Computer Usage in SLA: Communication Technology in Learning, or Learning through Communication Technology?

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1. Introduction

The goal of this research is to explore some paths of the computer's possible uses in *SLA*. Therefore, according to the consideration of different success percentage between *FLA* and *SLA*, this study begins by analyzing the divergences between these two processes. The purpose is studying the way in which technology's usage can possibly affect some of these aspects. In fact, the thesis of this research is that if, with the help of computers, instructors are able to reduce the differences between *FLA* and *SLA*, then a consequent improvement of *SLA* success percentage would also be possible.

The most substantial difference between FLA and SLA is that in FLA there is a 100% success, while in SLA the percentage is always hard to calculate. Consequently, if one intends to proceed in a deeper analysis of these two different kinds of acquisition, one may notice that they differ substantially in four aspects: a) the range of language sounds which can be easily covered by a FL learner as much as can create problems to a SL learner; b) the dissimilar motivations for FL and SL learners; c) the entertaining aspect, which often helps FL acquirers (especially children), but which habitually creates problems to shy SL learners; d) the time that FL and SL acquirers dedicate to the learning activity. In detail, beginning from the first of these aspects, it is quite noticeable that an instructor cannot take part in the acquisition process of language sounds, which seems to be deeply related with the learner's age. 1 Moreover, the daily experience of SL teachers immediately reveals that it is almost impossible for an adult to recreate SL sounds without filtering them through his/her FL sound range and without being conditioned by his/her eventual shyness.² Nevertheless, proceeding with the second aspect of the previous analysis, the primary goal of SL instructors is to stimulate adults' motivation in order to activate their natural passion to communicate, even though they cannot recreate an FLA environment.³ On the other hand, in this case it is possible to begin detecting an effect on learners, because it is reasonable to think that technology's use could raise the motivations of some SL adult acquirers. The third and the fourth parts of this analysis regard the aspects that can be affected the most by the usage of a computer. In fact, both the entertainment element and the time appear to be, among the four discrepancies previously noticed between FLA and SLA, those that can be changed the most by the use of technology. Therefore, since the computer can take part in at least two of these ingredients and, in

¹ In fact, scientific research has already showed how children until six years of age can easily reproduce every kind of sound in any language. Then, according to the same studies, it seems that after that age children focus only on sounds which they consider familiar; in other words, the ones which belong to their native language.

² Therefore, it is interesting to note how this *SL* learners' weakness could be actually one of the most powerful characteristics of child learning. It is easy to deduce that what really pushes a child (more than an adult) to speak a language is definitely the mixture of entertainment and will to communicate with the mother. Indeed, in the same situation an adult would probably consider certain sounds as childish or inappropriate for him. Thus, maybe this is what makes adults say so often "I cannot do that."

³ In effect, while the SL learner considers LA just as a secondary activity, the FL acquirer has to deal with it as with a matter of life or death. Therefore, since FL learner has to communicate in order to survive, he could obviously avail him/herself of stronger motivations.

⁴ Actually, thanks to the computer, an *SL* learner can greatly increase the amount of time s/he wants to be exposed to the target language. In effect, since with technology's use the entertainment quality of the time learners dedicated to the language acquirement is broader, as a result they obviously spends a larger amount of time dealing with the target language while they are using the computer.

certain cases, affecting also adult learners' motivations, the necessity to admit that technology's usage can play a relevant role in *SLA* appears quite clear. As a consequence, one of the possible aspects of this study might have been the analysis of the role that communication technologies play in relation to the different learning theories and instruction models.⁵ Nevertheless, the focus on technology's use in didactics seemed to be more connected with the topic of this research. In truth, the fact of using some electronic equipment is not an approach, nor is it a new methodology, nor is it an innovation in itself. The challenge is to discover how to benefit from technology as a teaching aid able to reveal profitable interconnections between learning theories and teaching models. One may characterize the computer's role as tutor, as a cognitive tool or as a cooperative tool, in accordance with behaviorism, cognitivism or connectionist theory.

The body of this study concentrates on the way an instructor can deal with computer usage and with the instructor's own role, which is that of a transmitter but can change into that of a coordinator, a mediator, an activator. Naturally, every teacher in this situation has to make a decision, because in dealing with the attempt to coordinate the SLA process, it is necessary to assign a definite role to the technology itself during the course. In these circumstances an instructor has to choose whether to benefit from computer as an aid to complete the program (which means using it as support during the learning process), or to allow the learning process itself to develop through the communication technologies. In fact, even without dealing with learning theories and teaching models, anyone who uses computers in SLA at a certain point has to decide whether to use the machine as a tool or as a tutor. Therefore, the enormous power of technology needs not to overwhelm human skills in communication. In order to keep the comparison between FLA and SLA and to reduce differences between these two processes, every instructor should use the computer not as a substitute, but as an extension. In other words, instead of abdicating the educational role, every teacher has simply to decide of which measure to take advantage amidst the innumerable possibilities offered by technology. In fact, the final part of this research intends to study how a computer can be used in teaching the four skills. For this reason, according to the instructor's choice, a student can deal with technology's usage to develop one or more skills, and this process can happen in or out of the classroom (the student may be required to use the computer to practice during the lesson or for homework). Then, particularly in this case, it is possible to notice technology's impact on affecting some of the discrepancies between FLA and SLA by offering new opportunities of autonomous learning with distance education and training procedure, which takes advantage of a cooperative acquisition process with distant persons. For instance, in these situations e-mail usage also provides a natural environment to use a language which is very similar to spoken communication, given the exchange speed and frequency which makes the communicative exchanges more like a conversation developing in time, than a form of written communication whose nature is more formal and coherent.

The concluding portion of the study is dedicated to deepening the way in which communication technologies could and should be used as an aid to the process of learning, instead of being the ruler of a learning process that is only based on communication technologies. Once again the purpose is to stress the role of the computer as tool and not as a tutor, because otherwise instead of counting on an ally, instructors will have to deal with an overwhelming opponent. Building on the study described here was Progetto Leonardo, a project open to the students of the intermediate and advanced Italian classes at the University of Connecticut. These students had the opportunity to improve their language skills by means of activities such as research in Italian publications and especially on the Internet (through those synchronous and asynchronous tools analyzed in this study's final part).

⁵ Since each one can provide teachers with different considerations that can be used in the classroom.

⁶ In fact, if one assumes that a computer can be available 24/7 in providing oral or written information about the target language, that can eventually monitor students grammar mistakes and that can also keep the learner in touch with other sources of cooperative learning (which means that it can almost cover the entire range of the four skills), is a human teacher still necessary? How can a teacher defend the prerogatives and peculiarities of teaching? And most of all, if the instructor decides to use the machine as a "tutor", more than a "tool", how is it possible to still consider the instructor better than an almost perfect opponent?

⁷ Then, the result of their research has been organized into instructive posters made of images and data.

2. Technology usage in didactics

"Computer-Assisted Language Learning (CALL) may be defined as the search for and study of applications of the computer in language teaching and learning." (Levy 1997, pg.1)

Technological revolutions have always played an important role in educational processes. After the development of the writing system it was the invention of the printing press that inspired the deep technological renovation, which allowed communication to the masses. Then, in the 20th century, communication has become even easier with telephones and with mass use of audio, video and digital players, photocopying and computers. As a result, in the brief history of Computer-Mediated Communication (CMC), the computer has assumed various roles, following the technological and methodological transformations of these last decades. Therefore, an analysis of computer usage in didactics has to begin right after its invention and follow the subsequent development of this machine. In more detail, according to Michael Hager (2001), CMC is often split into three categories: conferencing, informatics, and Computer Assisted Instruction. The most recent applications of CAI can be called CALL, or integrative CALL, once it intends to use the computer as a multimedia system. Regarding the usage of the computer in education, one may notice the presence of several models, which reflect the current theoretical practices as well as the technological capabilities of computers. In fact, a brief summary of technology's use in didactics has to emphasize that, during the 1960s and the 1970s, CALL was developed mainly through a couple of projects, called PLATO and TICCIT, which used the computer mostly as a tutor. 10 Nevertheless, according to Michael Levy (1997), although a significant amount of materials was produced for foreign language education, the number of institutions¹¹ using them remained somewhat limited. This usage of technology as tutor has defined the computer as an instructor, since it "knows" the correct answers. Moreover, software packages providing drill and practice routines are projected to follow this model, also because these exercises were an important part of the Audio-Lingual method, which was based on behaviourist psychology, and which was the most accepted at that time.

It was throughout the 1980s that, as underlined by Levy (1997, pg. 24), "the language teacher has not only played a role in developing CALL materials, but also in using them effectively with students." In fact, achieving a successful integration into technology, the teacher's role has proven to be central not only in choosing materials to integrate into the programs, but also in incorporating the computer activity into the lesson as a whole. During this decade CALL has been incorporated into a communicative perspective. Thus, if language has been primarily considered as a communication act, it has been also emphasized that the student's duty is in being an active part of this process and making decisions in order to produce communication. The computer as stimulus model had offered "exercises that encourage students in discussions, writing, and critical thinking, rather than discovering a right or wrong answer. This model was embraced by proponents of communicative methodology, which had its origins in cognitive psychology." (Hager, Rieper, Schmit and Shastri 2001, pg. 564) This change of perspective has forced learners to develop their role from simple manipulators of a preordained language to effective producers of communication. In practical terms, the computer was still a tutor but it was also a tool, an instrument to lead students and to give them the chance to control and also interact during the entire communicative process. At this point, the biggest break from the past was not only caused by the use of new programs, but also by a new perspective on the horizon. On the other hand, since the utilized software was no longer merely of didactic type, the same computers' use constituted a variety in the normal development of the lessons. Therefore, the machine itself began to

⁸ One may include into this category: the use of e-mail, interactive messaging, and also small/large group discussions.

⁹ This category embrace the use of on-line library catalogues, interactive access to remote databases, pictures, or movie archives.

¹⁰ Which means they used the computer as an active distributor of exercises able to immediately estimate the correctness of the answers given by the students.

¹¹ The reference is at the limited amount of schools, colleges, and universities using these new technological materials.

constitute a change in the routine of scholastic life and subsequently a new motivation for the learners. Nevertheless, it was during the 1990s that the role of the computer finally changed. Thanks to the multimedia technology usage and to Internet¹² diffusion, technology became a formidable ally of the language teacher. During this decade the computer developed into a powerful mass media, but also into an instrument to use in order to find information and to send or receive messages, written and oral. Due to the expansion of technology, computers finally had the chance to bring into the classroom an on-line global communication. As a result, even if with the on-line communication everything is truly no more than a virtual process, one must admit that this process - paradoxically - looks deeply real. The diverse typology of communication¹³ and the possibility of integrating the various linguistic skills in every single possible combination¹⁴ provide the instructors with the opportunity to interact with other people, organizations, and associations. Thus, teachers can communicate with the entire world through mass media, which provide them with continuous feedback and with the option to choose paths and to follow stimuli in accordance with their individual interests. Combining computer technology with a task-based approach, they can "create lessons that satisfy the fundamental requirements of the communicative approach." (Hager, Rieper, Schmit and Shastri 2001, pg. 564)

In conclusion, through the normal process of "choice, information gap and feedback", which characterize every communicative exchange, the computer can finally help every instructor to solve the biggest problem of every classroom language simulation. In fact, in every single exercise of their lessons they will always miss the main element, essential to every communicative exchange: the necessity to communicate using a code, which is different from the natural one. ¹⁵ Consequently, since they cannot recreate the real stimulus of communication, which is the need to communicate itself, one has to acknowledge that the new usage of the computer as a mass media can definitely offer a real environment in which the need to communicate can be also finalized in another language. Even though this process is simply a virtual one, it is the most perfect simulation instructors can offer to their students, probably better than every possible exercise they can present during the lesson.

3. The use of computers in learning or learning through the computer

"Finding an appropriate role for the computer, in the light of the technological options available at any given time, has remained an issue." (Levy 1997, pg. 42)

As suggested by Michael Levy in the preceding quotation, probably the biggest issue in this field is still about the role of technology. The question is whether computer usage really makes a difference in how well students learn. Firstly it is necessary to consider how much information technologies have nowadays become such a driving force in every aspect of everyone's life, to a point that now it would be probably impossible to think of a good teaching method or approach that does not intend to use them. On the other hand, it is also clear that, according to the technology evolution, the role of the computer needs to be continually re-evaluated. Also because "ascribing a role for the computer has implications for the role of the teacher, and for the ways in which material content and activities are

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¹² According to Michael Levy, 1997, p. 31, "the Internet is said to have begun in 1969 as a project of the US Government's Department of Defence, with the aim of providing an electronic communications network capable of surviving a nuclear attack."

¹³ In fact, this typology of communication is so diverse that it can be basically related to all the four skills. In truth, on one hand we can consider the use of graphics and writing as training for both reading and writing skills, because of the possibility of exchanging messages and opinions through the net. On the other hand, the opportunity of hearing and exchange music and especially sounds, can also be considered as a subsequent training of both listening and speaking skills.

For instance, the mixture of reading and writing noticeable in an e-mail message exchange, but also the combination of listening and speaking existing in a videoconference and, in general, every fusion of skills that remind of real life communication.

¹⁵ In other words, during the class students do not have the real necessity; do not feel the real "stimulus" to use a language that is not their first language. They can obviously be forced or decide to use the target language taught in that classroom, but their motivations and, consequently, their results will be absolutely different from motivations and results they could possibly obtained with their FL.

distributed between the two, especially if work conducted at the computer and away from the computer is to be properly integrated." (Levy 1997, pg. 42) In truth, with technology's usage teachers may definitely augment the amount of time that students spend dealing with the SL and, for those who are interested in technology, this also means a frequent improvement of their motivation. For these reasons, when instructors decide to update their materials to better accomplish their work by exploiting the incredible number of opportunities offered by technology, they add some extra value to their teaching activity. Besides the deeper effectiveness and the superior involvement on the part of the students, the learning activities are definitely optimized and accelerated by the utilization of some of the new technological capacities. Then, almost everyone who has to deal with computers is affected by another important factor: the entertainment aspect. It is this aspect, in fact, that naturally pushes learners to spend more time interacting with SL, augmenting their effectiveness. Therefore, it is evident how a "good use of technology" can accelerate some learning paths, by suggesting a continuous and broader offer of resources and helping collaboration in and out of the same classroom. Nevertheless, at this point an obvious but essential question arises: what is exactly a "good use of technology"?

The most interesting aspect of technology usage is how teachers decide to deal with technology itself. Therefore, the issue is, once again, of whether to use the computer as a simple tutor or as a tool in the hands of the instructor himself. According to the most recent use of computers as mass media emphasized previously, one may find that the computer's usage as a tool not only helps instructors incorporate it in a communicative perspective, but also allows the computer to become a formidable ally in the teaching process. If one considers the production of communication as the innermost goal of the language process, it is impossible to avoid stressing the computer's crucial importance in providing instructors with an immediate access to an enormous amount of resources and information. As a consequence, teachers have the challenging opportunity to perform interpersonal exchanges through the possibility of establishing a contact with the outside world. Beyond this, there is another important value that needs to be positively involved in this process; that is, the incontestable richness which derives from the development of all the strategies related to handling information in the language through the stages of searching, analyzing and processing information. Then, it is also interesting to note how these three phases of a pure virtual communication process are so fascinatingly tied with the aspects truly involved in real communication. If one takes for granted that computers have to be teachers' tools "in the online environment just as a hammer and saw are tools of the carpenter," instructors should select carefully "the tools that make their online adventure more pleasurable and achievable." (Moore, Winograd and Lange 2001, 5.4) Among the various opportunities offered by new technologies, they should focus on social rather than grammatical aspects. In fact, computer usage that is only focused on grammar tasks, risks segregating once again technology into a tutor position rather than using its "stimulus" power. As a consequence, instead of simply proposing a learning process based on technology, 16 according to the principles of the communicative methodology, instructors have to focus on finding ways to use technology as a precious instrument able to stimulate the learning process. The dilemma of how to integrate technology into the education process through a communicative perspective may be solved by considering that nowadays this methodology is definitely the most diffused approach to the teaching issue, and it is also the one which better allows usage of technology stimulus, since it implies that the process of learning can be conducted through the computer and not by the computer itself. Instead of simply using prepared CD ROM from which learners can merely - but only - obtain information by some links, this kind of approach should encourage the reality of the virtual communication through asynchronous and synchronous instruments (such as e-mail and chat rooms). In effect, by reading or listening to a CD ROM instructors can obviously influence the time factor of SLA but, after all, this new instrument is just another tool that recreates in a different way the same situation as a traditional lesson, since learners have to deal with pre-organized paths. Thus, one has to deduce that a CD ROM does not have the same immediateness and subsequent richness of a real teacher, who can immediately deal and try to solve unexpected problems. On the other hand, since the deepest characteristic of language is the interaction between the

¹⁶ As many researchers tried to do in the 60s and the 70s, attempting to incorporate computers' use in an Audio-Lingual Method mainly based on behaviorist psychology.

two sides of the communication, instructors have to try stimulating communicative production. For this reason, in order to accomplish this goal, they may take advantage of the online interaction and try to handle every unpredictable development of this process. In fact, it is certainly the power of this unexpected factor, which will "paint" this merely virtual exchange with the colors of real communication. During the analysis of the technology's possible use in teaching the four skills, this study will consider the sort of interaction produced by some interactive online technologies, with a particular focus on instruments such as e-mail, chat rooms and electronic conferencing.

Concluding, "instructors who use Internet technology can also create a world-as-a-classroom experience for their students, taking students o virtual field trips to museums and libraries" and also "arranging online discussions with content experts." (Moore, Winograd and Lange 2001, 2.5) Therefore, because one of the teacher's main goals is creating a collaborative learning environment, one of the teacher's duties should be to involve technology in this issue. If immersed in a broader interaction, students will probably begin to interact at a deeper, more meaningful level. They will almost certainly be more open to risk-taking in learning, and will also start engaging in kind of collaborative learning. As a result, combining technology with a task-based approach, every instructor can create lessons that satisfy the essential requirements of the communicative approach.

4. Instructor's choice in employing the computer

"As computers become more prevalent in the classroom, and indeed in all aspects of daily life, we must ask ourselves: What is the best way to incorporate computer technology into improved learning and teaching?" (Hager, Rieper, Schmit and Shastri 2001, pg. 563)

Due to previous considerations, teachers should not waste the rich opportunities offered by the Web, and use them as a resource for students' activities, an aid to employ during lessons or as assignments. Since computer usage can speed up some learning paths, by suggesting a continuous and broader offer of resources, and by helping an ample collaboration in and out of the same classroom, there will be a real modernization only when instructors will decide to use computers as communication media. Furthermore, it is along these lines that teachers become able to produce more attractive and effective instruction. In fact, given that from a communicative perspective the negotiation of meaning plays a bigger role than grammar accuracy, the use of the computer as a tool rather than a tutor could be perfectly integrated into the communicative method. Thus, all the instructors who recognize communication as the inner goal of their teaching experience should make a philosophical, rather than methodological choice by using the computer as an instrument to give life to this purpose. If on the one hand it is acknowledged that technology can be applied to every single methodology, on the other, it is also quite clear that, according to the instructor's response to the same old dilemma, there may be a complete change of perspective. If teachers should decide to use the computer as a tutor, they not only locate themselves in an Audio-Lingual perspective, but they also accept dealing with an often-overwhelming colleague, abdicating in a certain way some of their prerogatives as instructors. In spite of this, if teachers employ the computer's characteristics as a stimulus, they not only reduce it to a useful tool, 17 but they also reveal a greater openness to the communicative perspective. Therefore, also in light of the experience of technology's use during the last decades, the computer should be used to help instructors recreating a good classroom atmosphere, in the attempt to have more participation by the learners. If teachers make a good use of some equipment, they can more easily have students involved in the process of learning and communicating. Consequently, the integration of technology into a communicative perspective allows instructors to push students into spending more time interacting with the target language, through the stimulation of both the so-called entertainment factor and the personal motivations. ¹⁸ Wisely using the computer as a

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¹⁷ In fact, subordinating it to a communicative goal, they do not just use it to check the grammar accuracy.

¹⁸ Personal motivations that, having to deal with the computers, can be increased by technology's usage itself, which can push some learners more involved in technology to expose themselves to more interaction time with the target language.

tool, teachers can intervene in at least two or maybe three of the aspects that were previously mentioned as factors that differentiate FLA and SLA, obtaining a better rate of SLA successes.

Other indications may be obtained from a deeper analysis of some practical situations, especially by the consideration that many instructors who teach in conventional classroom already have web sites of their own. Then, a more accurate look shows us that typically "such web sites contain a course syllabus, a schedule of required readings and assignments, a listing of the office hours, and some hyperlinks to relevant web sites in the instructor's particular subject area." (Ko and Rossen 2001, pg. 254) At this point, the biggest problem is that, unfortunately, these web sites are usually visited by the students only at the beginning of the course, and before the midterm or the final exam. Therefore, a first step into the direction of broader learners' involvement into the target language through technology's use could be obtained by telling the learners that these instruments are a vital part of the classroom activities, and not only optional procedures. As suggested by Susan Ko and Steve Rossen, 19 a most extensive students' engagement can be acquired by posting some lectures on-line, ²⁰ by using a discussion board,²¹ by using on-line testing tools²² or also proctoring on-line exams. Moreover, instructors can also decide to counsel students via e-mail, to establish virtual office hours, to assign group projects or Web-based exercises. Making every use of the computer and of the Internet as optional rather than incorporating them into the curriculum could not allow a complete assimilation between technology and communicative perspective. If instructors decide to deal with the Web as an integral part of their course work, they will automatically make it more relevant and precious to the students and to themselves. On the other hand, "treating the Web site merely as a repository for chance comments or random postings reduces it to the level of a technological appendage and squanders its considerable potential to enrich what you are doing on the ground." (Ko and Rossen 2001, pg. 272) Even though delegating part of the teaching activity to the Web presents many challenges to the instructor, the most important aspect is that this way the teachers may involve students into the SLA process much more than with a traditional lesson. Then, instructors may gain a great benefit from this experience to a point that, according to Ko and Rossen, it is possible to affirm that among instructors who have taught on-line, the advantage of the process that they most commonly express is that it makes them better teachers.

5. The computer and the four skills

"One of the most influential teaching methods of the past few decades is the communicative approach, which focuses on negotiation of meaning rather than linguistic form. Two related methods have arisen from it, the natural approach and the task-based approach. Even though some problems with definitions remain, there seems to be consensus that tasks involve communicative language use

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¹⁹ For a deeper approach to a long list of practical suggestions consult Susan Ko, and Steve Rossen, 2001, p. 255-266.

²⁰ Susan Ko, and Steve Rossen, 2001, p. 256. The authors also suggest "the point here is that using the Web to post lectures is neither a panacea nor a threat. It depends entirely on how effectively the web-based material is integrated into the class."

²¹ As suggested by Susan Ko, and Steve Rossen, 2001, p. 259, a discussion board can be useful in small, seminarstyle classes, but also in large, lecture-style classes. In fact, since "for most students, attending such a class means finding a seat somewhere in a auditorium, staring at the back of someone's head, and listening to the instructor intone the lecture from a stage. Discussion in such a setting is usually fairly haphazard," because when the teacher is soliciting input from the students only "the more intrepid dare t raise their hands, while the rest sit quietly in the darkness." Therefore, in this case one can see how "the Web can humanize such a class and permit students far more interaction with their colleagues and instructors than might otherwise be possible."

²¹ According to Ko, and Rossen, 2001, p. 260, these tools can be quizzes "consisting of true/false statements, multiple-choice questions, one-word answers, multiple answers, matching answers, ordered answers or short or long essay questions."

where the focus of the activity is placed on meaning rather than on linguistic structures." (Hager, Rieper, Schmit and Shastri 2001, pg. 5)

As suggested by this quotation, all the latest and most diffused methodologies have common communicative bases. Therefore, if one focuses on the meaning of negotiation, which is the root of the communicative approach, one has to admit that some Web resources result extremely appropriate in training for this process and also the four skills. Among various interactive online technologies, this study intends to focus on e-mails, chat rooms and electronic conferencing. These instruments symbolize, especially thanks to their diffusion²³ and to their synchronous nature,²⁴ the most representative examples of interaction on the Net, and also the most useful tools that we can imagine to integrate in a classroom.

First of all, e-mail's use allows students to send or receive messages at any time at one person, a subgroup, or an entire class, and then documents and other file types may also be sent as attachments. This instrument is basically the essence of the Net, because Internet itself began by transmitting messages and files through a computer network. Then, the transmission of such messages and files became known as e-mail, and even now electronic correspondence is probably the most used among the many services offered on the web. Therefore, in an SL classroom every instructor has to take advantage of such diffusion, trying to use e-mails to keep communicating with learners also outside of the classroom. This will allow the usage of the target language to send announcements and updates to the entire class simultaneously or to transmit messages, assignments, documents or grades to individual students or to subgroups within the class. E-mails may be used differently according to the various learners' level. On a beginning level class it is better just to use it as a communication tool between the students and the instructor, and also to allow messages with e-mail partners, in order to practice the structures explained in class. On an intermediate level, e-mail usage can allow a deeper level of discourse, which could imply the approach of some cultural moments, the discussion of a daily routine or simply the exchange of questions and answers about topics related to the course. On an advanced level, teachers can permit students to communicate with residents in other countries where the target language is spoken, and eventually to deepen some cultural topics. Afterward, an even more challenging test in the use of the target language can be provided by chat room involvement, mainly because of their nature of synchronous tools that requires all participants to be present at the same time. In fact, in a chat room one may find typed text and voices, or a combination of the two. Then, "many chat rooms also support document sharing, white boarding, and posting URLs so that participants may view the same website simultaneously. Some Chat rooms support video conferencing as well." (Moore, Winograd and Lange 2001, 6.11) This real-time interaction among students and native speakers, which do not necessarily have to correspond to faculty members, may develop a new ability to quickly make-decisions, which genuinely resemble real-life communication. Chat rooms with real-time audio programs can also allow a conversation among distant persons and, in some cases, even a videoconference among students belonging to the same class, to various groups in the same country or to different ones.²⁵ In fact, "there may be one or more Chat rooms available for a particular class, depending on the software," and that a "chat is sometimes combined with a whiteboard." (Ko and Rossen 2001, pg. 90) Lastly, the usage of synchronous tools can also be very useful in forming groups when an instructor needs to divide up the class for the purpose of certain tasks. At this point, it is also necessary to draw into a deeper analysis, according to the different learners' level. In effect, instructors may decide to give to beginners some basic questions to be answered on a forum, or to simply ask them to summarize the information gathered from this activity. Having to deal with intermediate students, teachers may ask them to be more involved with a description of themselves or

²³ The reference is to all these three instruments, but especially to the e-mail.

²⁴ In this case, the reference pertains to the synchronous nature of the other two instruments, while the e-mail differentiates itself with its asynchronous nature.

²⁵ Obviously including, in this case, at least one target language speaker.

²⁶ These authors, at page 90, also assert "whiteboards are also a synchronous tool, running the gamut from those offering the ability to write on the screen (using text or simple drawing functions) to those that can display specialized math and science symbols."

of another individual, even a fictitious character. In this case, one can really see how this approach fits perfectly with a communicative perspective, since the goal of the instructor is to encourage learners to use creativity in their answers. Concerning students on a more advanced level, they should be involved in discussions on relevant topics to the society or the culture belonging to the target language. This option also involves the possibility of several sub-forums on many eventual sub-areas or the chance of a day after discussion leaded by the teacher during class. As a result of these considerations, beyond the internal,²⁷ the external²⁸ or the hybrid composition²⁹ of the participants to these Web instruments, and beyond their synchronicity or not, another liaison with real-life also subsists in the variety of the possible communication's types. Therefore, in spite of the tool used by the learners, if the computer is used as a functional utensil, as a successful stimulus, one may have the configuration of a complete communicative perspective, able to finally perform an enriching technology's usage. Moreover, the use of computer can also be a determinant factor in the application of the four skills. In fact, the interactive online technologies previously analyzed can be extremely useful in training learners' skills inside and outside of the classroom.

Considering the use of technology for the practice of listening, one may assume that learners can be trained by following the performance of asynchronous tools, such as the CD ROMs or by the screening (and consequently the listening) of the news or of every other kind of television program available on the net. After that, we also have to keep in mind that we can probably obtain the best training of the listening skill through synchronous tools, for instance chat rooms with real audio programs or videoconferencing in general. In this case, it is necessary to appreciate the importance of such a synchronicity, which forces the learners to listen and to try to have an acceptable level of comprehension in order to perform a quick and adequate answer. Subsequently, these two synchronous tools are also crucial in the training of the speaking skill. The abovementioned synchronicity is definitely a characteristic that makes the "colloquium" more real than the hypothetical and typical exchange between the student and the teacher or among the students that normally takes place into the classroom. Moreover, not being right in front of the conversation partner, the learner can probably prevail over the shyness that commonly troubles many students³⁰ with a consequent lowering of the anxiety level. Afterwards, when instructors deal with the writing skill they have to keep in mind that this proficiency can be trained through both synchronous and asynchronous tools. If they intend to propose an exercise on this ability, which is also provided with that synchronicity previously discussed, they may consider proposing the use of chat rooms. In this case they should remember that learners must be on an intermediate or advanced level, since their probable experience and fluency can help them to maintain the speed necessary to keep this tool as synchronous. The most diffuse training of the writing skill also corresponds to the most common use of the computer nowadays: the e-mail. In fact, this asynchronous tool is probably the easiest one to use and to recommend for learners' usage due to its simplicity and to its great power of communication. Nevertheless, also in this case the training of the writing skill could be very effective but could also be less stressful than the one obtained through the chat rooms, because there is no urgency in responding and also the beginners can feel comfortable using it. The list of the various technological instruments teachers can use for training the reading skill can be vast. Almost everything on the Net is also a text and can be used as a tool for practicing reading. Therefore, one may include in this hypothetical catalog every asynchronous and synchronous tool mentioned previously, as well as all the web sites and all the possible texts³¹ that learners can read in the target language.

²⁷ In this case the use of the Web instrument (e-mail, chat room, etc.) is only restricted to the members of the same classroom

²⁸ One member of the classroom is supposed to interact only with non-members of his classroom.

The interaction occurs into a heterogeneous environment, composed of members/non-members of the class.

³⁰ Especially if these students are adolescents, and they do not have high esteem, or image, of themselves and, consequently, they do not feel comfortable speaking in front of the class.

³¹ Such as online newspapers and magazines, or also research engines.

6. Conclusion

This study tried to demonstrate how technology's usage is able to reduce the differences between FLA and SLA, with the consequent improvement of the SLA success percentage. In fact, even though instructors have to admit they cannot recreate an FLA environment in their classrooms, they also have to acknowledge that their primary goal is to stimulate adults' motivation in order to activate their natural passion to communicate. Therefore, what this research tried to demonstrate is that both the entertainment element and the time are, among the four discrepancies noticed between FLA and SLA, as the ones that can be changed the most by the use of technology. The computer can take part in at least two of these elements, and, in certain cases, it can affect even adult learners' motivations. Consequently, it stands out clearly the necessity to admit that technology's usage can play a relevant role in SLA. In order to keep the comparison between FLA and SLA and to reduce the divergence between these two processes, every instructor should use the computer, not as a substitute, but as an extension. The consequence is that, instead of abdicating the educational role, every teacher has simply to decide in which measure wants to take advantage of the innumerable possibilities offered by technology. As a consequence, the final part of the study has been dedicated to deepening the practical usage of some of the most used among the various technology tools, and especially to the proposition of how the computer can be utilized in teaching the four skills.

In defining the role of technology into an SL course a teacher also defines some prerogatives and affirm his/her individuality as an instructor. In fact, with the usage of the machine as a "tool" and not as a "tutor", s/he will not have to deal with an almost perfect opponent but with a formidable ally, which can be very helpful in recreating the synchronicity and the unexpectedness typical of any real-life communication. Nevertheless, instructors also have to keep in mind that the issue is not "simply about utilizing technology. It's about good teaching. And what does good teaching come down to? Whether live or «virtual», it's about expertise, passion, communication, organization, and empathy for our students." (Moore, Winograd and Lange 2001, 8.3) Therefore, as suggested previously, the integration of technology into a *SL* class, ³² and especially into a communicative perspective, gives every teacher the chance to become a better teacher.

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³² Also according to the experience of the instructors who have taught on-line.

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