Mariusz Marczak
University College of Social Sciences, Częstochowa, Poland

An E-learning Supplement to a Teacher Training Course: the Trainees' Perspective

Abstract

The rapid development of information and communication technology has created opportunities for didactic innovation in the foreign language classroom and assigned a new function to teacher education, which is currently supposed to prepare teachers to cope with the challenges of Computer Assisted Language Learning (CALL). Effective CALL training must be extensive and systematic; ideally, it should exceed the limits of an ICT course and be integrated with the teaching of content. The present paper investigates whether an e-learning supplement to a face-to-face course in Glottodidactics can facilitate the learning of content while also fostering student teachers' positive attitudes towards technology-enhanced education. It also presents teacher trainees' resulting perspectives on the benefits of e-learning and its impact on their declared future classroom practices. The paper outlines: the rationale for the implementation of e-learning in teacher education; in-training/post-training factors which affect teachers' use of technology; as well as possible modes of blended learning. It further accounts a research study which surveyed the participants of an e-learning supplement to a f-2-f course on: the work modes which they used while learning online; the problems that they faced while utilising technology and their attitudes towards CALL in the light of the course experience.

Keywords: keyword; keyword; keyword; keyword; keyword

1. Introduction

2. Literature review

2. 1 E-learning in teacher education: the rationale

The rapid development of online technology, in particular the emergence of Web 2.0, has inspired a re-think of the forms of education in which contemporary learners are supposed to engage. Although the adequacy of the very term of *Web 2.0* has been questioned (Laningham 2006; Anderson 2007, Krajka 2012), it has grasped the attention of the ICT profession as well as educators.

The term *Web 2.0*, as it was proposed by Dougherty in 2004 (O'Reilly 2005), originally stood for the potentiality of the internet for the delivery of new services and the creation of business opportunities in the web industry. Berners-Lee (1999), the creator of Web 1.0, maintains that *Web 2.0* as a concept misleadingly implies that it refers to a totally new set of online technologies, whereas it is rather an empty phrase in that it embraces precisely the kinds of web services which were expected to emerge naturally in the course of the development of Web 1.0 came in to being.

Regardless of the dispute over the taxonomy, Web 2.0 has been strongly associated with a number of technologies, including: 'social software' technologies, user participation, contribution and social networking (Anderson 2007).

At roughly the same time as Web 2.0, a new dichotomy regarding two distinctly different groups of learners: digital natives vs. digital immigrants was proposed by Prensky (2001), who incited a new way in which the learners of today are perceived.

Digital natives, otherwise known as the Net Generation (Barnes, Marateo and Ferris 2007) or Generation Z (), are those learners who have been raised in an environment characterised by permanent access to information and communication technology, including the internet – hence the term *Net Generation*. Consequently, the members of the cohort are are supposed to take technology for granted and feel at ease while using it.

On the contrary, digital immigrants are those who at a point in the course of their lives migrated into the digital world and somewhat belatedly developed their ICT skills. Digital immigrants are credited with the possession of basic ICT competence, but are said to be less confident in their use of technology.

Learners who are alleged members of the Net Generation are share the following characteristics; for instance, they display a high degree of independence and autonomy in learning (Barnes et al. 2007). Due to exposure to interactive technologies, they are also supposed to easily grow bored with conventional ways of learning, based on transmittable knowledge and passive reception (Oblinger and Hagner 2005). Instead, they have a strong preference for interactivity, the use of a variety of learning resources, opportunities for self-selecting learning assignments in accordance with personal preferences, as well as varied forms of feedback (Barnes et al. 2007).

They are expected to cherish contexts which permit hands-on experiential learning, where they can be guaranteed immediate access to information and gratification (Hay 2000). At the same time, they are capable of multi-tasking, i.e. performing several learning tasks at the same time, as well as handling a large variety of media and technologies (Krajka 2012).

Finally, as in their daily lives they tend to use varied forms of communication, including social networking sites or web communicators (Barnes et al. 2007), and instead of pursuing learning individually, they willingly resort to networked formats, within which they can collaborate with colleagues through the use of online technology (Downes 2005).

At the same time, it must be observed that Kennedy et al. (2007), who researched the technology-related habits and technology usage amongst representatives of the Net

Generation from three Australian universities, reported that a large majority of the 2,588-strong sample had never contributed to a wiki or kept their own blog; over half of the students had never made use of social networking sites, read a blog entry or downloaded a podcast.

What is more, while the majority of those examined used the computer in order to manage digital photos and play digital audio clips, only a minority engaged in more advanced audio/video editing.

Only roughly 50% of the students played computer games, whereas a smaller proportion used game consoles or played games online. Although the majority of the students used mobile phones, they mostly limited themselves to the most obvious operations, i.e. making calls and sending text messages, and very few students used their mobile phones as a personal organiser or to access email and digital content.

Simultaneously, the students did not commonly use commercial services, such as online banking or shopping. Strangely enough, a vast majority of the representatives of the Net Generation, which is credited with eagerness to create content online, had never developed web pages either.

On the basis of the study, the authors concluded that, contrary to claims made by scholars such as Cairncross (2007), Lorenzo, Oblinger and Dziuban (2007), members of the Net Generation do not actively purvey online content. In fact, only minorities of the students surveyed in Kennedy et al.'s (2007) study regularly used Web 2.0 technologies.

As the findings cited above demonstrate, the question of whether Web 2.0 technology has genuinely exerted a serious influence on learner lifestyles and learning practices remains open and needs to be further investigated, but it must be remembered that the incorporation of ICT training into teacher education courses has already materialised, to a lesser or greater extent. Whether today's learners do display the alleged features of the Net Generation or not, they will – one way or another – be increasingly using technology in the classroom, as ICT has already made its entry there.

Bearing in mind the new characteristics of contemporary learners and the opportunities for learning which modern technology has to offer, teachers need to revise their methods in order to address the needs of the Net Generation. However easy the idea might appear, its implementation may in reality constitute much more of a challenge, which stems from the fact that today's teachers are largely digital immigrants rather than digital natives. As a consequence, the educational needs of the Net Generation today are supposed to be met by

those who may not be adequately prepared for the task. Therefore, as (Krajka 2012) suggests, it is essential for teacher education to involve training in ICT skills which would equip the digital immigrant-teachers for the challenges they are bound to face in the modern classroom.

The provision of teacher trainees with adequate ICT education which will enable them to handle the modern technologies that they can already find in the classroom has also been advocated by Gaible and Burns (2006), Montano (2011), and Peachey (2012).

According to Gaible and Burns (2006: 2), technology in teacher education may be utilised as:

- "a delivery system which providing teachers with information to improve pedagogy and content mastery
- A focus of study that develops teachers' ability to use specific tools, such as computers [and]
- A catalyst for new forms of teaching and learning such as inquiry-based learning, collaborative learning, and other forms of learner-centred pedagogy".

If the above recommendations are implemented in teacher education courses, an interesting question arises of whether and in what manner ICT training in teacher education is likely to translate into specific practices of the teacher trainees when they enter the classroom themselves.

2.1 The impact of training on teachers' classroom practices

Studies to date demonstrate that the impact of training relating to the use of technology in the classroom on student teachers' future classroom practices varies. At the same time, the results obtained are helpful in identifying what factors influence teachers' decisions on the implementation of e-learning.

Knezek et al. (1996) observe that the degree to which teachers display a positive attitude to technology as well as the extent to which they themselves use technology confidently for the purpose of teaching is determined by the formal education in ICT which they obtain in teacher training courses.

On the other hand, Grau (1996) is more sceptical and states that coursework may have a limited impact on teachers' attitudes towards actual in-class use of technology. According to his findings, less than a quarter of the participants of the in-service teacher education which he described believed that their computer skills were above average while a quarter of the trainees did not implement technology in the classroom in their initial year at school.

A similar observation was made by Langone et al. (1998), who stated that despite the knowledge and skills which teacher trainees develop, they may not use their expertise in the classroom, or may not be able to use technology flexibly over time.

Very symptomatic is evidence cited by Abdal-Haqq (1995), McMeniman and Evans (1998) and Debski (2000). They all seem to point to the fact that the very presence of a CALL component in teacher education does not suffice to ensure a transfer of training to classroom work. What is crucial is the development of teachers' positive attitudes towards technology.

As Knezek et al. (1996) suggest, in order for teachers to actively embark on technology-enhanced teaching, it is necessary to help them overcome anxiety towards technology. Reed et al. (1995) state that positive attitude towards technology may increase teachers' confidence in it and persuade them to believe that ICT indeed has potential to facilitate their work.

Other important factors to be taken into account are: the nature of training in computer assisted language learning training, its content as well as the skills that it involves. For instance, Abdal-Haqq (1995) claims that teachers are reluctant to use the technologies which they are familiarised with because the software which they are introduced to is often obsolete. It only allows them to continue their conventional teaching practices and routines, e.g. word/data processing and drilling, yet it does not permit them to innovate through the use of technology-assisted problem-solving or multimedia applications.

As it was mentioned above, what needs attention is not only the software that teacher education involves; it is also the content.

McMeniman and Evans (1998) maintain that CALL coursework will translate into classroom practice only as long as teacher trainees are presented with evidence that particular technologies increase the efficacy of language teaching. They additionally claim that in order to use technology in the classroom, teacher trainees also need to master the technologies which they are introduced to. However, even then – as Debski (2000) points out – teachers may not be aware of how to bring out in a specific classroom setting the potential that particular technologies allegedly carry.

Interestingly enough, Keirns (1992), Galloway (1996) as well as Smerdon (2000) emphasise the role of teachers' self-learning in the development of their own ICT skills. As they discovered – similarly to Reed et al. (1995) – teachers frequently master computer skills in private, outside teacher training courses, as a result of which, they are likely to primarily use computer technologies which they find useful outside their professional activity.

Therefore, it is advisable to encourage teachers to notice in what ways the technologies which they are familiar with through day-to-day practice may enhance their teaching. Overall, Keirns (1992), Galloway (1996) and Smerdon et al. (2000) suggest that CALL coursework needs to be individualised in order to breed tangible effects in the classroom.

As an example of effective CALL education, Smerdon et al. (2000) cite teacher training courses based on peer collaboration where teachers have an opportunity to implement specific technologies in the classroom while working with learners. The increased efficacy of systematically held *situated technology training* sessions was also reported by Grau (1996).

Ertmer et al. (2001) claim that if teachers are supposed to use the skills which they develop in training courses, they must be introduced not only to the technological means but also to ideas on how to use ICT in order to produce specific learning outcomes. Thus, they postulate the use of electronic models, whereby teachers could observe how teacher/learner roles, classroom management or assessment work in an ICT-enhanced learning context. To that end, they advocate the use of video clips illustrating CALL solutions, augmented by other electronic aids, e.g. lesson plans or student products.

Hughes (2004) underlines the importance of reflective practice and states that teacher trainees will be more likely to integrate technology into their classroom practice if they are offered opportunities to reflect on the use of technology themselves, so that they in person observe how technology facilitates the teaching/learning process. This may be achieved by incorporating ICT into subject matter teaching within teacher training courses themselves. In effect, teacher trainees will in the future make potentially more informed decisions about the implementation of ICT in their own practices, relying more on the pedagogical merits of technology rather than technological wizardry. On-hands experience may foster teachers' reflection, which may result in a shift towards teaching innovation in the long run.

Last but not least, as Pope and Golub (2000), Flores et al. (2002) and Hughes (2004) proposed, it must be remembered that teachers ought to be exposed to a manageably large number of technologies, so that they can identify the soundest and most adequate solutions for their own teaching contexts.

2.2 Post-training factors in implementing ICT in the classroom

One must be cognisant of the fact that the software, as well as the content, setting and nature of the teacher training courses are not the only factors that influence teachers' readiness to implement the CALL theory and ICT skills which they develop throughout their

teacher education. A number of factors which may thwart teachers' attempts to use technology in the language classroom derive from the classroom itself.

Wentworth (1996), Egbert et al. (2006) and Comacho Marti (2006) observed that even if teachers are willing to facilitate instruction with technology, they may be prevented from doing so by the lack of adequate computer facilities and resources at school or the lack of time; the latter has also been empirically confirmed by Lam (2000) and Marczak (2012).

Moreover, Grau (1996) suggests that noticeable change to teachers' practices requires time and usually occurs in the course of three years.

Parr (1999) argues that teachers may be discouraged from innovation by the lack of collaborative support to teacher-innovators at schools. Without the support of the school authorities and colleague teachers, and in the face of the resulting problems with access to computer facilities or class scheduling – as reported by Comacho Marti (2006), even enthusiastic teachers may lose motivation to alter their teaching practises.

Other factors which may prevent or limit the implementation of technology in the classroom, were listed by Marczak (2012), who reported that the three most often cited deterrents that discouraged Polish teachers of English from using ICT in the EFL classroom in his study were: (i) lack of teachers' orientation in computer assisted language learning software; (ii) lack of relevant technical skills; and (iii) technical problems.

However, according to Reed et al. (1995), even if teachers come across obstacles which could prevent them from working with technology, they may effectively overcome the difficulties if only they have had an opportunity to use computers in the past. In addition, Levy (1997b) maintains that teachers will be even able to develop new ICT skills, provided that they are equipped with a firm theoretical background of CALL in pre-service education. In such a case, teachers will be able to catch up with the rapidly developing technologies on their own, and they will discover how to do it.

2.3. Blended learning work modes

In the light of what has been suggested above, it seems desirable to attempt to increase student teachers' exposure to technology, so that they benefit from all the forms, both direct and indirect, of ICT training they obtain. This could be achieved by supplementing content teaching courses with technology-based instruction, i.e. by introducing elements of *blended learning* (BL) to teacher education.

A broad definition of blended learning covers the use of technology in traditional face-to-face courses. Those who perceive blended learning in this manner are Mason and Rennie (2008), Salaberry (2001) and Claypole (2003). According to them, blended learning may manifest itself in the use of the tape recorder, the CD-player as well as the computer or the interactive whiteboard.

Other examples of broad definitions of blended learning (BL) are presented by Neumeier, who sees BL as "any learning context that involves computer assisted learning" (Neumeier 2005: 164); and Bañados, who states that it is "a combination of technology and classroom instruction in a flexible approach to learning that recognizes the benefits of delivering some training and assessment online but also uses other modes to make up a complete training program which can improve learning outcomes and/or save costs" (Bañados 2006: 534).

A narrower view of blended learning reduces it to "blending f2f with web-based learning" (Motteram and Sharma 2009: 91). It appears that this definition in not inclusive of computer-based techniques which do not directly involve the use of the internet, thus it will not encompass the implementation of CALL software, computerised quizzes and other applications which can be run from the computer hard drive or a Local Area Network (LAN) server.

Sharma and Barrett (2007) divide blended learning courses into: (i) *dual track* courses, (ii) *integrated* courses, and (iii) courses with *embedded* technology. The former are characterised by the dual character of the learning that occurs within a specific course. On the one hand learners receive instruction from the teacher in face-to-face, classroom-based lessons, on the other hand they can follow their own learning path through self-study. Both tracks may either be complementary to each other, or they may be independent.

In integrated BL, learners work with the teacher in the classroom on the subject matter for the study of which they prepare on their own, with the use of technology. Alternatively, they may be requested to perform technology-enhanced consolidation activities after a classroom lesson that they have already participated in (Sharma and Barrett 2007).

The third possible course design is based on *embedded technology*, i.e. technology which is utilized in the very classroom. The technology itself may vary from relatively obvious tools, such as CD-ROMs, to more sophisticated multimedia solutions. e. g. the use of websites, online communications tools or interactive whiteboards (Sharma and Barrett 2007).

2.5 The survey study

2.5.1 The context

The study was conducted at two teacher training colleges in central Poland, where second-year students attended a year's lecture-based course in the theory and history of Glottodidactics, supplemented with a very basic e-learning course, featuring interactive consolidation quizzes on the content covered.

As the e-supplement was only supposed to provide the course participants with an opportunity to consolidate the material which was initially taught in a face-to-face setting, i.e. lectures held in the classroom, according to Sharma and Barrett's (2007) taxonomy, the course can be classified as a case of *blended learning*, administered in *integrated work* mode.

The course in Glottodidactics embraced 60 hours of face-to-face classroom instruction altogether, 30 hours per semester, as well as a roughly estimated 16 hours of e-learning, delivered through the *Moodle* platform – 76 hours in total.

The e-learning supplement was compulsory for all the course participants and was set up for particular groups of learners, i.e. students who visited the *Moodle* course website were aware of the presence of only their group colleagues there.

The e-learning course spanned over 40 weeks; it commenced on 1st October, 2011 and lasted until 24th June, 2012. It was delivered on a weekly basis, i.e. the user interface displayed the course content in the form of quizzes to be taken by the participants every week. Depending on the need, the number of online quizzes per week ranged from 1 to 4. The quizzes fell into three major types: (i) multiple choice quizzes, (ii) matching quizzes and (iii) gap filling quizzes, which included cloze reading and short answer tasks.

The quizzes opened and closed automatically and permitted an unlimited number of attempts, which were scored on a range of scales between 1-15 points – depending on the number of questions featured within each quiz, with one point granted for every correctly answered question.

2.5.2 The research questions

The purpose of the present study was to investigate the teacher trainees' attitudes towards the e-learning course in which they participated, the manner in which they utilised the online course resources throughout the academic year, the problems which they faced as well as, the degree to which the e-learning experience influenced their willingness to use forms of e-learning with their future learners.

Thus the study sought to answer the following research questions:

1. Were the teacher trainees' attitudes towards the e-learning course in which they participated positive or negative?

2. In what manner did the participants utilise the online course resources throughout the academic year?

3. How did the participants benefit from the e-learning supplement?

4. What problems did the participants face during the course?

5. Having had the e-learning experience, were the participants likely to use forms of e-learning with their future learners (despite the minimalist course design)?

2.5.3 The subject sample

In order to investigate the teacher trainees' impressions about the course as well as their suggestions as to the course design, a survey study was conducted on a sample constituted by 2 groups (N=40) of second-year students from two teacher training colleges in central Poland: the Teacher Training College in Sieradz and the Teacher Training College in Łowicz. The Sieradz sample comprised a group of 21 students (15 females, 6 males), whereas the Łowicz sample consisted of a group of 19 students (16 females, 4 males).

2.5.4 Design and data collection

The questionnaire. The respondents filled in a questionnaire where they answered a set of sixteen questions which pertained to their course experience. The questions were worded as follows:

1. How did you use the e-learning course: systematically or periodically?

2. If the e-learning course had not been compulsory, would you have participated in it?

3. Did the online activities help you in learning Glottodidactics at all?

4. In what manner did the online activities help you?

5. Which types of activities did you find the most useful: multiple choice, matching or gap filling?

6. Which types of activities did you find the least useful: multiple choice, matching or gap filling?

7. What other types of activities would you consider desirable in an e-learning course in Glottodidactics?

8. What other course features could improve the quality of an online course?

9. Did you experience any technical problems while participating in the e-learning course?

10. What problems were they (if you had any at all)?

11. Did you find yourself in need of technical support during the course?

12. Did you obtain the desired technical support?

13. Would you expect other forms of technical support?

14. Given your experience as an e-learning course participant, would you like to learn more about e-learning platforms such as *Moodle*?

15. Would you consider using an e-learning course in work with your future students?

The questionnaire was conducted electronically over the period of 5th August – 31st October, 2012 with the use of a *Moodle* questionnaire module, which was utilised in order to both author and administer the survey.

2.6 Results and discussion

Below is an account of the results obtained through the survey conducted after the e-learning course in Glottodidactics. The responses are analysed in terms of the frequency of occurrence, expressed in percentage points. The return rate for the survey amounted to 85%, as 34 out of the 40 course participants completed the questionnaire form. One must be cognisant of the fact that in the case of open questions the total percentage score for the responses obtained occasionally exceeds the value of 100% due to the fact that individual respondents supplied a number of response options.

The frequency of course participation. 91% of the respondents reported that they participated in the e-learning course in Glottodidactics on *Moodle* systematically throughout the academic year. Only 9% of the student teachers accessed the e-course website periodically.

The trainees' willingness to participate. 91% of the participants maintained that they would have taken the e-learning course even if it had not been compulsory. At the same time, 9% of the teacher trainees admitted that they would have not used the opportunity to participate in the e-learning course, had it not been obligatory.

The facilitative value of the e-learning activities. All the participants stated that the e-learning supplement to the lecture course in Glottodidactics facilitated their learning. 73% of the sample stated that the e-learning activities helped them consolidate their knowledge of

glottodidactic theory in a number of ways. For example, the student teachers who provided more detailed responses maintained that through the electronic quizzes, after each lecture class they could: revise the content covered during the face-to-face lecture or test their knowledge pertaining to e.g. the dates of the emergence and development of language teaching methods; the details of language teaching/learning theories; important names; and the principles of particular language teaching methods.

One of the trainees reported that the e-learning supplement permitted her to memorise the meaning of particular glottodidactic concepts, i.e. it increased her understanding of metalanguage.

35% of the student teachers stated that the e-activities helped them prepare for the end-of-year examination in Glottodidactics. They claimed that due to the fact that the quizzes remained open throughout the academic year, they constituted a useful warm-up before the examination. In addition, the quizzes reportedly demonstrated to the trainees how seemingly obvious questions could still pose problems to them despite prior learning.

Another 24 % of the participants confessed that due to the obligatory character of the e-learning course, they learnt Glottodidactics more systematically, and without delay. One of the participants maintained that if it had not been for the quizzes, they would not have read their notes from the lecture classes, i.e. they would have probably learnt much less, overall.

21% of the respondents claimed that the electronic activities enabled them to systematise knowledge. For instance, the quizzes highlighted the most important facts relating to each of the topics taught or clarified the details of specific language teaching/learning theories, particularly the ones which the trainees found confusing after the lecture class alone.

18% of the sample admitted that the e-learning supplement rounded up the material covered in the lecture class. For example, the quizzes very helpful in identifying information missing from the trainees' notes. What is more, they helped 12% of the course participants complete their notes from the lecture class with the information they had left out.

To 12% of the student teachers the quizzes provided an opportunity to verify how much information they had memorised in the lecture class and to what extent they were able to recall particular facts while relying on class participation per se.

3% of the trainees stated that the prospect of them having to complete the online quizzes required greater concentration from them in the lecture class while 6% appreciated the fact that the e-supplement to the offline course allowed them to use the knowledge acquired during the lecture in order to respond to specific problems raised by the quiz questions.

An E-learning Supplement to a Teacher Training Course: the Trainees' Perspective
Mariusz Marczak

Finally, 3% underlined that due to the e-course they could keep up to date with the content taught offline in the case of absence from school.

Preferred types of online activities. Of all the activity types offered within the e-learning supplementary course, the student teachers favoured gap-filling the most, with the greatest preference for this type of activity expressed by 68% of the participants. The activity which ranked second was the multiple-choice quiz, which was favoured by 41% of the course participants. The type of activity which was the choice of preference for the smallest proportion of the student teachers (26%) was matching.

The results cited above were corroborated by the responses whereby the teacher trainees indicated which activity types they favoured the least. The order of preference was perfectly reversed in this case, with gap filling selected by the smallest proportion (21%) of the student teachers, multiple-choice activities selected by 32% and matching selected by 47%.

Suggested activity types. The student teachers cited several types of activities which in their view would be a desirable addition to the three main types of activities which they had an opportunity to use. 26% of the respondents did not know what activities could possibly be added to the e-learning course, and a further 26% stated that the course activities did not require supplementation, as they already catered for the needs of the participants.

23% of the participants recommended that the repertoire of activities be expanded with true/false tasks, which constituted a component of the end-of-year examination in Glottodidactics which they took.

6% of the subjects were in favour of increasing the number of multiple-choice of activities, whereas another 6% suggested the addition of error correction activities. The proportion of the trainees (6%) also called for enhancing the matching activities already featured on the course website through drag and drop functionality or the use of numbers and letter symbols to indicate items to be matched, instead of the scroll-down lists which they had used.

In a further 6% of cases, the respondents suggested the addition of open-ended tasks, including open questions or even essay assignments, which would not be computer-evaluated. 3% of the trainees recommended multiple-choice cloze activities, where they could fill in blanks with a response selected out of a number of options.

Last but not least, 3% of the course participants expressed the believe that the course would be permit students to assess their knowledge of glottodidactic theory more holistically if it contained round-up, end-of-semester/end-of-year quizzes.

Suggested additional course features. 59% of the course participants admitted that they did not know what other features could be added to the course in order to improve its quality. 15% maintained that the course features which they had used had sufficiently facilitated their learning.

6% of the trainees suggested the addition of hand-out files which would include an overview of the topics covered in the face-to-face lecture classes, and a further 6% recommended enriching the course resources with video viewing materials, e.g. short video clips which would illustrate practical implementations of particular language teaching methods.

6% of the respondents proposed that a beneficial solution for the learners would be a glottodidactic glossary featuring the most important terminology, as well as names appended with brief descriptions, whereby the students could associate particular scholars/educators with given topics or problems.

3% of the student teachers suggested complementing the course with hyperlinks to external websites and other, unspecified, online resources relevant to the topics covered in the lecture classes, whereas a further 3% recommended the addition of a document containing a brief overview of the most important items to be revised by the students before the end-of-year examination.

Finally, 3% of the respondents suggested that a set of interactive quizzes could be added to the e-learning website which the course participants would periodically take in the classroom. However, no explanation was offered as to the purpose of such a solution.

Technical problems. 29% of the student teachers reported that they had experienced technical problems when using the e-learning course website, whereas the remaining 71% claimed to have had no problems at all. As out of all the course participants only 65% *did not* list any technical problems which they had faced, it might be posited that the remaining 6% whose responses to two different questions about technical problems were inconsistent did not consider their problems very serious.

Of all the problems which the course participants experienced, the most frequent one related to logging on to the course website, as indicated by 15% of the subjects. They maintained that such problems occurred sporadically towards the beginning of the course, and they may have been caused by browser issues. Another two problems, mentioned by 3% of the trainees each; were: (i) issues with page display and (ii) occasional problems with accessing the e-learning website. In addition, 3% of the participants reported unspecified

technical problems which they faced while working online, yet they admitted that the problems stemmed from lapses in their own computer literacy rather than any malfunction of the technology involved. The remainder of the responses obtained were invalid.

Need for technical support. 18% of the e-learning course participants reportedly found themselves in need of technical support while 82% maintained that they did not require any assistance. Strangely enough, as much as 56% of the trainees maintained that they had obtained the technical support needed while 44% of the course participants stated that they had not received it.

Expected other forms of technical support. A vast majority of the trainees (94%) claimed that they did not feel the need to obtain forms of technical support other than the ones that they had been offered while only the remaining 6% of the student teachers expressed such a need. However, only 3% specified the form of this additional support, stating that the quiz rubrics could contain detailed information pertaining to the technical limitations of particular quiz formats. 3% of the subjects admitted that they did not know what other forms of support they could alternatively obtain.

Impact on motivation and future practices. A vast majority of the student teachers (88%) declared that they wished to learn more about the use of e-learning platforms in education such as *Moodle*, given their own experience as e-learning course participants. Only 12% of the trainees did not express interest. At the same time, an even greater majority of the trainees (97%) declared that they would consider using an e-learning course as part of their own teaching practices in the future, with only 3%, i.e. one teacher trainee (N=1) claiming otherwise.

Summary of the results. All in all, the research questions which motivated the present research can be answered as follows:

Research question 1. The trainees' attitudes towards the e-learning technology in which they participated were very positive, with a vast majority of them expressing the will to have taken the course even on a voluntary basis.

Research question 2. A distinctively large majority of the course participants reported that they used the e-course resources systematically throughout the academic year.

Research question 3. The students teachers all maintained to have benefited from the e-learning course, and the most frequently cited outcomes of the course were: material consolidation, greater opportunities for content memorisation, assistance in preparation for

the end-of-year examination in Glottodidactics, the systematisation of knowledge as well as increased student activation.

Research question 4. 71% of the course participants claimed to have experienced no technical problems while taking the e-supplement, of whom an estimated 6% faced only minor issues. The most frequently occurring problems were: difficulty in accessing and logging to the course website. Some of the less frequently mentioned issues were e.g. page display and the students' limited computer skills. It is worth mentioning that a definitive majority of the participants maintained to have obtained adequate technical support during the course.

Research question 5. In the light of the findings it may be stated that the e-learning supplementary course exerted a very positive influence on the participants, as all but one student teachers expressed willingness to consider the use of technology with their learners, and a very large majority declared a wish to learn more about the use of e-learning platforms in education.

3. Conclusions and implications for computer assisted teacher training

Basic course characteristics. Although the e-learning course resources were available to the participants throughout the academic year, the proportion of student teachers who used them systematically was high (81%). Yet, in a course where systematicity is essential this proportion could be further increased by setting the course resources to open and close periodically.

In the study a majority of the student teachers (81%) declared that they would have taken the e-learning supplement course even it had not been compulsory. However, one cannot expect the pattern to be replicated in the case of other courses. Therefore, one must be cognisant of the fact that making an e-learning supplement available to students will not necessarily result in participation, which may need to be stimulated through obligation.

Pedagogical benefits. In the light of the findings obtained, it turns out that even a simple e-learning course with limited resources may play a number of functions facilitating teacher training. It may: (i) assist teacher trainees in consolidating knowledge, including metalanguage; (ii) highlight the most important items to be learnt; stimulate the trainees to systematically (iii) review; and (iv) complete their lecture/class notes; and in effect, (v) facilitate information recall. In addition, e-learning permits the student teachers to: (vi) catch up with the course content taught in case absenteeism; (vii) regularly self-test their learning

progress; (viii) activate declarative knowledge through quiz activities, as well as (ix) revise before end-of-year examinations.

Course features. Although an e-learning course limited in resources can fulfil a number of roles, as it was indicated above, student teachers will be expecting an addition of multiple other resources, whereby the potential of e-learning functionalities could be used to a greater extent. Another advantage of a more elaborate e-learning supplement would be the opportunities which it would create to familiarise teacher trainees with varied forms of computer-enhanced learning, which they could potentially utilise in their own classroom.

Other resources expected by student trainees which could be possibly used are: (i) true/false quizzes; (ii) error correction activities, (iii) drag and drop matching activities, (iv) open-ended tasks, or cloze gap-filling quizzes. The remainder of resources which would be appreciated by teacher trainees are: (i) files featuring course handouts; (ii) a glossary including definitions of the most important terms used within the course; (iii) hyperlinks to external resources relating to the course content; and (iv) an overview of the major areas of content to be revised before the end-of-year examination.

Technical issues and support. Despite the fact that an e-learning course may be delivered through a virtual learning environment, such as *Moodle*, the course administrator/moderator must be prepared for problems that the course participants are likely to face and be ready to provide the necessary help, despite the participants claims about problem-free learning.

Possible problems may involve: accessing the course website, logging to the e-learning platform or page display. Although some of the problems may be caused by the technologies involved in course delivery and administration, others may stem from the participants' limited computer skills.

The forms of technical support to be provided may concern clarifying the rubrics of online tasks, particularly with regard to technical limitations, which has an important implication for task design. It indicates that task rubrics must contain information not only about the nature of the task per se but also the technical limitations stemming from the technology that it involves.

Impact on motivation and teaching practices. It seems that although the course was minimalist in design and limited in resources, it did evoke the teacher trainees' interest in the use of e-learning platforms in education. That in turn might cause the teacher trainees to explore the problem in the future through forms of in-service training, and in the long run, result in the implementation of e-resources in the trainees' teaching practices; the more that

97% of the student teachers explicitly declared readiness to consider the use of e-learning in the future. What is more, given the trainee's ability to cite the benefits in which the e-learning supplement had facilitated their learning, one may venture to state that by taking the e-learning course they identified, at least to a degree, the pedagogical merits of technology.

All in all, it must reiterated that the e-learning course analysed above was supposed to function as a supplement a course in Glottodidactics, however, the results of the study demonstrate that it may have offered the student teachers an added value, in generating interest in computer-enhanced teaching and motivating them to consider the use of technology in their teaching practices. Needless to say, this form of training cannot replace education focused specifically on computerised education, and would need to be followed by further pre-service/in-service training focused on the theory as well as practical aspects of CALL.

References

Anderson, P. (2007). What is Web 2.0? Ideas, technologies and implications for education. *JISC Technology and Standards Watch*, February.

Berners-Lee, T. (1999). *Weaving the Web*. Orion Business Books.

Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Clevedon: Multilingual Matters.

Byram, M. (2008). *From Foreign Language Education to Education for Intercultural Citizenship*, Clevedon, Buffalo, Toronto: Multilingual Matters.

Camacho Marti, M. (2006). *Teacher Training In ICT-Based Learning Settings: Design And Implementation Of An On-Line Instructional Model For English Language Teachers*. A doctoral thesis. Retrieved November 1, 2012, from World Wide Web: www.tdx.cat/bitstream/10803/8919/1/tesiMarCamacho.pdf.

Gable, E. & Burns, M. (2005). *Using Technology to Train Teachers: Appropriate Uses of ICT for Teacher Professional Development in Developing Countries*. Washington, DC: infoDev/World Bank. Retrieved November 16, 2012from World Wide Web: http://www.infodev.org/en/Publication.13.html.

Krajka, J. (2012). *The Language Teacher in the Digital Age – Towards a Systematic Approach to teacher Development*. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.

Marczak, M. (2012). *Developing Intercultural Competence in the EFL Classroom through Information and Communication Technology*. An unpublished PhD dissertation. Warsaw University: Poland.

Montano, D. (2011, Thursday, December 15). Technology has changed our classrooms, but headteachers don't always know what works best. *The Guardian*.

Peachey, N. (2012, May 18). Wasted technology. *The Guardian Weekly*.

Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon*, 9(5), 1-6.

O'Reilly, T. (2005). *What is Web 2.0: Design Patterns and Business Models for the next generation of software*. O'Reilly website, O'Reilly Media Inc. Retrieved November 11, 2012 from World Wide Web: http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>.

An E-learning Supplement to a Teacher Training Course: the Trainees' Perspective
Mariusz Marczak