ICT Implemented to a Basic English Class in a Private University of the Dominican Republic

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Abstract

The purpose of this research was to determine through a pretest / posttest study: a) whether there is any significant difference in learning Basic English when implementing teaching strategies based on Information Communication Technology (ICT); and b) identify which frequencies, devices, and the purpose for accessing to ICT. At the university where the study was implemented, the Basic English class clusters are arranged by the institution administration, so it is impossible to randomize the subjects under study. Therefore, this research used a quasi-experimental design with not equivalent group pretest-posttest, applying a quantitative approach. The transversal data was compared thru unpaired t statistics. In the first week of the course a pretest was implemented, showing a P-value = 0.7 which was > 0.05 Alpha level or error rate, the outcomes determined that both groups were similar. After the intervention, the posttest results show that the P-value = 0.02 < The alpha level of 0.05. These outcomes show that there is a significant difference in learning English between the experimental group and the control group.

Keyword Research. ICT- Basic English- Teaching Strategies- T Statistics- Quasi-experimental design for not equivalent groups with pretest-postest

Introduction

Statement of the Problem

The higher education center in which this study was carried out is a private university of the Dominican Republic, which offers a bachelor's degree in Modern Languages. This university program lasts four years divided into 12 four-month terms, during the students are train in English language teaching courses as well as in French language teaching.

In the case of the English as foreign language course, which is the first foreign language level taken by the students is delivered through a traditional methodology. The educational environment is composed of a board, a desk, chairs and fans, where the instruction is presented through a method or English textbook, a workbook, and the use in some cases of a radio where the students listen to and practice the unit dialogues and vocabularies (Espinal-Payano, 2010). However, the clusters are composed of from 30 to 45 students, which provides possibly a poor learning process to students to internalize the basic skills for real English language communication. These students enter this career with minimal language knowledge or null skills (true beginners) in most cases. For this, learning the English language is of a great importance for the students of this program.

This university is framed as a technological university, so it is perceived that this program must be delivered through the ICT. The application ICT at the Basic English level

might allow students to develop their multiple intelligences to internalize the language However, according to a research conducted in this university, this situation is the opposite in the English classroom (Espinal-Payano, 2010).

The purpose of this research was to: (a) If there is any significant difference in learning English when implementing ICT-based teaching strategies in Basic English classes in relation to the traditional English classes in this higher educational institution; (b) identify the Internet access frequency, Electronical devices y the students' Internet access purpose.

Significance of the Problem

This private university of the Dominican Republic offers the Basic English I for the students enrolled in the bachelor's degree in Modern Languages. In this course program, the purpose is to develop students' communicative and cognitive competences at the English basic level. Being this university framed in the technological field as its name indicates promotes implicitly that English language teaching must be delivered through ICT teaching as a reinforcement tool in face-face classes. This issue directly means that the ICT usage in teaching practices at the basic level might allow students to develop their multiple intelligences to internalize this language. However, according to a research conducted in this university, this is the opposite (Espinal-Payano, 2010). Therefore, it was of relevant importance to implement a pretest / posttest study, where the Tics were used in the instructional process, which was conducted in the four-month term from May to August in 2015. This allowed to obtain relevant and dependable data on the level of performance of students 'performance from in the use or non-use of ICT in Basic English classes.

For this reason, these results can be used by teachers not only in the field of higher education but also can be extrapolated to other similar teaching environments allowing English teachers to obtain insights about the instructional process under these conditions to foster appropriate learning strategies. Due to these reasons, the implementation of this English course in this university was motivated.

Research Questions

1. What is the academic performance level that exists between the Basic English students where ICT-based teaching strategies are implemented in relation to the control group students

under the traditional teaching methodology in a private University of the Dominican Republic from May to August in 2015?

2. What is the Basic English students' gender in the experimental group in relation to the control group students in a private University of the Dominican Republic from May to August in 2015?

3. What is the Basic English students' age who are both in the experimental group and in the control group in a private University of the Dominican Republic from May to August in 2015?

4. Where do Basic English students (in the experimental group and in the control group) have access to Internet in a private University of the Dominican Republic from May to August in 2015?

5. What types of electronic devices do Basic English students (in the experimental group and in the control group) use to access the Internet in a private University of the Dominican Republic from May to August in 2015?

6. How often do Basic English students in the experimental group have access to Internet in relation to the students in the control group in a private University of the Dominican Republic from May to August in 2015?

7. what purpose do Basic English students (in the experimental group and in the control group) use the Internet in a private University of the Dominican Republic from May to August in 2015?

Objectives

1. Determine the academic performance level that exists between the Basic English students where ICT-based teaching strategies are implemented in relation to the control group students under the traditional teaching methodology in a private University of the Dominican Republic from May to August in 2015.

2. Verify the Basic English students' gender in the experimental group in relation to the control group students in a private University of the Dominican Republic from May to August in 2015.

3. Identify the Basic English students' age who are both in the experimental group and in the control group in a private University of the Dominican Republic from May to August in 2015?

4. Verify the place in which Basic English students (in the experimental group and in the control group) have access to Internet in a private University of the Dominican Republic from May to August in 2015.

5. Identify the electronic devices do Basic English students (in the experimental group and in the control group) use to access the Internet in a private University of the Dominican Republic from May to August in 2015.

6. Present the frequency that Basic English students in the experimental group have access to Internet in relation to the students in the control group in a private University of the Dominican Republic from May to August in 2015.

7. Verify the purpose that Basic English students (in the experimental group and in the control group) use the Internet in a private University of the Dominican Republic from May to August in 2015.

Review of the Literature

Research Background

In the private technological University in which this study was conducted, there is only a bachelor's degree in the Modern Languages, since the university does not have a masters' degree programs in the English language field. Therefore, the relevant studies conducted at this university were two-monograph studies. These are:

Espinal-Payano (2010) presented an exploratory and descriptive type monograph to allow familiarization with the problem, since it evaluates the situations of the variables. These are the presence or absence of the application of didactic innovations and the frequency with which the ICT are applied. This monograph used surveys, interviews, and a questionnaire with the 68 subjects that made up the sample. These were 17 teachers, the academic director of the Modern Languages career, and 56 students of that career.

Espinal-Payano expresses that the university has put aside the use of the ICT and keeps working in a very traditional way. That is, the use the textbook, whiteboard, and rarely a radio to listen to the unit CD that is being worked on.

The research outcomes show that faculty members agree that the university has few technological teaching resources, that class hours are limited to 45 minutes. Therefore, this limits their use and that although it is a technological university, its reality at the teaching level is different. The results also show that most professors and students express that the university is not in line with what modern times demand and that it must make a rapid and effective change in physical space, time in the classrooms, ICT use.

Morel (2010) evaluated in his monograph the integration levels of WebQuests to the repertoire of technological resources for language learning. This author expresses that the ICT integration among Webquests resources is at the utmost importance. Therefore, in his study he demonstrates how necessary they are for foreign language learning. In addition, the ICT type of access used by English students was identified and the WebQuests application usefulness in the teaching-learning process was determined. In this study, a questionnaire was applied to faculty members, and 50 students. These data were analyzed statistically. The results showed the teachers' and students' perceptions, understanding that ICT strategies are very important for the English and teaching process.

The objectives in this research were to explain what WebQuests are in use and identify the students' access to technology. It was identified that 80% of the students own their own computers and that 90% of them express that they have access to the Internet at home.

Regarding the use of ICT in the classroom, a master's thesis was made at the Autonomous University of Santo Domingo (UASD). Santana (2005) did an investigation to show how faculty members and students perceive the use of technological advances applied to English language teaching and if they facilitate the development of the four skills (hearing, speaking, reading and writing). For this, a descriptive and non-experimental research was done.

The samples were collected in a single moment through questionnaires and interviews with faculty members and students. The sample was composed of advanced levels students who were 100% of the universe, as well as professors who regularly teach these levels. 138 students and seven teachers were interviewed. The results of this research showed that both students and

faculty members were aware that ICT foster motivation, compression, cultural aspects, as well as the development of English language skills. In addition, it was also determined that technological resources motivate students to practice speaking and listening skills, providing many opportunities to interact with the English language and content areas.

Research on ICT at the University Level

According to Salinas (2004), advanced education organizations must join the utilization of ICTs in the understudies' instructional courses, since along these lines they would be offering responses to the general public needs in which they should work as experts Similarly, this researcher stresses that so as to effectively perform what has come to be known as the information society. Advanced educational establishments must be adaptable and open to new changes. It likewise underscores the significance of the way that employees are stayed up with the latest in regard to the administration and ICT use, which speaks to an extraordinary test for educators and the instructive organizations wherein they educate.

Graell (2007) points out that in the framework of the globalized information society, the ubiquitous and powerful ICT tools (and especially the Internet) are inducing a profound revolution in all social spheres that also substantially affects the educational world. That's right, the educational world does not remain indifferent to the new changes that quickly impact teaching, forcing those who are dedicated to improving it to design new educational tools in order to help both teachers and students, more qualitatively and quantitative, to the achievement of knowledge.

Coleto (2009) perceives the innovation process with the purpose of increasing the system products in which it is applied and consequently said process must introduce improvements in the systems. Therefore, the educational system of our globalized society requires that its human product be updated taking into account the needs and demands of the existing market. This author explains that the innovation process in which we are living affects the social and educational system itself. Therefore, this process directly affects teachers and students who at the end of their studies who should show a positive attitude towards innovation. In this way, the system educational curricula must adjust the technological evolution and the needs of the communities. In addition, the students or final product of this process must reflect that they have

training, around the Tics, that allows them to fit into the labor system in an efficient and competitive way.

For Coscollola and Fuentes (2010), most of the students who attend the educational centers belong to the digital era, and therefore possess knowledge and skills in the use of technological tools, which serves as a motivational agent. All this leads then to teachers, in the face of this reality, stay updated and innovating constantly, to be able to offer quality teaching and updated, in accordance with the new times and their requirements. These authors suggest, among other things, the creation of a virtual community for teachers, which would allow them to share knowledge with other colleagues in the world, and at the same time, keep up to date with regard to ICTs and their contributions to the educational field.

Similarly, Ferro, Martínez, and Otero (2009) argue that the globalization process in which today's societies are immersed is leading to changes, challenges, and problems, to which satisfactory answers and solutions must be sought. These authors point out that those who benefit most from the advantages offered by Tics in the field of education are people with special needs. They also argue that ICT allow learners to devote more time to the development of students' higher cognitive skills, and allow teachers to keep up to date through the courses offered online, which contain information that could contribute to the development of their professional skills.

Salinas (2008), suggests that from a context analysis, innovation is integrated both in geographical, pedagogical, technological as well as institutional aspects. In the case of the pedagogical aspect, teachers and students must adopt new roles, the number of learning means must be expanded, and changes in the teaching strategies must be operated. In the technological aspect, a wide availability of technological means must be guaranteed, both for teachers and for students.

According to Briones (2001) distance education is a teaching modality that mediates the teacher/student relationship and uses a series of technological devices that allow the circulation of both the contents and the specific processes of the didactic intervention. These devices or media, in terms of Giddens (1990: 280) are cultural objects, as «artifacts that transcend the contexts of presence / state but are different from objects in general to the extent that they incorporate expanded forms of significance.

However, this novel way of teaching kept the exhibition-memorial form, although some things begin to change, such as the book, the main support of the content to be transmitted, begins to be looked at with other eyes. Since the teacher is not present to clarify the concepts, propose examples or metaphors, the text needs to be understandable by itself. The systematic (although often formal) insertion of self-checking activities also appears. The teacher, who no longer teaches, transmits information to his students through the texts of those books. It helps them learn through the texts of the teaching material and the work and exercises proposed in guides and activity booklets.

In this sense, Merejo (2015) expresses that "the virtual education that is part of the cyberworld is interactive, where the tutor becomes familiar with each of the students". Therefore, the new distance education model allows teachers to better understand their students and maintain an interaction, although the student is in another country will not be alone in his instructional process, since he has the help of his teacher in each of the process of the program that it takes.

According to Merejo (2015), in this new modality the students must be responsible for the teaching-learning process that must be self-regulated. This author states that in online education the teaching and learning environment is dislocated, tutors and students do not interact synchronously. Students must manage and adapt their time and self-discipline to learn. Tutor and student do not share the same time and space, but also this type of teaching uses fundamental tools, such as electronic tools.

Through the internet the student enters the cyberworld, which offers the student an unlimited amount of knowledge to learn. Merejo (2015) states that through the cyber world the student has access to virtual education, with their learning environments, virtual classrooms, technology networks. These are virtual teaching and learning communities, which use blogs for discussion exercises. The cyberworld citizen will be characterized by the ability to manage and use the information through the Internet and also to convert it or not into specific knowledge and practical use.

Briones and Martínez (2001) emphasize that the place of Distance Education is precisely the non-place of Cyberspace. It cannot be physically located in the real world, but communicative interactions are implemented in it that overcome the space - time limitations of the already mentioned physical reality. In these environments, it is possible to interact with other

people, both students and teachers and access bibliographic and documentary sources distant from their own spatial and temporal context.

The globalized society that is based on quality makes human beings embark on a constant updating of knowledge about the area of expertise knowledge. According to this author, "we live in the era of cyberworld, which is characterized by lifelong learning." This learning is constant, since the modern world is constantly changing thanks to the discoveries and events that happen in any latitude of the world are carried through the Internet. Merejo explains that the world between networks began in the seventies, due to the cold war. This discovery was initially developed as a political strategy. Today the uses that are given to the Internet are unimaginable.

The so-called information and communication technologies, based on the digitalization of information and networks are modifying many things in all aspects of society's life, at a pace never seen before. There is no doubt that education urgently needs to take note that these technologies are part of existing reality, reflect on them and reflect with them, incorporate them into educational practices and constitute them as an important element (neither unique nor, perhaps, principal) of the Essential update of training systems.

According to Garcia (2008), the tutor, within a virtual learning environment (VLA), conducts a guided didactic dialogue. In it, the student enters into communication with the materials published in the environment (simulated dialogue, since it is unreal, imaginary, where the student interacts with the aforementioned teaching materials), with the other students and with the tutor through written communication (real mediated dialogue, which materializes through all the communication tools available within the platform).

Research Methodology

Research Design

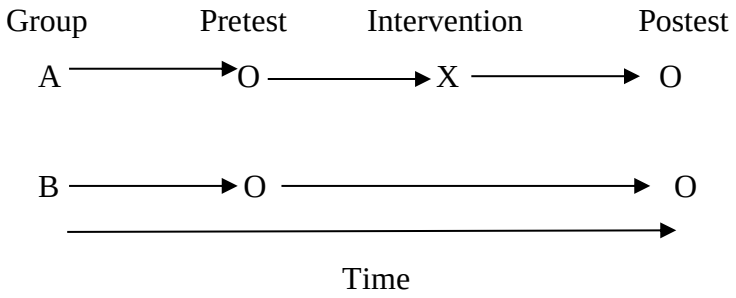
This research uses the quantitative approach to analyze the findings. Cresswell (2014) defines it as a means to test and measure the objectives of theories, examining the relationships between the variables. These variables, in turn, can be measured through instruments that allow the analysis of statistical procedures. For this, the researcher uses statistical methods to analyze academic performance among the experimental group and control group.

This study is quasi-experimental. Cresswell (2014) defines quasi-experimental research as those in which a convenience sample is used, since the researcher must use groups already

formed beforehand (for example: a classroom, an organization, or a family) or volunteers. Therefore, this type of procedure is taken when subjects to investigate cannot be randomized.

In the same tenor, Kerlinger, cited by Cohen, Manion, and Morrison (2003) expresses that the situations in which the researcher must embark on a quasi-experimental design they are called compromised designs, which apply successfully in educational research because this type of environment does not allow a randomized sample selection, since in schools it is difficult to handle randomness.

In the private university where the study was conducted, the English class clusters are made up by the institution. Thus, it is impossible to use any kind of randomness among the subjects to investigate. Clusters already established were taken. The kind of design in this research was non-equivalent group with pretest-posttest, since it is a design a quasi-experimental design. Therefore, the scheme of this design according to McMillan and Schumacher (2005) is:



This study is cross-sectional since the samples in the stages of data collection they were taken in a single moment, to then be compared using the statistic t (*t* student).

Participants

There were four Basic English clusters during the term from May to August 2015-2 in the bachelor's degree program in Modern Languages in the public university in which the study was carried out. It was selected one at random for the control group and another for the implementation (experimental group), which was also chosen at random. The clusters that were used for both the control and experimental groups were selected as similar as possible. These sections were composed of 30 students.

Instruments

Initial data were collected through a pre-test to identify the students' level and determine if these were true beginners or false beginners when entering the program. This exam was designed following the textbook and class program for basic English I in this university. While a post-test was used to show the students' level at the end of process. These data showed how the experimental group acted in relation to the control group. The pre and posttest were validated through the content validity technique. Litwin (2003) states that content evaluation commonly involves an organized review of the question contents to ensure if they contain the contents that must or not have.

It was asked to the four faculty members who regularly teach these levels to act as experts to review the relevance and validity of these instruments. In the pre-test, they all agreed that the test should include 20 questions that covered in general the basic English content to determine the students' level at beginning of the course. While in the post-test, they determined that should be evaluated the skills contained in the program, such as oral comprehension, oral production, reading comprehension and written production taught during the level. In this test, they provided their recommendations of what should or should not be used in the test.

In addition, a questionnaire was used to identify the gender, students' age, the place where they access Internet, the types of electronic devices they use, how often they access and the purpose for which they use Internet.

The reliability in the pre-test and post-test was obtained through test-retest and internal consistency. For this reliability test, a sample of a Basic English I cluster was taken for the pre-test in its second-class week. As for the post-test, a pilot test was applied with a random selection of students who took level one following the traditional methodology of this university. Post-test students were in the second week of Basic English level II classes. Litwin (2003) indicates that researchers may have the same subjects to investigate taking the same instrument at two different times to determine how stable their answers are. These resulting data are then analyzed with the statistics: Correlation Coefficient and Alpha coefficient.

The re-test data were collected a week later. Therefore, to avoid practice effect in this phase, the alternate reliability test was used. This author indicates that a very common or simple way is to change the question order to analyze this type of reliability. This type of strategy is very effective when the moments in which it is applied the instrument are very close in time.

It was used the Statistical Product and Service Solution (SPSS) version 19 for this type of analysis. The results obtained with this statistical software of the Correlation Coefficients were .99 for the pre-test and post-test, which indicate a high reliability of the test-retest technique in both instruments.

According to Litwin (2003), the coefficient of internal consistency is an indicator of how well different tests measure the same problem. This author emphasizes the importance of internal consistency, since the test items have to be focused on the variables to be measured. The internal consistency shows an Alpha Coefficient for the pretest of .93 and for the post-test of .89, which suggests that the reliability in both instruments is very good. These measurements were also obtained with the SPSS statistical software.

Procedures

The control group used the university traditional methodology, while the group Experimental intervention was made applying ICT. Both groups were given a pre-test to determine if they are true beginners or false beginners, to determine their English level at the beginning of the course. Finally, a post-test was applied to compare the results of the implementation with the results of the control group.

The questionnaires were also applied to both groups to identify the gender, the students' age, the place where they access, the types of devices electronic devices, the frequency with which they access and the purpose with which they use the Internet to analyze how these factors impact academic performance. The students' data were kept confidential so that cannot affect the subjects under study, using a code to identify them. these results were analyzed through t student statistical tests to determine whether or not there is a significant difference in the academic performance level in the pre-test and post-test.

The implementation lasted 14 weeks in the period May-August 2015-2 in the private university where this research was carried out. The techniques that were used in the experimental group are:

1. A blog on the Internet that allows students to practice the English language.
2. The students' emails to send the tasks and practice small compositions at the students' level.
3. The use of the projector to make the most significant explanations.

Results

At the beginning of the Basic English class I, both groups (experimental and control) were composed of 30 students each. The type of analysis presented is cross-sectional because they are analyzed or compared in a single moment. The *t* statistic was used for this analysis. The percentage of error or Alpha α level is 5% = 0.05.

When comparing the P-value = to 0.7> the Alpha value of 0.05. We can say that there is no significant difference between the two groups at the beginning of the investigation. Nevertheless, in the means it can be seen that the experimental group has a 55.0 and the control group consists of an average of 57.4. This indicates that the control group had a small difference of 2.4 percentage points, which is not significant and can be seen randomly. These results show that there were some more students of the false beginners in the control group.

Table 1: Experimental and control group at the beginning of the course (pre-test)

	Experimental	*Control*
Mean	55.0000	57.4000
Variance	391.3793103	486.248276
Observations	30	30
Pearson correlation coefficient	0.303927766	
Hypothetical difference of means	0	
Degrees of freedom	29	
Statistical t	0.3889	
P(T<=t) one tail	0.3501	
Critical value of t (one tail)	1.6991	
P(T<=t) two tails	0.700225	
Critical value of t (two tails)	2.0452	

Source: Results of student grades in the experimental and control group at the beginning of the course

1. What is the academic performance level that exists between the Basic English students where ICT-based teaching strategies are implemented in relation to the control group students under the traditional teaching methodology in a private University of the Dominican Republic from May to August in 2015?

Table 2: Experimental and control group at the end of the course (posttest)

	Experimental	*Control*
Mean	78.6206897	65.3448276
Variance	114.243842	831.662562
Observations	29	29
Hypothetical difference of means	0	
Degrees of freedom	36	
Statistical t	2.32454334	
P(T<=t) one tail	0.01292624	
Critical value of t (one tail)	1.68829771	
P(T<=t) Two tails	0.02585249	
Critical value of t (two tails)	2.028094	

Source: Results of student grades in the experimental and control group at the end of the course

The type of analysis presented is cross-sectional because they are being analyzed or compared in a single moment and for independent data, since the data belong to two groups. It was used for this analysis the t statistic. The percentage of error or Alpha α level is of 5% = 0.05. When comparing the *P*-value = to 0.02 <the Alpha level of 0.05. We can say that there is a significant difference in academic performance among the subjects to be investigated by the group experimental in relation to those of the control group at the end of the investigation. For this, in the *means* can be seen that the experimental group has a 78.6 and the control consists of a *mean* of 65.3. This indicates that the experimental group after implementation had a small difference of 13.3%, which is significant.

At the end of the Basic English I course, the experimental group had 30 students, while the control had 26 students. Grading results show that there were four students in the control group for 13.3% who dropped out, while in the experimental group all concluded the course program.

2. What is the Basic English students' gender in the experimental group in relation to the control group students in a private University of the Dominican Republic from May to August in 2015?

Table 3: Students' gender in the experimental group in relation to the control group

Students 'gender	***Experimental***	***Percentage***	***Control***	***Percentage***
Masculine	6	20%	7	23%
Feminine	24	80%	23	77%
Total	30	100%	30	100%

Source: Questionnaire implemented to the students in the experimental and control group

The experimental group was formed by six masculine members, for a total of 20% and 24 of the female gender for 80%. While, the control group had seven male students for 23% and 23 female students for a 77%. These data show that in both groups the largest number of students belongs to the female gender.

3. What is the Basic English students' age who are both in the experimental group and in the control group in a private University of the Dominican Republic from May to August in 2015?

Table 4: Basic English students' age in the experimental and control group

Age	***Experimental***	***Percentage***	***Control***	***Percentage***
16 to 20 years	23	77%	25	83%
21 to 25 years	06	20%	03	10%
26 to 30 years	01	03%	02	07%
Total	30	100%	30	100%

Source: Questionnaire implemented to the students in the experimental and control group

The students' age in the experimental group is 16 to 20 years, since there were 23 members for 77%, six students from 21 to 25 for 20% and one student from 26 to 30 years for 3%. While, in the control group there were 25 students from 16 to 20 for 83%, three students

from 21 to 25 for 10% and two students from 26 to 30 years for seven percent. This indicates that in both groups most students were aged between 16 to 20 years.

4. Where do Basic English students (in the experimental group and in the control group) have access to Internet in a private University of the Dominican Republic from May to August in 2015?

Table 5: Basic English students access to Internet in a private

Access to ICT	***Experimental***		***Control***	
	Frequency	Percentage	Frequency	Percentage
Home	26	87%	28	93%
Work	06	20%	04	13%
Internet Center	02	07%	02	07%
Friend	03	10%	04	13%
Relatives	06	20%	04	13%
Smart Phone	18	60%	14	47%
Free Wifi zone	05	17%	04	13%

Source: Questionnaire implemented to the students in the experimental and control group

Students in the experimental group had access to the Internet at home in 87%; in work and relatives' houses in 20%; through an Internet center 7%; in friends' houses by 10%; with their own Smart phone 60%, and 17% in a free Wifi zone. While the students in the control group had access to the Internet in at home in 93%; they had access to the Internet at work, friends' and relatives' houses, and free Wifi zone by 13%; 7% through Internet center; and 47% with their own smart phone. Therefore, it can be seen in this table that the students of both the experimental and control group had access to the internet 100%.

5. What types of electronic devices do Basic English students (in the experimental group and in the control group) use to access the Internet in a private University of the Dominican Republic from May to August in 2015?

Table 6: Types of electronic devices

Electronic devices	***Experimental***		***Control***	
	Frequency	Percentage	Frequency	Percentage
Desktop computer	07	23%	06	20%
Laptop	21	70%	19	63%
Smart phonre	18	60%	14	47%
Tablet	06	20%	07	23%

Source: Questionnaire implemented to the students in the experimental and control group

Students in the experimental group access the Internet through a desktop computer 23%; laptops in 70%; 60% Smart phones; and through the Tablets in a 20%. Meanwhile, students in the control group make use of the Internet 20 thru desktop computer, Laptops in 63%, smart phones in 47% and 7% through Tablets.

6. How often do Basic English students in the experimental group have access to Internet in relation to the students in the control group in a private University of the Dominican Republic from May to August in 2015?

Students in the experimental group access the Internet always in a 43%, usually in 47%, sometimes in 10% and seldom or never in 0%. While in the control group, the students access always 53%, usually 37%, sometimes seven percent and seldom three percent. Therefore, students in both groups have access always and usually in 90%.

Table 7: Access to Internet in the Experimental and control group

Access to Internet	***Experimental***		***Control***	
	Frequency	Percentage	Frequency	Percentage
Always	13	43%	16	53%
Usually	14	47%	11	37%
Sometimes	03	10%	02	07%
Seldom	00	00%	01	03%
Never	00	00%	00	00%
Total	30	100%	30	100%

Source: Questionnaire implemented to the students in the experimental and control group

7. what purpose do Basic English students (in the experimental and control group) use the Internet in a private University of the Dominican Republic from May to August in 2015?

Table 8: Internet use in the experimental and control group

Internet usage	***Experimental***		***Control***	
	Frequency	Percentage	Frequency	Percentage
Send Text messages	8	27%	9	30%
Chat	23	77%	20	67%
Send photos	10	33%	8	27%
Social Networks	20	67%	17	57%
Study	15	50%	18	60%
Send e-mails	08	27%	08	27%

Source: Questionnaire implemented to the students in the experimental and control group

The students of the control group use the internet with the following purposes: a) send text messages in 27%, b) chat in 77%, c) send photos in 33%, d) access social Networks in 67%, e) study in 50%, and f) send e-mails in 27%. While, the Control group students expressed that they

use Internet to: a) send text messages in 30%, b) chat in 67%, c) send photos in 27%, c) access social Networks pages in 57%, d) study in 50%, and e) send e-mails in 27%.

Conclusions

The Basic English I clusters selected for the experimental and control group at the beginning had 30 students each. The t (t-student) independent sample statistic was used to compare the groups under study because the dependent variable was numerical (academic performance). This study in both research stages is cross sectional because the data ware taken at a single moment, both for the pretest and the posttest.

Academic Performance Level between the Experimental and Control Group

Students in the experimental and control group were applied in the first course week a pretest, which showed a *P*-value = 0.7 which is > the Alpha level 0.05 or error rate. This allowed to conclude that there was no significant difference in the academic performance between both groups. That is, both groups were similar. Even if the control group pretest scores are analyzed in relation to those of the experimental group, a small difference can be seen, just as if the variances are analyzed in the experimental group 55.0 and control 57.4; however, this difference is not significant, since it can be seen at random (see Table 1).

Finally, the ICT implementation results in the Basic English I instructional process showed consistency with the data indicated above. These results were that the *P*-value is 0.02 <the Alpha level of 0.05. Therefore, there is a significant difference among the research subjects in the experimental group in relation to those of the control group at end of the ICT implementation. This can be seen in the *Means*. The experimental cluster average is 78.6, while the average of the control group is 65.3 (see Table 2).

Another relevant posttest data in this study is that the ICT implementation in the Experimental group kept students motivated not to abandon the teaching-learning process. However, it can be observed in the control group that four students dropped out at the end for 13.3%. While, in the experimental group all finished the course, although some obtained grades below 70 points. These students can be promoted if the teacher considers the arduous work they did despite their limitations as true beginners. Therefore, these final research outcomes

corroborate that the ICT implementation in the Instructional process serves as motivational strategies that allow meaningful knowledge delivery. In other words, ICT help to transform educational environment through techniques that make possible to build up knowledge (Riascos-Erazo et. al 2009). In addition, these results reaffirm that ICT implementation is a requirement and need for knowledge acquisition (Sunkel, 2006)

Students' Age and Gender in the Experimental and Control Group

The research outcomes showed that around 80% in both groups were aged between 16 and 20 years. In addition, it can be perceived that 100% of the students in both groups are under 30 years old. That is, 95% of students at these levels are below 25 years. This means that it is a very young population (see Table 4). As for gender, 80% of the students that make up both groups are female (see Table 3). This leads us to conclude that there is a great motivation to study this career for this gender.

Internet Access in the Experimental and Control Group

Being an ICT implementation, the first thing that should be examined in the Experimental group was whether students could access the Internet or had the necessary equipment. The questionnaire showed that 100% of the students in the experimental group, as well as the Control group had access to the internet. These research findings show how access has increased, since in this study 100% of the students had access to this medium when starting the course (see Table 5). These data not only corroborate Morel (2010), but it can also be perceived how access to this technological environment has increased, for in this study all the students had access to this medium at the beginning of this course. Therefore, the techniques used in the implementation can be applied by faculty members in the Second language Instruction process of language at the university in which the study was conducted, expanding the number of strategies to improve teaching practices.

Electronic Devices Used by the Experimental and Control Group

It can be seen that the students that composed the Basic English I clusters in this investigation, 93% have access to their own technological means, since only 7% in both groups express that access through Internet center. Therefore, the results show that the Smart phone use

to access the Internet has increased in relation to the results in Espinal-Payano (2010) that were 40%, since the students in the Experimental group use this medium in 60% and in the control in 47% (Table 6).

Access Frequency to the Internet

The data in this study show that the frequency with which subjects under investigation access the Internet is about 90% (see Table 7). This confirms that the application of instructional strategies based on the ICT is of great help to the learning process. This is because most students are motivated to use technology or look for it, since they are part of globalization and the digital age. Since they have knowledge of how to use technology, producing a motivational effect in the learning process. Therefore, Merejo (2015) express that cyberworld citizens will be characterized by the ability to handle and use the information through the Internet and as well as converting it or not into specific knowledge and practical use. In this way, the use of technology is an excellent tool for students manage to get rid of memorial formulas or analytical procedures (Camacho & Alfonso, 2007).

Purpose of Using the Internet

A central question that needed to be understood is the purpose that Basic English I students use technology because it is a very young population as shown in the study results. The purpose given to the Internet between 67% and 77% is to chat and, likewise, visit social Network pages, between 57% and 67% (see Table 8). In other words, they use the internet for fun and communication in most of their free time. According to Merejo (2014), cyberspace is not limited to just the transmission of information or accumulation, but can be used in various ways, both to communicate or interrelate and relax. Therefore, the teacher's role will be to teach the Students access information and process it efficiently, critically and creatively.

Despite this, both groups were consistent in showing that the study or studying through the Internet was used in 50%. This leads to the conclusion that both faculty members and educational institutions must work towards developing teaching strategies based on ICT, getting involved in an update process allowing them to offer academic quality and professional performance. In this tenor, UNESCO (2004) states that designs and implementation of training programs in the management and effective use of ICT for teachers are the fundamental elements of educational reforms and goals to achieve in contemporary education. Also, according to

Brown and Stevens (2011) these increase technological knowledge, promote learning knowledge of literature Multicultural, promoting deep reflection and participation.

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