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The Internet and computer enhanced foreign language learning and intercultural communication

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Abstract

The present study aims at discussing the potential of the Internet and computer-mediated artefacts for education. The understanding of digitalised and technology utilised education, which is the current trend of our age, is highlighted and some computer-mediated artefacts such as the so called modular object-oriented dynamic learning environment (MOODLE), the online virtual reality chatting game Second Life, and some others are introduced in a unified connection to show how they can be practically integrated in education, and how they can foster foreign language learning and practice, and intercultural communication. It is emphasised that the current situation of the physical conditions, and also the needs, interests and abilities of the new-age learners should be considered more carefully to give education a correct direction in the future.

Keywords: The Internet, computer-mediated artefacts, intercultural communication, FL learning;

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1. INTRODUCTION

The current age of digital technologies often urges educators to try and use a variety of computer-mediated artefacts, which are usually easily accessed through the Internet. Numerous websites that contain plenty of foreign language (FL) learning materials and software have been prepared and activated during the last two decades. It seems that computer assisted language

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learning (CALL) holds every potential to replace the traditional educational settings and approaches, since it provides not only learners but also teachers with richer resources of educational equipments and opportunities, more flexible working environments, and better options in relation to the individual needs, interests, abilities, and intelligence types. Therefore, searching the ways to take the utmost advantage of the digitalised world for the sake of progressive and improved quality in education should not be delayed. Chapelle (2003, p.1) emphasises that things change, and as technology becomes the dominant means of learning and communication, unusual alterations might occur in expectations about the abilities that language learners should acquire, and also teachers should possess. So, it is argued that all language professionals need to reflect on the ways in which technology is shifting the perspectives, implementations, implications, etc. of the profession of FL teaching. There is also need for educators to question themselves as significant criticisms have been forwarded recently against the teachers and authorities who lack the necessary qualities and awareness related to improvement in educational technologies. They are blamed for not possessing the skills and knowledge to integrate technology effectively into their classrooms, and that they are not as effective as they should be in motivating students to learn, and also that although they have a lot to learn from students they just ignore it (e.g. Becker, 2007; Prensky, 2003; Gee, 2003; Thorpe and Edmunds, 2011; Melville, 2009; Oblinger and Oblinger, 2005; Keser et al, 2010; Dewitt & Siraj, 2010). The recent debates indicate that a serious incompatibility exists between the two parties of the modern world (the teaching side vs. the learning side). Prensky (2001, p.2) emphasised that the single biggest problem facing education today is that our “digital immigrant” instructors, who speak an outdated language are struggling to teach a population- “digital natives”- that speaks a much different language. So, two things seem to require careful consideration and revision: 1. generally speaking, the needs, abilities, and interests of the ‘new-generation’ learners (the learners in short), and 2. the content that is to be delivered to the learners as well as the philosophies, methodologies, and approaches adopted while realising the educational aims and goals (the content and procedures).

In the following, these two aspects are going to be reviewed and discussed in relation to the current innovations in FL teaching, facilities and trends in education and the ways in which ‘learning-technology-teaching’ triangle can be set up and harmonised.

1.1. The Modern Versus Postmodern Approaches To Education

Prior to talking about the ‘new-generation learners’ and the ‘content and procedures required in the age of technology’, it would be helpful to explain the role of philosophy as a starting point and the basic layer in education and training. The philosophical stance that is adopted in education plays a crucial role during all processes and applications. At this point, it is possible to discuss about two understandings in education: ‘the modern approach to education’ vs. ‘the postmodern approach to education’. Figure 1 describes the characteristics and general tendencies of these two approaches to education.

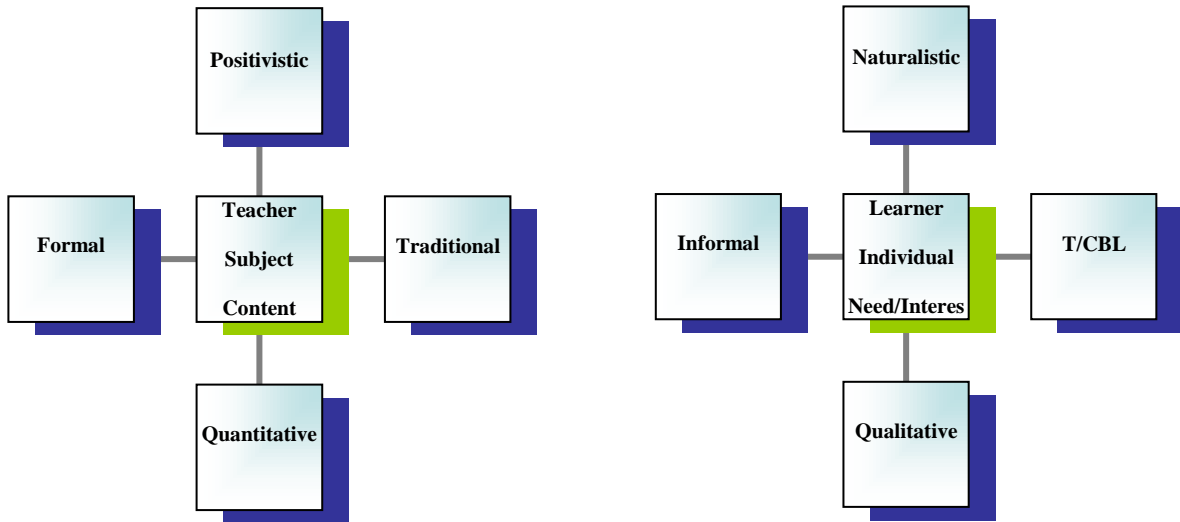


Figure 1. Modern vs. Postmodern approach to education

The modern educational system contains dichotomies such as traditional language learning vs. computer assisted language learning, formal education vs. informal education, social/group learning vs. autonomous/individual learning, etc., and although there is no certain answer to the question ‘Which of the mentioned approaches in the dichotomies is superior, or is there any superiority between them at all?’, the general tendency is to value the first approach in each dichotomy more than the latter. Actually, this is a kind of “chicken from the egg, or egg from the chicken” issue. As it is illustrated on the left picture in Figure 1, the modern approach to education puts the teacher, subject, and content in the centre, and needs or values mostly formal and traditional settings, and positivistic and quantitative procedures and results. On the other side, the postmodern approach to education sees the learner, individual, and needs/interests in the centre, while regarding and underlining the informal and technology/computer based learning (T/CBL) environments, and naturalistic and qualitative processes and results.

The understanding of education in our “digital” age might have shifted actually towards as in the picture on the right in Figure 1, especially from the learners’ point of view if not from the teachers’. The discussions of formal versus informal and individual versus social learning have been hot topics within the educational environments (Wong and Looi, 2010). Anyone, anytime, anywhere learning as well as lifelong learning and distance learning concepts have been emphasised and underlined, almost at any platform related to education (Gu et al., 2011; Sharples, 2000; Patten et al., 2006). So, it is possible to postulate that education is witnessing a transitional shift away from the modern educational system towards the postmodern.

1.2. The new generation learners, their abilities, education, and teachers

Information and communication technologies (ICT) have gained enormous power and acceleration since 1980s, so that a serious gap has been created and is being widened each passing day between the generation of the last 30 years and the generation that was born prior to this time. Prensky (2003) reported that the amount of time the youth spends by using computers in today's world is estimated at 10,000 hours (just by playing computer games) by the time they are 21, and that the brains of the children are changing to accommodate the new technologies with which they spend huge time. When this finding is considered closely, it would not be naïve to comment that the new generation learners have already accomplished the first step(s) in becoming autonomous and lifelong learners. Web 2.0 platforms and other information sources on the Internet provide promising learning environments that cannot be avoided, and what is more, each day they are consulted and used by a considerable number of individuals throughout the world. Almost any computer user is able to download and upload documents, pictures, programs, etc., to set up these or to embed and use them in other applications. In short, any basic skill and information is possessed and actively practiced by the youth. Moreover, it is obvious that the new generation would be willing to carry their education on digital platforms, in which case they will need 'competent' instructors who will be able to guide and assist them efficiently.

1.3. The new age FL learners

Actually, the existing FL websites on the Internet and the number of the distance education programmes are clear indicators that there is not only need for these but also that they are favoured by the learners as an increasing demand exists. Today, FL learners can easily go on the Internet and read passages in the target language, do exercises of any kind, take quizzes and tests, practice the target language in online chatting sites, listen to news, songs, and videos, etc. There are also many kinds of software that help them to carry out synchronous conversations such as Skype, and many other audio and video messengers (e.g. *MSN*, *Yahoo*, and *ICQ*). Moreover, the hot innovation and trend on the virtual world is the so-called social media (e.g. *Facebook*, *Twitter*, *Wikis*, and forums) where individuals share (read, write, listen, and watch). So, besides the traditional and formal FL learning settings, learners who spend much time on the Internet and with computers have every opportunity to benefit from the online tools and contents. Nevertheless, not all learners are aware of or made ready every opportunity and learning setting of the digital world. So, it should be suggested that although the new age learners actually can be autonomous; teachers, instructors, or authorities that are responsible for the educational policies need to be aware of the technical and practical information about every opportunity and setting to inform learners about these, while also providing guidance and education on how to use these. Autonomous FL learners might need and benefit, for instance, from rubrics that would be prepared for the learners of different intelligence types and proficiency levels. Moreover, it might be helpful if big portals of foreign languages be

prepared and activated, so that FL learners will have some official and unified websites, the content of which will be trustable, and will provide clear and standardised instruction and materials for the learners of all languages. The most important aspect in the way of technological education, however, would be to adopt a postmodern approach where the interests, tendencies, and habits of the *learners* will be granted and met. FL teachers will have to accept and understand that their existence is bound to the existence of their learners, and not the opposite. Therefore, the FL teachers of the future should be not only teachers of a FL, but the 'teachers of the digital natives'.

1.4. The contents and procedures for digital FL learning

At the point, where online FL learning is going to be applied and carried out, there is need to remember that the learner should be the one to decide about the process rather than the teacher, and also it should be comprehended that the individual needs and interests come before the subject and contents. So, the main philosophical principle should be that 'rather than teach the FL, help learners to learn it' and also 'in the way they request it'. In the following a suggestion about how to achieve this, in parallel with the abilities and tendencies of the new generation learners, is going to be presented.

1.5. How to implement the blended online FL teaching/ learning procedures

If it is agreed that the digital learning environments are favoured and useful, instructors should search for ways to move their courses on the digital platforms. One way to create a digital learning environment is to register a domain name and to find a place to host it. While these initial steps can be taken by the help of professional companies, it is possible to realise it through the companies that provide free services on the Internet as well. Once the website is set and activated, it becomes ready for broadcasting educational materials and providing learners with online courses (synchronous and asynchronous).

The second step is to decide on the programme and content to be introduced. In our case, let's assume that the programme is intended to focus on improving the 'reading' and 'writing' skills, and the content is to deal with English as a FL. The so-called modular object-oriented dynamic learning environment (*MOODLE*) is a free platform that provides quite professional, flexible and rich opportunities where online courses can be organised and presented (see Brandl, 2005 for details). What we need to do is to download *MOODLE* software from its website, and install it in our website. Later on, the courses can be easily created where each week will be displayed with all the materials, exercises, and tasks that will be included by the instructors, and also by the learners if and whenever preferred (see Figure 2).

The screenshot displays the Moodle interface for an "e-Reading Course (10 weeks: 24 October-1 January)". The user is logged in as "Admin User". The course page features a navigation menu on the left with "Navigation" and "Settings" options. The main content area shows a "Weekly outline" with three weeks of activities:

- 24 October - 30 October:** News forum, Introduction and Needs Evaluation, Story Cube, Online Reading, A Day Like No Other, Forum: Discussion on the text, Glossary.
- 31 October - 6 November:** Out to Lunch, Upload your own text, Upload your own questions, Prepare your glossary.
- 7 November - 13 November:** Free Reading, Reading Workshop, Quiz 1.

The right sidebar includes a "Search forums" section with a search box and "Go" button, a "Latest news" section with an "Add a new topic..." button and a message "(No news has been posted yet)", and an "Upcoming events" section listing "Online Reading", "Upload your own text", "Upload your own questions", and "Prepare your glossary", all scheduled for "Saturday, 5 November".

Figure 2. The weekly appearance of an exemplar reading-writing course on MOODLE

As it might be observed in Figure 2, each week of the course, and the exercises, which can be created by the *HotPotatoes* software or MOODLE embedded facility, and tasks are displayed so that learners can do anything that they would do in a traditional course, and even more than that such as searching and reading passages of their own choice and interest from among hundreds of texts on the Internet, or searching for additional information and reading about the places, people, things, etc. that they read in the initial text. They also have the chance to quickly look up the meanings of the unknown words in online dictionaries and to listen to their pronunciation. Note that these are just some of the advantages and opportunities of the digital environments among all others. In the following I am going to explain the procedures to better clarify how the online reading and writing course can be delivered.

1.5.1. The exemplar online reading and writing course

1.5.1.1. Week 1

As it can be observed in Figure 2 (the snapshot of the first four weeks of the Pre-intermediate level online reading and writing course), the course begins with a 'news forum' section where the instructor introduces and explains the requisites of the course as well as the parts of the website. Under this title, the instructor can record and post video files for students to watch and see what they can do in the website, and also to know where and how they can access the particular sections and materials. Since or if the instructor is not going to ask his/her students to set up a MOODLE site and create or modify lessons, showing them just how to navigate through the MOODLE site of the teacher should be enough for the orientation of the learners. Otherwise, s/he will need to teach them about the MOODLE or just direct them to some useful materials or videos that have been prepared by other instructors and professionals, which can be found and previewed or watched on YouTube website, for instance. Learning about the basics of MOODLE should not be a tough task for the digital natives and generally would not take longer than a week.

Following this initial phase, it would be a good idea for the instructor to prepare and apply a 'needs analysis' questionnaire, which could be easily prepared by the help of *Google Documents* for instance, to understand what his/her learners would be willing or interested to read about. Generally saying, this is something that modern educational approaches just ignore or neglect. The fixed course books usually provide all students with the same reading passages regardless of their unique interests. In other words, the modern educational approaches tend to see the whole class as a 'single big body', a person who is or should be interested and motivated by the same materials, procedures, aims, etc. Nevertheless, with this MOODLE based online course, the instructor has the opportunity to provide and allow options for the learners to do the reading in accordance with their own needs or areas of interest. The teacher himself/herself as well can choose and prepare the contents of the course according to the results of the needs analysis questionnaire. This understanding and course delivery procedures seem to serve significant flexibility not only for the students but also for the teachers.

In this exemplar course, the instructor uploaded a 'story cube' (a form of specific instructions that ask students to pay attention to and answer some specific and/or general questions while reading, such as 'What is the text about? Who is/are the main characters? Where does the story take place and/or when? What are the definitions or L1 equivalents of the unknown words that you face?, What would you do if ...', etc.) by which students are guided during their autonomous reading activities. They can just download the PDF document and see what their instructor wants them to do generally or each week throughout the reading activities. Accordingly, this form can be a fixed one or can be modified each week by the teacher. So, prior to the essential reading sessions, the instructor would become sure that each student understands what s/he is expected to do and how to do in due course.

1.5.1.2. Week 2

In the second week of the online reading and writing course, the instructor posts a note informing students that they are required to do free 'online reading' from a number of specific websites (might be previously determined and introduced by the teacher), and to follow the instructions on the story cube. The instructor provided this option for the learners who would not be willing to or interested in reading the text (*A Day Like No Other*) and answering the questions provided by their teacher. So, each learner had to accomplish the task of the week, which was reading a text and answering some questions related to it, whether it is the choice of their instructor or their own. As a follow up activity, the instructor created a 'forum: discussion on the text' section in which he asked each student to post at least three entries about the text they read. These entries were in parallel with the follow up questions of the text *A Day Like No Other* (the teacher posted a question and an idea to initiate discussion and to elicit students' opinions while checking their comprehension, and also triggering the need of writing something about what learners know), or the story cube (the teacher asked the students to post at least three sentences in which they would use words from the unknown list(s) that they indicated in the story cube form). For both groups, whether the *A Day Like No Other* readers or the free online readers, the teacher asked each student to send their responses by e-mail to check rather than checking their notebooks of pen and paper.

The 'glossary' in week two was created by the instructor and each student in the class was asked to post at least five entries to this glossary from the texts they read. Both creating a glossary and entering words are quite simple tasks in MOODLE.

1.5.1.3. Week 3

In week three, the instructor provided students with a text (*Out to Lunch*) to read and answer some comprehension questions, as he did in week two. In addition, an option was provided as a task, for those who would like to read another text of their own choice. They were asked to upload the MS Word or PDF file of their text(s). They also had to prepare and upload some comprehension questions about their text(s). In addition to these, they were asked to create and build their own glossaries by including the entries of the unknown words that were in the text. The instructor let them do everything on MS Word and e-mail their documents to the teacher if or when they faced a difficulty in working with the MOODLE site.

1.5.1.4. Week 4

In week four, the instructor planned to apply a short quiz (Quiz 1) as a regular check up activity of the course (these quizzes were administered once in three weeks, that is, in week four, seven, and ten). Prior to implementation of the quiz, the instructor provided one specific website where students could enter and read short passages about a particular topic/theme. Subsequently, the students were required to enter the 'reading workshop' page in the MOODLE course site, and to submit a short assignment in which they were instructed to include at least three quiz questions on the text they read up to that week. The submitted assignments were made available to all learners. All students knew that the quiz would be prepared by the teacher, but he would use their

assignments as a source. So, they had a reason to read the questions prepared by their classmates, and also to check the texts by going backward to do the necessary scanning or skimming.

1.5.2. Second Life and Skype

The online virtual reality 3D-chatting-game *Second Life* (see Figure 3) provides an enjoyable and interesting option for the FL learners (see Salmon, 2009 for details). They can meet many individuals from all over the world who are there for chatting. So, this setting makes the writing and reading activities more authentic and natural when compared to the artificial writing tasks urged in the traditional courses. Moreover, learners find the opportunity to improve their FL writing skills while exchanging fresh and daily information with others about the things they read in the texts. Among many possible ways in which *Second Life* (SL) can be consulted and used for FL learning, throughout this course it was utilised in the simplest possible way to avoid it become a burden for the students, but rather to be approached just as a game.



Figure 3. Scenes from Second Life

As an integral part of the course, the learners were instructed to read about a specific topic or event each week before going on SL and talking about it with people or classmates (few specific rooms in SL were determined and introduced to the learners). They were also asked to copy their conversations and paste in MS Word or Notepad, and send their documents to their instructor by e-mail. These documents were also circulated by e-mail to everyone in the class so that interested students could take it as extra non compulsory reading.

In addition to SL, for students who did not have a private computer (PC) with minimum hardware requirements to easily run SL software; Skype (software that enables users to speak, see and instant message others) was introduced and enabled. All learners had Skype installed in their PCs and could

connect one another after school. They were instructed to do the same thing with those who preferred SL (copy-paste- and e-mail the conversations). Both SL and Skype create many opportunities for synchronous applications in FL education, and can be adopted and used in many different ways depending on the computing literacy and creativity of the instructor and the learners. Both SL and Skype are promising and hold every potential to enable and accelerate intercultural communication. These are two of the best ways to increase global communication and interaction through the Internet, whether written or spoken.

2. DISCUSSION

2.1. Which technologies to employ, how to use and by who

It seems that inclusion of technology more and more in education and in a variety of ways is inevitable, but the crucial question would be 'which technologies will be employed, how they will be used and also by who'. According to Geoghegan (1998), teacher populations are important determiners related to what technologies will be mostly adopted as the beliefs and attitudes of teachers directly influence the educational practices. Although this might be a correct statement for the modern philosophical aspect, there is need to remind once again that in postmodern educational approaches, education is not an action for teacher satisfaction, but rather a process in which learners receive the desired support, guidance, and help. Therefore, it might be more meaningful to concentrate mostly on the learners as the essential stakeholders of the process, and let them determine about the technologies. It would be beneficial as the technologies proposed by the learners would be most probably those that are widely accepted among learners. Otherwise, it might be something such as a 'smart board', which is imposed by some authorities but has no validity or popularity among learners at all. Actually, technologies such as smart boards are bulky and inconsistent with the postmodern philosophies and approaches to education, as they limit the 'time and space' principle in autonomous lifelong learning. Dodigovich (2005, p. 74) asserted that in order for an innovation to become widely accepted, it needs to be embraced on a social and psychological level, first of all, regardless of the definitions about the rich advantages that it serves or brings to a field. The current state indicates that the Internet is massively popular among both teachers and learners, and thus, maybe it might be better talking about Internet Assisted Language Learning (IALL) instead of CALL, because physical equipments and hardware such as computers are bound to replace one another or change in time completely. What used to be carried out only by PCs in the past can be and actually is preferred to be done by mobile phones today, and who knows, maybe in the future phones can be replaced by a watch or a tiny chip. Thus, mobile assisted language learning (MALL) or CALL are terms that actually do not comprise or explain the matter in all aspects. The matter can be exemplified as in the following:

If a computer is a car, then the Internet might be defined as the gasoline/petrol that it uses to move. That's why; the Internet is the vital element. So, even if we do not have a car, we still can use it in our motorbikes or other vehicles.

One might suggest that CALL and MALL are fields that have much to offer both to teachers and learners, but the future belongs to IALL. IALL has the magical ability to ignore the limitations of the physical space and time and expand FL learning and teaching to its furthest possible level.

As it stands today, the Internet promises a lot for the future. It not only enables and accelerates education but also triggers, supports, and guides communication. Very few individuals today remain without an e-mail address, for instance, which indicates that the electronic and digital environments in every area and also in education will unavoidably create and shape the future. In this case, it would be better for educators to move their work and studies online as early as possible. In addition to the advantages that the digital word offers to teachers and learners, one might not pretend as if there are not any disadvantages. Nevertheless, the obstacles that appear because of technology can easily be eliminated or removed again by higher technology solutions. Improvement is simply a matter of need and requirement. So, the field of FL education needs more demanding learners and more giving and supportive teachers in order to go one step beyond the present conditions. Using, developing and improving different educational software tools such as MOODLE, Second Life, HotPotatoes, Skype, etc. would certainly not be enough if they are not introduced to teachers and students, and if professional support or workshops are not provided to show how these can be adapted for FL courses.

The present study provided an example for an online reading and writing course, and these examples should be increased by researchers. It would be undoubtedly useful for the practitioners of the profession to see some concrete examples before deciding to adopt them. In addition to the FL software tools, the World Wide Web (www) is ready to accompany FL learners and teachers, and is already frequently consulted indeed. Felix (1999) reminded that one great advantage of the Web is that it offers easy access to a large variety of resources which makes it so attractive for everyone. So, as an initial step has already been made into the stream of technology, there is no need to try to avoid it but to seek for ways and options to get the best and utmost benefit from it.

2.2. Online courses, advantages and limitations

The advantages of online course delivery have been discussed in general and can be summarised as in the following.

Digital and online environments provide:

1. Easy access to rich and diversified content
2. Opportunities for diversified interaction and feedback
3. Time and space free applications

4. Interesting and highly motivating applications, especially for the new generation
5. Effort and time saving implications

On the other hand, it would be sensible to mention about the limitations as well. If we take the online reading and writing course provided in the present study as an example, we should mention that the biggest and most significant limitation that might cause problems would be if learners do not have a PC, internet connection, or electricity. These three elements can be regarded as the most basic and vital units of digital education. Apart of these, it should be noted that instructors will always need a domain name and a hosting service to install their websites, MOODLE, or materials. Therefore, these will need to be provided by the institutes or the government since not every teacher can afford it, or might not be willing to pay extra for these as it is always possible to carry out the educational applications in traditional ways. Moreover, there is absolutely need for learners and also teachers to be introduced and made accustomed to working on digital environments with as less pen and paper as possible. This can be realised through in-service courses for the instructors and official courses in the educational programs for the learners. Teachers will have to control each student's work each week, which might add some workload, but in-class time can be shorter or with lighter duties because students will do most of the things at home or in the classroom but with their computers, and just consult their teachers to ask for guidance rather than asking for long explanations by the teacher. The task of the instructors or professionals will be to plan and prepare the tasks, materials, and procedures for each course in a semester. The education of different skills will need different tasks and procedures and these should be determined and validated by the professionals. These implementations might be very disturbing in the beginning until minds and habits get used to it all. Therefore, qualified managers will need to be provided for both technical and administrative support whenever requested.

3. CONCLUSION

Besides the numerous advantages of the digital educational settings, maybe the most considerable one is that they provide rich and equal 'lifelong learning' opportunities for anyone regardless of age, gender, or any other factor. Moreover, it enables instructors to reach not only students in the formal platforms but also their parents in informal platforms such as e-mail applications or MOODLE. And, software tools such as Second Life and HotPotatoes seem promising for education, but it is certain that much progress is needed both on the software development part, and on the training of teachers related to showing them how to incorporate these software tools in their courses and how to move their work on the digital environments. However, first and foremost it should be underlined that the educational philosophies need to be revised closely in parallel with the current learner profiles, technological innovations, and conditions of our era. Also, as 'reflection' in education is such a hot term and topic nowadays, the teachers and authorities that are responsible for creating and applying educational programs as well as philosophies, need to reflect

on their own understandings and aspects related to education in whole, to better meet the requirements of the learners and satisfy their expectations.

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