



# MULTILINGUAL ACADEMIC JOURNAL OF EDUCATION AND SOCIAL SCIENCES



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To Link this Article: <http://dx.doi.org/10.6007/MAJESS/v1-i2/457>

DOI: 10.6007/MAJESS/v1-i2/457

*Received: 04 September 2013, Revised: 24 October 2013, Accepted: 08 November 2013*

Published Online: 18 November 2013

In-Text Citation: (Tsoutsa et al., 2013)

To Cite this Article: Tsoutsa, S., Kedraka, K., & Papastamatis, A. (2013). Secondary education Greek philologists as adult learners on ICT. *Multilingual Academic Journal of Education and Social Sciences*, 1(2), 91–106.

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Vol. 1, No. 2, 2013, Pg. 91 – 106

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# MULTILINGUAL ACADEMIC JOURNAL OF EDUCATION AND SOCIAL SCIENCES



## Secondary Education Greek Philologists as Adult Learners on ICT

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### Abstract

The aim of this study is to investigate the knowledge, skills and attitudes acquired by a group of secondary education teachers, called philologists in Greek, of the Prefecture of Kavala in Northern Greece after their training (B-Level) in the course: "Training Teachers to the Use and Exploitation of ICTs in Educational Process", offered by the Greek Ministry of Education. Specifically, the training course objectives are to determine whether there are changes in their way of teaching, due to the adult learning process they have followed, and also to identify the factors philologists believe that affect the use of ICT in their teaching practice. Qualitative research was conducted using focused interviews as the main tool. Additionally, two diaries were used, the informants' and the researchers' diary. The sample was eight philologists who successfully attended this training course and they taught at Kavala's secondary education schools. Content analysis was chosen for data processing. The findings showed that the trained philologists acquired new knowledge and skills and cultivated fresh attitudes on the pedagogical use of new technologies. However, factors that might hinder the use of ICT (such as conflict with traditional teaching strategies, poor equipment, etc.) combined with the lack of feedback, led some of them reduce or even abandon the use of ICT in the classroom, which underlines the necessity of a strong follow-up process.

**Keywords:** Secondary Education Teachers' Training, ICT, Adult Learning, Follow-up.

### Introduction

During the 20<sup>th</sup> century the rapid development of ICT and their penetration into every workplace, has modified the way people work, communicate and interact with each other

on an interpersonal or group level –therefore explore, process and present information- (Jimogiannis & Komis, 2004). Eventually, ICT impacted every area of human activity; therefore, education, too. In the last few years, the new technologies have been integrated in the Greek educational system mainly through the enhancement of technological equipment in schools and the introduction of educational projects in the teaching process.

The most extensive training on ICT in Greece was held from 2002 to 2005 within the project: "Training teachers in the use of Information and Communication Technologies (ICT) in education, "known as "A-Level Training." The years 2006-2008 this educational effort was continued with the project: "Training teachers of primary and secondary education in basic ICT skills." The goal of these projects was the cultivation of basic handling skills on basic ICT tools such as word processor, spreadsheets, etc. However, they lacked emphasis on the pedagogical use of ICT, which could facilitate the collaborative and student-centered learning.

### **Theoretical Framework**

Most of the studies conducted to evaluate the results of these projects concluded that secondary education teachers, even if they had a positive attitude towards new technologies, continued to use them in a limited, traditional teacher-centered way and they didn't use them to enhance pupil centered-learning. This may happen due to many

The term "philologists", as it is used in the Greek educational system, means secondary education teachers that teach several courses (history, Greek modern and ancient, literature, ancient Greek literature, Latin, philosophy) depending on the needs of their school. Because the term is strongly connected to the literature

culture of Greece, we don't think that any other term is proper, so for the understanding of this study we will call this group of teachers "philologists".

factors depending on the school unit, its culture and its equipment; the teachers' attitudes; the students' response; the course; the pedagogical framework and the lack of training in the pedagogical use of ICT (Bullock, 2004; Cox, Preston & Cox, 1999; Drent & Meelissen, 2008; Kotzabasaki & Ioannidis, 2004; Papanicolaou & Jimogiannis, 2005; Jimogiannis & Komis, 2004; Jimopoulos, 2003; Fachantidis, Christoforou, & Pnevmatikos, 2004). As the integration of ICT in the educational process means that significant changes should be adopted within the teaching strategy, the lack of training concerning the pedagogical use of ICT appears to be an important factor preventing secondary education teachers to use ICT in their lessons. By the term "using ICT in a pedagogical way", we mean that new technologies are used in a way that collaborative and interactive learning is enhanced in a student centered environment and the traditional role of teacher is being transformed. Teachers become students' assistants and inspiring instructors rather than knowledge transmitters. At the same time the student's role is changing as well: from a passive receiver becomes an active partner in the learning procedure. Students are encouraged to approach knowledge and skills in a constructive manner by taking initiations and collaborating with each other. Traditional teaching methods and learning environments change as well; ICT in teaching means that we can approach knowledge through internet, use e-books and interactive whiteboards. As a result, teachers' training in the pedagogical use of ICT appears to be essential

(Giavrimis, Papanis, Neofotistos & Valkanos, 2010; Koustourakis & Panagiotakopoulos, 2008; Papageorgakis, Pliasa & Georgakouda, 2011).

The training course: "Training teachers on using ICT in Education Teaching Process" - also known in Greece as "B-Level training on ICT"- aims to incorporate those elements. It started in 2008 and it is a 96 hour training program trying to include all Greek teachers eventually. Its objectives are two-fold: first, teachers should become familiar with the principles of pedagogical use of ICT and secondly they should acquire skills according to their specialisation, so that they will be able to use educational software and general tools (e.g. office software) in order to improve the teaching quality. Therefore, it would be interesting to evaluate the project effectiveness after a certain period of time, so as to verify the impact of its objectives by examining the possible changes in the teachers' teaching practices after their training.

The follow-up evaluation is probably the most appropriate way to estimate the actual impact of any training course (Ayers, 1989), because it is a process of gathering data after its implementation. Data is often collected months or even years after the completion of the course and its analysis is possible to lead us in conclusions about the overall success of the program (Conway-Dessinger & Moseley, 2004). Follow-up should provide answers to complex questions, such as "are the participants implementing the knowledge, attitudes and skills learned in the real world?" or "what problems have they encountered?", and therefore it is necessary to collect data from various sources (Greer, 1992). Typical tools that might be used include questionnaires, interviews, observers' guidelines and checklists, or discussions (Ayers, 1989). The importance of a follow-up evaluation in adult education is significant, as it aims to assess whether the participants of the training course practically use what they have learned and how. Furthermore, in adult training projects, its role is crucial because a 'de-learning' process is needed, considering that they have already built a norm model of teaching and have developed standard teaching strategies. It is considered a painful process which may lead to a more critical and 'adult' way of learning (Mezirow, 1990; Rogers, 1999). As pointed out by Joyce and Showers (2002), in addition to the theoretical training, the educational programs for teachers should focus on practice in real or simulated situations, providing feedback of the performance and help in the class, in order to be effective. In our case, although the importance of a follow-up process is clear, unfortunately, no follow-up and/or feedback process has been proposed by the Ministry of Education regarding the project "Training Teachers to the Use and Exploitation of ICTs in Educational Process" (B-Level).

### **Literature Review**

Limited studies concerning the results of "B-Level" training course have shown that the initial intentions of secondary education teachers to use ICT in a pedagogical way do not come true. Even after their training, they mainly use new technologies as a presentation tool or as a preparation medium and they avoid taking innovative actions by creating lesson plans for teaching with ICT (Karabinis, 2010; Trapsioti, 2010). Even if secondary education teachers changed their attitude towards new technologies, there was not any significant transformation of their teaching behavior. This fact confirms the findings of relevant studies, according to which the understanding of the relevant theory and the change of teachers' attitude do not necessarily mean changes in their teaching behavior (Papastamatis, 2010). It seems that the lack of well-articulated educational objectives plays a significant role as well (Pelgrum, 1997; Vosniadou,

1997). Literature reveals the same conclusions concerning philologists in Greece after their training in B-Level training course. However, it is worth noting that these few studies conducted immediately after the end of the course, showed that the attitude of philologists was positive towards ICT, they intended to use new technologies in classroom and they felt having the knowledge and skills to do it (Zetta, Papakonstandinou & Apostolidis, 2008; Karabinis, 2010).

Taking into consideration that this training program is still taking place for Greek secondary education teachers and therefore it could still be improved, it would be useful to examine whether the trained philologists use new technologies to improve the quality of their teaching, in which way they use new technologies and if the way they use it depends on their specialisation. It is even more interesting to investigate whether this training has enhanced the implementation of ICT in history, language and literature courses. As we have already mentioned, Greek teachers called "philologists" teach several courses (history, Greek modern and ancient, literature, ancient Greek literature, Latin, philosophy) depending on the needs of their school. Due to their multiple areas' specialty, philologists have to work hard for the preparation of their courses; therefore, they face new technologies as an additional work load (Matos & Chronaki, 2009).

Furthermore, ICT was not a course they were taught during their university studies and they feel insecure using it and they believe that their school courses are not easy to be taught by using the tools of new technologies (Matos & Chronaki, 2011). We, finally, have to take into consideration a sub-culture that has been growing in Greece the last years: behind the lines, we would say in the Greek non formal educational culture and norms, philologists tend to be reluctant to get involved with ICT, because they believe it is a new scientific area, completely far from their expertise, where, on the other hand, maths and science teachers think it is closer to the nature of their specialty and therefore seem more eager to incorporate it to their teaching (Matos & Chronaki, 2009; Jimogiannis & Siorenta, 2007).

### **Aim of the Study and Research Questions**

Thus, the aim of this study was to investigate in what way(s) knowledge, skills and attitudes acquired by philologists of the Prefecture of Kavala, after their training in B-Level training course: "Training Teachers to the Use and Exploitation of ICTs in Educational Process" affect their teaching methodology. Its objectives are to determine whether there are changes in their way of teaching, due to this training and also to identify the factors that philologists believe that affect the use of ICT in their teaching practice. It is noted that Kavala is the second largest prefecture in Northern Greece after Thessaloniki. Its population is about 150.000. In the prefecture of Kavala there are 268 philologists and about one third of them attended the course "Training Teachers to the Use and Exploitation of ICTs in Educational Process" in the past.

Four key questions were formed concerning the philologists of the prefecture of Kavala that participated in the B-level training:

1. Has any ICT knowledge been acquired by philologists that could assist them in using ICT in their courses?
2. Which ICT skills philologists have developed during their training in B- Level so that they can use ICT in their lessons?
3. What attitudes -concerning the use and exploitation of new technologies in their teaching process- have philologists developed, after their training in B- Level?

4. Which factors are related to the actual use and utilization of the ICT by philologists in teaching process, after their training in B- Level?

### **Methodology**

This research is a case study on a limited number of philologists who were trained during the last 3 years in the ICT training project by specialty "Training Teachers to the Use and Exploitation of ICTs in Educational Process" (B- Level) addressed to Greek secondary school teachers. It was conducted in 2012 in Kavala. Qualitative research was chosen because as a method allows deeper analysis and interpretation of situations, events, behaviors or experiences (Kedra, 2008).

### **Data Collection Methods**

For data collection three tools were chosen:

- a) The unstructured but focused *interview* was chosen for the investigation of the first three research questions, as this kind of interview questions can change depending on the way each person responds but also reduces the risk that the interviewer will fail to gather the necessary for the research information. For the fourth research question *unstructured and non directed interview* was chosen as the researchers expected to illuminate the causes of the discrepancy revealed in many quantitative researches, between the intention of philologists to use pedagogically ICT in their teaching and the non-confirmation of their intention in action. Thus this kind of interview considered to be more adequate as it allows the interpretation of phenomena by the respondents themselves (Tsourvakas, 1997).
- b) The *informants' diary* was chosen because it allows researchers to gather data on situations they cannot be eye witness, such as in the classroom during a lesson (Faulkner et al., 1999).
- c) The *researchers' diary (journal)* was chosen because it enables researchers to capture emotions and nonverbal reactions of the respondents and to write down their thoughts and personal feelings, which they can later use during the data analysis of the interviews (Altrichter, Posch & Somekh, 2001).

### **Data Collection Techniques**

- a) An "Interview Guide" was designed which included a question- starting point for each research question.
- b) An "Informants' diary" was designed which included close-loop questions concerning the frequency and manner of use of ICT and open-loop questions demanding a brief description of the teaching process. The notes should be kept in chronological order.
- c) The "Researchers' diary" was rough notes after the end of each interview.

### **Sample**

Through targeted sampling, the sample of this study was 8 philologists that have attended the training project at different periods of time between the years 2008 - 2011. Each one of them had been successfully certified through an evaluation process, which followed after each training course that took place between 2008 and 2011. The philologists were chosen according to some criteria: their personal relationship to the researchers (so they would easily collaborate and open-up during the interviews) and their interest on ICT. Seven of them are women and one is man,

and their age is between 39-46 years old. Some of them preferred to be anonymous, so in this study they are noted as T1, T2 etc.

### **Data Collection Process**

In the beginning of February 2012 all research participants were personally approached in face to face meetings with the researchers, they were informed about the study and agreed to take part in it. Then, they received by email the "informants' diary" for the period 6/2/12-17/2/12 along with instructions. All interviews were held between mid February and March 2012, after a pilot one. After each interview, rough notes were being kept concerning the interview process and things often said after the recording device were off.

### **Data Analysis**

Content analysis was used as a data processing method and the phrase was chosen as the unit of analysis, because it is an element in the Greek language that bears meanings. Four main content categories were created, each one with subsections:

*Knowledge*, acquired by philologists after their training. Subsections: internet-websites, lesson plans especially made by teaching with ICT, educational software and tools relevant with their specialty, web 2.0 (social networking, blog, wikis etc.), collaborative learning with ICT, windows, office tools and multimedia.

*Skills*, acquired by philologists after their training. Subsections: internet-websites, lesson plans especially made by teaching with ICT, educational software and tools in accordance with their specialty, web 2.0, ability to use ICT, use of computer lab, windows, office tools and multimedia.

*Attitudes*, developed by philologists after their training. Subsections: ICT and effectiveness in teaching, ICT as a teaching media, frequency of using ICT, ICT and changes in teacher's role, ICT and subject subcultures, ICT and history, language, literature.

*Factors*, affecting philologists in the way and frequency they use ICT in their courses. Subsections:

1. Factors concerning school. Subsections: conditions in the computer's lab, the school's culture, the school director's attitude, the existing ICT equipment.
2. Factors concerning students. Subsections: knowledge on using ICT, familiarity in using ICT as a pedagogical tool, response by the students.
3. Factors concerning philologists. Subsections: teaching's preparation time, conflict with teaching's habits and existing values, motivation, knowledge on using ICT, familiarity in the use of ICT, personality of the teacher and teaching model that teachers already follow.
4. Factors concerning the educational material (e.g. educational software, lesson plans and so on) and the course. Subsections: discordance with the curriculum, access to educational software and websites, variety of courses to teach.

### **Results**

#### **ICT Knowledge that has been Acquired by Philologists**

The research results reveal changes in knowledge the philologists noted they acquired from their training (see Table 1), so that they can implement ICT in their class courses. This is consistent with the results of previous papers (Zetta et al., 2008; Karabinis, 2010).

**Table 1.** Change in knowledge acquired in training (Y= yes, N= no) (according to the statements of philologists in the interviews).

Knowledge mentioned by philologists	T1	T2	T3	T4	T5	T6	T7	T8	total
internet-websites	Y	Y	Y		Y	Y	Y	Y	7
lesson plans for teaching by ICT	Y	Y	Y	Y	Y	Y	Y	Y	8
web 2.0 (social networking, blog, wikis e.t.c)	N	Y			Y		N		2
collaborative learning with ICT	Y	Y		Y	Y	Y			5
office tools - multimedia			N			Y			1
educational software and tools relevant with their specialty	Y		Y	Y	Y		Y		5

#### ICT Skills that have been Acquired by Philologists

The philologists who took part in our research mentioned that they developed skills which helped them use ICT in their courses (see Table 2). This is consistent with the results of previous papers (Zetta et al., 2008; Karabinis, 2010).

**Table 2.** Change in skills acquired in training (Y=yes, N=no) (according to the statements of philologists in the interviews).

Skills mentioned by philologists	T1	T2	T3	T4	T5	T6	T7	T8	total
internet-websites	Y		Y						2
lesson plans for teaching by ICT				Y	Y	Y		N	3
web 2.0 (social networking, blog, wikis etc.)	N	Y		Y			Y		3
use of computer lab	N	Y	Y	N		Y	Y		4
office tools – multimedia	Y		Y	N		Y	Y	Y	2
educational software and tools relevant with their specialty	N				Y	Y			5
ability to use ICT	Y		Y	N		Y	Y	Y	5



### Attitudes -concerning the use and Exploitation of New Technologies in their Teaching Process- that Philologists Developed

Philologists' attitude towards use and exploitation of ICT in the classroom changed as well, after their training (see Table 3). We could say there was a change in the way they used new technologies in the classroom, which was noted in the "informants' diary" and in the "researchers' diary" as well. According to the "informants' diary" all philologists used ICT during their courses, whereas before their training most of them did not use ICT at all. Furthermore, they used new technologies not only as a presentation tool but also as a pedagogical learning tool that enhanced collaboration between students (see Table 4). According to the "researchers' diary" all philologists after their interview process had ended, continued talking about the use of ICT in classroom, which reveals their real interest on this matter. But some of them seemed to use new technologies more as a presentation tool due to various factors that they were unable to handle. Indicatively, some philologists mentioned:

**T6:** "...students are not familiarized with this way of teaching (by ICT)...they are used in the traditional way..."

**T8:** "...it is difficult for me to find or to create educational material for my course every time that I have to teach a lesson..."

**Table 3.** Number of times philologists use ICT in classroom (according to "informants' diary")

Date	T1	T2	T3	T4	T5	T6	T7	T8	Total
6/2	1	0	0	1	0	2	0	1	5
7/2	2	1	2	1	1	0	3	0	10
8/2	2	0	1	1	1	0	0	1	6
9/2	1	1	1	1	4	0	0	0	8
10/2	1	0	0	1	1	0	0	2	5
13/2	1	0	3	1	3	1	0	1	10
14/2	2	1	0	1	0	1	0	0	5
15/2	2	0	3	1	2	1	0	2	11
16/2	0	0	2	1	2	0	0	0	5
17/2	1	0	0	0	0	1	0	1	3
Total	13	3	12	9	14	6	3	8	68
Days that they didn't use ICT	1/10	7/10	4/10	1/10	3/10	5/10	9/10	4/10	
Days that they didn't teach at all	1/10	0	3/10	0	0	0	0	0	
Frequency of ICT use during observation days	100%	30%	86%	90%	70%	50%	10%	60%	

**Table 4.** Way and times of using ICT: presentation or pedagogical learning tool (according to “informants’ diary”)

Way of using ICT	T1	T2	T3	T4	T5	T6	T7	T8	Total
As presentation tool (courses)	13	1	4	1	2	5	3	8	37
As pedagogical learning tool (courses)		2	8	8	12	1			31
Total	13	3	12	9	14	6	3	8	68
% of use as presentation tool	100%	33%	33%	11%	14%	83%	100%	100%	54%
% of use as pedagogical learning tool	0%	67%	67%	89%	86%	17%	0%	0%	46%

These findings contradict the findings of previous studies according to which secondary education teachers and among them philologists, mostly use new technologies as presentation tool and not in a qualitative pedagogical way (Karabinis, 2010; Koutsogiannis, 2007; Trapsioti, 2010). By the term “presentation tool” we mean that new technologies are used as a means to present information in a teacher centered learning environment and by the term using ICT in a pedagogical way we mean that new technologies are used in a way that collaborative and interactive learning is enhanced in a student centered environment. An interpretation for this contradiction could be the wide spread of ICT the past few years; therefore the familiarization of philologists with new technologies. Furthermore, we could assume that the previous training projects offered to secondary education teachers by the Ministry of Education had an impact on philologists’ attitude towards ICT and its use in classroom.

The majority of philologists in this study declared that they considered new technologies as an effective teaching tool for their lessons but they doubted the daily ICT use for teaching modern and ancient Greek language would be effective. According to their opinions, a teacher should use many teaching strategies and not only ICT in his/her courses. If not, problems could arise regarding the curriculum:

**T2:** “...yes I feel that my role as teacher has changed. We do not consider anymore ourselves as authorities in our subjects and this is how it should be...”

**T6:** “...I think that using ICT in my course helps students to assimilate the new knowledge better and more pleasantly...”

...How someone can teach grammar and syntax with the use of ICT? On the contrary, why shouldn’t we use new technologies in every history course?”

**T4:** “...even the most interesting teaching method, when it becomes a routine, it becomes boring for students, I am afraid...”

The above statements are in agreement with the results of previous studies concerning secondary education teachers of every specialty and among them philologists

(Giavrimis et al., 2010; Koustourakis & Panagiotakopoulos, 2008; Koutsogiannis, 2007; Kyriakidi & Xeni, 2010). Secondary education teachers believe that their lessons most probably become more interesting by using ICT but they doubt ICT is the best solution to all teaching problems. On the other hand, the findings of our study contradict the findings of previous studies that claimed that the use of ICT is negatively relevant to the specialty of 'philologists' (Goufas, 2007; Jimogiannis & Komis, 2004). Most of the philologists who participated in our study considered that their specialty was not an important factor that could hinder them from using ICT in their lessons.

**T5:** *"... there was a stereotype that a philologist is not good in using new technologies, but I believe that is not true anymore..."*

We could explain this, if we take into consideration the impact of new technologies in everyday life, so nowadays more and more people (among them the philologists, too) daily use new technologies and they have got familiarized with them (e.g., they have cell phones, emails, they use e-banking services, they are e-shopping etc). It is also worthy to note that most philologists in this study during their interview or immediately after the end of it, mentioned that ACT seemed to be an answer to the need of cooperation with their colleagues. As it is noted in the "researchers' diary" **T2** created a blog intending to improve communication and exchange of creative ideas, **T8** considered the cooperation among philologists mostly important, so that everybody could improve his work with the help of the others. Some of the philologists also mentioned how important it was the help of their school director, their ICT lab's responsible teacher and their educators in the training course. On the other hand, some others declared their disappointment of being not helped when they met difficulties:

**T4** *"...it makes me feel weak, when I have to work in the lab without the help of the lab's responsible teacher..."*

**T1** *"...the first months after my training, I was more willing to implement my "new knowledge". But this has changed, because in my first tries to use ICT in my course, I had faced many problems and had no help from the director or my colleagues and that has disappointed me ..."*

### **Factors that are Related to the Actual use and Utilization of the ICT by Philologists**

The findings of this study reveal that many factors hinder or enhance philologists in their using new technologies in a pedagogical way. These are factors concerning the actual school unit (conditions in the computer's lab, the school's culture, the director's attitude, the access to the equipment), students (knowledge on using ICT, familiarity in using ICT as pedagogical tool, response of students), themselves as teachers (preparation time, conflict with existing values, motivation, knowledge on using ICT, familiarity in the use of ICT, personality of teacher and teaching model that teachers already follow) and educational material and the teaching subject (discordance with the curriculum, easy access of relevant educational software and websites, great number of teaching subjects). These findings are in agreement with the findings of previous studies which pointed out that there are various factors that interfere with the use of new technologies in classroom (Bingimlas, 2009; Bullock, 2004; Chen, 2001; Drent & Meelissen, 2008; Jimoyiannis, & Komis, 2007; Giavrimis, et al., 2010; Kyriakidi & Xeni, 2004; Liakopoulou, 2010; Bikos & Tzifopoulos, 2011; Jimogiannis & Siorenta, 2007).

### **Validity and Reliability**

The researches implemented triangulation by using three data collection methods so as to cross-check data from various resources. A pilot interview was conducted, which led to the improvement of the “interview guide” as a tool, so it became more compatible to the aims of the research. The researchers tried to avoid personal interference during the interview process, adopting the appropriate interview skills (Kedracka, 2008). Finally, philologists were asked to check the reliability of the interview parts the researchers had used.

### **Research Restrictions**

The qualitative research was restricted in terms of time; therefore the “informants’ diary” and the number of the participants were limited. Furthermore, the “informants’ diary” was restricted through close-loop questions, and finally, the possibility of philologists’ behavioral change during diary completion period could not be checked (Bell, 1997).

### **Conclusions and Future Perspectives**

The philologists who participated in this study after their training on ICT through the seminar: "Training Teachers to the Use and Exploitation of ICTs in Educational Process B-Level" seemed to have acquired significant knowledge, elaborated skills and changed their attitude towards using new technologies in a pedagogical way during their lessons. All of them were willing to implement what they had learned and all of them tried to change their everyday method of teaching, so that they would incorporate ICT in their courses in both ways: as a presentation and as a qualitative learning tool. As they tried to implement ICT in their courses, they encountered difficulties due to many factors that hindered their efforts and determined the frequency and the way they were using new technologies in their courses. Some of them were disappointed but they continued trying to teach with the ICT use, even if they felt better prepared to teach in a traditional way. Some of them either rarely used ICT or they continued to use technologies only as presentation tool.

But, no matter whether and how they used ICT in classroom, it seems that they were in need of support and feedback. These elements are necessary after every educational process in adult education: the philologists who participated in this study faced problems and they needed help, encouragement and coaching. Additionally, philologists reconsidered many aspects of ICT as they were incorporating ICT in their lessons. All these led us to the conclusion that a follow-up research, which was not offered by the actual training project, could lead in the improvement of teachers’ practice and the development of new resolution in problem strategies. A feedback provision should be offered as well. This could be done through a systematic communication with the educators of the seminar or through Mentoring, designed and applied by the training project (cf. Herman and Mandell 2004; Minton 2005). Reconsideration could be enhanced through various practices: philologists for example, could often meet in groups and share good practices, lesson plans for teaching with new technologies, or they could exchange educational visits with their colleagues in their classroom and attend their lesson, so as to discuss afterwards suggestions that aim to improve their teaching strategies. New research could help to implement an effective design of follow up processes for this kind of training seminars.

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