DIGITAL VS IN-PERSON LEARNING ENVIRONMENT IN ESP CLASSROOMS: LET THE STUDENTS DECIDE

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Abstract

In this study of English Foreign Language Learners, the author explored the learning preferences of 14 students (ages 18-20) enrolled in English for Specific Purposes (ESP) course. All students were provided with the same content, course materials, assignments and time for completing the assignments. They were all given the same pre and post-learning questionnaire, writing tasks and final exam. However, they completed these tasks either in a digital environment or in-class.

The study was conducted at South East European University in Macedonia where digital instruction is not well known or practiced. The results indicate that the best way for students to learn is by combining the two learning environments. By completing an assignment both ways, students discovered not only that some tasks are best done in a digital
environment and others in class, but also they discovered their preferred way of learning.

**Keywords:** Digital instruction, Digital learning environment, In-person learning environment.

**Introduction**

In today’s world, the classroom itself is no longer the primary learning space, nor should it be the more formal and traditional setting it once was. Teachers must reshape and fundamentally redesign their classrooms into a collaborative learning environment where the students combine outside learning experience with in-class learning. This is sometimes referred to as blended learning, which allows students to learn anytime and everywhere. Thus, instructors can focus less on delivery of information (especially in a lecture) and more on what helps the students learn most effectively. With the advanced technologies we have today, learning becomes more engaging and enables students to learn more effectively.

Some studies also show that students are likely to perform better in an online learning environment than in a traditional classroom environment (Liu, Ho, & Song, 2011). Digital teaching and learning activities have continued to develop as an alternative to traditional face-to-face teaching and learning. According to Dickinson, et al. (2008), if instruction takes place in a less traditional setting, learners experience a more comfortable learning environment.
Technology is useful in most academic areas, but is very important in language learning because students communicate so much through technology. After all, language education does not happen only in the classroom and should not stop after the learners leave the classroom. Thus, technological devices should be frequently used by students and the teachers in order to provide an interaction between language learners and teachers or peer-to-peers. The development of Web-based language teaching and learning activities continue to be a stimulating and growing field allowing language teachers to create their own web-based language activities and use the communication tools. Digital learning can increase flexibility of access, eliminate geographical barriers, and improve convenience of use and the effectiveness of collaborative learning in language classes.

As a result of this new awareness, the philosophy behind European Higher Education is being altered with university educational models that initiate new methodologies aimed at students’ life-long learning for personal or professional purposes. Preparing students to be able to communicate successfully in the international labor market is one of the biggest challenges of university degrees, i.e. the acquisition of English written and spoken skills. Technological advancements have a significant effect on learning styles: learners use computer-mediated communication to further their written and spoken skills, although the effectiveness of these innovations greatly depends on the way they are used.
Literature review

Teachers as Digital Immigrants

Instructors can provide the most beneficial learning environment if they understand their students’ preferences for digital or in-class learning: always; in some cases; not at all. Tapscott (2009) describes today’s students as the “Net Generation” learners. They grow up with technology; technology becomes an unavoidable part of their lives that shapes their personalities and learning preferences. Likewise, Prensky (2001) coined the term “Digital Natives” to point out towards the theoretical affinity and digital literacy of the new generation. But on the other hand, Prensky also referred to the lack of digital literacy among educators by naming them “Digital Immigrants.” The term refers to the educators being outsiders in the land of the digital natives. He indicates that there is a discrepancy between the natives and the “immigrants” regarding the education process. The teaching practice of the immigrants is not compatible with the natives’ skills and preferences.

Are All Students Digital Natives?

However, according to Kennedy (2008), the arguments used to support these opinions need closer examination before university educators start changing curricula and learning practices (p.9). These arguments are based on a hypothesis that all the students coming to universities have the same digital background and educational experience. This implies that students coming to universities are all digital natives and they all have more or less consistent technological experiences. Moreover, these students are believed to have advanced knowledge and understanding of
technology. But this generalization hinders the objective point of view regarding students’ technological skills, knowledge and preferences.

**Basing Instruction on Student Preferences**

Previous studies have found that Web-based instruction was superior to classroom-based when the course design included course management software (Schaber, Wilcox, Whiteside, Marsh, & Brooks (2010). According to Bloch (2013), technology in ESP teaching has provided access to authentic texts and has been used as a tool for helping with traditional (face-to-face) type of language learning. Ware and Helmich (2014) point out that the digital turn in education has inspired numerous scholars to speculate on how educators might influence new technologies to redefine how schooling and learning intertwine.

As the literature review shows, much of the presented evidence on the effectiveness of online learning comes from research that has focused on higher education and professional development contexts (Barbour & Reeves, 2009; Means et al., 2010; Smith, Clark, & Blomeyer, 2005). A meta-analysis done by Means et al (2009) of the available research (mainly carried out in post-secondary settings) indicated that on average, students in online learning conditions performed better than those receiving face-to-face instruction. Students who participated in blended online learning experiences outperformed students in face-to-face settings by a larger degree than students who participated in online courses that were conducted entirely online. However, in such circumstances, it should be mentioned that these blended courses usually have additional instructional elements not
included in the face-to-face instruction, so the success in the learning outcome cannot be attributed solely to the online learning.

Online teaching and learning activities have continued to expand as an alternative to traditional face-to-face teaching and learning. In addition, computer-assisted language learning can promote collaborative, learner centered knowledge construction and offer a more comfortable and less face-threatening environment for interaction than do instruction and discussion in a traditional classroom setting (Dickson, et al., 2008).

**The Learning Environments Differ**

Online learning depends on technologies of delivery. In order to promote student-teacher interaction and provide feedback, different technological tools are used, such as: online materials and resources, video lessons, conferencing platforms, emails, Learning Management Systems, multimedia computer technology. In the face-to-face environment still the most important factor for learning is the teacher. The role of the teacher in the classroom is connected to students’ perceptions and learning outcomes. The stronger the teacher is, the more engaged students are. Dedicated and passionate teachers produce more confident students. On the other hand, researchers and educators believe that integrating technology into the classroom and combining it with the face-to-face instruction increases student’s performance (Sommers, Owens, & Piliawsky, 2009).

However, choosing a technological tool for learning should be with a specific purpose on mind. According to Peridore & Lines (2011), if a teacher selects a tool that does not have a purpose or stops students
from learning the content and gaining required learning skills, this tool should not be used. This is in line with Warschauer and Meskill (2000), who point out that “the key to successful use of technology in language teaching lies not in hardware or software but in "humanware"; our human capacity as teachers is to plan, design, and implement effective educational activity (p.316).”

**Methodology**

In order to conduct this research and gather useful information, both quantitative and qualitative methods of data collection were used with an emphasis on qualitative methods. As Creswell (2009) points out, the concept of mixing different methods probably originated in 1959, when Campbell and Fiske used multiple methods to study validity of psychological traits. They recommended that others should use their "multi method matrix" to study various approaches to data collection in a study.

By using this combination, both validity (truthfulness) and reliability (consistency) are better ensured. The independent variables in the study were the types of activities given to the students, the amount of time designated for each task and the alternation of the class instruction (students switching between digital and in-class learning groups). The dependent variables were the motivation, efficiency and the effectiveness of learning in the digital learning environment.
**Purpose of the Study**

This research was designed to answer the following questions, especially in the context of the ESP language learner:

- Which environment leads to better understanding and greater learning?
- How can the technology be best used to improve students’ English language learning and increase their motivation and participation?

**Setting**

This research was conducted at South East European University (SEEU) in the Republic of Macedonia, more specifically at the Language Centre. The time frame was one semester with total of 15 instructional weeks. The students spent four hours in the course English for Specific Purposes (ESP) 1 course twice a week, a total of eight hours per week. ESP instruction, as a specific study of EFL, is based on learner-centered and needs-based approaches to learning, and the use of any type of technology in ESP instruction should be based on students’ needs, preferences, and learning styles (Dashestani and Stojkovic, 2015). The period of one semester provided enough time for the students to get accustomed to the idea of studying from home as opposed to study in class. Moreover, the students were a crucial part of the research and their continuous feedback served as a basis for the study. The author provided the same content, course materials, assignments and the same period for completing the tasks to both groups. All students were given the same pre and post learning questionnaire, writings and final exam. Additionally, both groups were required to participate in
discussions (in-class or on the Learning Management System (LMS) used at the SEEU) and debates to develop skills for learning ESP and demonstrate mastery.

Participants

The 14 participants of this study were this researcher’s students from the ESP 1 group who study Computer Sciences and Business Informatics. The class was a mix of first and second year students; that is, the students were in their first and third semester. Prior to taking this course 12 of them had two semesters of Basic Skills English at the Language Center and two had come directly from high school. Their level of proficiency was high and they were expected to be at B2 according to the CEFR upon completion of ESP 1. They have used various materials in the classroom due to the multidisciplinary character of their studies and no single textbook was appointed. The group comprised 11 male and 3 female students, all between 18-20 years of age. They have all been studying English for approximately 12 years, starting from their primary education, secondary school and now at the tertiary level.

Data Collection Instruments and Analysis

For the purpose of conducting the research one class of ESP students with compare-contrast types of digital literacy was used. The following methods and techniques for collecting data were used:

*Questionnaire of Student Experiences with Using Digital Literacy to Learn.* The questionnaire in this study consisted of 18 questions and it was adapted and combined from two different questionnaires from
Kennedy (2008) and ECAR (2009). The questionnaire consisted of both closed and open format questions. With the closed format questions, the students had to choose from a set of given answers. These questions are quick to answer and easier to code. Providing a pre-determined set of responses is wise when it is possible to expect the full range of possible responses and when these responses are relatively few in number. On the other hand, they limit the array of possible answers. Below is an example of a closed format question:

1. The digital learning brought new opportunities for learning.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Strongly disagree</th>
<th>Not applicable</th>
</tr>
</thead>
</table>

The open format questions involve writing free answers adjusted to students’ content and style. The students can also qualify their responses and there is freedom of expression. There is a lack of bias in such responses but also the answers are more prone to researcher interpretation. These questions are also more difficult to code. The open ended approach is also recommended when we are interested in obtaining the respondent's unique views on an issue or topic (Ruane, 2005, p. 131).

Here is an example of an open-ended question:

1. Do you prefer digital or in person environment for learning English? Please explain your choice, or explain why you prefer one or the other in different situations.

In this particular questionnaire six questions were open-ended were students could openly comment on the use of technology in the
classroom. Five questions were based on 1-5 point Likert scale of strongly agree, agree, neither agree or disagree, strongly disagree and not applicable on the positive aspects of digital learning. Three questions were also Likert-scale based starting from daily, weekly, monthly, over monthly to not used on the students’ use of different technologies. One question examined students’ skill level of using the Internet; one explored their use of different technology tool throughout the semester and the last two questions focused on the use of the LMS and their overall experience in its use.

The analysis of the questionnaire included two aspects, the quantitative and the qualitative one. The quantitative aspect of the questionnaire was the counting of students’ responses and comparing the before and after responses. The qualitative was interpreting the open-ended questions and looking for patterns. The complete pre-questionnaire can be found in the Appendix.

Observation Notes on How Students Do with Each Task. Students in this study were asked to rate their interest and engagement in learning after every given assignment. Then the researcher observed their interest in each task and sketched her observation. Later, these observation notes were written down and coded appropriately.

Here is one example of an observation when the first in-class/digital environment task was assigned:

Student 1 exhibits great enthusiasm after being assigned for the blog writing. He sees this as an opportunity not to come to classes. After several weeks, the enthusiasm is notably reduced. He reports having
many distractions while working from home and spending a lot of time on one task.

Post-Questionnaire of Student Preferences for Using Digital Literacy to Learn. The main purpose of this post-questionnaire was to determine whether students’ perceptions and views have changed by the end of the course. The analysis was done both in qualitative and quantitative manner with tallying the responses and comparing the pre and after answers.

The post-questionnaire can be found in the Appendix.

Here is an example of a close format question:

1. The digital learning brought new opportunities for learning.
   
   | Strongly disagree | Agree | Neither agree nor disagree | Strongly agree | Not applicable |

   Given below is an example of an open-ended question:

1. Of all the things done this semester which one was the most challenging in learning English? Please explain your choice.

Interviews with 4 Students from the Class. The interview in this study was semi-structured and face-to-face done in class after the end of the semester. It contained structured as well as unstructured sections with open ended questions and additional responses. The analysis from the interview was done by looking for similarities and dissimilarities (patterns) in the data. The patterns were looked at systematically. While recording what is said the researcher also recorded different emotions, reactions. The interviewees had the questions in front of them, but all the
additional responses were recorded as well. Every behavior that depicted interest or engagement was noted. The questions from the students’ interview are added in the appendix.

Here is an example of a structured question:

1. What are my strengths for study when I am using a paper environment?

**Digital and In-class Activities.** To examine students’ motivation, satisfaction and effectiveness in learning in a digital or face-to-face environment, the researcher of this study selected and adapted various classroom materials and assignments. The tasks used included: Khan online vs. In-class lectures; writing a traditional report or writing a blog entry; participating in on-line vs. In-class discussions; reading text vs. reading at websites.

When choosing the particular tasks for the instruction, the researcher had two potential questions in mind:

What should good digital learning environments contain to stimulate and motivate students to learn?

Is the extent to which students use technology in their everyday life related to their preferences for their use of technology at the University?

**Blogs vs. In-class Reports.** In this particular course, blogs were assigned as a task done outside the classroom. They were individual blogs written in *WordPress*, a popular platform used for blogging. Before the task was assigned, students were distributed a rubric and a guideline for blog writing.
In addition, in-class reports were assigned as well, but they were written in class. A rubric and guideline for writing these in-class reports was distributed also.

**Traditional Lecture vs. Open Educational Resources.** For the purpose of increasing authenticity in this particular course a variety of OERs was used. Materials were taken from courses on Udemy, Khan Academy and Edx. The selected lessons were assigned for homework. The purpose was for students to analyze a course on a specific IT topic, but from a language point of view. They watch, read, analyze, take notes and then come to class and share their experiences. Then they answer the following questions: What did they find interesting? What was the most motivating task? How did it improve their English? What techniques did they use to learn vocabulary?

**Reading in Class vs. Reading Different Websites.** This activity has raised the question whether students use different strategies when reading print texts than when reading digital text. The answer to this question may lead us into redesigning the traditional classroom reading practice. These were the websites used for practicing reading: https://www.technologyreview.com/, https://gizmodo.com/, https://www.digitaltrends.com/, https://www.theverge.com/.

**Do Activities in Class vs. Watch Same Activities on Video.** Half of the students were watching the activities/videos in class and the other half did the same thing from home. The next time groups changed the environment they had to report what way of learning was easier/more motivating/more efficient/. Three of the video lessons were more vocabulary oriented and this activity was closely related to the next one
described below. In order to provide variety different vocabulary items were learned. The two video lessons were complete lessons that focused on one aspect of technology and included mixture of activities.

**Learn Set of Vocabulary Words in Traditional Manner vs. Using Vocabulary Apps.** A set of vocabulary words was learned in class during class time. The learning was done traditionally, by reading, explaining the meaning and using the word in context. The digital learning was done using vocabulary app or a website specialized in technology. After few sets of vocabulary words were assigned for learning, the students took a short quiz. This way, the author could measure the level of understanding of certain words. The level of satisfaction and motivation in learning in class or digitally was jotted down in the observation notes.

**Research findings and interpretations**

After being exposed to divergent learning environments throughout the semester, the students agreed that digital learning motivated them more to learn English. The digital learning also improved teacher-student communication. During the classes there was a positive feeling that learning different things in different environments was very motivating and interesting. It helped students increase their critical thinking skills and improved their autonomous learning. Students’ comments indicate that some learning activities work better in the classroom, because they require social interaction, while others work better in a digital environment outside of classroom walls. Students’ learning styles and personality are also key factors in determining what works best and where.
Students were given the pre-questionnaire at the beginning of the semester and the post-questionnaire in the end of the semester. Some of the questions were the same on both the pre and post, and some required their opinion after the end of all the assignments. The following are the interpretations from both questionnaires used in the research and the observation notes:

- **Students believed that digital learning was a positive learning experience.**

  3. (pre) Digital learning will bring new opportunities of learning.
  - Seven students agreed
  - Four students strongly agreed
  - Two students strongly disagree

  - Nine students agree
  - Nine students agree
  - Six students strongly agree

The answers on this question from the pre-questionnaire differed from those in the post-questionnaire. It is clear that there was a change of mind in favour of the digital learning. If the majority of the students believed that learning English is best done face-to-face at the beginning of the semester, the end reshaped their opinions. Students seemed to discover that spending time in the digital world can be helpful not only for gaming but also for learning. They appreciated tasks that demonstrated how digital learning puts to use what they are already familiar with daily for personal entertainment. Students seemed interested to further explore the possibilities of digital learning and expand their knowledge and skills. They were interested in the potential of mobile phones and how they can be used not only for social media but for learning as well. The fact that they have access to every possible type
of information made them realize how to value that access and how to further utilize that information for learning.

In summary, students recognized the potential of digital learning in not only bringing new opportunities for learning but also in connecting their own digital world with the academic setting. The natural environment where they ‘play’ became a space where they also learn.

- Not all face-to-face instruction is interactive. The teacher can also create interactive online learning environment.

The responses suggest that students thought that due to digital learning the teacher-student communication improved. Initially, students put a lot of emphasis on the verbal and social interaction between the students and the teacher. They suggested that they rely heavily on verbal cues used by the teacher when explaining the assignments. Thus, they expected that the ability to decide what was important when learning in a digital environment would not provide verbal clues and would be an insufficient communication process. Through interaction with the instructor in the face-to-face environment, the instructors’ tone or emphasis on certain parts of the task was a signal for the students to what they should be paying attention. They were not sure that they could infer that through email.
However, at the end of the semester almost all of the students (14 in total) agreed that digital learning improved the teacher-student communication. The change occurred because they understood the reliability of the online communication and how fast the information can be exchanged. Students appreciated the fact that they don’t have to wait until the next class to ask a question or express their concern. Some of the shy students benefited from writing emails as well, because their lack of confidence to ask in class was substituted with the opportunity to freely ask for additional information. Email as a form of communication was greatly accepted by the students and they all found it to be very beneficial.

- **Digital learning increased students’ motivation.**

  6. (pre) Digital learning will motivate me more to learn English.
  - Four students agree
  - Four students neither agree nor disagree
  - Four students strongly disagree

  4. (post) Digital learning motivated me more to learn English.
  - Seven students agree
  - Five students strongly agree
  - Two students neither agree nor disagree

It was the students’ perception that motivation for learning cannot be connected to the learning environment or the type of assignments. They felt that they would not be motivated enough to engage in the course or complete the work without attending a physical classroom. However, on the post-learning questionnaire, it is clear that the students have changed their perceptions. They indicate that they were more motivated to learn English when exposed to digital learning environment.
Furthermore, students’ responses demonstrated that the use of two different modes of delivery increases students’ motivation and their intrinsic desire to learn, thus intensifying their level of engagement and learner efficiency. This is in accordance with methodically integrated digital instruction in the syllabus. Students’ responses also indicated that having two different learning environments helped them learn how to prioritize various tasks thus becoming more independent learners.

- **Technology is ubiquitous in students’ lives and its use as a learning tool has become crucially important.**

Students recognized the importance of learning better through technology at the beginning of the semester. The end of the semester only confirmed their previous perceptions.

The use of technology in the classroom depends mainly on the instructor’s preferences and his/her teaching style. However, due to technology, students’ learning can no longer be confined within the classroom walls. Learning is happening outside of academic settings as well. The sooner the instructors acknowledge this and find a way to transfer students’ insatiable desire to be online all the time into their learning in the academic environment, the better learning environments can be created.

In addition, students reported that the way instructors are using technology in the classes has a great impact on the way students learn. If technology is used to promote and enhance collaborative learning and learner autonomy students tend to learn better.
• Students identified a need for a combination of both learning environments as their preferred environments for learning English.

The findings suggest that students were aware that some tasks work better in class and some at home. They recognized the value of having a teacher in class, but at the same time, they perceived themselves as capable of learning at home and not being physically present in class. Having interesting and challenging assignments had a significant positive impact on students’ preferred learning environment.

In summary, students agreed that the choice of the learning environment is based on their individual learning styles and the type of assigned tasks. In addition, they need to be exposed to different learning environments for a longer period of time in order to understand what suites them better. As students indicated, they don’t want to be told how to learn. Imposing one learning style or one mode of instruction delivery will not work in the classroom. Students want to have a say in what is learned and how the instruction is delivered. Different students have different ways of retaining and processing information. By letting students choose the instructors secure better learning environments and more effective learning.

Such findings imply that students want to take charge of their learning and know when a digital environment could work for them, especially if they have guidance from instructors who also understand when to include both types of learning environments. In addition, having different learning environments that cater to different learning styles leads to one of the biggest advantages of technology, that is the
personalized learning. Personalization in learning is achieved through instructional approaches that address the various learning needs and preferences of individual students.

- The findings from the observations suggest that different assignments in different learning environments led to better learning, increased students’ critical thinking skills and boosted their self-confidence.

The observation focused on the interest and engagement of the students when faced with a particular assignment in a specific study environment, their participation and reaction to a given situation. The majority of the students reacted positively about having two different learning environments. For the more shy and introverted students the ability to work from home was perceived an option worth exploring. Not all of the students enjoy having presentations in front of the class or participating in a class debate, so the opportunity to participate in discussion forums, to learn vocabulary using mobile apps was openly welcomed. At the end, students were excited for being able to experience both modes of learning English and not relying solely on a course book. Even if not everyone participated equally in the beginning there was a progress as students switched back and forth between in-person and digital learning at home.

**Conclusion**

This study was intended to identify students’ preferred ways of learning, thus adding evidence and providing guidance about what language instruction is best done online and what works best in a face-to-face environment. The study demonstrated that the so-called ‘digital natives’
prefer to learn as well as ‘play’ in a digital environment when studying in the ESP classroom. The preference is mainly connected to their learning styles and the types of assignments provided. Also, students’ responses of the pre and post-learning analysis indicate that students’ perception about learning in the digital environment changed as a result of this study. In the first questionnaire their preferences are based on their own perceptions of digital learning, while in the latter, their preferences are based on the actual experience in learning in the digital environment. However, students still highly value the presence of the teacher in the classroom and the social interaction that the in-person instruction provides. They value the whole experience of being at a university, not just attending classes. Also, digital tools cannot be simply transferred from one learning environment to the other automatically. In order for their use to be successful they need to be adapted and modified according to students’ needs.

Furthermore, based on students’ responses and instructor’s observations it can be confirmed that students consider online activities to be an effective and efficient way to learn course content. The effectiveness of the assignments is validated through the use of different online tasks that were used throughout the semester and that were highly rated by the students. The efficiency is indicated by students’ responses that they were able to learn the course content at their own pace in their preferred setting. In addition, students find online activities to be a satisfying component of the course. Learning in a digital environment can be successful only when it contains stimulating and motivational tasks. Assignments should be carefully planned and chosen to stimulate
students’ needs for learning. Digital tools that they use in their everyday life (mobile apps, social media, even games) can be transformed into learning tools, but only when they are systematically embedded in the syllabus. This can increase students’ engagement and enhance their motivation for learning.

References


Appendices

Appendix A

PRE – LEARNING EXPERIENCES QUESTIONNAIRE

Name and Surname:
Gender: F/M
Faculty:
Years of studying English:

1. Do you know what the term ‘digital natives’ means? Please write your definition:
2. How do you evaluate the reliability of the materials you find on the Internet? Please explain.
3. Digital learning will bring new opportunities of learning.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Comment:

4. Digital learning will improve communication between student and teacher.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Comment:

5. Digital learning is a quicker method of getting feedback in learning.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Comment:

6. Digital learning will motivate me more to learn English.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

60
Comment:

7. Table 1: Questions showing how often students use computer based technologies

<table>
<thead>
<tr>
<th>THE COMPUTER</th>
<th>Daily</th>
<th>Weekly</th>
<th>monthly</th>
<th>over monthly</th>
<th>not used</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use a computer for writing documents (e.g. using Word, Google Docs)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I use a computer to create graphics or manipulate digital images (e.g. using Photoshop, Flash)</td>
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</tr>
<tr>
<td>I use a computer for creating multimedia presentations (e.g. PowerPoint, Prezi)</td>
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<tr>
<td>I use a computer for general study, without accessing the web, such as writing a paper, studying notes taken in class…</td>
<td></td>
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<tr>
<td>I use a computer to play games, without accessing the Internet</td>
<td></td>
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</tr>
</tbody>
</table>

(adapted from Kennedy, Judd, etc. Australasian Journal of Educational Technology, 2008, 24(1), 108-122)

8. Table 3: Questions showing how often students use mobile phone based technologies

<table>
<thead>
<tr>
<th>THE MOBILE PHONE</th>
<th>Daily</th>
<th>Weekly</th>
<th>monthly</th>
<th>over monthly</th>
<th>not used</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use a mobile phone to call people</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I use a mobile phone to text/ SMS people</td>
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</tr>
<tr>
<td>I use a mobile phone as a personal organizer (e.g. diary, address book)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use a mobile phone to access information/services on the web</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use a mobile phone to send or receive email</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(adapted from Kennedy, Judd, etc. Australasian Journal of Educational Technology, 2008, 24(1), 108-122)
9. Table 3: Questions showing how often students use web based technologies

<table>
<thead>
<tr>
<th>THE INTERNET</th>
<th>Daily</th>
<th>Weekly</th>
<th>monthly</th>
<th>over monthly</th>
<th>not used</th>
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(adapted from Kennedy, Judd, etc. Australasian Journal of Educational Technology, 2008, 24(1), 108-122)

10. What is your skill level for the following?

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<td></td>
<td></td>
</tr>
<tr>
<td>3. Using the Internet to search for information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Are you using the following for any of your courses this semester? Check all that you are using.

- Spreadsheets (Excel, etc.)
- Presentation software (PowerPoint, Prezi, etc.)
- Social networking websites (Facebook, Twitter, etc.)
- Instant messaging (Viber, WhatsUp, etc.)
- University library website
- LMS

12. How often do you use LMS?
Never
Once a year
Once a semester
Once a week
Several times a week
Daily

13. Describe your overall experience using LMS.

Very negative
Negative
Neutral
Positive
Very positive

14. What is your opinion about the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I get more actively involved in courses that use IT.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. The use of IT in my courses improves my learning.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. I skip classes when materials from course lectures are available online.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

(Adapted from ECAR, Research study 6, 2009)

15. What are the major advantages in using technology in the classroom? Please comment.

16. What are the major disadvantages in using technology in the classroom? Please comment.

17. Do you think that using technology in the classroom will help you learn better? Explain how.

18. Do you prefer digital or in person environment for learning English? Please explain your choice, or explain why you prefer one or the other in different situations.
Appendix B

POST – LEARNING EXPERIENCES QUESTIONNAIRE

Name and Surname:
Gender: F/M
Faculty:
Years of studying English:

1. The digital learning brought new opportunities of learning.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Comment:

2. The digital learning improved communication between the students and the teacher.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Comment:

3. Learning in a digital environment provided quicker feedback.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Comment:

4. Digital learning motivated me more to learn English.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

Comment:
5. Table 1: Questions showing how often students use computer based technologies

<table>
<thead>
<tr>
<th>THE COMPUTER</th>
<th>Daily</th>
<th>Weekly</th>
<th>monthly</th>
<th>over monthly</th>
<th>not used</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use a computer for writing documents (e.g. using Word, Google Docs)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I use a computer to create graphics or manipulate digital images (e.g. using Photoshop, Flash)</td>
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</tr>
<tr>
<td>I use a computer for creating multimedia presentations (e.g. PowerPoint, Prezi)</td>
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</tr>
<tr>
<td>I use a computer for general study, without accessing the web, such as writing a paper, studying notes taken in class…</td>
<td></td>
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<tr>
<td>I use a computer to play games, without accessing the Internet</td>
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</table>

(adapted from Kennedy, Judd, etc. Australasian Journal of Educational Technology, 2008, 24(1), 108-122)

6. Table 3: Questions showing how often students use mobile phone based technologies

<table>
<thead>
<tr>
<th>THE MOBILE PHONE</th>
<th>Daily</th>
<th>Weekly</th>
<th>monthly</th>
<th>over monthly</th>
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<tbody>
<tr>
<td>I use a mobile phone to call people</td>
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<tr>
<td>I use a mobile phone to text/ SMS people</td>
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<tr>
<td>I use a mobile phone as a personal organizer (e.g. diary, address book)</td>
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<tr>
<td>I use a mobile phone to access information/ services on the web</td>
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<td>I use a mobile phone to send or receive email</td>
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7. Table 3: Questions showing how often students use web based technologies

<table>
<thead>
<tr>
<th>THE INTERNET</th>
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9a. Of all the things done this semester which one was the most effective in learning English? Please explain your choice.

On-site classes

Learning from home
Writing the in-class report
Writing the online blog
Prezi presentations
Website evaluations
In-class debate
Discussion forum on LMS

9b. Of all the things done this semester which one was the most challenging in learning English? Please explain your choice.

10. If you can rank the previous assignments in terms of their successfulness, how would you rank them on a scale from 1-8 (1 being the most successful, 8 being the least)?

11. What were the major advantages in using technology in the classroom? Please comment.

12. What were the major disadvantages in using technology in the classroom? Please comment.

13. Do you think that using technology in the classroom helped you learn better? Explain how.

14. After the semester is finished can you tell if you prefer digital or in person environment for learning English? Please explain your choice, or explain why you prefer one or the other in different situations.
Appendix C

LEARNING PREFERENCES INTERVIEW QUESTIONS

1. What are my strengths for study when I am using a digital environment?
2. What are my weaknesses for study when I am using a digital environment?
3. What are my strengths for study when I am using a paper environment?
4. What are my weaknesses for study when I am using a paper environment?
5. How do I use my strengths?
6. How can I correct my weaknesses?
7. Discuss what you would do when faced with a specific study task in digital or paper based environments.
8. When you are learning in a digital environment, how do you manage your time? Do you schedule enough time for the task? Do you rely on the objectives stated by the instructor in class?
9. Did you have a realistic study plan and enough time to study when learning in a traditional (class) environment?
10. Did you have a realistic study plan and enough time to study when learning in a digital environment?
11. Were the designated assignments helpful? Why or why not? (give suggestions to help students answer fully).