ATTITUDES OF ENGLISH TEACHER CANDIDATES TOWARD ICT

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Abstract

The purpose of this study was to investigate the attitudes of English teacher candidates at formal and distance higher education contexts toward ICT and reveal whether there was a significant difference between these two groups in terms of their attitudes toward ICT. The sample of the study consisted of 175 prospective English teachers at two different higher education contexts. The participants were randomly selected among forth-year students at the ELT departments of Euopean University of Lefke (EUL) in North Cyprus and Anadolu University (AU) Open Education Faculty in Turkey during 2009- 2010 Academic Year. Due to differences between the educational context and instructional method, the nine item questionnaire developed by the researchers was administered to the prospective teachers at EUL (N=92) and AU (N=120) to collect data. The return rate from AU prospective English teachers was 70.8% (N=85), while the response percentage from EUL prospective English teachers was 97.8% (N=90). Data were analyzed using frequencies, percentages, mean and standard deviation and independent samples t-test. While the general ICT attitudes of prospective EFL teachers at the formal higher education context were positive with an overall mean score of 4. 29 (SD= 0.69), a great number of prospective EFL teachers at distance higher education context exhibited less positive attitude toward ICT integration in education with a mean score of 2.77 (SD= 0.19). The results also indicated that there was a significant difference between the attitudes of prospective EFL teachers at formal higher education contexts and the attitudes of prospective EFL teachers at distance higher education contexts toward ICT integration (p < 0.05). The ELT curriculum should be reconsidered to provide real ICT experiences for prospective teachers. Furthermore, the number of courses as to ICT use in education should be increased. More opportunities should be presented to allow the prospective EFL teachers to attain valuable experiences and gain self-efficacy in the use of ICT in their future teaching.

Keywords: Language education, Englısh aducation, Information and Communication Technology (ICT), English teacher candidates

INTRODUCTİON

During the past two decades, there has been a worldwide proliferation of Information Communication Technologies (ICT) in the field of education. The educational potential of ICT is stressed in a variety of ways (Becker, 2000; Godfrey, 2001; Bruce and Levin, 2001; Cooper and Brna, 2002; Toprakçı, 2006, 2007). For instance, Godfrey (2001) stresses the benefits of ICT as it presents rich learning environments, allows the learners to adopt multiple ideas, encourages inquiry and communication, assists students' self expression and caters for individual differences. Due to its growing power and capabilities, ICT triggers a revolution in the outmoded educational system. In the same vein, the higher education institutions around the world

17

have increasingly adopted ICT as tools for teaching, curriculum development, staff development, and student learning (Kumpulainen, 2007; Usluel et al., 2008).

In developing countries, in particular, the aforementioned promises have generated a great set of speculations about the necessity of educational reforms that will deploy the new technologies at all levels (Pelgrum, 2001). Nevertheless, research has identified severe impediments to fully integrating technology into the teaching and learning processes in higher education (Becta, 2004). Despite the increased availability of ICT hardware (Ertmer, 1999), school related support for ICT integration (Baylors and Ritchie, 2002), and a larger consciousness of teachers about the significance of educational ICT use (Khine, 2001), a large number of teachers are still hesitant to adopt technology in teaching tasks (Berker, 2000; Wang et al., 2004; Hermans et al., 2008).

The rate of adaptation is affected by factors including various economic, sociological, organizational and psychological variables (Straub et al., 1997). For instance, inadequate infrastructure (Pelgrum, 2001; Mehlinger and Powers, 2002), lack of training and personal expertise (Schrum, 1999; Strudler and Wetzel, 1999; Willis et al., 1999) and weak technical support (Schrum, 1995) are the most frequently cited challenges in the implementation of ICT in educational arena. In addition, regarding university faculties, Parker (1997) asserted some logistical factors hindering the use of technology such as lack of time, hardware, software, unavailability of ICT resources and computer labs. Furthermore, many studies focused on micro level (class level) variables such as computer experience (William et al., 2000; Becker, 2001) and gender differences (Shapka and Ferrari, 2003; Volman et al., 2005). Additionally, as another individual factor influential in facilitating or impeding the ICT use in teaching activities, attitudes of teachers were stressed by Cuban (1993) since attitudes 'shape what they choose to do in their classrooms and explain the core of instructional practices that they have endured over time' (p. 256).

Although early research on computer uses in education has neglected the impact of teachers' attitudes toward the new technology (Harper, 1987) by mainly focusing on its effect on students' success (Clark, 1983), concurrent studies have shown that the effective deployment of ICT depends largely on the attitudes of educators who ultimately decide how it is implemented in the classroom. According to Myers and Halpin (2002), fundamental reason for studying teachers' attitudes is that it is a major predictor of prospective ICT use in the instructional setting. In this respect, much of recent research has supported the idea that acceptance and implementation of computer technologies have been strongly affected by the teachers' attitudes (Isleem, 2003; Tondeur and Valcke, 2004; Huang and Liaw, 2005).

As Baylor and Ritchie (2002) state, 'regardless of the amount of technology and its sophistication, technology will not be used unless faculty members have the skills, knowledge and attitudes necessary to infuse it into the curriculum (p.398). That is, teachers should become effective agents to be able to use technological tools in the classroom, which is possible through positive teacher attitude thereby adopters feel more comfortable with using them and usually integrate them into their teaching (Kersaint et al., 2003; Bullock, 2004). Positive attitude often stimulates teachers with

18

less technology knowledge to learn the required skills for employing ICT- based tasks in the classroom setting.

Accordingly, in his theory of Diffusion of Innovation, Rogers (1995) views teachers' attitudes as an indispensible aspect of innovation decision and adoption process and, thus, identifies five main attributes of technology that affect its acceptance and subsequent adaptation: relative advantage, compatibility, complexity, observability, trialibility. Therefore, a novel technology can be increasingly diffused in case the adopters perceive that the new technology: (1) has an advantage beyond the previous innovations, (2) is compatible with existing practices, (3) is not complex to understand and use, (4) shows observable results, and (5) can be experimented with a limited basis before adaptation (Albirini, 2006).

Given importance of teachers' attitudes in ICT integration, this study has mainly focused on different attitudes of prospective EFL students at formal and distance higher education contexts in Turkey where technology has very recently been infused into the educational system, as is the case of most developing countries. The study involved basically EFL teachers as 'the field of foreign language education has always been the forefront of the use of technology to facilitate the language education process' (Lafford and Lafford, 1997, p.215).The current study investigated the effect of educational settings and conditions on shaping prospective EFL teachers' attitudes toward ICT and its diffusion in their future educational practice.

This study was conducted in two different higher education contexts which constitute the core of Turkish Higher Education System duly inaugurated on November 18, 1933 just after the proclamation of the Turkish Republic in 1923. In 1981, with the basic *Law on Higher Education* (YÖK, 1981), higher education in Turkey was reorganized and tied to Council of Higher Education in a centralized structure (Mızıkacı, 2006). Currently, there are one hundred thirty nine universities, of which ninety-four are public and forty-five are private institutions. Likewise, Higher Education in Cyprus is similarly coordinated by Higher Education Planning, Evaluation, Accreditation, and Coordination Council established in 1979 and later reformed in 2005 (YÖDAK,2009). In particular, the majority of students from Turkey get higher education at universities on the island. Thus, aforementioned councils operate collaboratively to meet the expectations and needs of the students.

As one of the six universities in Cyprus, European University of Lefke (EUL) was founded in 1990 by Cyprus Science Foundation and the university today offers 6 Associate, 28 Undergraduate and 10 Postgraduate programmes. The Department of English Language Teaching was one of the higher education contexts in which the research was conducted. In the department, all courses are instructed in English in technologically-furnished classrooms. Upon investigating the curriculum of English Language Teaching department developed by Council of Higher Education and adopted with minor changes, four courses are recognized as to ICT, namely Computer I, Computer II, Teaching Technology and Material Design and Internet Skills in Language Teaching, which are conducted in face-to-face sessions. At the end of a four year program, students are expected to complete these courses successfully and employ ICT in their subject teaching.

19

The other context in the study is Open Education Faculty (OEF), founded in 1982 by Anadolu University in Turkey and has functioned as a leading distance higher education model with not only national but also worldwide reputation since then (Picciano, 2001; Simonson et al., 2009). The Department of English Language Teaching was established in the same year to meet the great need for EFL teachers. The department offers courses through printed materials and TV programs at a distance while few lessons in the first and second years are provided in the classroom setting. The ELT curriculum involves such courses related to ICT as Computer and Teaching Technology and Material Design, which are expected to be learned without instruction and practicum. However, the OEF has very recently started to provide online courses to support the students.

As clearly stated, despite the shared title, higher education, the methods and principles used in these institutions are varying to a great extent. Thus, this body of research aims to explore whether this variety in higher education in Turkey has any impact on the attitudes of English teacher candidates toward ICT. That is, the purpose of this study is to unearth the attitudes of English teacher candidates at formal and distance higher education contexts toward ICT and find out whether there was a significant difference between these two groups related to their attitudes toward ICT.

METHOD

The study was conducted with the participation of 175 English teacher candidates at two different higher education contexts. The participants were randomly selected among forth-year students at the ELT departments of EUL in Cyprus and OEF in Turkey and each participant was assigned a number during the data analysis procedure because of ethical considerations. Demographic properties of the participants are presented in Table 1.

Table 1. Demographic properties of the participants (N= 175)

		Frequency	**Percentage (%)**
Gender	Male	78	45
	Female	97	55
Age	20-22	11	6
	22-25	98	56
	25-above	66	38
Type of HE	Formal	90	51
	Distance	85	49
Total		175	**100**

Due to differences between the education context and instructional method, a questionnaire was developed by the researchers to gather data needed for the study rather than using an existing instrument after an extensive literature review of literature utilized in different educational backgrounds (Jones and Clarke, 1994; Robertson et al., 1995; Sooknanan, 2002; Isleem, 2003; Dudeney and Hockly, 2007). The development of the instrument was guided by a number of experts working at both higher education

20

settings. This panel of experts including two professors of educational technology, two native experts and two non-native EFL teachers checked the instrument for content and face validity and contended that the questionnaire is appropriate and comprehensive for the context of the study. To check the reliability, the instrument was analyzed through the Cronbach's Alpha Coefficient $\alpha = 0.90$, which shows high level reliability.

The questionnaire contains nine items based on 5-point likert scale (from 1=strongly disagree to 5= strongly agree). EFL teacher candidates' personal characteristics (gender, age, type of higher education) were also included into the design of the study to ensure maximum control of variables (Gay and Airasian, 2000). The instrument was designed in English as all participants were known to have a high level of language proficiency, which is a requisite for attending to the ELT departments in THES.

The questionnaires were administered to the prospective teachers at EUL (N=92) in the classrooms since they attend various courses in the main campus of the university and to the prospective teachers at OEF (N=120) through the internet as they were in separate parts of Turkey during December, 2009. The return rate from OEF student teachers was 70.8% (N=85) whilst the response percentage from EUL prospective teachers was 97.8% (N=90).

Data were analyzed using the Statistical Package for Social Sciences (SPSS. 16). The demographic variables for this study were discrete data (nominal and ordinal), therefore, descriptive statistics were utilized to run for mean and standard deviation (Heiman, 2001; Sekaran, 2003 Beins, 2004;). In this study, Kolmogorov- Smirnov test was utilized to see whether the data contained in the general variable is normally distributed or not. The H_o -null hypothesis was "*general variable which belongs to students at formal higher education and those at distance higher education is normally distributed*". The results of tests of normality revealed that there was no significant difference between two groups, that is, the significant value (p-value) is lower than 0 (p < 0.05). In other words, H_o -null hypothesis was rejected because sig. (significance 2-tailed) value is lower than 0.05.

21

Table 2. Tests of normality (N= 175)

	Group	Kolmogorov-Smirnov[a]		
		Statistic	**df**	**Sig.**
General	Students at formal HE	0,154	90	0,000
	Students at distance HE	0,317	85	0,000

Hence, non-parametric analysis was used such as Mann-Whitney U Test to determine whether there is a significant difference between two sets of scores or to compare means and correlation.

RESULTS

Participants were asked to respond to 9, Likert-type statements dealing with prospective English teachers' attitudes toward ICT integration into education (Appendix A) and the ICT attitudes of prospective EFL teachers were presented by a mean score

on a 5-point scale where 5 (strongly Agree) shows the maximum score and 1 (Strongly Disagree) represents the minimum score. To present a planned report of the results, the findings will be structured along the following list of research questions which comprise the central basis of the current study.

- What are the attitudes of prospective EFL teachers at formal higher education context toward ICT integration?
- What are the attitudes of prospective EFL teachers at distance higher education context toward ICT integration?
- Is there a significant difference between these two groups in terms of their attitudes toward ICT integration?

1. What are the attitudes of prospective EFL teachers at formal higher education context toward ICT integration? As Table 3 illustrates, the general ICT attitudes of prospective EFL teachers at the formal higher education were positive with an overall mean score of 4. 29 (SD= 0.69). Eighty-two point nine (82.9%) of the respondents had positive (23.7) or highly positive (59.2) perceptions of ICT integration into education. These respondents reported that they enjoyed using ICT, had no apprehension of it, felt very comfortable while working with ICT, learned more about in-class ICT implementation. In addition, most of the respondents agreed and strongly agreed that ICT saved time and effort, enhanced learning many new things, did not intimidate or threaten the learners and should be integrated into the curriculum more.

Table 3. Distribution of mean scores on the attitudes of students at formal HE (N= 90)

Item	X	SD
Item 1	4,766	4,766
Item 2	4,100	1,281
Item 3	4,666	0,703
Item 4	4,200	1,256
Item 5	4,300	0,827
Item 6	4,566	0,765
Item 7	4,400	0,804
Item 8	3,800	1,143
Item 9	4,233	0,765
Overall attitude	4,296	0,691

2. What are the attitudes of prospective EFL teachers at distance higher education context toward ICT integration? As shown in table 4, a great number of prospective EFL teachers at distance higher education context represented partially positive attitude toward ICT integration in education with a mean score of 2.77 (SD= 0.19). Seventy-five point two percent (75.2%) of the participants exhibited negative attitude toward using ICT in subject teaching while twenty-four point eight (24.8%) percent of the respondents expressed positive or highly positive intentions in terms of employing ICT in their prospective teaching career. The most striking result in this section is that the respondents showed no positive attitude toward items 4, 8 and 9. This implied that ICT use intimidated them to a serious extent and they considered changing

the curriculum to integrate more technology as a difficult attempt. Also, almost all of them were of the opinion that utilizing ICT too often to be of very much use would break down.

Table 4. Distribution of mean scores on the attitudes of students at distance HE (N= 85)

Item	X	SD
Item 1	3,400	0,492
Item 2	2,141	0,350
Item 3	4,070	0,650
Item 4	1,894	0,617
Item 5	2,847	0,748
Item 6	3,576	0,777
Item 7	3,576	0,777
Item 8	2,529	0,502
Item 9	2,529	0,502
Overall attitude	2,772	0,198

3. Is there a significant difference between these two groups in terms of their attitudes toward ICT integration? From the output of Table 5, it was found that there was a difference between the ICT attitudes of two groups of prospective EFL teachers. Prospective EFL teachers at EUL had positive attitude toward ICT integration in education with a mean rank of 126,42 while their counterparts at the distance higher education realm exhibited considerable less positive attitudes with a mean rank of 47,32.

23

Table 5. Ranks (N= 175)

	Group	N	Mean Rank	Sum of Ranks
General	Students at formal HE	90	126,42	11377,50
	Students at distance HE	85	47,32	4022,50
Total		175		

To determine the proportion of the difference in the attitudes of prospective EFL teachers toward ICT, Mann-Whitney U test was used to compare the means of the attitude variables of two groups as shown in Table 6. The results indicated that there was a significant difference between two groups, that is, the significant value (p-value) is lower than 0 ($p < 0.05$). In other words, H_o - null hypothesis claiming that there is no significant difference between the perceptions of two different groups was rejected because sig. (significance 2-tailed) value is not greater than 0.05.

Table 6. Test Statistics [a] (N= 175)

	GENERAL
Mann- Whitney U	367, 500
Wilcoxon W	4,022E3
Z	-10, 433
Asymp. Sig. (2-tailed)	0,000

a. Grouping Variable: Group

In the light of these findings, it can be stated that H_o - null hypothesis was rejected and that there is a significant difference between the perceptions of two different groups.

DISCUSSION

Studies investigating attitudes toward using or integration ICT in education yield both promising and challenging results. (Li and Kirkup,2007; Yu and Yang, 2006; Meyer, 2003;Schoech,2000) because teachers' attitudes toward ICT have been globally recognized as a significant factor for the achievement of technology integration in education (Watson, 1998; Rogers, 1995) and much of the research, conducted in different social, cultural and education settings, reveals positive attitudes toward the use of ICT as teaching tools (Simsek, 2008; Ruthven et al.,2005; Brandl, 2002; Le and Le, 1999). On the other hand, some studies report that, in spite of substantial investment in ICT education worldwide, many teachers struggle to successfully employ new technology in their teaching (Zhao and Frank, 2003; Phillips, 2002; Zhao et al., 2002).

In view of a likewise purpose of the study, three separate, yet interrelated, research questions were posed to obtain information about the attitudes of prospective EFL teachers at formal and distance higher education contexts and the collected data was analysed using different statistical analysis methods. The results underpin the importance of an integrated and concurrent understanding of the relationship between the prospective teachers' thinking processes and the ICT instruction. Findings suggest that their attitudes are affected through the courses they have taken in higher education period (Demetriatis et al, 2003).

This study seems to support the idea that each educational setting has distinguished systems within which the adaptation and diffusion of ICT follow different ways (Huang and Kapur, 2007) and each learner in these systems makes his/her own decisions about the implementation of ICT, which has implications for the type of higher education and the way of instruction. If the use of ICT is increased in the classroom, it is likely to impact directly prospective teacher outcome with a greater likelihood of engagement and a greater willingness to try since the actual exposure to ICT instruction rather than virtual is positively related to the mastery of specific ICT-competences of teachers (Becker and Riel, 2000; Becker, 2001)

A number of studies have looked into the success of pre-service teacher programs and the majority have concluded that several institutions of higher education have failed to prepare prospective teachers for future implementations of ICT or develop their positive insight into the potential of educational technology, and in turn ICT (Gunter, 2001; Becker, 1999). In this respect, the preliminary training on ICT in Bachelor's degree establishes the prospective intentions of beginning teachers on integrating ICT in their teaching activities (Masood,2010), yet the curriculum and instruction strategies differ from one higher education institution to the next.

Accordingly, the relevance of the curriculum by these institutions with respect to the training of ICT integration should be scrutinized in that one of the perceived reasons in this study leading to the paucity of positive attitude to ICT implementation is the

24

mismatch between ICT and existing curricula. It is not enough for attaining successful integration of ICT to amalgamate few courses into the curriculum since well-motivated procedures accompanied by interaction and performance are the needs of prospective EFL teachers for describing and interpreting the value of ICT for language development (Koeber, 2005;Chapelle, 1998). Hence, the ELT curriculum is to be reconsidered to provide prospective teachers with real ICT experiences (Albion, 1999).

Even if the higher education institution has a distance education policy, it is to offer courses related to ICT in a classroom setting whereby the future educators establish early habits that will make them feel confident in their ability to conduct classes designed with technology. As Barton and Haydn (2004) state, the idea of training teachers through distance learning in ICT proved to be problematic and unhelpful.

Furthermore, the number of courses as to ICT use in education should be increased and refreshed not only to foster teacher sufficient use but also meet demands of advancing technology. More opportunities with conducive and non-threatening environment should be provided to allow the prospective EFL teachers to attain vicarious experiences and gain self-efficacy in the use of ICT in their future teaching profession (Teo, 2008; Wang et al.,2004). As a consequence, as asserted by Cochranen (1995), the use of ICT tools is no longer to be considered as an optional 'extra' for teachers, so higher education institutions should aim to stimulate the manifestation of ICT literacy.

CONCLUSİON AND RECOMMENDATİONS

25

The results of the study stated that the general ICT attitudes of prospective EFL teachers at the formal higher education context were positive with an overall mean score of 4. 29 (SD= 0.69). However, a great number of prospective EFL teachers at distance higher education context exhibited less positive attitude toward ICT integration in education with a mean score of 2.77 (SD= 0.19). Moreover, the results denoted that there was a significant difference between the attitudes of prospective EFL teachers at formal higher education contexts and those of prospective EFL teachers at distance higher education contexts toward ICT integration ($p < 0.05$).

The ELT curriculum should be reconsidered to present real ICT experiences for prospective teachers (Albion, 1999). Moreover, the number of courses as to ICT use in education should be maximized. More opportunities should be provided to enable the prospective EFL teachers to gain valuable experiences and gain self-efficacy in the deployment of ICT in their future teaching profession (Teo, 2008; Wang et al.,2004).

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26

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27

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28

APPENDİX

Questionnaire for Students of English Language Teaching Department

With this survey, we hope to collect data about the attitudes of prospective EFL teachers at both formal and distance higher education context toward ICT integration. The questionnaire consists of two parts. In the first part, you are asked to fill in your personal details. In the second part, you are requested to read nine statements below and then rank the items between 1 (strongly disagree) to 5 (strongly agree). (1=totally disagree   2= disagree   3= no strong opinion   4= agree   5= strongly agree)

Attitudes to Information and Communication Technology	1	2	3	4	5
1. I enjoy using Information and Communication Technology.					
2. I think using ICT saves time in class.					
3. I know that ICT can help me to learn many new things.					
4. Using ICT does not intimidate or threaten me.					
5. I feel very confident when it comes to working with technology in class.					
6. I want to learn more about using ICT in class.					
7. I believe that ICT can really improve my teaching practice.					
8. Changing the curriculum to integrate ICT is possible.					
9. ICT does not break down too often to be of very much use.					

İNGİLİZCE ÖĞRETMEN ADAYLARININ BİLGİ VE İLETİŞİM TEKNOLOJİLERİNE YÖNELİK TUTUMLARI

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Genişletilmiş Özet

Problem: Bu çalışmanın amacı, örgün ve uzaktan yüksek öğretim ortamlarındaki İngilizce öğretmen adaylarının bilgi ve iletişim teknolojilerine yönelik tutumlarını anlamak ve bu tutumlarla ilgili olarak her iki grup arasında anlamlı bir farkın olup olmadığını ortaya çıkarmaktır.

Yöntem: Araştırmanın çalışma grubunu iki farklı yüksek öğretim ortamındaki 175 İngilizce öğretmen adayı oluşturmaktadır. Denekler 2009-2010 Akademik Yılında Kuzey Kıbrıs Türk Cumhuriyeti'ndeki Lefke Avrupa Üniversitesi (LAU) ve Türkiye'deki Anadolu Üniversitesi Açık Öğretim Fakültesi (AÖF) İngilizce Öğretmenliği 4. sınıf öğrencileri arasından rastlantısal olarak seçilmişlerdir. Araştırmacılar tarafından geliştirilen dokuz maddelik anketi iki eğitim teknolojisi profesörü, iki anadili İngilizce olan uzman ve iki anadili İngilizce olmayan İngilizce öğretmeni içeriksel ve yüzeysel geçerlilik açısından kontrol etmiş ve anketin çalışmanın bağlamı için uygun ve kapsamlı olduğunu belirtmişlerdir. Anketin güvenirliğini kontrol etmek için ise anketin güvenirlik katsayısı hesaplanmış ve anketin yüksek güvenirlik seviyesine sahip olduğu (α = 0. 90) bulunmuştur. LAU (N=92) ve AÖF (N=120) İngilizce öğretmen adayına dağıtılmıştır. AÜ (AÖF) İngilizce Öğretmen adaylarının % 70.8'i (N=85) ve LAÜ İngilizce öğretmen adaylarının ise % 97.8'i (N=90) anketi doldurmuşlardır. Veriler frekans, yüzde, ortalama, standard sapma ve bağımsız iki örneklem t-testi kullanılarak çözümlenmiştir.

Sonuçlar: Örgün yüksek öğretim ortamındaki İngilizce öğretmen adaylarının bilgi ve iletişim teknolojilerinin kullanımına yönelik tutumları genel olarak olumlu olmasına rağmen (X= 4.29; SD= 0.69), uzaktan yüksek öğretim ortamındaki İngilizce öğretmen adayları bilgi ve iletişim teknolojilerinin kullanımına yönelik genel olarak daha az olumlu tutum sergilemişlerdir. Örgün yüksek öğretim ortamındaki İngilizce öğretmen adaylarının pek çoğu (%82.9) bilgi ve iletişim teknolojilerinin eğitimde kullanılmasında olumlu (%23.7) ya da çok olumlu (%59.2) tutuma sahip olduklarını bildirmişlerdir. Araştırma sonuçları örgün yüksek öğretim ortamındaki İngilizce öğretmen adaylarının bilgi ve iletişim teknolojilerinin kullanımına yönelik tutumları ve uzaktan yüksek öğretim ortamındaki İngilizce öğretmen adaylarının bilgi ve iletişim teknolojilerinin kullanımına yönelik tutumları arasında örgün yükseköğretime devam edenler lehine anlamlı bir farkın olduğunu da göstermiştir (p < 0.05)

Öneriler: İngilizce öğretmen adaylarına bilgi ve iletişim teknolojileri ile ilgili tecrübe sağlanması için İngilizce Öğretmenliği ders programı tekrar gözden geçirilmelidir. Üstelik eğitimde bilgi ve iletişim teknolojilerinin kullanımı ile ilgili derslerin sayısı artırılmalıdır. İngilizce öğretmen adaylarına gelecekteki öğretmenlik mesleklerinde bilgi ve iletişim teknolojilerini kullanmaları için değerli tecrübeler ve öz-etkililik kazanmalarını sağlayabilecek daha fazla imkanın sunulması gerekmektedir.

Anahtar Kelimeler: Dil eğitimi, İngilizce eğitimi, Bilgi ve İletişim Teknolojisi (ICT), İngilizce öğretmen adayları