

The Internet in EFL Teacher Education: Investigating the Possibilities and Challenges in a Pre-service Teacher Education Programme

Mahmoud Mohammad Sayed Abdallah^{1,2}

1. University of Exeter, Exeter, UK, 2. Assiut University College of Education, Assiut, Egypt

The paper reported on a small-scale qualitative study on EFL (English as a Foreign Language) teacher education with a two-fold objective, investigating the possibility of integrating the Internet for academic purposes in the context of a pre-service English teacher education programme in Egypt, and suggesting some guidelines based on the specific context of Assiut University College of Education. Semi-structured interviews were conducted online with some student teachers (n=10) and teacher educators (n=10) at the university to identify their personal viewpoints, experiences and concerns regarding integrating the Internet into this teacher education context. For triangulation purposes, content analysis was conducted on 12 online documents. Results reveal some difficulties, challenges, and concerns related to the process and some new forms of literacy needed for this context. Based on this, some guidelines are suggested for integrating the Internet into pre-service EFL teacher education programmes with special reference to the Egyptian context.

Keywords: Internet, teacher education, literacy, new literacies, English language learning, technology, professional development, new literacy forms

Abbreviations & Acronyms: EFL (English as a foreign language); ELT (English language teaching); IRA (International Reading Association) TEFL (teaching English as a foreign language); TESOL (teaching English to speakers of other languages).

Acknowledgement: Many thanks to the Egyptian government represented in the Ministry of Higher Education and the Egyptian Cultural Centre & Educational Bureau in London headed by Dr Nader Matter, for sponsoring and supporting this project which is part of my PhD study at the Graduate School of Education, University of Exeter, UK. Many thanks go also to the Egyptian EFL student teachers and teacher educators at Assiut University College of Education, Egypt, who participated in the study.

1. Introduction and Background

On a general scale, to better prepare prospective teachers for literacy and the new literal forms and dimensions emerging in the wider social context, as implied by Cavanaugh (2005), their undergraduate

Mahmoud Mohammad Sayed Abdallah, Ph.D. student (TESOL) at the Graduate School of Education, University of Exeter, UK & Assistant Lecturer of Curriculum, Literacy & TEFL/TESOL Methodology at Assiut University College of Education, Egypt.

programmes, hosted by universities and teacher education institutions in higher education, need to include literacy and technology concepts and address new ICTs (Information and Communication Technologies), especially the Internet. More specifically, there is a growing and persistent need to address the Internet as a dominant innovation, and how it can be employed adequately to improve students' learning and help them master the lifelong learning skills and competencies required in this information age. This is particularly relevant to EFL student teachers and all language teachers, who are burdened with the double tasks of mastering both the academic and lifelong learning skills that they need as adult learners as well as the teaching competencies and skills that they need as prospective teachers of English (Roberts, 1998). From a more pragmatic point of view and in terms of working conditions at present, Karchmer (2001) anticipated that the workplace will require students to become proficient in using Internet-based literacies, which makes the role of teacher education in this age even more critical and significant. Similarly, studies show that university students (some of whom are prospective teachers) rely heavily on the Internet for general and academic purposes, indicating that student usage will increase over time (Harman, 2007). In 2002, the IRA (International Reading Association), as Cavanaugh (2005) reported, recommended that teacher educators should integrate effective instructional models, using the Internet into preparation programmes to provide opportunities for pre-service teachers to practise by using age-appropriate ICTs.

Hence, an up-to-date preparation for prospective teachers of English is important for three main reasons: (1) the Internet has provided access to a massive amount of information, but the task of managing that critically has become vital (Ingraham, Levy, McKenna, & Roberts, 2007, p. 168). This is particularly relevant, because EFL teachers will be faced with the challenge of using the Internet for updating their professional knowledge which necessitates training in information management strategies, and other skills needed for managing, organizing, evaluating, and employing online content (Leu, Kinzer, Coiro, & Cammack, 2004); (2) student teachers are expected to deal with language learners who will be skilled in using ICTs; if they are not trained in these aspects, a literacy gap will exist, and thus hindering communication and rapport in the classroom. Students, as the IRA suggests, have the right to have teachers skilled at using new literacies for teaching and learning (Cavanaugh, 2005).

This is a natural right since the teaching-learning process has become so complicated involving new roles for teachers as facilitators, managers, counsellors, observers, feedback providers, assessors, process leaders, material developers, and above all, "guide on the side" and not "sage on the stage" (King, 1993; Roberts, 1998); (3) the Internet is so closely relevant to English teaching/learning that it is impractical to disregard it in any context of language learning and English teacher preparation. According to Warschauer, Shetzer and Meloni (2000), the Internet has been providing many benefits in this context as it: (1) provides access to authentic language material; (2) enables communication in English to take place, and thus, language practice is fostered; (3) caters for students' personal needs and individual differences; and (4) can create a rich context for using some effective language teaching/learning approaches and methods, such as: reflective learning, cooperative learning, problem-based learning, enquiry-based learning, and self-paced learning.

With the dominance of the Internet in all fields and walks of life, a persistent question that has been always recurring is: *Is it possible to integrate the Internet for academic purposes in formal teaching/learning contexts, especially in English Language Teaching (ELT) and English Language Learning (ELL)?* This question is particularly crucial within the field of Teaching English as a Foreign Language (TEFL) or Teaching English to Speakers of Other Languages (TESOL), essentially due to the significant influence the Internet has

been having on the English language (Crystal, 2001), and concept of literacy and “who is to be considered literate” (Abdallah, 2008). Always new forms of communication and interaction are coming to the fore, and hence, in this new technological context, it is hard to restrict ourselves as English as a Foreign Language (EFL) teacher educators and student teachers, to the traditional paper-based forms of literacy which are still dominant in the pre-service teacher education institutions in Egypt. The traditional concept of literacy is based on the long-established assumption that the printed book is the sole means of literacy and the teacher/instructor is the main source of information or the fountain of knowledge.

Recognising the importance of the Internet as an information, teaching-learning resource, Coiro, Knobel, Lankshear and Leu (2008) assumed that the Internet is the defining technology of literacy in the 21st century, as no other invention in the history of humankind (e.g., press, telephone, and TV) has ever transformed the meaning of literacy in the same way the Internet has. As a reaction to ICTs, new terms have come to the fore to express the relationship between literacy and new technologies (especially the Internet). For example, the New London Group (NLG) (1996) presented “multiliteracies” indicating the multiplicity of communication channels in the world today which calls for a much broader view of literacy. Hull and Schultz (2002) talked about “multimodal contexts” in which literacy is differentiated. Tyner (1998) focused on “critical literacies” that teaches about information, as well as with information, suggesting a “media literacy perspective” that addresses the new literacy forms required by new media.

As far as ELT is concerned, this implies a need to address and assimilate the new dimensions that have emerged into the language literacy practices. It is well known that the main language skills are: reading, writing, listening, speaking, comprehension, and communication. Traditionally, all the literacy practices related to these skills have been paper-based. However, nowadays, we are experiencing a shift from traditional paper-based practices to electronic, online practices, or as Jewitt (2006, p. 13) put it, a “shift from page to screen”, which has been influencing all the educational programmes at all educational stages (including kindergarten) all over the world. In this sense, in addition to the traditional paper-based skills and practices, ELT should encompass the new forms that such skills and practices have taken in this information age which include: (1) “online reading” which involves hypertext, hyperlinks, the new ways of navigation through the text and the new electronic environment which mediates the reading process (Coiro, 2003); (2) “online communication”, whether synchronously (e.g., through chat) or asynchronously (e.g., through e-mail) (Warschauer et al., 2000); (3) “online composition and writing” which involves new ways of composing, managing and organizing words and sentences online; and (4) “online listening and speaking” which involves using online media and tools to listen to audio and video materials and talk to people in other places in the globe who might be English native speakers (Abdallah, 2007).

2. Problem of the Study

Despite the many studies recently conducted to address the issue of using the Internet in the context of pre-service EFL teacher education programmes in Egypt (England, 2007; Mekheimer, 2005), the focus has been on experimenting some Internet-based applications and tools (e.g., e-mail and chat) for the purpose of developing and/or improving specific linguistic skills for EFL student teachers, such as essay writing and reading comprehension, without presenting guidelines into how to integrate the Internet into the EFL teacher education programme in general and into the Egyptian pre-service EFL teacher education programmes in

particular. These studies have focused more on the “tool” rather than the “context”. It is important to understand the context of Egyptian pre-service EFL teacher education, especially in the colleges of education, so as to determine how much practical the integration is, and whether there is any theoretical framework based on this specific context that might guide the process. Hence, the study seeks to generate some guidelines in this respect.

More specifically, the study attempted to answer the following questions:

(1) What is the range of those difficulties, challenges and concerns involved in the process of integrating the Internet into Egyptian pre-service EFL teacher education programmes with specific reference to one of those programmes provided in Assiut University College of Education in Egypt?

(2) What are the new forms of literacy skills that Egyptian EFL student teachers need to develop in the context of their education programmes?

(3) Which guidelines can be used to inform this integration process?

3. Methodology and Procedures

This is a short-term qualitative study that draws on the interpretivist paradigm to reach a contextual understanding of the investigated phenomenon (Grix, 2004) throughout delving into the personal viewpoints and experiences of both EFL student teachers and their educators. This paradigm is employed when subjective viewpoints are sought. Hence, semi-structured interviews (Appendix A) were used as the main data collection tool to obtain such subjective viewpoints. In particular, the flexibility that such type of interviews allow (Cohen, Manion, & Morrison, 2007, p. 355) helps with exploring meaning, insights and personal experiences. Standardized tools may not help much with capturing the whole image or understand some deeper aspects. Rather, it sounds more appropriate to give the concerned participants chances to express themselves in a free, relaxing interview situation.

Participants were sent invitation e-mails that explained the research objectives and the aim of conducting the semi-structured interviews. They were asked to choose between two online communication tools—e-mail and chat software—as a means for conducting the interview. This was intended to put participants at ease as one may contribute effectively when he/she chooses the means of communication that appeals to him/her. Twenty participants (10 EFL student teachers and 10 EFL teacher educators) from Assiut University College of Education (http://www.aun.edu.eg/fac_edu) (in which I work) replied and expressed their willingness to participate, most of whom (n=12) preferred chat, while the rest (n=8) preferred e-mail declaring that they would feel more relaxed when using e-mail as there would be no pressures or tensions during the interview. Interviews were conducted based on date and time arrangements made with the participants. For chat-based interviews, each one lasted between 30-60 minutes depending on connection speed and other personal factors. For e-mail-based interviews, participants were sent a question at a time, and based on the participant's response, another question was sent till all needed data were obtained. This way, the e-mail based interview was a simulation of the chat interview and face-to-face ones in terms of preserving the semi-structured nature by not sending the participant all the questions at one go. The latter procedure is usually used with e-mail-based interviews that take a questionnaire design.

Following these interviews, a small-scale content analysis of some online documents which included e-mail exchanges, online ELT/TEFL-related articles, and blogs, was conducted. All these online contributions were made by EFL/ELT teacher educators interested in the Internet and the improvement of pre-service EFL

teacher education in Egypt. A pragmatic, selective approach was employed for analyzing the relevant documents (12 documents). Following the interviews with content analysis is methodologically useful in this context. In other words, methodological triangulation of two data collection methods was employed here to overcome any potential weaknesses related to reliability which might be attached to conducting qualitative research (Grix, 2004). More specifically, after interview data were qualitatively analyzed to come out with some recurrent themes, these themes were iteratively compared and contrasted with the content of the online documents. Finally, the interview analysis results, together with content analysis results, were used to inform the suggested guidelines.

4. Results

Based on a thematic analysis of the data obtained from both interviews and online documents and with the purpose of coming out with some main themes in the light of the interview questions (Boyatzis, 1998), some generalizations were reached and clustered around the following aspects: (1) the types of difficulties that EFL student teachers experienced with using the Internet for academic purposes; (2) the training that those student teachers should receive in the context of their pre-service education programme; (3) the new literacy forms that students need to master; (4) the benefits that integrating the Internet should bring to students as far as English language learning is concerned; and (5) the difficulties and challenges standing as an obstacle in the way of integrating the Internet into the Egyptian pre-service EFL teacher education programmes.

In terms of the types of difficulties, all student teachers reported various types related to using the Internet for ELL-/ELT- related academic purposes. More specifically, these difficulties revolved around: (1) the inability to locate the exact material they needed; (2) feeling that they are “lost on the Web” owing to the massive amount of material and returned results they find; (3) the inability to employ effective searching strategies including using accurate and appropriate keywords/phrases; (4) the inability to employ appropriate online reading strategies (e.g., skimming, scanning and purposive selection) to save time and effort; and (5) the inability to distinguish between the trustworthy, objective websites on one hand, and the personal, subjective and prejudiced ones on the other.

All student teachers stated that they did not receive any training of any kind in using the Internet in general, and in using it for ELT-related academic purposes in particular. The only training course they received was a basic computer literacy course during their first year of study that was too out-of-date to encompass the online competencies and the new literacy forms needed for EFL student teachers in the 21st century. Most of them stated that they relied on themselves while using the Internet, whether at their own homes or in Internet cafes, working according to a ‘trial-and-error’ basis to master the minimum skills that would qualify them to get useful web-based materials relevant to the English language and ELT. All of them highlighted the necessity of receiving an organized, guided and purposive training at Assiut University College of Education with a special focus on how to employ the Internet for learning English as a foreign language.

All EFL student teachers asserted that integrating the Internet into their pre-service education programmes as an essential component would make a great difference for many reasons. In other words, using the Internet in this context would: (1) help them to develop their language skills by communicating with native speakers; (2) give them opportunity to know more about the target English culture; (3) allow them, through some online communication tools (e.g., e-mail, chat, e-groups), to exchange ideas with other colleagues, whether in Egypt or in any place all over the world, and receive feedback from experts; and (4) enable them to access online

updated materials relevant to the English courses they study.

EFL teacher educators focussed on the necessity of making a transition in the Egyptian pre-service EFL teacher education programmes in general from the traditional paper-based forms of literacy to the electronic forms. All of them highlighted the poor state of EFL student teachers' literacy practices in English which are still oriented more towards memorization than towards the creative, functional and communicative use of English as a foreign language. They anticipated that the electronic environment enabled by the Internet would foster creativity and free production in English learning.

As far as ELT and the Internet are concerned, some new literacy skills are needed to employ the Internet effectively for ELT in the context of this pre-service teacher education programme. The skills that are drawn from participants are represented in:

- (1) Using effective techniques for surfing the Web to locate online resources and materials related to the English language (e.g., linguistics and literature) and ELT/ELL;
- (2) Reading online materials critically and selectively to choose those which are useful and relevant;
- (3) Employing Internet tools (e.g., chat software, e-mail, and English teaching/learning websites) for improving basic language skills (e.g., listening, reading comprehension, speaking and written communication);
- (4) Mastering online writing skills that differ from traditional offline writing; these new skills are urgent within an online environment in which people can compose online and communicate with a wider range of people from all over the world.
- (5) Accessing English teaching/learning resources that provide EFL student teachers with English/ELT/ELL- related useful materials. There are many authentic English websites (e.g., www.bbc.com and www.bbcarabic.com) which involve free online English teaching services directing to speakers of other languages including Arabic.

The challenges related to integrating the Internet in this context and which were reported by EFL educators are quite similar; all of them revolved around the following: (1) the insufficient number of computers available in the college labs; (2) the student teachers' poor skills and negative attitudes towards learning new things in general, and learning the Internet for academic purposes in particular; (3) the required long-term comprehensive technical training courses that student teachers need, since there is a great diversity in their mastery of the basic computer and Internet skills (e.g., still, few student teachers are not capable of using Windows as an operating system); (4) the administrative, bureaucratic difficulties which would hinder and delay such a positive change from quickly taking place; and (5) the need to train EFL teacher educators themselves on mastering the basic computer and Internet skills since some teacher educators, especially those who have negative attitudes towards new technologies in general, are still lagging behind.

5. Conclusion: Suggested Guidelines

Based on the thematic analysis conducted with the qualitative data obtained from the interviews and the online documents, some guidelines for integrating the Internet into the Egyptian pre-service EFL teacher education programmes are suggested. Though these guidelines are based on the Egyptian context, they can be used by EFL teacher educators all over the world to inform their practices, once they wish to integrate the Internet into their teaching:

5.1 Developing studied courses

Two main courses studied by EFL student teachers need to be updated enough to address ICTs in general

and the Internet-related new literacy forms in particular: Educational technology and TEFL methodology. Moreover, a link should be created between those two courses so that new ICTs, especially new Internet-related skills and strategies, are used practically in TEFL workshops and real-learning practices in the context of English language learning. The educational technology course should provide the basic technical training that student teachers need on how to use the Internet. The TEFL methodology course should focus on the literacy and competency aspects that students need to develop. The input that student teachers get in the educational technology course should be effectively employed in the TEFL methodology course which is divided into two main parts: a theoretical part and a practical part. It is the practical part that should address these new aspects, because it involves real interactions with student teachers in workshops.

5.2 Developing the main language skills for EFL student teachers

The main language skills (i.e., listening, reading, writing, speaking and communication skills) addressed in the TESOL/TEFL methodology course should be studied in the light of a new perspective based on ICTs, especially the Internet, and the associated new literacy forms that have been influencing the English language in such a way that language skills, competencies and practices are taking new forms and shapes that need to be considered in the process of preparing future teachers of English. Therefore, focus should be on online reading, and how to skim and scan in the web-based environment that includes hyperlinks and hypertexts.

5.3 Blended learning is an appropriate approach for organizing learning

In the context of the EFL teacher training programmes, blended learning (i.e., web-based learning reinforcing and complementing traditional instruction) is the most appropriate mode and/or approach of using and employing the website at this stage. The Internet or the Web, as many teacher educators emphasize, should never replace traditional face-to-face instruction. Hence, blended learning should combine the best elements of both modes to help student teachers to achieve the greatest benefit. In this sense, the website according to this approach should be used to: (1) reinforce and consolidate the students' learning and understanding of new concepts, skills and ideas studied in the TESOL/TEFL methodology course and other academic courses (e.g., literature and linguistics); (2) enable effective synchronous/asynchronous communication among students and between students and their tutors to achieve the best learning outcomes; (3) provide more space and time to discuss assignments and give feedback; (4) make use of the massive resources available on TEFL/TESOL-related websites to develop lifelong learning skills.

5.4 Helping students to practically use some web-based tools and applications in the TEFL methodology workshops

These tools and applications include e-mail, blogs, chat-rooms and search engines. These tools include specific features that can be usefully employed to help with fostering some new literacy practices for student teachers, while they are accomplishing real learning purposes and objectives in the context of English language learning (e.g., surfing the Web to find an answer to a question, reading an article online to identify the main idea, writing a report reflecting personal opinion based on online reading and real communication with experts/professionals in the field of TESOL/TEFL).

5.5 Coordination between EFL teacher educators is needed

There should be some coordination among all EFL teacher educators (i.e., those teaching the academic linguistic and literature courses on one hand, and those teaching the educational, methodological courses on the other) as to the procedures and strategies that they should use to encourage student teachers to use the Web in realistic learning purposes. In other words, there should be a unified attitude among those staff members to

direct students to resort to the Web as an essential learning resource.

5.6 Resolving technical problems

The technology labs and the computers should be ready for students to use and access at any time. Having access outside the university campus is sometimes problematic to many students. Old computers should be updated and new ones should be purchased to meet the increasing number of enrolled students.

5.7 Using new teaching/learning approaches methods

It has become evident that traditional, formal teaching/learning methods used in the Egyptian context of EFL teacher education which revolve lecturing, rote learning and memorization are no longer useful within a blended learning context. Instead, some other socio-constructivist learning/teaching methods should come to the fore. Examples of these include socio-cultural theory, constructivist learning, cooperative learning, project-based learning, problem-based learning and enquiry-based learning. Socio-cultural theory is an interactive approach, especially Vygotsky's concept of ZPD (Zone of Proximal Development) which is closely relevant to language learning particularly in a web-based context. According to Moll and Greenberg (1990, p. 5), ZPD represents a change of focus from teacher-fronted instruction to student-centred learning. ZPD focuses on the English learners' active creation or use of new means to accomplish and understand an activity while collaborating with others to learn. The author thinks that an eclectic approach that makes use of constructivist and learner-centred principles may be useful that all the previously-mentioned approaches share the common interest in the learners and building knowledge interactively and constructively, not through memorization of facts and ideas.

References

- Abdallah, M. M. S. (2007). *Exploring the process of integrating the internet into English language teaching*. (Online submission to ERIC: ED498887)
- Abdallah, M. M. S. (2008). "New literacies or new challenges?" *The development of the concept of literacy in the context of information and communication technologies and language teaching*. (Online submission to ERIC. ED502132)
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage.
- Cavanaugh, T. (2005). Integrating literacy and technology literacy instruction in preservice education. In: G. Richards (Ed.), *Proceedings of world conference on e-learning in corporate, government, healthcare, and higher education* (pp. 2552-2556). Chesapeake, VA: AACE.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). London: Routledge.
- Coiro, J. (2003). Reading comprehension on the Internet: Expanding our understanding of reading comprehension to encompass new literacies [Exploring Literacy on the Internet department]. *The Reading Teacher*, 56(6), February. [Online]. Retrieved from http://www.readingonline.org/electronic/elec_index.asp?HREF=/electronic/RT/2-03_column/index.html
- Coiro, J., Knobel, M., Lankshear, C., & Leu, D. (2008). Central issues in new literacies and new literacies research. In J. Coiro, M. Knobel, C. Lankshear, & D. Leu (Eds.), *The handbook of research on new literacies*. Erlbaum: Mahwah, NJ.
- Crystal, D. (2001) *Language and the Internet*. Cambridge, Cambridge University Press.
- England, L. (2007). Technology applications in English language teaching in Egyptian universities: A developing relationship. *CALICO Journal*, 24(2).
- Grix, J. (2004). *Foundations of research*. Basingstoke: Palgrave.
- Harman, J. C. (2007). Let them use the Internet: Why college instructors should encourage student Internet use. *College Teaching* 55(1), 2-4.
- Hull, G., & Schultz, K. (Eds.) (2002). *School's out!: Bridging out-of-school literacies with classroom practice*. New York: Teachers College Press.
- Ingraham, B., Levy, P., McKenna, C. & Roberts, G. (2007). Academic literacy in the 21st century. In G. Conole, & M. Oliver (Eds), *Contemporary perspectives in e-learning research: Themes, methods and impact on practice*. London: Routledge.
- Jewitt, C. (2006). *Technology, literacy and learning: A multimodal approach*. London: Routledge.

- Karchmer, R. (2001). The journey ahead: Thirteen teachers report how the Internet influences literacy and literacy instruction in their K-12 Classrooms. *Reading Research Quarterly*, 36(4), 442-466.
- King, A. (1993). From sage on the stage to guide on the side. *College teaching*, 41(1), 30-35.
- Leu, D. J., Kinzer, C. K., Coiro, J. L., & Cammack, D. W. (2004). Toward a theory of new literacies emerging from the Internet and other information and communication technologies. *International reading association*[Online]. Retrieved from: <http://www.readingonline.org/newliteracies/leu/>
- Mekheimer, M. (2005). Effects of Internet-based instruction, using Webquesting and e-mail on developing some essay writing skills in prospective teachers at the Faculty of Education at Beni Suef. *PhD Dissertation*. Beni Suef Faculty of Education, Egypt.
- Moll, L. C., & Greenberg, J. B. (1990). Creating zones of possibilities: Combining social contexts for instruction. In L. C. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp. 319-348). New York, NY: Cambridge University Press.
- Roberts, J. (1998). *Language teacher education*. London: Arnold.
- The New London Group (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60-92.
- Tyner, K. (1998). *Literacy in a digital world: Teaching and learning in the age of information*. New Jersey: Lawrence Erlbaum.
- Warschauer, M., Shetzer, H., & Meloni, C. (2000). *Internet for English teaching*. Alexandria, VA: Teachers of English to Speakers of Other Languages.

Appendix A: Semi-structured Interviews

I-Sample Interview Questions Used with EFL Student Teachers

- (1) Have you experienced any difficulties related to using the Internet in your study (if participants were not able to get what was meant by difficulties in this context, they were briefed that examples of such difficulties include: not being able to locate relevant data to something they study; feeling overwhelmed with the vast amount of data available online; and not being able to understand online content)?
- (2) If so, what were these problems/difficulties? (Be specific and detailed giving examples as much as you can)
- (3) Have you received any training of any kind in the College of Education in using the Internet for study/academic purposes related to English teaching and learning? If the answer was positive, other follow-up questions would follow: In what subjects/courses did you receive such training? Was the training sufficient/satisfactory meeting your expectations?
- (4) Do you think that you need a focussed or concentrated instruction/guidance in your training programme at the College of Education into how to use the Internet effectively for study purposes? Why? (Participants were prompted to state detailed and specific reasons).
- (5) Have you heard about the new literacy forms imposed by the Internet? If the answer was positive, another follow-up question would be: do you think that you need any of these new Internet-related forms in your pre-service training as an English teacher?
- (6) Do you think that the college provides you with opportunities to use the Internet for academic purposes in the course of your study programme? Participants were prompted to give as much justifications, explanations, and examples as possible.
- (7) Do you believe that integrating the teaching of how to use the Internet for academic purposes in your training programme will make any difference? Why? (Participants were prompted to state their reasons in both cases).
- (8) In your personal opinion, how important the Internet can be for you in the context of this education or

training programme? (Participants were prompted to give realistic examples and specific details).

II-Sample Interview Questions Used with EFL Teacher Educators

(1) Do you encourage your students to use the Internet for academic purposes related to TEFL/ELT? Have you noticed (or heard about) any difficulties that your students might have experienced with using the Internet? (Teachers were given examples of these difficulties, such as not being able to locating relevant data to something they study) If the answer was positive, this following question would follow: what were these problems/difficulties? (Teachers were asked to be specific and detailed giving examples as much as possible).

(2) Do EFL student teachers receive any training of any kind in the College of Education in using the Internet for study/academic purposes related to English teaching and learning? (If the answer was positive, the following question would follow: In what subjects/courses did they receive such training?).

(3) Do you think that they need a focussed or concentrated instruction/guidance in their current training programme at the College of Education into how to use the Internet effectively for study purposes? Why?

(4) Do you think that your students need to acquire and practice the new literacy forms imposed by the Internet?

(5) Throughout your interaction with those students, how far are you satisfied with their current literacy practices?

(6) Do you believe that integrating the teaching of how to use the Internet for academic purposes in the EFL training programme will make any difference for them? Why? (Teachers were prompted to state reasons in both cases).

(7) To what extent do you think the Internet is useful for improving students' language skills and academic study? (Teachers were prompted to give details and examples).

(Note: These questions are just exemplar questions which were not typically used in the same order and format)