commitments and family responsibilities, therefore attending a conventional, full-time, face-to-face course with a fixed timetable is considered to be a rather unrealistic perspective.

Illeris presents the participant perspective as his key tenet [14]. For Liu [21] adult and continuing education has entered into the "Customer Century", and it under-

goes one of its biggest challenges: the traditional sellers' market has been shifted into the buyers' market.

C. *Open and Distance Learning*

Another important notion of great significance over the last years is that of Open and Distance Learning, which concurs to the promotion of flexible forms of learning, education, training and instructing adults [5], [10], [22]. Distance learning is commonly used in contexts where dispersed populations present challenges to traditional classroom-based educational systems [20].

The origins of distance learning lie in correspondence education, but nowadays most distance-learning institutions make extensive use of electronic resources, with course materials provided on CD-ROMs and dedicated websites and tutorial support provided by electronic mail and computer-mediated conferencing [19]. Over the last three decades studies on distance learning within adult education have highlighted not only the benefits, but also the challenges that adult learners face when participating in distance and online educational programs [18].

In Open and Distance Learning the gap separating adult trainees and their instructors constitutes a key element [8] and therefore the importance of the educational material and its outlining style is stressed in order to facilitate the learning procedure.

Researchers in distance education have also been criticized for their unreflective borrowing of concepts and methods from mainstream educational research [6]. Online educational programs have enabled learning opportunities to adults that allow them to break away from space and time constraints [7]. Although a great deal of research has addressed the feasibility of online education and the use of technology within formal educational settings, notoriously little research has been conducted within the professional development environment, that involves training related to the current occupation of the adult learner, as opposed to academic credit courses offered by colleges and universities [4]. Garrison [11] states that the majority of distance educational programs mainly focuses on meeting the educational needs of adults.

Nowadays, open and distance learning should be broadened by some newer approaches such as active learning, social constructivism, active learning and connective learning, which are approaches very much related to adult distance learning [7], [10], [12]. Individual home learners and adult learners at their workplace seem to be a target group, which is becoming the first choice for Open and Distance Learning providers. Distance education helps lots of adults without discriminating between countries or cities, the young and the old, the rich and the poor, where other educational systems fail to fulfill. For distance learning courses high degree of interactivity and engagement are necessary requirements for effective learning by providing a motivating environment on a well-structured knowledge base [23].

In order to support distance learning and collaborative work, various web-based Learning Management Systems (LMSs) have been developed, such as the Web Course Tools (WebCT), the Web Course Homepage System (WebCH), the Blackboard Learning System and the System for Multimedia Integrated Learning (Smile).

LMSs have become popular since they incorporate a suite of functionalities addressed to learners, tutors and system administrators. These functionalities are designed, among other services, to create, deliver and manage learning content, track and report learner's activity and progress, enable synchronous and asynchronous collaboration/communication and provide centralized control to tutors and system administrators [13], [18].

II. THE "DISTANCE LEARNING EDUCATIONAL PROGRAM FOR THE INSTRUCTORS OF ADULTS"

Distance learning can take place over the Internet, in which case instruction and educational contents are delivered via the Internet. Advancements in ICT and the concept of "open schooling" has enhanced educators to respond in unique and creative ways to meet distributed educational challenges and provide high quality educational experiences for children around the world [13].

In 2007 a 100 hour program on training adult trainers was launched in Greece. This program conducted within the framework of the project "Distance Learning Educational Program for Instructors of Adults" addressed executives and instructors, regardless their position, their specification, their thematic field nor their didactic subject, related to the context and the programs effectuated by ICAE (Institute for Continuing Adult Education) supported by GSAE (General Secretary for Adult Education). GSAE of the Ministry of National Education and Religious Affairs is the main institution of adult education in Greece.

The program's general goals were conducting adult education familiar, training educators with wide knowledge on topics, like detecting adults educational needs, designing courses and producing original educational material, evaluating educational programs and trainees, as well as educating adults by using new technologies.

The participation rates in adult education in Greece are low in comparison with other European countries [2]. For this reason the educational method used for the program's realization was some kind of hybrid educational method, combining traditional methods of education - face to face method- and the asynchronous e-learning method based on the internet technology [16]. This distance learning asynchronous method was accomplished through a complete system platform supported by a Learning Management System (LMS). An internationally approved open source platform, called Moodle was used for the asynchronous e-learning method mentioned above. The educational material was presented in this platform and was accompanied by multimedia. Part of the educational material was also a DVD, which consisted of interviews of academics as well as microteaching.

The program included four 25-hours modules, joined by classes throughout Greece:

(a) The first module introduced the participants in notions and issues of adult education, the characteristics of adult learners, the role of the trainer, needs and assessment and theories of adult education.

(b) The second module focused on the group dynamics, the importance of the therapeutic group, the socially vulnerable groups, the initial meeting and the learning contract.

(c) Topics discussed on the third module were the planning and delivery of a course, with modules, such as the learning objectives, the techniques and the delivery means.

(d) The fourth module concentrated on evaluation, techniques and means and self evaluation.

Within every taught module a 5 hour coordinating educational meeting requiring physical presence was scheduled. A 4 hour coordinating educational meeting requiring physical presence took place at the end of the program.

This educational program commenced in November 2007 and was completed by April 2008. Its duration was 100 hours, out of which 76 hours were covered through distance learning and 24 hours through 5 coordinating meetings that required the physical presence of the instructor and the trainees.

III. RESEARCH PURPOSE

This present case study, aimed at investigating the program evaluation process realized within the Region of the island of Crete. A total of 5 classes, each with an average of 30 trainees, were held. More specifically, the requirement was to observe the trainees' attitude instructed on topics related to program organizing, instructor adequacy as well as the overall trainees' attitude towards the program they attended. In addition, an attempt was made to examine the data related to the distance learning system used.

IV. METHODOLOGY

The fundamental methodology tools used within the framework of this present research comprised:

(a) 4 semi-guided interviews addressed to the participants of the program.

(b) Based on the previous interviews an appropriately structured anonymous questionnaire addressed to the participants of the program was formed, which comprised 2 sections.

The 1st section of the questionnaire consisted of 6 questions, mainly related to the participants' personal information. The 2nd section included 7 statements based on Likert's 5 degree scale (1=strongly disagree, 2=disagree, 3= neither agree nor disagree, 4=agree, 5=strongly agree) related to the educational level, concerning the approach used in presenting the new educational material, the organizational level, concerning equipment use, classroom facilities, as well as the technological level, concerning the platform's availability. In addition, 3 open type questions were used in order to investigate trainees' attitude towards the procedure of their evaluation, the quality of the LMS, as well as in order to detect the obstacles the trainees met throughout their training. For the quantitative analysis the SPSS software was used.

Within the current research, a total of 42 individuals participated. Out of whom 27 individuals were women (64.3%) and 15 were men (35.7%). All the participants were active instructors of adults having an average of 4.8 years of educational experience. Regarding the level of studies, the majority of the participants had a higher education degree (19 individuals, 45.2%), 13 of them held a postgraduate degree title (31.0%), 9 of them were

technological university graduates (21.4%) while one individual held a doctor's degree title (2.4%). The sample age varied between 23 and 55 years old - average age 36, with a standard deviation of 6.2 years. The trainees covered a vast spectrum of expertise (literature professors, foreign languages teachers, teaching professionals, physicians etc), while the vast majority of the sample (18 adults, 42.9%) were information technology instructors.

V. RESEARCH RESULTS

Regarding the research results of the 2nd part of the questionnaire at first their reliability was checked by using Cronbach's Alpha reliability coefficient scale. The coefficient was priced at 0.69 and was thought to be a specifically satisfactory illustration of the coherence of the answers. The maximum value for every statements listed below was 5 and the minimum value was 1, the maximum value appearing in the total scale is 35 and the minimum value is 7 (Table I).

TABLE I.
DESCRIPTIVE QUOTIENTS OF THE PROGRAM EVALUATION SCALE

Statements of Evaluation	Descriptive Quotient	
	Average	Standard Deviation
The contribution of the educational material in knowledge acquisition	4.10	0.43
The acquisition and presentation of the digitalized educational material.	3.71	0.54
The quality level of the activities proposed within the educational material.	3.95	0.55
Instructor availability in terms of collaboration and communication.	4.90	0.30
The platform used as the dominant means of communicating with the instructor.	4.21	0.75
The usefulness of the program's group meetings.	4.40	0.70
The quality level of the electronic teaching system used.	4.05	0.91
Total Scale	29.33	2.58

By studying the data presented in Table I it is observed that the participants have developed an unconditionally positive attitude towards the program they have attended - Average, A=29.33 - which is a result of the program's successful design of elements concerning program content, program material, instructive goals, the coherence of teaching units etc. It must be noted that throughout the statements the lowest rate - A=3.71 - was recorded for the statement related to the acquisition and presentation of the digitalized educational material.

This low performance is associated with the participants' remarks during the open type questions regarding the quality of the electronic program management system supported by the Centre of Lifelong Learning through Distance Learning Methods. In detail, the participants pointed out the debility of saving the digital material offered on their computer, something that resulted in users being constantly "online" in order to complete the teaching material study, the lack of capability in posting discussion topics through the platform used, the lack of capability in exchanging views with

trainees from other classes or other regions, the disability of downloading certain multimedia applications as well as the non interactive use of platform which is limited down to reading certain documents in PDF form or the unproductive observation of the multimedia material.

On the contrary, the statement with the highest rate is related to the instructor's availability in terms of collaboration and communication, highlighting the important role held by the instructor in a hybrid program of training adults. In particular, in the case of Open and Distance Learning the instructor constitutes a key element for the learning procedure. Time limitations and the lack of frequent contact between trainees and instructors conduct adult trainees more susceptible, when compared to traditional education students, regarding the possibility of abandoning the study program at an early stage. Open and Distance learning demands equal communication paths between trainees and instructors [8].

Therefore, it appears that the instructor's presence is highly valued for an important number of trainees [12]. The role of instructors of adults in open and distance learning is to operate as a facilitator within the learning procedure and at the same time becoming a consultant for adult trainees [17], [20]. The participants, when addressed the open type question regarding the program evaluation procedure, - ex. quality of assessment, level of difficulty, time framework, deadlines, marking scheme, deficiencies etc - commented that quite often the assessment outlines were non comprehensible and the delivery was thought to be not well stated and relatively obscure.

According to trainees the restraint concerning word limits posed on assessments was not appreciated since they estimated they were capable of developing the subject in question in less or more words, while the marking scheme, on the other hand, could be more extent in order to ensure a larger diversification of marks. To conclude with, trainees pinpointed that the general framework of the evaluation process, as organized and delivered, did not require hard studying in order to respond to the assessment tests.

The assessment submission time framework was reasonable, non stressful and assisted to the understanding and examining in depth the educational units. Furthermore, the participants, when questioned about the weaknesses of the program, underlined the difficulty many of the participants faced because they had to commute from far away in order to attend the scheduled meetings. This was often the reason why participants had a negative attitude during the-meetings.

A negative comment also incurred regarding the conditions met during these meetings that concerned material and technical means - classroom video and sound equipment, low speed internet access, insufficient number of computers. Furthermore, when asked about the educational material used for the program, the participants replied that although the distributed material was understandable, they highlighted the fact that the texts were rather dense and included many activities.

Besides, as noted by 30% of the trainees, there were many common elements between the distributed educational material and the one used for their certification

through the EKEPIS (National Accreditation Center for Continuing Vocational Training) to such a degree, they were tired of practically studying the same topics. In addition, they indicated that more tutorial classes should be included. EKEPIS is a statutory body supervised by the Greek Minister of Employment and Social Protection with administrative and financial autonomy.

VI. ADDITIONAL STATISTICAL ANALYSIS

Within the framework of supplementary statistical analysis the influence of trainees' sex through the program evaluation procedure was investigated. By applying the "t" criteria to the independent sample data acquired by the 7 elements total scale presented in the 2nd part of the questionnaire, it was concluded that there is no correlation between the trainees' attitude towards the program they attended and their gender [$t(40)=-0.99$, n.s].

In order to examine the correlation between trainees' profession and attitude towards the seminar the sample was divided in two large categories, the first included graduates from the exact sciences stream - information technology, physics etc - and the other graduates of pure sciences stream - philosophy, foreign languages, mentoring etc. By the use of single path float analysis, the outcome extracted was of insignificant value. Therefore, the argument stated is that the trainees' profession does not influence their attitude towards the instructive program [$F(1.40)=2.00$, n.s]. Additionally, the trainees' attitude towards the instructive program did not appear to be influenced by or correlated to the instructors' demographic characteristics, such as their educational level [$F(3.38)=1.95$, n.s] and their age [$F(3.38)=0.24$, n.s]. Finally, by using Pearson's correlation indicator "r" neither the years of teaching experience [$r(42)=0.16$, n.s] influenced their attitude towards the program.

VII. DISCUSSION – FURTHER ANTICIPATIONS

Adults are autonomous and self-directed. They need to be actively involved in their own learning process, motivated and persuaded of the value and relevance - to them as individuals - of what you aim to teach them. The participation rates in adult education in Greece are low in comparison to other European countries [10], [12]. Within the present research, the intention was to investigate trainees' attitude towards the distance learning program they attended. Trainees' attitudes are particularly important, primarily because they are also active instructors of adults and secondly, because the innovative teaching method, applied to the program, constitutes a template for future training programs.

Educational programs targeting adults need to consider their goals, past life experiences, intrinsic and external rewards from learning, needs for positive reinforcement and practical concerns about how they can apply new knowledge in practice. Adults need to understand the purpose or meaning of learning the required information and how that knowledge relates to their own lives. Knowles [15] claimed that adults are intrinsically motivated towards learning, but that motivation is premised on their perception of the need to learn given material in relation to their adult roles.

The outcomes of this research are particularly encouraging. The majority of trainees expressed a positive

view towards the program, while their overall participation was evaluated positively. More specifically, the trainees expressed a particularly warm reception towards the learning material, multimedia presentation, the capability of studying in a desired place and within a time framework and the interaction with other users through the platform by message exchange.

Furthermore, the fact that their attitude is not influenced by their previous experience in instructive programs encourages the effort of effectuating similar programs in the near future, involving geographically remote areas or disadvantageous areas and including individuals not necessarily experienced on training adults. This way, the program will be established as ideal for training new instructors in educating adults.

However, despite the positive elements of the program, it is important to report a sequence of problems encountered and related to the limitations met by these kinds of programs. These limitations primarily focus on technical issues raised within the e-learning environment, lack of appropriate material and technical equipment in the teaching premises used, and the inadequacy of the Adult Training Centers to fulfill this need. The distance certain trainees had to cover in order to attend the face-to-face meetings was thought to be an important disadvantage, that substantially discredited the flexibility of the program, as well as the teaching and learning pattern promoted by an instructive program based on the principles of open and distance learning. This element often intensified tension during meetings.

Based on the findings presented in this current research the new perspective offered in applying this program on a larger scale is important. Results are positive and depict that, although considerable issues must be taken into account for such approaches to be efficient, there is a growing interest for the potential learning outcomes of such a method.

Adults do not want their time wasted [9], [12]. They demand learning to occur at a time and a place convenient to them, in a format and a pace acceptable to their learning style. They should be engaged with the topic through interactivity and sensory stimulation. People with different learning styles need varied teaching methods [18]. Old-fashioned teaching methods, stand-up lectures studying on their own, are not sufficient for today's adult learners [7], [9], [15].

Nevertheless, many challenges for the implementation of lifelong learning remain. The motivation of adults learning through distance education is one of the most difficult cases for the design of effective learning experiences [17]. Training adults alone cannot induce worldwide changes. Well-informed and more knowledgeable citizens are better equipped to take responsible and effective action on their own behalf.

However, adult training is likely to enlighten human beings by offering them the perspective of a better life. Jean Jaurés stated in 1888 that nobody teaches neither what he wants, nor even what he knows or thinks he knows. One teaches only what he is.

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