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Distance Teacher Development in ICT. A Case in Pilot Experimental Schools in Greece

BİT Alanında Öğretmenlerin Uzaktan Gelişimi: Yunanistan'da Pilot Uygulama Olan Deneysel Okullar Örneği

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Abstract
This research aims to present a teacher development program on new technologies in education delivered for the first time ever to professionals working in Experimental Schools around Greece and also examine, among others, teachers' motives of participation in professional development programs, their skills and attitudes towards using technology in education, methods of learning and communities of practice. The paper includes a description of the program and links to the material used are provided. Quantitative methods of analysis were employed; two online questionnaires. However, a qualitative methodology was also employed supplementary, drawing material from the forum discussions. Overall, all stages of the professional development program were highly successful. The findings of the research highlighted the fact that participants are motivated mainly by their own personal interests and incentives of professional advancement, they prefer blended learning and group work publicly available, they take up challenges and are eager to explore new tools.

Key Words: Professional development, distance learning, dxperimental schools, new technologies

Öz
Bu araştırma, Yunanistan'daki deneysel okullarda çalışan öğretmenlere ilk kez uygulanmış ve eğitimde yeni teknolojilere yönelik olarak öğretmenlerin mesleki gelişimleri için hazırlanmış bir programı sunmayı amaçlamaktadır. Araştırma aynı zamanda öğretmenlerin mesleki gelişim programlarına katılma güdülerini; eğitimde, öğrenme yöntemlerinde ve uygulamalarda teknolojiyi kullanma tutum ve becerilerini incelemektedir. Çalışma, kullanılan programa ilişkin tanımlara ve kullanılan materyallerin yer aldığı internet adresi bağlantılarına yer vermektedir. İki adet çevrimiçi anketten toplanan verilere nicel analiz uygulanmıştır. Bununla birlikte, toplantılarda yapılan tartışmalar ile nicel verileri destekleyici nitel yöntemler uygulanmıştır. Sonuç olarak mesleki gelişim programı tüm aşamalarda oldukça başarılı olmuştur. Araştırmanın bulgularının aydınlattığı bazı gerçekler şu şekilde olmuştur: katılımcılar kendi ilgileri ve mesleki gelişim güdüleri doğrultusunda güdülenmektedirler, karma öğrenmeyi ve mümkünse grup çalışmalarında açıklığı tercih etmektedirler, başladıkları işlerin üstesinden gelerek yeni araçlar keşfetmeye istekli görünmektedirler.

Anahtar Sözcükler: Mesleki gelişim, uzaktan öğrenme, deneysel okullar, yeni teknolojiler

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Introduction

Rapid technological advances, global economy, countries' common policies, multiculturalism, along with a global information based economy have all forced the need for lifelong learning for all professionals who wish to remain competitive and up-to-date with markets' demands. Under these circumstances, continuous development has become a demand for all educators. Evidently, teaching professionals have similar development needs to professionals in other fields, so as to avoid professional demotion, update their skills, advance their careers but also develop their social and personal skills even further (Kelpanidis & Vrynioti, 2012). Of course, participation needs and motives may vary greatly from an inner need for self-realization and a profound eagerness to acquiring knowledge and skills to peer pressure, anticipated income raise and distinguished professional career paths (Gkountouma, 2014). Simultaneously, beneficial outcomes of a teacher development program are also expected for society, as such programs are a step towards upgrading the quality of the education provided to students, thus resulting in an overall upgrade of the quality of the entire education system in the country (Pedagogical Institute of Greece, 2009). After all, development programs for new technologies have become essential since new technology integration in education has inevitably led to crucial changes in the education delivery process (Davis, 1999).

However, in Greece there is a lack of systematic, organized, expanded, continuous professional developemnt of all active public teaching professionals. The Pedagogical Institute of Greece (2009) has focused on the following shortcomings: lack of continuity and consistency, lack of a concrete and feasible teacher training plan, overlap of responsibilities and jurisdiction, organization and coordination issues, ignorance of the actual teachers' professional needs, state centralization, and lack of credible teacher training providers. In addition, a number of deterrents prohibit teacher participation in the limited programs available; lack of free time and heavy family responsibilities, teacher frustration, financial issues, limited access to information on available programs or limited admission to these programs.

Within this context, a distance teacher development program, available to teachers currently working in Greek primary and secondary education experimental schools was designed, implemented and evaluated. Before the implementation of this program, no other professional development program on Information and Communication Technology (ICT) had been designed and implemented especially for teachers working in experimental schools, after having carefully examined the context and purpose of these schools and having inquired about the specific needs and challenges that arise for teachers working in such a school environment. What makes the case of Experimental schools unique, but also highly challenging and competitive, is that they provide advanced-quality education, experiment on innovations in education, promote field-research, partner with Universities, provide professional development for all their edu-

cators, and pilot school curricula, educational material etc. that are than implemented in regular schools around the country (FEK 118/24-05-2011).

The main goal of this program was to provide opportunities to the teachers to become accustomed to using ICT tools in their classrooms, learn how to collaborate with peers in online environments, feel more confident about using ICT tools and positively shift their attitude towards technology and teacher trainings. This program was conducted on a weekly basis, in modules, provided on the Open e-class platform, supported by the academic network GUnet. Participants asynchronously designed and implemented a great variety of learning tasks, reaching weekly predetermined goals, which were uploaded on the platform and were instantly available for all participants. Also, participants were evaluated both formatively and summatively. All the aspects of the program will be further analyzed in the following section.

Literature review

The professional development of teachers

All people learn throughout their lives, in formal, non-formal and/or informal settings. However, the importance of obtaining some form of written recognition (such as a certificate, a degree, a diploma etc.) for participating in continuous development and acquiring new skills or knowledge is undoubted, as it not only certifies what has been achieved, but also provides feasible job seeking or career advancement opportunities (Kelpanidis & Vrynioti, 2012). Moreover, continuous education contributes towards personal and social skills development, increases work related performance and job satisfaction and in the long run promotes the quality of professionalism in the job market. The Pedagogical Institute of Greece (2009) also emphasized the fact that continuous development is beneficial for the local communities and the greater society, as people become more confident and skilled in creating and maintaining meaningful relations with life partners, friends and neighbors, colleagues, etc. and adopt a culture of substantial communication, interaction and collaboration. In addition, in 2012, the Education Policy Development Center of the Greek General Confederation of Labor conducted a survey so as to investigate why people participated in professional development programs. Most people (90%) responded that they enjoyed acquiring new knowledge, 86,4% wanted to become more efficient in their workplace and 85,1% believed that education was an investment for life. Two other significant factors related to the increase of qualifications (79,2%) and to the increase of income (76,3%). Evidently, the exploration of motivation factors is multidimensional and covers a wide spectrum of human behavior and activity.

On the other hand, it could be argued that continuous development requires constant alertness, continuous updating, money and time. The distribution of time between professional and family life, personal and social life along with money affordance,

depending on day-to-day costly obligations and responsibilities all deter people from deciding to participate in a continuous development program. Besides that, other deterrents such as the quality of free training courses, admission requirements, limited seat availability, and the chaotic uncompromising public service mechanism significantly weigh in on the decision to participate or abstain from continuous education. Cross (1981) connected the deterrents to issues highly related to self-evaluation, life transitions, access to information on opportunities but also attitudes about education.

Such a gap currently exists in the field of ICT in education in Greece, as either there are no free accredited programs or seat availability is scarce and limited to teachers of specific subjects (Greek language and history, physics, mathematics, primary school teaching). Still, technology is presented as the enabler of potential and currently dominates our everyday lives, along with the education sector of course. However, many teachers are not considered as digital natives, and it appears that they are having an excessive hard time adjusting to the new global context of the knowledge and information based society. Issues of conflict regarding work-style arise quite frequently as the older teachers consider technology redundant and focus on experience whilst the younger teachers call for more ICT integration in education, in order to catch up with their digital native student's lifestyles (Salkowitz, 2008). This demand for more ICT brings to light the technology age gap, which in fact is a source of great anxiety, stress and frustration for more experienced but also older teachers. As a suggestion, these people could or ought to be first-priority recipients of places available on ICT in education professional development programs, as they are the ones who are left behind.

Distance training

Technological innovations have rapidly and massively changes everyone's everyday life, way of thinking, learning and doing; and their integration in education systems has brought about significant changes in the educational process (Gkountouma & Kouklatzidou, 2013). According to Rutsky (1999), in the 21st century we are gradually starting to realize that technology is at the center of critical thinking about culture, human nature, man-made and natural environment. All the ICT tools employed in educational settings are not solely used to enhance young underage students' learning process. Their use is much broader, in school administration, educational databases, admission to tertiary education and also for the professional development of teachers of all subjects, level of teaching (primary, secondary, tertiary) and years of service. Besides that, ICT has not only changed our work-style but also our entire lifestyle.

The adoption of distance education and training has significantly contributed towards overcoming deterrents commonly heard from all voices in the teaching communities. In specific, barriers frequently mentioned in non-formal settings, such as lack of free time and problematic distribution of time among various duties and responsibilities, the inability to be physically present in an educational setting, tuition fees,

family life and inner psychological barriers such as unsociability, low self-esteem, lack of cooperation in groups (Gkountouma, 2014) can all be fairly bent in distance asynchronous education and training programs, provided via learning management systems (LMS).

LMS are increasingly popular around the world, as they seem to redefine time and space available or necessary for educational purposes (Dutton et al, 2004). Besides that, LMS are been gradually integrated and obtaining a key-place in schools, as well (McGill & Klobas, 2009). Taking these facts into account, such a system was selected for the needs of the participants and the purposes of the aforementioned distance training program; Open eclass platform, supported by the Greek University Network GUnet. It is, in fact, a learning environment based on open-source software philosophy, which is freely distributed mainly towards Universities, since Universities are their main users anyway. This platform embeds a series of technological tools, which support a multitude of tasks and e-course management (Severson, 2004), including but not limited to wikis, teleconference tools, multimodal tool embedment etc. As will be further presented in the results, during the summative evaluation of the program, teachers-participants affirmed their satisfaction regarding the platform's usability, friendly environment and functionality, which of course vindicated the initial selection of the specific platform.

Method

The program

Nowadays, new technologies are a dynamic part of everyday teaching practices and school administration. Still, the available free accredited ICT training programs for teachers (ICT Training, Level A & B) provided by the Greek Ministry of Education, Research and Religious Affairs are either not offered anymore or address a limited number of resident public teachers of specific subjects. Taking this ominous fact into account, a teacher training program named "ICT in Education I" was launched and implemented, after obtaining the necessary approval by education authorities.

The program was initially piloted in the 2013-2014 school year as an in-service teacher training of professionals working in the 3rd Experimental Primary School, in Evosmos, Thessaloniki, Greece, where one of this paper's co-authors is also working. After taking into account the experience of the pilot and the feedback provided by the participants at various stages of the program, various improvements and customizing were made in the following school year. The program was then again available, in its 2_{nd} stage, for teachers of all subjects and levels of education (primary and secondary), provided that they were working in a public Experimental School in Greece. At a 3rd stage, later the same year teachers working in the 3rd Experimental Primary School and teachers working in traditional public primary schools in the city of Thessaloniki also

took part in the program.

The complete program was 12-weeks long, including a few days in the beginning of the program for meeting the newcomers, studying their needs and accustomizing them with Open eclass, in addition to some days at the end of the program dedicated to summative evaluation of the program, feedback on the overall progress of the participants and finalization of technicalities, such as issuing and posting certificates etc. The work load per week was estimated at about 4-5 hours for a mid ICT user. For elementary users or users frustrated during a task additional counseling Skype-time was provided so as to avoid creating a multiple-speed gapped group of participants as much as possible. Among the prerequisites of the program were basic ICT skills, owing a personal computer (not just a tablet or android devices) with Windows and MS Office installed, managing an email account and checking it regularly, etc. All participants received a manual for Open eclass and the booklet "Best practices of all stakeholders in the program" in which issues regarding the use of the platform, communication and conduct code with peers in the forums, program requirements and successful completion, teaching hours, and other guides were provided and thoroughly explained.

The program was implemented in weekly modules via Open eclass platform. All weekly tasks were *asynchronous* and addressed specific teaching needs which did not expand in more than 2-weeks' time. Specifically, participants were expected to (cognitive goals): 1) become accustomed to using the software required for each task, such as creating exercises for students, using timelines, exploring web 2.0 tools (written guidelines and technical support via Open eclass and Skype were provided for every software), 2) design lesson plans embedding ICT tools, 3) employ various means of cognitive interaction and learning. In addition, participants were expected to **(literacies):** 1) practice on using ICT tools, 2) work in virtual environments, 3) participate in learning platforms and engage in on-line communities of practice, 4) manage and organize the time and resources available, 5) collaborate in peer-projects and 6) experientially engage in lively learning/teaching practices. Moreover, participants were expected to **(attitudes):** 1) acquire a positive attitude towards technology, 2) embed technological means and tools in their teaching practices, 3) develop professionally at their own pace and place and 4) realize that learning is not a static confined process but can assume multiple forms and dimensions. It is worth noting that the overall purpose of the teacher development program was not to "teach" participants how to use an ICT tool; this can be easily achieved through video tutorials available on the internet or written guidebooks. The authors' aspiration was to provide their peers with the opportunity to selectively use ICT in education by being enabled to create appropriate lesson plans and negotiable dynamic educational material under the scope of critical literacy.

The evaluation of the participants in the program was performed in a number of ways. During the program, every participant had to complete compulsory weekly tasks, either in the form of individual tasks or in scenarios and projects. Participants

were also encouraged to use to forum; thus, every week the tutors posted reflection questions and prompted participants to respond. As the program progressed participants became rather encouraged and they started creating their own thread in the forum, posting their own original questions and topics for discussion. Of course, because participation was not compulsory, not all participants took part in the forum discussions regularly, providing various reasons or excuses for not doing so. By the end of the program, a database/pool of compulsory tasks and activities had been created which remains available to all teachers for future use in the classroom.

The profile of the participants in the program

As mentioned, the program was offered in three stages; the 1st pilot stage, the 2nd nation-wide stage and the 3rd back-to-local stage. In the 1st stage twenty (20) professionals working in the 3rd Experimental Primary School, in Evosmos, Thessaloniki, Greece took part. In its 2nd stage, it was made available to forty-three (43) teachers of all subjects and levels of education (primary and secondary), provided that they were working in a public Experimental School anywhere in Greece. In a 3rd stage, fourteen (14) teachers working in the 3rd Experimental Primary School and forty (40) teachers working in the city of Thessaloniki also took part in the program.

Still, the main focus of attention in this paper is on the participants who took part in the 2nd stage of the program. During this stage of this teacher development program 43 individuals initially enrolled (35 females and 8 males). Out of them, 39 (90,7%) successfully completed the program (32 females and 7 males). Most of the participants were still working in public Experimental primary schools. Specifically, they were working in 12 schools, of significant geographical distribution. In detail, they covered schools on islands, and on the mainland; in the capital Athens, but also in less populated cities, such as Patras, Ioannina, Florina, Alexandroupoli. Public secondary education was represented by teachers working in six different public Experimental secondary schools. In terms of teaching subjects, the variation was great, including religion teachers, Greek language teachers, mathematicians, French, English and German language teachers, painters, physical education teachers, musicians, ICT teachers, theater studies teachers, primary school and kindergarten teachers. However, primary school teachers (42%) and English language teachers (11%) represented the greatest participation.

Data collection instruments

Getting to know the participants and receiving feedback from them was highly important so it was encouraged during various stages of the program. Initially, they received an on-line initial questionnaire which explored their needs and expectations from the program as well as their preexistent knowledge and ICT skills, along with their stance and attitude towards ICT use in the classroom. The initial survey partici-

pants had to fill in is available online at http://goo.gl/forms/Q4yWjkOBGrE55EI33. It was short and simple and it included work-place related questions, such as full name and contact info, teaching subject, school district etc. prior certified and non-formal experience with ICT, categories of web 2.0 and other ICT tools they are most interested in along with preferred method of e-communication. During the program, a specifically assigned thread in the forum prompted participants to share their thoughts, discuss the difficulties they were facing throughout the program and comment on it. As soon as the program ended the participants had to fill in another final questionnaire, available online at http://goo.gl/forms/tAddYr4N8fWsNNZ83. This questionnaire evaluated key elements of the program, such as motives of participation, duration, format, content, written material provided, kinds of activities, selection of tools used, peer interaction, communication and collaboration, types of work (individual, peer, etc.) but also reflecting on their own role as students, instead of teachers. Participants were also prompted to submit their own ideas and proposals for future ICT-related programs as well as to send material created in their classrooms after the program. As one can see in the links provided above, both questionnaires, the initial and the final one, included 1) open-ended questions, when related to the participants profiles, 2) Likert scales, when related to evaluating the duration of the program, the compulsory and optional tasks, the expectations met, etc. 3) multiple choice questions related to the usefulness and level of difficulty of using each tool or the likelihood of further use in the future, etc. where more than one answers were allowed to the participants whilst 4) some yes/no questions were also placed, such as when exploring preferable means of communication or task submission.

Data collection and analysis procedures

As aforementioned, both questionnaires were provided, completed and submitted online, which made data collection more effective in terms of time and energy. Some descriptive qualitative data were also provided via the forum discussions, either the guided ones or in spontaneous threads created by the participants. Though Google forms provide statistical analysis for all Google questionnaires, the researchers chose to insert the data on a statistical analysis package, Statistical Package for Social Sciences (SPSS), which provides the opportunity for more elaborate inferential statistical analysis.

Findings

Motives of participation in the program

The questionnaires administered during the program revealed the motives of participation in it. The items related to motives were multiple-choice, which allowed participants to choose more than one motive at a time. In the following Figure 1 the most

popular motives are presented. Evidently, the most significant motives of participation in this in-service teacher training program was the participants' personal interest and preoccupation with technology (94.7%) and their need for further professional development (78.9%).

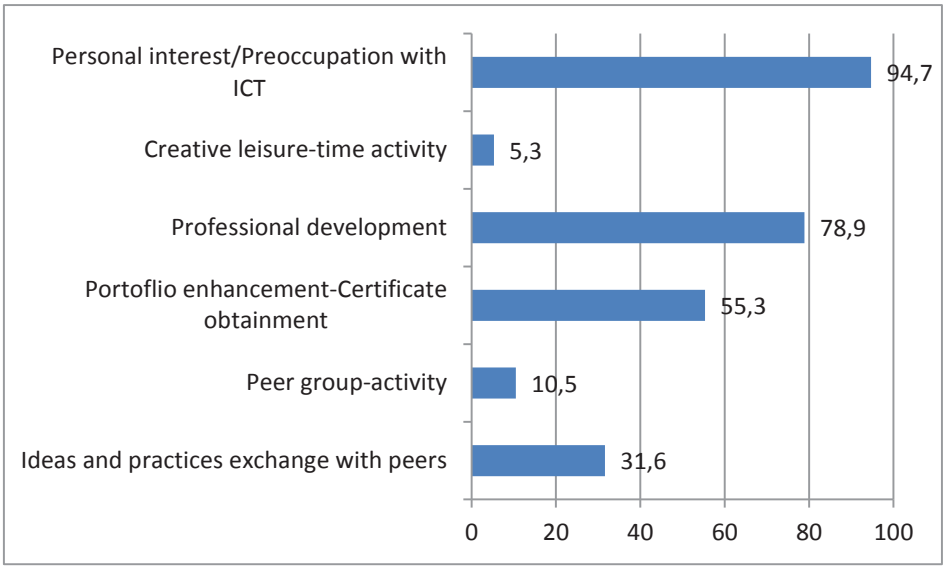

Figure 1. Motives of participation

Just over half aimed at enhancing his/her portfolio and curriculum vitae (55.3%) or acquiring an accredited certificate of attendance. Fewer participants were interested in exchanging ideas, best practices and experiences with peers working in other experimental schools around Greece (31.6%), although about 10.5% stated that they decided to participate in the program so as to attend a group activity with peers from the same region. Only 5.3% participated in order to spend their free time constructively, which is partially justified given the fact that most people nowadays sadly do not have much free time.

Participants' prior experience and preferences regarding ICT

In relation to ICT skills, the majority of the participants (89.6%) had attended an elementary ICT course in the past (mostly on Windows and/or MS Office) and had obtained the State Certificate on ICT, Level A, provided by the Greek Ministry of Culture, Education and Religious Affairs. However, due to aforementioned barriers, only 27.1% of the participants had attended the In-service Training of Teachers in the utilization and application of ICT in the teaching practice, Level II, organized and provided by the Greek Ministry. Furthermore, it was considered quite important, in relation to ICT familiarity, that about 68.8% of the participants possessed other technological

gadgets, such as tablets, smartphones besides a traditional computer.

In terms of interests and preferences, participants could choose more than one tool. So, most participants (87.5%) were highly interested in digital storytelling ICT tools, about 81.3% wanted to learn more about video and sound mixing and processing software, 77.1% were looking for innovative creative ways of presenting projects, about half of them (47.9%) were also in need of organization and management tools (47.9%) whereas 31.3% of the participants were seeking advanced methods of searching and selecting information of the internet.

Preferences of the participants regarding trainings

According to the responses made to the questionnaire, most participants preferred attending sessions from October to December (71%), whilst fewer chose January-March (16%) or April-June (13%). As this program, ICT in Education I, has a follow-up, ICT in Education II, when asked, half of the participants stated that they preferred attending the courses separately, but within the same school year (47%); whilst 34% preferred a merged 25-week course. Finally, about 19% of the participants stated they would rather attend the 2 courses separately and in different school years. In terms of the training method, about half of the participants (53%) preferred blended learning (a combination of distance and face-to-face learning) whereas the remaining 47% chose distance learning.

As mentioned earlier, the program was 10+2 weeks long. The majority of the participants (63%) thought the duration was satisfactory, about 26% considered it enough but 11% thought the program was too short. Each module lasted 1 week, which for the majority of the participants (71%) was more than enough, for about 26% of them it was enough and for 8% it was too short to complete the tasks.

The program was designed in weekly modules. Most of the participants (68%) thought that the tasks assigned to them each week were sufficient, 29% thought they were few and 3% complained that they were too many. When asked about evaluation, about 37% of the participants claimed they preferred weekly tasks. Still others, as shown in the following Figure 2 preferred others ways of evaluation. Specifically, 29% of the participants wanted shorter, easier tasks every week, 16% of them preferred quizzes and questionnaires instead of tasks and projects whereas another 16% wanted only one final cumulative assignment.

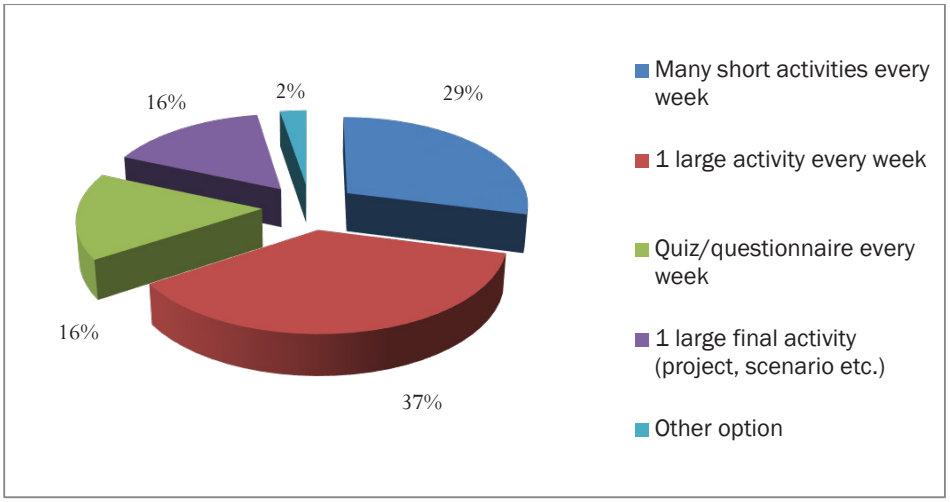

Figure 2. Preferences of evaluation

In terms of communication and submission methods, though participants were given many choices for task submission (on the platform, Google Drive, personal e-mail), most of them preferred to submit their tasks and projects either on Google Drive (78.9%) and on the platform (73.3%), without one selection excluding the other. Finally, almost everyone (95.8%) wanted to receive information and feedback and communicate with the trainers via private emails and only a few chose discussion over landline or mobile phones, whereas most of them expressed hesitation about writing issues of private concern on the forum provided in Open eclass. Evidently, the forum was used for more general discussion over ICT tools, current education affairs, lesson plan ideas and suggestions, etc.

Participants' opinions about the program

At the end of the program participants were requested to contribute their opinions about the program. In relation to the communication and collaboration with the two trainers, the majority of the participants (68%) claimed that it was quite fruitful and hoped for a long-term communication; 24% thought it was satisfactory, while 8% considered it quite formal. In terms of peer-cooperation in projects, and forum discussions the majority of the participants had a positive view (37% stated it was satisfactory and 26% fruitful) whilst 37% of the participants preferred a more formal relationship with their peers.

The participants' expectations were partially met. For 39% of them, the program was sufficient, for 53% of them it was satisfactory and for 8% it exceeded any expectation. When asked whether they would be interested in participating on ICT in Education II the following school year, 94.7% stated that they would enroll; whereas 5.3%

claimed they would think about it, depending on their free time and family duties. It is quite significant that all participants were keen on pursuing further professional development; thus, ICT in Education II, after being piloted, indeed took place the following year, as well.

The questionnaire also explored the participants' opinion regarding the usefulness of the tools and software presented throughout the program. For every tool employed during the program, the participants were asked to provide a separate evaluation, grading their usefulness on a Likert scale. Evidently, among the most useful tools participants preferred using in their work were Google Drive (65.8%), iSpring (65.8%) and Prezi (63.2%) whereas the least useful ones were Voki (28.9%) and Slide Boom (31.6%). In the following Figure 3, the participants' opinions about some of the tools included in the program are presented.

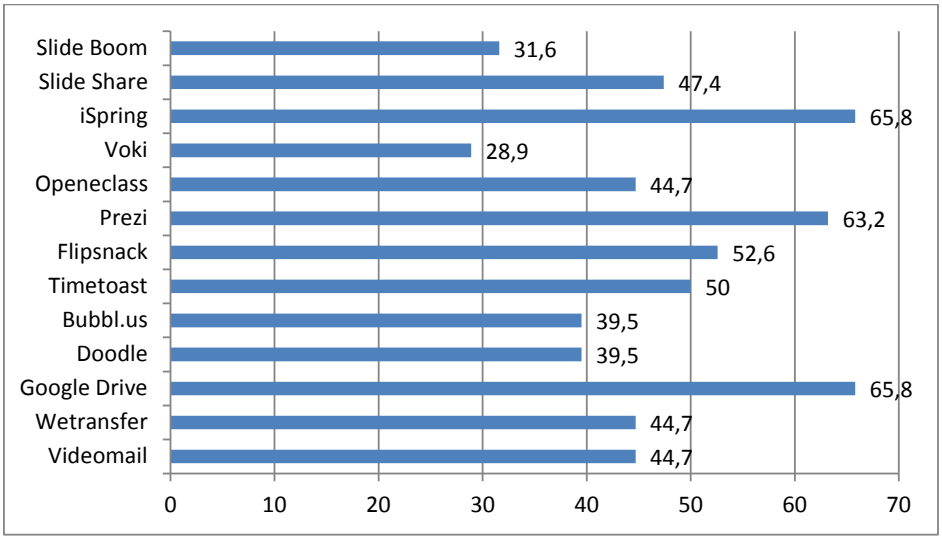

Figure 3. Participants' opinion regarding the usefulness of the tools

Similarly, participants were requested to evaluate the level of easiness of each tool and software on a Likert scale. They considered Videomail (57,9%) and Wetransfer (52,6%) the easiest tools whereas iSpring (7,9%) and Prezi (13,2%) were the hardest, perhaps because presentation software requires much more functions and combination of tools. The level of easiness is presented in Figure 4 below:

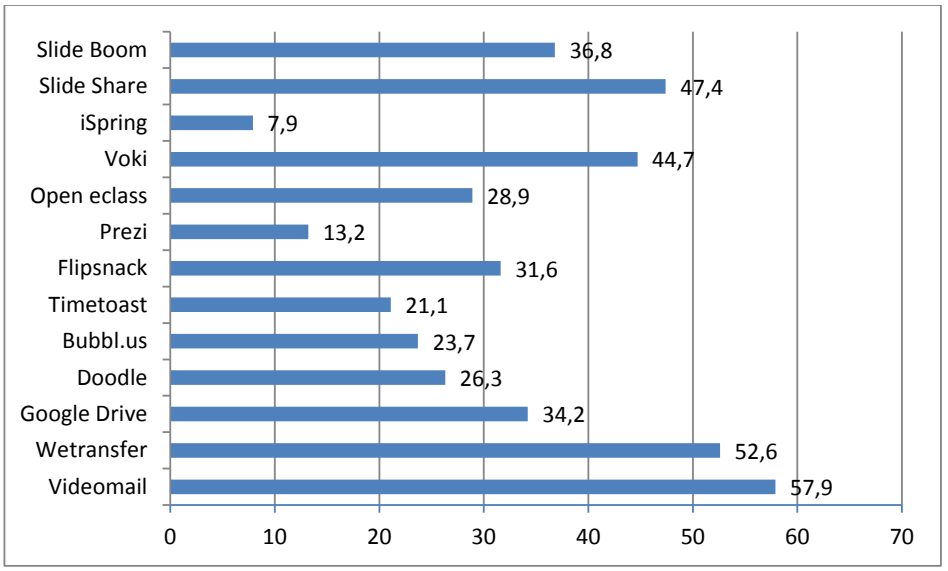

Figure 4. The level of easiness of each tool and software

Finally, participants were asked their opinion about which tools and software, among the ones they worked with during the program, they thought they would use more in the classroom after the program. The questionnaire allowed for more than one response to this question. They reported that they would use Prezi (65.8%), Google Drive (57.9%) and Slide Share (55.3%) most in a classroom whereas they thought that Videomail (13.2%), Open eclass (18.4%) and Doodle (21.1%) would not be employed much.

In general, participants' feedback showed that they prefer working on a project in groups, which highlights the importance of communities of practice. Throughout the program some of them expressed fears and anxiety that they were too old or too ignorant to work with ICT, they had many personal and family responsibilities whilst some were hesitant to upload their work on Google Drive and in the platform out of fear of their peer's judgment. In addition, some participants expressed the need for spending more time on each tool and practicing on it even more as well as the need for an even greater variety of tools. Such comments, being plenty, were in fact the reason to design ICT in Education II.

Discussion

As seen in the profiles of the participants, almost all of them successfully completed the program, which indicates both their strong motives and their attitude towards learning and their commitment to the engagements they took on. The high rate of completion was reflective of the stronger motives they had mentioned, which are

related to their personal interest in ICT and their eagerness in pursuing further professional development. An eager professional with a strong personal interest is indeed expected to complete what s/he has taken up successfully. Curriculum vitae enhancement, which was also a strong motive of participation, can be partially justified if one considers that teachers working in experimental schools are the only ones who are constantly evaluated for their performance and portfolio and given the fact that entry into experimental schools is highly competitive and only well-qualified teachers can work there and enjoy the benefits of this workplace. On the other hand, the least preferable motive was lots of free-time, which is also justified since experimental schools are highly demanding; they require a lot of extra teacher preparation and often engage in afternoon or weekend compulsory school activities.

As expected in our high-tech era, most participants had a fair experience in technology, definitely owning a personal computer and a smartphone, whereas many of them already had tablets and other hi-tech devices. Still, though the majority had obtained the State Certificate on ICT, Level A, almost all of them had not obtained the State Certificate on ICT, Level B. As it was mentioned in the introduction, the scarcity of available seats in Level B certification as well as the restriction of applications, limited to few teaching subjects only, led teachers to other sources of professional development via which they could gain knowledge, skills and an accredited certification, which provides points in future teacher assessments. As most of the participants where already well-qualified, Master or PhD degrees holders, it was quite anticipated that they would not be interested in tools related to seeking advanced methods of searching and selecting information of the internet, since they would have already known these during their studies. Thus, most participants where interested in audiovisual tools; digital storytelling tools, video and sound mixing and processing via which a teacher can create attractive and engaging learning content for the students.

In terms of training per se most participants preferred pursuing professional development in the first trimester of the school year, when they are less tired and eager to work on various projects. In relation to the duration of the program, the amount of activities and tasks per week, the evaluation process and their overall expectations most participants were somewhere in the middle, which actually served the aspiration of the program designed to address the mid users, instead of the experienced or the beginner ones. Also, though the participants complained about their limited free time, it is interesting that about half of them requested meetings in present along with on-line ones, thus preferring blended learning instead of solely distance one. From the forum discussions it turned out that some meetings in present were requested not in order to receive assistance on ICT tools but in order to get to know the other participants and build a trusting relationship so as to feel more relaxed and free to share content and comments online afterwards. In relation to trust and fear of public exposure, it is justified that though most participants preferred to submit their tasks and activities on

public folders, so as to check on one another, they wished to receive feedback or help privately, so that no one else would know about their weaknesses or perhaps *silly little questions,* as they called them.

Last but not least, in relation to the tools employed in the program, though most participants originally asked for audiovisual tools, in the end they stated that they thought tools for online content sharing (such as clouds and Google Drive) and tools for presentations would be much more useful in their future work. Interestingly enough, the tools they chose as most useful were also the ones they rated as most difficult to learn how to use. In this light, and putting their reservations about exposure aside, they also mentioned that they would prefer doing the difficult tasks in groups, so as to gain time and feel less stressed about their capability to complete the task and submit it on time.

Conclusion

During the school years 2013-2014 and 2014-2015 ICT in Education I was available to teachers working in the 3rd Experimental Primary School in Evosmos, Thessaloniki, in other Experimental Primary and Secondary Schools around Greece and in teachers in traditional schools in the region of Thessaloniki. About a hundred-twenty teachers were enrolled in total and besides a few cases that faced particular personal and family difficulties, they all received an accredited certificate of attendance.

The needs for ICT embedment in education, the great variety of tools and software available and contemporary pedagogical and sociocultural approaches have been among the incentives to design and implement this program. Its wide acceptance and recognition by a rather demanding audience of teachers working in Experimental Schools, lead to the design and pilot implementation of ICT in Education II, which will run its 2nd stage during the school year 2015-2016. Meeting the demands of the participants, two e-books, including the material of the programs, have been published and are available on the two authors' Academia Profiles.

In this paper, the distance teacher training program was presented as an alternative teacher development on ICT option that could meet the needs of any teacher in any type of school in any place. This paper also aimed at encouraging both prospective online teacher trainers and adult participants to continuously pursuing their professional development, putting aside fears and hesitations and allowing space for personal, social and professional growth.

Özet

Giriş

Bu araştırma Yunanistan'daki deneysel okullarda çalışan öğretmenler için tasarlanmış ve onlara uygulanan Bilgi ve İletişim Teknolojileri (BİT) üzerine hazırlanmış

ilk mesleki gelişim programını sunmaktadır. Araştırma aynı zamanda öğretmenlerin mesleki gelişim programlarına katılma güdülerini; eğitimde, öğrenme yöntemlerinde ve uygulamalarda teknolojiyi kullanma tutum ve becerilerini incelemektedir.

Her şeyin hızlıca değiştiği ve gelişim gösterdiği bir dünyada, öğretmenler dâhil olmak üzere tüm meslek uzmanları, kendilerini sürekli kişisel ve mesleki açıdan geliştirmelidir. Bunu gerçekleştirmek çalışanların hem mesleklerinde mevki kaybetmelerini engeller, kariyerlerinde ilerlemelerini ve becerilerini güncellemelerini sağlar (Kelpanidis & Vrynioti, 2012), hem de ruhsal ihtiyaçlarını karşılar, sosyal merdivende yukarılara çıkmalarını ve gelirlerini artırmalarını sağlar (Gkountouma, 2014). Bunlara ek olarak, Davis'in (1999) de belirttiği gibi, eğitim süreci teknolojik gelişmeler sayesinde o kadar yoğun bir değişime uğramıştır ki öğretmenlerin/öğretim uzmanlarının özellikle BİT alanında kendilerini mesleki olarak geliştirmeleri çok önemli hale gelmiştir. Yunanistan Pedagoji Enstitüsü (2009) mesleki gelişim ihtiyacını daha büyük ölçekli bir şekilde incelemekte ve öğretmenlik programında öğrencilere verilen eğitimin kalitesinin arttırılarak öğretmen eğitiminin geliştirilmesi gerektiği düşüncesini desteklemektedir. Böylece tüm eğitim sisteminin kalitesi artacaktır. Yunan Genel İşgücü Konfederasyonu Eğitim Politikaları Geliştirme Merkezi (2012) katılma güdülerinin çok boyutlu olduğu sonucuna ulaşmıştır. Bu boyutlar; eğitimi, yeni bilgi edinmekten başka iş ortamı etkililiği ve gelirin arttırılması için bir yatırım olarak görmeye kadar çok çeşitli davranış ve etkinlikleri kapsamaktadır.

Mesleki gelişime duyulan ihtiyaç çok önemli olsa da Pedagoji Enstitüsü (2009) Yunanistan'da sistemli, devamlılığı olan ve güvenilen (accredited) bir öğretmen eğitiminin, özellikle BİT alanında, olmadığının altını çizmektedir. Enstitüye göre maddi kaynak eksikliği, merkezileşme durumu, kaotik örgütlenme ve eşgüdümleme sorunu gibi durumlar da ülkenin öğretmen eğitiminde görülen diğer eksikliklere örnektir. Cross (1981) bu eksikliklere öz-değerlendirme, yaşam geçişleri, fırsatlara ulaşmada bilgiye erişim gibi durumları da eklemektedir. Salkowitz (2008) ise doğuştan dijital öğrenciler (digital natives-students) ile teknolojiye aşina olmayan ya da teknolojiyi gereksiz bulan yaşlı öğretmenler arasında oldukça fazla bir teknolojik yaş açığı bulunduğunu belirterek bu tartışmayı alevlendirmektedir. Bunlarla birlikte çağımızın diğer büyük sorunu hızlı teknolojik gelişmelerle baş edebilmektir. Teknoloji, insan eliyle yapılmış ve gerçek doğa, insan doğası ve kültür hakkında eleştirel düşünme merkezine kaydığından dolayı (Rutsky, 1999), eğitim de bu durumdan etkilenmiştir; aslında teknoloji eğitim sürecinin tamamını değiştirmiştir (Gkountouma & Kouklatzidou, 2013).

Bu bağlamda, Deneysel İlk ve Orta Okullar gibi bazı okullar sıradan okullara göre daha çok zorluklarla karşılaşmaktadır çünkü bu okullar gelişmiş ve kaliteli bir eğitim sunmakta, eğitimde yeniliklerle ilgili deneyler yapmakta, alan araştırmasını desteklemekte, tüm eğitimcilerine mesleki gelişim olanakları sağlamakta ve örnek okul öğretim programları oluşturmaktadır (FEK 118/24-05-2011). Açıkça görülebilir ki, bu okullarda çalışan uzmanlar eğitime daha çok ihtiyaç duymalarına rağmen mesleki gelişimlerinde diğer öğretmenlerle aynı sorunlarla yüz yüze gelmektedir. Bu nedenle bu araştırma ve araştırmadan elde edilen bulgular, alanlarında nitelikli olmalarına ve gönüllü olarak talepleri yüksek bir deneysel okulda çalışma zorluğuna göğüs geren ve hâlâ destek ve gelişime ihtiyaçları olan

insanlara adanmıştır.

Yöntem

Deneysel okulların özel doğası ve ihtiyaçları göz önünde bulundurularak, "Eğitimde BİT-I" adlı bir öğretmen eğitimi programı, yetkili makamlardan gerekli izinler alındıktan sonra uygulanmıştır. Bu program ilk aşamada, 2013-2014 eğitim-öğretim yılında, Yunanistan'ın Evosmos bölgesinde yer alan Selanik'te bulunan 3. Deneysel İlkokulda çalışan yirmi öğretmene pilot uygulama olarak uygulanmıştır. 2014-2015 eğitim-öğretim yılında ise program, Yunanistan'ın farklı bölgelerinde yer alan deneysel okullarda çalışan, farklı alan ve farklı eğitim düzeylerinde (ilkokul ve ortaokul) görev yapmakta olan kırk üç öğretmenin yer aldığı ikinci aşama için hazır hale gelmiştir. Aynı yıl gerçekleşen üçüncü aşamada ise Selanik'teki kamu ilkokullarında çalışan öğretmenler ve 3. Deneysel İlkokulda çalışan öğretmenlerden oluşan kırk dört kişilik bir grup programa dâhil olmuştur. Bu aşama 12 hafta sürmüş ve orta düzey bir BİT kullanıcısı için yaklaşık 4-5 saatlik bir haftalık iş yükü hesaplanmıştır. Program, Açık e-sınıf platformu aracılığıyla haftalık modüller halinde uygulanmıştır. Program için, bir öğrenme yönetim sistemi (ÖYS) olan Açık e-sınıf seçilmiştir çünkü tüm ÖYS'ler eğitim süreci için gerekli veya uygun görülen zaman ve mekanı yeniden tanımlama eğilimindedirler (Dutton vd., 2004); tüm ÖYS'ler e-ders yönetimini ve çoklu görevleri destekleyen teknolojik araçları birleştirirler (Severson, 2004) ve ayrıca okullara gün geçtikte entegre olmakta ve okullar için anahtar rol oynamaktadırlar (McGill & Klobas, 2009).

Katılımcılardan belirli bilişsel hedefleri gerçekleştirmeleri ve yazın yeteneklerini geliştirmeleri beklenmiştir. BİT ile katılımcıların eleştirel düşünme ve projelerde akran işbirliğini sağlamaları ve eğitimde uygulama toplulukları ve mesleki gelişim gibi öğelere karşı tutumlarını değiştirmeleri de beklentiler arasında yer almaktadır. Katılımcıların gelişimleri zorunlu haftalık görevler, bireysel veya grup projeleri, isteğe bağlı toplantı tartışmaları ve müzakereler yardımıyla değerlendirilmiştir. Ek olarak, programa başlamadan önce katılımcılara sınıf içinde BİT kullanımına ilişkin tutumlarını ve duruşlarını, daha önceki BİT bilgi ve becerilerini, programdan beklentilerini ve programa ilişkin ihtiyaçlarını ölçen çevrimiçi bir anket gönderilmiştir. Programın sonunda ise katılımcılar katılım güdüleri, süre, biçim, içerik, sağlanan yazılı materyal, etkinlik türleri, kullanılan araçların seçimi, akran etkileşimi, iletişim ve işbirliği, iş türleri (bireysel, akran, vb.) gibi programın anahtar öğelerini değerlendiren bir anket doldurmuştur. Bu anket, katılımcıların öğretmen olarak değil, öğrenci olarak katılımcı rollerini yansıtmalarını sağlayan açık bir alan yaratmayı mümkün kılmıştır. Görüleceği üzere bu araştırmada, toplantı tartışmalarının nitel analizi ile desteklenen nicel araştırma yöntemi kullanılmıştır. Bu yöntemin kullanılmasındaki amaç, programın hedeflerinin ne derece başarılı olduğuna, katılımcıların profillerine, bir mesleki gelişim programı tasarlamanın ve uygulamanın ihtiyaçlarına, beklentilerine ve genel zorluklarına yönelik veri toplamak, bilgi birikimi kazanmak ve bu verileri istatistiksel analiz programlarıyla incelemektir.

Bulgular

Katılımcıların 35'i (%81,4) kadın ve yalnızca 8'i (%18,6) erkektir. Bunların içinden 39'u (%90,7) programı başarılı bir şekilde tamamlamıştır (32 kadın ve 7 erkek). Programa katılma güdüleri incelendiğinde, %94,7'lik bir oranla kişisel ilginin en çok işaretlenen seçenek olduğu görülmüştür. Katılımcıların %78,9'u daha çok mesleki gelişime ihtiyaç duyduğunu ifade etmiştir. Güdülenmenin yanı sıra katılımcıların BİT alanında deneyimlerinin olduğu (%89,6), çoğunun bilgisayar dışında teknolojik bir cihazının olduğu (%68,8) ve büyük bir çoğunluğunun dijital hikâye anlatıcı araçlar (%87,5) ile görsel-işitsel işleme araçları (%81,3) kullandığı belirlenmiştir.

Programın tasarımı ve buna benzer sorulara cevap olarak, katılımcıların çoğu eğitim-öğretim yılının ilk çeyreğinde (%71) ve karma öğrenme yöntemleriyle (%53) eğitimlere katılmayı tercih ettiklerini belirtmiştir. Katılımcıların çoğu (%63) için on iki haftalık eğitim süreci ve onlara haftalık verilen ödevler (%68) yeterli görülmüştür. Katılımcılar, verilen ödevlerin Google Drive üzerinden gönderilmesini (%78,9) ve özel e-posta adreslerinden iletişime geçmeyi (%95,8) tercih etmişlerdir.

Programın hedefleri ve çıktıları incelendiğinde, katılımcıların eğitimi tatmin edici buldukları (%53) görülmüştür. Katılımcıların %94,7'lik bir bölümü, devam projesi olarak tasarlanan Eğitimde BİT II adlı programa katılmak istediklerini ifade etmişlerdir. Katılımcıların kullanmayı tercih ettiği ve en kullanışlı gördükleri araçlar Google Drive (%65,8), iSpring (%65,8) ve Prezi (%63,2) olmuştur. Videomail (%57,9) ve Wetransfer (%52,6) adlı programlar en kolay araçlar olarak belirlenirken iSpring (%7,9) ve Prezi (%13,2) adlı programlar kullanması en zor araçlar olarak ifade edilmiştir. Son olarak, tüm araçlar birlikte ele alındığında, katılımcıların sınıf içinde kullanmayı düşündükleri araçlar *Prezi* (%65,8), *Google Drive* (%57,9) ve *Slide Share* (%55,3) olarak belirlenmiştir.

Tartışma

Katılımcıların profillerinde görüleceği üzere, neredeyse tüm katılımcılar programı başarıyla tamamlamıştır. Bu durum katılımcıların programa yönelik kuvvetli güdüleriyle birlikte öğrenmeye ilişkin tutumlarını ve başladıkları işe olan bağlılıklarını yansıtmaktadır. Katılımcıların programa başlamadan önce ifade ettikleri BİT'e olan ilgileri ve mesleki anlamda gelişim gösterme istekleri, onların kuvvetli güdüleriyle ilişkilidir. Bu da programı tamamlayan katılımcıların oranının yüksek olmasını sağlamıştır. Zaten bir konuya özel ilgisi olan bir meslek uzmanının başladığı bir işi başarıyla tamamlaması beklenmektedir.

Yüksek teknoloji çağının gereği olarak, çoğu katılımcının teknoloji ile yeterli deneyimi olduğu görülmüştür. Katılımcılarının hepsinin kişisel bir bilgisayarı ve bir akıllı telefonu bulunurken, çoğunun tableti veya başka bir yüksek teknoloji ürünü bulunmaktadır. Katılımcıların çoğu yüksek lisans ya da doktora mezunu olduğu için internetten bilgi arama ve seçmeye yönelik gelişmiş yöntemler barındıran araçlara ilgi duymayacakları öngörülmüştür çünkü yaptıkları çalışmalarda bu araç ve yöntemleri zaten kullandıkları görülmüştür. Bu nedenle, çoğu katılımcı görsel-işitsel araçlara, dijital hikâye anlatıcılara, video ve ses karıştırıcı ve işleyici araçlara ilgi duymuştur. Bu araçlar, öğretmenlerin öğrenciler için diğer araçlara göre daha ilgi uyandıran ve dikkat çeken içerikler yaratmasını

sağlayabilmektedir.

Yalnızca eğitim süreci açısından bakıldığında, çoğu katılımcının mesleki gelişim programlarına eğitim-öğretim yılının ilk çeyreğinde katılmayı tercih ettiği görülmüştür. Katılımcılar bunun nedenini bu dönemde yorgunluklarının daha az olmasıyla ve farklı projelerde çalışmaya daha istekli olmalarıyla açıklamışlardır. Programın süresi düşünüldüğünde haftalık etkinlik ve ödev miktarının, değerlendirme sürecinin ve katılımcıların programdan beklentilerinin orta düzeyde olduğu belirlenmiştir. Orta düzey, programın tasarlanma amacına uygun görülmüştür çünkü program başlangıç düzeyi ya da tecrübeli kişiler için değil, orta düzeyde katılımcılar için tasarlanmıştır. Öte yandan katılımcılar program süresince boş zamanlarının azlığından şikâyet etmiş olsalar da, katılımcıların neredeyse yarısı çevrimiçi görüşmelere ek olarak yüz yüze görüşme de talep etmiştir. Bu da katılımcıların yalnızca uzaktan öğrenme ile yetinmeyip karma öğrenmeyi tercih ettiklerini göstermektedir. Toplantılarda yapılan tartışmalar incelendiğinde, bu toplantıların sadece BİT hakkında bilgi alma amaçlı değil, aynı zamanda diğer katılımcıları tanıma ve onlara karşı bir güven duygusu oluşturma amacını taşıdığı da görülmüştür. Böylece katılımcılar kendilerini daha rahat hissederek diğer katılımcılarla gelecekte çevrimiçi paylaşımlarda bulunabilecektir. Topluluğa duyulan güven veya topluluğa karşı hissedilen korkuya bakıldığında, katılımcıların çoğunun ödevlerini ve etkinliklerini yaparken diğer katılımcıların da görebileceği açık dosya sistemini tercih ettikleri görülmüştür. Böylece herkes birbirini kontrol edebilmiştir. Ancak herhangi bir dönüt veya yardım almak istediklerinde bunu özel olarak talep etmişlerdir. Böylece kimse onların zayıf noktalarından veya onların deyimiyle "küçük, saçma sorularından" haberdar olmamıştır.

Sonuç

Bu programın tasarlanması ve uygulanmasında, eğitimde BİT'in kullanılmasına duyulan ihtiyaç, mevcut araç ve yazılımların çokluğu, çağdaş pedagojik ve sosyokültürel yaklaşımlar önemli güdüleyici öğeler olmuştur. Programın deneysel okullarda çalışan öğretmenler tarafından kabul görmesi ve beğenilmesi, 2015-2016 eğitim-öğretim yılında uygulanan ikinci aşama için Eğitimde BİT II'nin pilot uygulaması ve tasarlanmasına temel oluşturmuştur. Katılımcıların talepleri üzerine iki adet elektronik kitap basılmıştır ve bu kitaplar yazarların Academia profillerinde yer almaktadır. Bu çalışmada uzaktan öğretmen eğitimi programı, BİT alanında alternatif bir öğretmen yetiştirme yöntemi olarak sunulmuştur. Bu yöntem ile herhangi bir okulda her öğretmenin ihtiyaçları fazlasıyla karşılanabilir. Aynı zamanda bu çalışma, öğretmenlere çevrimiçi eğitim verecek kişileri ve yetişkin katılımcıları; mesleki gelişimlerini devam ettirmeleri, korkularını ve tereddütlerini bir kenara bırakmaları, kişisel, sosyal ve mesleki gelişimleri için daha fazla alan yaratmaları konularında cesaretlendirmeyi amaçlamıştır.

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