ARMY POLYTECHNIC SCHOOL

DEPARTMENT OF LANGUAGES

APPLIED LINGUISTICS IN ENGLISH PROGRAM

TITLE: THE INCIDENCE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN THE LEARNING PROCESS OF ENGLISH FROM STUDENTS OF THE THIRD YEAR OF HIGH SCHOOL, MATHS AND PHYSICS MAJOR AT "DON BOSCO" EDUCATIONAL CENTER IN THE FIRST QUARTER DURING THE SCHOOL YEAR 2006 -2007.

BY:

MARJORI SULEMA MELENDRES LUCERO

SONIA IRENE QUILACHAMÍN CÓNDOR

ADVISORS

LIC. MIGUEL PONCE **DIRECTOR**

DR. OSWALDO VILLA T. **CO-DIRECTOR**

QUITO - ECUADOR

YEAR 2007

INFORMATIVE DATA

TITLE: The incidence of Information and Communication Technologies (ICT) in the learning process of English from students of the third year of high school, Maths and Physics major at "Don Bosco" Educational Center in the first quarter during the school year 2006 -2007.

DIRECTED BY: Lic. Miguel Ponce   **Director**

            Dr. Oswaldo Villa   **Co-Director**

PROJECT'S TARGET: Third year of High School, Maths and Physics Major.

TECHNICAL ASSESSOR: Ing. Pablo Bolaños P.

COVERING PROJECT: Third year of high school Maths and Physics Major.

AUTHORS: Marjori Melendres & Sonia Quilachamín

LEGAL FOUNDATION

This Project is legally sustained to its research, development and execution with the due authorizations: from the Unit Fiscomisional Educative "Don Bosco" of La Tola, and the regulation of the internal Law of Education of Army Polytechnic School "ESPE".

For previously mentioned perseverance they are attached in the next page "The application with the approval by authorities of the Educational Institution" and like Annex Nº 1. "Copies of the chapters and the respective articles previous to obtain a degree in applied linguistics".

Chapter 1   OF THE REQUIREMENTS: Arts. 127 to 137

Chapter 2   OF THE GRADUATION PROCEDURE: Arts.138 to 148

Chapter 3   OF THE FINAL GRADE SCORE Arts. 149 to 152.

ACKNOWLEDGEMENT

CERTIFICATION

We Lic. Miguel Ponce, Director and Dr. Oswaldo Villa Co-Director, duly certify that the thesis under the title: The incidence of Information and Communication Technologies (ICT) in the learning process of English from students of the third year of high school, Maths and Physics major at "Don Bosco" Educational Center in the first quarter during the school year 2006 -2007, has been reviewed and we found it apt for oral sustain.

_____   _____
Lic. Miguel Ponce   **Dr. Oswaldo Villa T.**
Director   **Co - Director**

DEDICATION

This project is dedicated to all people who contributed in the virtual learning growing and mainly those who helped us to achieve this project succesfully.

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EXECUTIVE SUMMARY

The project looks for determining the incidence of Information and Communication Technologies (ICT) in the learning process of English from students of the third year of high school, Maths and Physics major at "Don Bosco" Educational Center in the first quarter during the school year 2006 -2007.

In the same one, the trends and mega world trends are analyzed, the language acquisition theories, learning theories, a Salesian Curricular Design by competences with features of systemic, holistic and procesual, parameters and standards for the languages teaching provided from Common European Frame (CEF) at a level A2.

INTRODUCTION

The project tries to determine the incidence of the Information and Communication Technologies (ICT) in the learning process of English from students of the 3rd year of high school in Maths and Physics Major at "Don Bosco" Educational Unit.

This project is based on Cooperative Learning with constructivist methodology which promotes the collaboration and the interaction between students and teachers trying to achieve level A2 according to the Common European Frame

The technological development in different fields of human activities, the scientific advance and the social dynamics demand of a permanent educational innovation as answer to the necessities of a new society and taking in count, the computers actually had become a human partner to ease daily activities.

Consequently the project is based on the implementation of a pedagogic virtual pattern in the inter learning process of English in the third year of high school, specialty Maths and Physics of Educational Center Don Bosco in the first quarter during the school period 2006 -2007, which is developed under the platform "Moodle" in the domain **EVCOL**[1] "Easy Virtual Courses On Line", it has a structure of parameters and features of a virtual classroom with cooperative learning and educational technology.

This platform has been established with a constructivist methodology supported in a Salesian Curricular Design by competences with features of systemic, holistic and procesual reaching a level A2 according to the Common European Frame[2] .

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[1] http://www.evcol.com
[2] http://www.madridteacher.com/pdfs/marco-comun-europeo.htm

This modality will facilitate a constant interaction (Student → Teacher and Teacher → Student). The learners will have a permanent and personal guide that will contribute to development of skills for learning English as a second language, as we can observe in the chart below:

Traditional Education TEACHER → STUDENT	New Education STUDENT→ TEACHER
➢ Repetition ➢ Memorizing ➢ Individual Work ➢ Information ➢ Outcome ➢ Static ➢ Conservation ➢ Dependence	➢ Creativity ➢ Research ➢ Team Work ➢ knowledge ➢ Process ➢ Dynamics ➢ Innovation ➢ Autonmy

Chart. N° 01 Traditional Education Vs. New Education

Then; this paper intends to evaluate e-learning teaching against traditional ones by testing student's language skills after attending a pre-established learning course. One group attended full e-classes and another normal class only (traditional and e-learning). Logically, we chose students with identical language learning background and set conditions to ensure reliable results. We conclude and recommend about some pedagogical and methodological features of classrooms, skills and abilities acquired by students, costs of implementing in e-learning classrooms. And finally we speak about teacher's ideal background to run e-classes satisfactorily.

After bringing about the feasibility to quantitative level of a E-learning over a traditional education, we could improve its original proposal, as in its planning, as in its orientation and modification.

We are being supported by the authorities of "Don Bosco" High School" who allow us to develop the research and execution of our project in the students 3rd courses of high school.

Finally, with the EVCOL implementation we wish to reach significative achievements, especially in our English Area. Therefore, we will accomplish the layout objective which is to improve the learning of English as second language.

RESEARCH TOPIC

The incidence of Information and Communication Technologies (ICT) in the learning process of English from students of the third year of high school, Maths and Physics major at "Don Bosco" Educational Center in the first quarter during the school year 2006 -2007.

CHAPTER 1

RESEARCH PROBLEM

1. RESEARCH PROBLEM

PROBLEM IDENTIFICATION.-

Therefore, It is important to consider as a reference the "Unidad Educativa Salesiana Don Bosco" from the "La Tola" neighbourhood and, particularly the third year of high school, in which were found several learning handicaps. These handicaps are: students with few motivation related with some subjects, insufficient class hours, outdated textbooks and, teachers with short of continuing training. In relation with these problems, the language area has outlined a project which allows to solve the detected difficulties.

With the previously mentioned, it is necessary to use new methodologies and technological trends which have contributed in the educational processes. The application of a test KET (Annex n° 02) determined the knowledge level reached by the students in the development of different skills learning during the last year (2005-2006), so the following percentage chart shows the outcomes. See **Chart N° 02**.

Level of skills development		Level				
		Low	Regular	Medium	Standard	High
Skills	Listening	54%	32%	7%	3%	4%
	Speaking	61%	29%	7%	3%	0%
	Writing	44%	34%	15%	4%	3%
	Reading	45%	33%	14%	3%	5%
Average		51%	32%	11%	3%	3%

Chart N° 02 Scores of Educational test to evaluate skills

Once we analyzed the test scores, we can begin with real bases to justify the project implementation because it was evidenced learning handicaps and besides, these scores serve as teaching parameters for the next quarter. This allow us to outline alternative solutions required by the institution previously mentioned in order to improve the education quality by means of the fulfillment of European international standards.

PROBLEM FORMULATION

The educational problem detected in our research center is; few hour class classes which contributes to allow learning performance in the English language by the students; additionally there is insufficient physical space so, the students are crowded because there are excess of them and there is also shortage of didactic material so, the teacher has to use conventional methods of typical masterful classes, achieving a few motivation by the students. For this reason, in order to motivate the students to learn English, we have designed a virtual classroom with the use of Information and Communication Technologies and the support of a Moodle Platform to create Websites and courses on line

VARIABLES WORKING OUT

Independent Variable (X). Information and Communication Technologies (ICT).

Dependent Variable (Y). The English learning level.

For a best learning the Chart N° 03 bellow shows a conceptualization matrix about how the variables work out.

CONCEPTUALIZATION MATRIX AND VARIABLES WORKING OUT			
VARIABLE	CONCEPTUAL DEFINITION	DIMENSIONS	SUB – DIMENSIONS (INDICATORS)
Information and Communication Technology (ICT)	It is the group of technologies which allow the acquisition, production, storage, treatment, communication, registration and presentation of information, in voices , images and data contained in acoustic, optic or electromagnetic resources	1.- Electric telegraph. 2.- GPS (Global positioning system). 3.- Electric Telegraph 4.- Fixed Telephone 5. - Radiotelephony 6. - Television 7. - Internet 8. – Mobile Telecommunications.	Internet : a) E- Learning: * www (world wide web) * email * news groups * forums * chat b) E-Commerce c) E- Business
Learning levels	The " Common European Reference Standards for the Languages" serves as a generalized reference pattern so that it is possible to know in a fastly and effective way everywhere in Europe or America the learning level related with other countries. Levels : they are ranges reached in the development of skills or aptitudes according to several processes.	**Basic User**	A1Breakthrough A2 Way stage
		Independent User	B1Threshold B2 Vantage
		Proficient User	C1 Effective Operational Proficient C2 Mastery

Chart N°03 Conceptualization Matrix and Variables Working out

OBJECTIVES

       GENERAL

- To determine what the incidence of ICT is in the English learning level in the third year of high school, Maths and Physics major at the "Don Bosco" Educational Unit by implementing a new didactic resource called E-Learning.

SECONDARY

- To achieve an A2 level in the students of third year of high school -Maths and Physics major, according to the standards of the CEF as reference to the Languages, with the implementation of e-learning in the teaching-learning process.
- To motivate the students to discover new learning ways, beyond the classroom and school texts, providing information about specific issues of their school tasks, in Virtual form (Adviser On Line)
- To provide the society of students with e-learning skills, by means of active participation in an online mode offered by the EVCOL platform, which is able to face the constant virtual challenges.

JUSTIFICATION

A society needs the support offered by new technological trends to solve many problems in different fields effectively and quickly.

Implement an e-learning classroom in the educational area will create an appropriate environment work for the holistic development of the students.

 To obtain the fulfillment of the mission and to reach the objectives outlined by the institution

The training of this virtual classroom will use a platform of management of the knowledge guided to teaching on-line through Internet; and the equipment will have to consist with the minimal technical requirements that requires for its installation and its correct operation. In addition the institution counts with most of the required elements needed to implement the same one.

To this we have taken as a reference the Salesian Educational Unit "Don BOSCO" (La Tola) and particularly the sixth years of high school.

The teaching project with virtual technology will benefit all the subjects, and it would be used in the following way: conferences video, forums video, virtual libraries, interactive software route virtual connection, conferences in the Web, etc.

We want to overcome many challenges so education applying new pedagogic trends will brake paradigms of the traditional education applying new Information and Communication Technology trends. In this way we obtain the students develop new dexterities and abilities in a practical way so they will be able to reach an A2 level according to the Common European Frame.

It is supported in the Salesian Curricular Design with an innovative proposal and in new pedagogic trends based on a constructivism model which are being applying in this Educational Unit. These are the following:

Autogogía: self-education pedagogy

Hodogogía: Accompaniment pedagogy

Infogogía: Interactive Pedagogy

Neurogogía: Cerebral Pedagogy

The pedagogic process which guide the development of our project and by means of which all signature in the institution must be held, it's the "Holistic Systemic and processing" that is an integral teaching and by processes.

CHAPTER 2

THEORETICAL FRAME

2. THEORETICAL FRAME

CONCEPTUAL THEORETICAL APPROACH

Today the information technologies are fundamental element of all process, so the emergent digital environment demands to design new actions in all environments, facilitating the creation of a social space → virtual. These technologies are developing In the education area, because it facilitates new learning processes and the transmission of knowledge through the Telecommunications with Modern and sophisticated Nets of Communication.

In the educational field, the information technologies have been applied in several places of the world and they have reached high acceptance levels. For their features of speed, covering and flexibility, these technologies have been able to enlarge knowledge frontiers, indispensable tool for the development.

This environment is more important every day, because to adapt an Educational Institution to a social space, it requires the creation of a new distant education system and on line, however, the efficient incorporation of new technologies to education is not a reality in all the countries. There are regions which does not produce nor invest in technology for this environment. Therefore, in these places the traditional educational system prevails.

In these countries and especially in ours, if we don't work for the improvement of the educational processes and if we do not use the potentiality of the new technological tools, we face the risk of political, social, economic and cultural exclusion. However is essential to know if the use of these tools will satisfy the needs of different educational realities.

As well there are new scenarios, instruments and methods for the educational processes, it is required new knowledge and skills which will be learned in the educational processes. For many basic reasons, it is necessary to reconsider the organization of educational activities, by means of a new virtual educational environment.

ICT IMPLICATIONS IN THE EDUCATIONAL SYSTEM

The denominated Information and Communications Technology (ICT) occupy a central place in the society and in the economy of the end of the century, with a growing importance. The concept of ICT is arising as a technological convergence of electronics, software and communications infrastructures. The association of these three technologies gives origin to a conception of the information process, in which the communications open new horizons and paradigms.

INNOVATIVE EDUCATIONAL TRENDS

In the last decades, there are three technological information lines which point out toward new structures and possibilities: hypertext, Internet and virtual reality.

With the hypertext is definitively left the idea of a systematic base at the beginning of lineal advance steps, where the book is read since the first page until the last one, and where are built most of the teaching texts according to a systematic elaboration and of continuous advance. With Internet we found a communication structure characterized by features as in which there are not centre, beginning or end and - the most important thing - any principle of traditional professional hierarchy order. With virtual reality is dissolved the separation between facts and fiction and the relationship space-time is changed.

These technological tendencies could indicate from now and in the future that we will not be bound any more to the structure of lineal time. Education has as his last objective the human being integral formation, understanding him as a being of necessities, abilities and potentialities. Education tries to influence at a Cognitive level (knowledge) Axiological (values) and Psycho motor behaviour (Abilities and Dexterities), to improve life quality[3].

For these reasons education should reconsider objectives, goals, pedagogies and didactic if it wants to fulfil its mission in the XXI century. In order to offer satisfaction to the man's necessities, the same technological forces which will make the learning so necessary, they will make it pleasant and practical.

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[3] http://www.uib.es/depart/gte/revelec7.html

Corporations are reinventing themselves around opportunities opened by the information technology, so educational centres will also have to do it."

New technologies should be looked as instruments or means to improve the teaching learning processes. When the Internet is analyzed from the point of view of its learning utility, it is necessary to point out the following principles: Multiple intelligence, Constructive, Conversation Theory (Pask), Teaching for understanding, Critical Theory of Habermas, Jesus Love Pedagogy and Knowledge Theory (Young), they seem particularly suitable to support such utility

a) MULTIPLES INTELLIGENCES

Intelligence is defined as the ability to solve problems, or products creation which are valuable in one or more cultural environments.

Chart N° 04 & 05 shows the types of Multiple Intelligence, which are based on special studies of biological and anthropological tests and they gave as a result the criterion to define an specific intelligence.

Item	Intelligence	Concept
1	Musical	It allows the individual to create, communicate and Understand the musical sense
2	Kinestesic	It allows the individual to use part or all his body to create products or to solve problems.
3	Logical - Mathematical	It allows the individual to use and appreciate abstract relationships
4	Linguistic	It allows the individual to communicate and give meaning through the language
5	Spatial	It makes possible the individual perceives visual or space information and transform this information recreating visual images in his memory.
6	Interpersonal	It allows the individual to recognize and distinguish mood states, motivations and other people's feelings.
7	Intrapersonal	It helps the individual to distinguish his own feelings, build appropriate mental models and use this knowledge to elaborate his own decisions.
8	Naturist	It allows the individual to distinguish, classify and use the characteristics of the environment.
9	Cybernetic	It allows the man to establish relations through technology, to create and use the tools of the net to be integrally formed.

Chart. N° 04 **Multiple Intelligences**

	STAND OUT IN	LIKING	LEARNS BETTER
LINGUISTIC VERBAL AREA	Readings, writing, stories narration , dates memorization, he thinks in words	Reading writing, relating tales, speaking, memorizing, and puzzles	Reading, listening and watching words, speaking, writing, discussing and debating
LÓGIC – MATEMATICAL	Mathematics, reasoning, logic, and problems resolution.	Problem resolution, question, work with numbers, make experiments	Using rules and relationships, classifying, working with abstract things
SPACIAL	Maps and graphics reading, drawing, labyrinths, puzzles, imagining things, visualizing	Design, drawing, building, creating, dream awake, watching drawings	Working with drawings and colours, visualizing, using his mental eye.
BODILY- KINESTESIC	Athletics, dances, dramatic art, manual works, use of tools	Movements, touching and speaking, body language	Touching, moving, processing information through corporal sensations.
MUSICAL	Singing, recognizing sounds, remembering melodies, rhythms	Singing, hum, playing an instrument, listening music	Rhythm, melody, singing, listening music and melodies
INTERPERSONAL	Understanding people, leading, organizing, Communicating, solving conflicts, selling	Making friends, talk and joining people.	Sharing, comparing, relating, interviewing, cooperating
INTRAPERSONAL	Understanding himself, recognizing strength and weaknesses, establishing goals	Working alone, meditation, to follow own interests	Working alone, making projects at his own rhythm, having space, meditating.
NATURALISTIC	Understanding nature, making distinctions, identifying flora and fauna	Participating in nature to make distinctions.	Working in nature, exploring live beings, learning topics of animal and plants life and nature

Chart. N° 05 Tabulation Multiple Intelligences [4]

When analyzing chart N° 05 it is determined that the educational system is not neuter, it does not pay the same attention to all the learning styles, neither it values equally all the intelligence or abilities. We only have to look to any schedule to realize that the school does not dedicate the same amount of time to develop body intelligence - kinaesthetic and linguistic intelligence, as an example. In relation to the emotional intelligence (the ability to understand and control own emotions) the school simply ignores it. It is not that it does not consider as important, it is that its learning is considered as implied.

School does not make more than reflect the society vision as a whole. It is not strange to anybody that a student has to make many exercises to learn how to solve equations, however, we do not consider for example about to train our students in paying attention during a conversation. Additionally, we also do not know how to make it. Saying in other words, because we have never considered it part of our task we have not learned how to make it. What is posed now for the

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[4] http://www.monografias.com/trabajos12/invcient/invcient.shtml#cuadro

first time is that, in the same way we practice and we develop the ability to write or practicing sports, we can develop and practice the group of abilities which let us to related in an appropriate way with the external world and with ourselves.

b) CONSTRUCTIVISM

Basically, Constructivism can be defined as the idea hold by an individual in relation to cognitive and social aspects of behaviour as well as affective.

According to the constructivist position, knowledge is not a copy of reality, but a human being's construction in which the development of this it depends of the schemes own by him, that is to say with what he already built in the relationship with the environment that surrounded him. Constructivist learning is characterized by the following principles:

FROM INSTRUCTION TO CONSTRUCTION

Learning does not simply means the replacement of a point of view (the incorrect one) for other (the correct one), neither to simply accumulate new knowledge over the old one, but rather to transform it. This transformation happens through the active and original thought of learning. Therefore, constructivist education implies experimentation and problems resolution and it considers that mistakes are not anti ethic of learning but rather its base.

FROM REINFORCEMENT TO INTEREST.

Students understand better when they are surrounded by tasks and issues that capture their attention. Therefore, from a constructivist perspective, teachers research what is interesting by their students so, they elaborate a curriculum to support and to expand those interests, and to involve the student into the learning project.

FROM OBEDIENCE TO AUTONOMY Teacher should stop demanding submission and in the other hand should foment responsible freedom. Into the constructivist model, autonomy is developed through reciprocal interactions at a micro genetic level and it is manifested by means of integration and considerations of oneself, the others and society.

FROM COERCION TO COOPERATION. Relationships among students are very important. Relationships help them to develop equality, justice and democracy concepts, (Piaget, 1932) [5] and help to improve academic learning.

Internet presents features of a constructive learning environment because it allows the use of the principles before mentioned. Internet is an open system guided by the interest, activated by the apprentice, and it is intellectual and conceptually provocative. The interaction will be attractive in as much as the environment design is perceived as interesting.

Constructivist is constituted in:

PSYCHOLOGICAL BASIS

VYGOTSKY (1896-1934) During all his life Vygotsky was devoted to teaching. His theory always defended the role of culture in the development of mental superior processes, considering them of social nature. Vygotsky theory underlines the relationships between the individual and the society.

He considered that psychology study was the study of changing processes, because when people respond to situations, they change them. One of his bigger critics of Piaget theory, it was that the Swiss psychologist did not give enough importance to the influence of environment in the child's development. Vygotsky is considered as one of the first critics of the cognitive development theory of Piaget.

Vygotsky research and writings are focused in thought, language, memory and playing. At the end of his days he worked on educational problems.

Vygotsky work is an exceptional example among the most influential current tendencies in the children cognitive development psychology. First, due to the fact his work remained unknown for the West until the sixties. His influence in United States began after his death in 1962.

Vygotsky had a very important role in psychology. His theory of child development stress the importance of relationships between the individual and society. His

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[5] http://www.monografias.com/trabajos16/teorias-piaget/teorias-piaget.shtml#DEFIN

work was recognized some years after his death. His opinions about the social context of learning have an important impact in the current educational practices.

JEAN PIAGET (1896 – 1980)

In his works Piaget distinguished four stages of the boy's cognitive development which are related with knowledge activities as thinking, recognizing, perception, remembering and others. Piaget put the emphasis of his work in the understanding of human being's intellectual development. His practical studies were done with children who were observed how they developed stages and how they acquired diverse mental abilities.

For Piaget, intellectual development is a process of knowledge restructuring. The process begins with a structure or thinking form characteristic of a level.

Some external changes or intrusions in the customary thinking produce conflict and imbalance. People solve this confusion and conflict using their own intellectual activity. From this, it results a new way of thinking and structuring the things; a way that gives new understanding and satisfaction to the person.

In other words, a **new balance**.

SOCIOLOGICAL BASIS Max Horkheimer, Theodor Decoration, Walter Benjamin. Herbert Marcusre and Jürgen Habermas, and the early militancy of Erich Fromm among others, conform the Frankfurt school as an open reaction to the logical positivism which it postulated that science was the only philosophical truth. The Critical Theory, as it is known his method of common investigation, it is the base of the most liberal sociological tendencies in the present.

In human sciences, an action is always followed by a reaction, and the same happens with philosophy. The Frankfurt School is considered as the opposite to the thinking of the Circle of Vienna and the Positivism Logical, and to the concept of reason, and to the idea of progress arose in the XVIII century. In spite of the fact their members did not profess a single thought line, and even the same

profession, his method, the time and the different world visions among both schools give us this perspective.

They have a change in relation with the new-positivistic position in relation to the world "such it is" – as in relation with the hermeneutic philosophy which reduces the reality to its mere interpretation - toward Hegel's revaluation of the dialectical method; as well as an ethical concern and a constant search of the truth and a Marxist view of the environment.

It is denominated as "The Frankfurt School", the group of intellectuals who worked, around the "Institut für Sozialforschung" (Institute of Social Investigation), under support of the University of Frankfurt and the German government. However due to Félix's Klein legacy, a wealthy Jew with progressive ideas, this Institute is born to request of Félix Weil. Karl Grünberg, an Austrian studious historian from the labour class, was his first director.

During the twenties, it was enjoyed in Frankfurt an extraordinary intellectual environment fomented by a wealthy and open bourgeoisie. Additionally to the recently founded university is added the existence of a liberal newspaper, a radio station open to innovations, and besides another institution which contributed, at least to several thinkers: "Das Freie Jüdische Lehrhaus" (The Free Centre of Jewish Instruction).This allowed to many intellectuals to work Ander a common roof.

Here appears the idea of an "philosophical reconsideration of Marx's social and political theories under the light of the dialectical method – the only appropriate method for understanding life - and new knowledge contributed by the human sciences, for example, Freud's psychoanalysis, Max's Weber sociology, or the new economic positions (Friedich Pollak) derived from the capitalism evolution", as it is pointed out by Giannnini in his Brief History of Philosophy (Editorial Catalonia, Santiago, 2005).

ONTOLOGICAL BASIS Science ontological bases are based specifically on the distinction or demarcation grade between science and philosophy and this is subtle and practically imperceptible.

The integration force of these units not only make possible in some grade the understanding of his own analysis environment, but it also surpass his own virtual limits of reality, integrating sciences to a wider and more complex universe of the knowledge. Thus, objects and phenomena configured theoretically by independent concepts, are the hypothetical limit of our current knowledge but not the ontological limit of reality ". To our knowledge, it is never offered a closed world as an unit, but rather as a divided or torn. The research is guided by unit ideas, valid in certain world environments; but until now there is not any unit idea that it can be scientifically fruitful applying it to the whole world."

The object is not the limit of sciences. It could be in the order of the practical action, but it is not it in the order of knowledge. Once his object is configured, the configuration fact promotes other understanding or explanatory requirements which are not solved with accumulated knowledge but once again in the knowledge of that ignored.

Units are not intelligible for themselves and once they are demonstrated to some degree, it arises the logical requirement of thinking in other units (concrete or abstract) in the invisible universe and dark to our experience: units every time bigger in the direction of integration and smaller units in the direction of the reduction theories.

What is known of the world it is not autarkical, because the intelligibility of reality is in some way, a complex symbolic illusion, since it doesn't solve the knowledge in the limit of its question; on the contrary, the intelligibility of the real thing amplifies the limit of the question in its ontological dimension and this in turn amplifies the question in its rational dimension.

EPISTEMOLOGICAL BASIS In order to determine the epistemological basis, it is important to consider Piaget-s theory, which it mentions that learning is firs a constructive process basically of internal character, that it means that the own cognitive activities of the individual determine their interactions with the environment in which they are developed.

Second, it denominates to the balance process to the self-cognitive regulation which it occurred when the fellow assimilates and adapt the previous knowledge to new data, considering learning as a reorganization process and restructuring process.

Lastly, it incorporates the analysis as necessary conditions of learning, the social interaction and the taking of conscience.

The Piaget-s epistemological school offers significant contributions to the study of the human intellect as the fact of considering the decisive role of objective activity as well as the description of the ontogenetic development of thinking defining different stages.

The central problem of knowledge is to understand formation, elaboration, organization and function of the operational structures since learning is a constant situation of balance / imbalance between the ability of assimilation and the complexity of the reality to know.

c) THE THEORY OF MEANINGFUL LEARNING

Some of the theories which changed the way of thinking of some teachers in relation to what it should be their educational practice, it is David Ausubel-s theory, which consists basically in that the learning of new knowledge depends on what it is already known. In other words, to build the knowledge begins with an observation and recognition of events and objects through the concepts that are already possessed

The mentioned author establishes that to learn significantly, people should interact new knowledge with the outstanding concepts already known. New knowledge must interact with the structure of existent knowledge. Significant learning can be contrasted with learning based in memory which it can also incorporate new information to the knowledge structure, but without interaction, it can be acquired independently of the used instructional strategy[6].

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[6] http://sensei.ieec.uned.es/~miguel/tesis/node14.html

In as much passive learning (passive student with a directive teacher) or learning by discovery (active learning where the apprentice chooses the information that he wants to learn) can be significant learning. However, it is not necessarily how the information is presented but how the new information is integrated in the structure of existent knowledge, what is crucial for learning significant learning occurs.

Therefore, the teacher as a classroom manager should take in consideration that the didactic material which is used, it will be designed to surpass the traditional knowledge based on memory and to achieve a more integrative, understanding and autonomous learning. Of course always relating what the student knows with what is pretended to learn.

d) PASK'S CONVERSATION

The theory frequently invoked to base the pedagogic validity of the internet environment it is that of the conversation (Pask, 1964). This follows the Vygotsky point of view (1978) on the fact that learning is by nature a social phenomenon; that the acquisition of new knowledge is the result of people's interaction who participate in a dialogue; and that to learning is a dialectical process in which an individual contrasts his personal point of view with those of another until reaching an agreement. The Internet follows the notion of vygotsky interaction among people who brings different experience levels at a technological culture. Internet is an environment which supposes a specific social nature and a process through which the apprentices create a virtual area of "proximal development" (Vygotsky, 1978).

e) LEARNING FOR UNDERSTANDING

There is a widespread agreement about teaching for understanding in all the educational institutions and teachers; however, they have been valued at least rhetorically, because most of teachers are surrounded of models, activities, standardized evaluation forms, plans and programs and experience which reinforce teaching based traditional.

Teaching for the understanding tries that teachers be critical thinkers, people who outline and solve problems and who is able to surpass complexity, to go beyond routine and living productively in a world in change and it is supported in the conviction, that schools should commit the students in a more intense way and to have his understanding as his part.

Finally, the understanding goals are explicit and public. Explicit because they have to be clearly established according with the interests of the students' necessities. To assist the diversity of them I propose the possibility of common and personal objectives. Public, because they have to be totally known by the school community, what it will allow to know to everybody toward where they are advancing and how much of it has been gotten.

f) YOUNG'S SITUATED KNOWLEDGE

Apart from the constructivist and conversational theories, another theory used to defend the internet reliability as a learning medium, it is that of the positioned knowledge. In accordance with this theory, knowledge is an active relationship between an agent and the environment, and learning happens when the apprentice is actively involved in a complex and realistic instructional context (Young, 1993). The most extreme position in the situated learning establish that not only learning but thinking is also situated and therefore it should be considered from an ecological perspective. Such a position is based on Gibson's works (1986), which it emphasizes that learning occurs through perception and not memory.

The internet environment responds to the situated knowledge premises located in two of its characteristics: realism and complexity. On the other hand, Internet facilitates authentic exchanges among users from different cultural contexts but with similar interests (Brown, Collins and Duguid, 1989). Adittionally, the unstable nature of the internet environment is not a trouble for new users who however, and thanks to their continuous peripheral participation, are rewarded with a gradual enculturation.

g) HABERMAS' PRACTICALTHEORY

Theories derived only from positive science provide norms for the domain of things, without forming practical aptitudes with relation to interaction and the men's action. Habermas before this situation proposes scientific reflection, in such a way that this process can include the practical and objective consequences of science to incorporate them to the social life in a conscious way.

Consequently the group of regarding ideas to the educational environment can be expressed in a systematic or unsystematic way.

h) JESUS' LOVE PEDAGOGY

Jesus reaffirmed in his teaching and in practices the person's absolute value, in front of which everything must be relative and in function of whose realization everything should be guided. Neither institutions, neither the law, neither traditions, in spite of the sacred they are, can block and neither can be manipulated to legitimate oppression or instrument people. Everything should depend on people's life and welfare of people of the poorest and excluded.

Educational love is translated in friendship which is synonymous of proximity, affection, trust, confidence, oneself donation. For Jesus, love, friendship, fondness and mercy were the principle that inspired all his educational actions and the ones which should vitalize all educational relationship.[7]

Living humanly means to give sense to life. The possibility to decide, to become the main character of his own history, therefore, of deciding. It also presupposes the conditions that facilitate and allow to make possible elections, freedom. It contrasts with Jesus' educational attitude the multiple coercion forms, conditioning, apparent behaviourisms which limit or deny freedom. Education based on Jesus' example will always be an education for freedom, and an liberating education.

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[7] http://www.epe.cl/Pages/pepeweb/EpPE03.htm

INNOVATIVE EDUCATIVE MEGA TRENDS

DEFINITION "It is the element which allows the approach to knowledge about future behaviour of factors which characterize to the organizations".

Considering that XXI century in a global world, let us to point out that we are in front of a crucial moment in the humanity's history. Comparatively, the speed of changes is faster every year. Societies with few economic and technologic development can be characterized to be located in the pre-modernity. Societies of intermission development would be modern.

Growing inequity between countries and social classes, the radicalization between cultures and nations, was also a symptom of the nineties years. To be able to characterize the scenario of the year 2025, we should take in consideration the recent tendencies and to project them toward the future. A mega tendency in this sense, is a viable hypothesis on the future, based in that the future will be presented starting from the historical data of the present.

Let's point out some features of megatrends:

a) TECHNOLOGY AND KNOWLEDGE

The access to the technology which is in relation with the purchasing power will be more selective. The school pyramid has important pressures in the school demand; the offer on the other hand, does not have either quality either the appropriate quantity. This way, knowledge acquired by mechanisms of formal education will be more selective.

b) POLITICAL ASPECTS

Society demands less investment in political parties, less bureaucracy and fair salaries for officials. It is observed a tendency of being annoyed by political parties

and toward the emergence of candidates from citizenship. Woman will have a key role in decisions; gender aspects will transform the future.

c) FLEXIBLE MODELS IN EDUCATION (DISTANT EDUCATION, PROVILEGE OF LEARNING OVER TEACHING)

Although post-modernity is characterized by the intensive acquisition of technology and knowledge, by the adoption of economic models focused in the market, by irruption of new paradigms and for a quick pragmatism with contempt to traditional values and beliefs. Education has also suffered and it will suffer post-modern modifications. We can mention the most important:

In order to make flexible the educational offer toward new forms as the distance education.

Escalation of the link school-industry in the form of collaboration nets.

Offer orientation by the necessity of having qualified manpower; the school in the factory.

Professor acting as tutor who facilitates learning.

Curriculum focused in competition norms. Training for multifunction.

Without a doubt telecommunications will guide the communication among individuals and organizations at such a level, that who does not have access to these means, it will be relegated and excluded. So education will look for new outlines, and communication via Internet it will be more usual. Teachers will have abilities for handling this technology.

d) SOCIETY

The family nuclei will begin a gradual disintegration because of the woman departure from home, mainly in the economies from south. Interaction with other cultures by means of intensive use of media, it will also rebound in a loss of value of the family. Young people will get married in older ages The divorce average will be increased considerably and the number of children will diminish.

e) TECHNOLOGICAL PROGRESS

The launching of the World Wide Web in 1990, it was followed by the gratuitous distribution of Netscape in 1994. This transformed this established technology for the scientific communication but not known for the public, into a net of easy use for everybody. This not only cause a wider access at smaller cost. It also introduced an entire new communication structure, allowing the simultaneous information transfer of words, numbers and images to places located all over world. These technological innovations in communications transformed the possibilities to increase social solidarity and to mobilize people all over the world in social nets.

For these reasons Mega tendencies are also denominated as " General Profile of Future", as it is shown in chart N° 06.

MEGATRENDS	EDUCATION TYPES
Globalization Polly centre Global Economy	Education for a Cosmopolitan Humanism
Diverse society Ecumenical religious	Education for a diverse Society
"South is the north" The Pacific basin	Education for autochthonous science and technologies
Post industrial Society Post modern culture	Education for the Future
Participate Democracy Female Leadership	Education for Woman's Leadership
Decentralization Self-help	Education for Autonomy
Holistic Ecology	Educación para conservación y desarrollo del Medio Ambiente Education for conservation and environment development

Chart. N° 06 Global context of Education[8]

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[8]Dr. MORALES G. GONZALO. (Project of Salesians' curricular innovations, study document prepared for the workshop on curricular design, Quito,5th and March 6th of 2005

EDUCATIONAL PARADIGM

The pedagogic paradigm is a system of philosophical and pedagogic theoretical components which guide the design considering human being's conception and his reality. It establishes its limits and grants him the coherence logic-epistemological and methodological. As we look in the next chart.

Educational Paradigm

Paradigm 01	Paradigm 02	Paradigm 03
Bank **Education** Accumulation (Storage)	**Educational** **Technology** Professionally (Efficiency)	**Holistic** **Education** Formation (Growing)
Positivistic **Science** **Empiric** **Knowledge** Know (Information)	**Technocratic** **Science** Knowledge Useful Power (Efficiency)	**Holistic** **Science** Knowledge Integral Living (Service)
Capitalist **Economy** **Production** (Profit) Productiveness	**Neoliberal** **Economy** Market (Competence) Sustainable	**Economy** **Solidarity** Life quality (Cooperation) Solidarity

Chart. N° 07 Educational Paradigms [9]

LANGUAGE ACQUISITION THEORIES

Language acquisition is largely matter of maturation of an innate linguistic capacity, maturation which is guided by internal factors, for an innate language form which improves, differs and it reaches a specific realization through experience. "[10]

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[9] Dr. MORALES G. GONZALO. (Project of Salesians' curricular innovations, study document prepared for the workshop on curricular design, Quito,5th and March 6th of 2005

[10] Acquisition Languague theories "Chomsky"
In his The problem of Universals in Language, Charles Hockett gives a varied list. He mentions, for example, as in all the languages there are own names, an element which denote the person who

Let us synthesize in three arguments this theory:

1. The boy learns his native language with extraordinary easiness and speed, and he emits and understands in a limitless way, messages which he never had listened before.

2. In the child exists an inwardly "grammar", a deep structure which enables him to make a creative use of language.

3. This explains the linguistic existence of some linguistic universes[11], common to all the languages.

The most important theories about language acquisition are summarised as it follows: ENVIRONMENTALISTS, NATIVISIC, COGNITIVE, MULTIPLE INTELLIGENCE, AND THE KRASHEN'S THEORY.

a) ENVIRONMENTAL THEORIES:

Let us keep in mind that Saussure considered language as the social part of language and therefore, the boy goes assimilating little by little, as an appropriation of something coming from the exterior. Skinner, the most remarkable of the behaviourists psychologists, tried to explain the language acquisition as a mechanism based on reinforcement contingencies which operate on the fellow to promote positive answers. Obviously it is necessary to point out against behaviourism that the language acquisition is not only product of a mechanism stimulus - answer.

b) NATAL THEORY

Also called as Innate Theories. These theories give primacy to internal individual factors, mental or biological.

c) COGNITIVE THEORIES

Environmentalists theories as the innate theories give a special primacy to the linguistic development in relation to cognitive, to the language against thought. On the contrary, cognitive theories confer the primacy to the cognitive development and they subordinate language to the thought

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speaks and another who denotes the subject to whom is spoken, elements whose indication depends on the extra linguistic context (now, here), etc.
.

All the superior cognitive process, as memory, language, problem solution, images, deduction and induction, are different manifestations of the same underlying system" [12]

d) MULTIPLE INTELLIGENCE THEORY

It defines intelligence as the ability of solving problems of creating products which are valuable in one or more cultural ambient.

Among the principals we can mention the following:

- Musical Intelligence
- Kinetic Bodily Intelligence
- Logic and Mathematical Intelligence
- Linguistic Intelligence
- Space Intelligence
- Inter. Personal Intelligence
- Intra personal Intelligence I
- Cybernetic Intelligence

e) KRASEN THEORY

The Krashen's theory or model offers 5 important hypothesis which serve as foundation to the usual practices in the communication methods for the acquisition of a second language, so we have the following :

- ✓ Acquisition-learning Hypothesis
- ✓ Natural order Hypothesis
- ✓ Monitor Hypothesis
- ✓ Under stable input Hypothesis
- ✓ Active filter Hypothesis

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[12] (ANDERSON, 1983, pág. 1)
In his The problem of Universals in Language, Charles Hockett gives a varied list. He mentions, for example, as in all the languages there are own names, an element which denote the person who speaks and another who denotes the subject to whom is spoken, elements whose indication depends on the extra linguistic context (now, here), etc.
 (ANDERSON, 1983, p. 1)

KRASHEN'S HYPOTHESIS (LEARNING VS. ACQUISITION)

There are two different strategies used to develop a second language. Language acquisition is in two senses, a subconscious process: (a) people many times do not realizes that they are acquiring a language; (b) they are more concentrated in being able to use it to communicate. The apprentice is not generally aware of what he has acquired; he can not speak of the rules he assimilated neither to describe them; He simply learned them without noticing it.

LEARNING A LANGUAGE IS DIFFERENT

It is knowing about a language or to know it formally. It has been supposed that the explicit rules presentation and mistakes correction facilitate learning of other languages. Supposedly, mistakes correction helps the apprentice to arrive at a correct mental representation of a rule. However, there are good evidences which show that mistake correction does not help the subconscious acquisition of another language.

NATURAL ORDER HYPOTHESIS

Grammatical structures are acquired in a predictable sequence. Some elements are acquired before others. The conclusion is that the acquisition order of the first and a second language is very similar, but not identical. However it is important to notice that Krashen does not conclude saying that it is important or necessary to teach a second language following the natural order. The content of that learned in the maternal language acquired during childhood is based on what the child is interested in the moment.

MONITOR HYPOTHESIS

The monitor hypothesis indicates the relationship between acquisition and learning. It seems that acquisition is more important. Acquisition is what allows the fluency in A second language and our ability to use it easily and comfortably. Conscious learning does not give us fluency. Rather it seems to

have a single function: editor or monitor. We use conscious learning to correct or change our emission before speaking or writing, or sometimes even after speaking or writing (self correction).

It have been done research which indicate that it is not easy to use the monitor in efficient form. To use the monitor there are three necessary conditions. Even under the presence of these three conditions, the use of the monitor is difficult, because it requires of:

- **TIME** To use rules consciously. The speaker needs enough time to process them. In a normal conversation the speaker never has that time.

- **FORM** It is not enough to have enough time. The speaker of a second language has to concentrate on the form of its production, or thinking of speaking in a correct way. But the research shows that people generally concentrate more in content than in the form of what it is expressing.

- **RULES** This condition is quite formidable because the best linguists do not know all the rules of only one language of the world, all the rules; less the teachers or students.

COMPREHENSIBLE INPUT HYPOTHESIS.

Among the Krashen contributions, the comprehensible input hypothesis is perhaps the most important. He concludes that the increase or increment in the language happens when we receive information through the comprehensible input or that it contains a structure from a lightly superior level which it is already mastered. This idea corresponds to Vygotsky with the next development. The context of received information contains clues or stimuli that which maintain message integrity.[13]

AFFECTIVE FILTER HYPOTHESIS

The fact of learning a second language in a non natural situation, it produces anxiety in the student, and this it works as an affective filter which stops him to learn the second language. The teacher function is to inactivate this affective

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[13] http://sensei.ieec.uned.es/~miguel/tesis/node14.html

filter. The following affective variables are those that appear in the bibliography dedicated to the research of language learning.

- Anxiety. A low anxiety level helps to learn languages. The less anxious the student is, the better the learning will be.

- Motivation. A strong motivation helps to a better learning. There are several motivation types. For example, "instrumental" motivation when this language is a practical necessity. The integrative motivation happens when you learn a second language to be integrated to a group or to be identified with this.

- Trust in oneself. The apprentice with bigger self-esteem and trust learn more and better a second language.

These factors are more important for the subconscious learning than for conscious learning. Theoretically, when there are affective barriers, the student will have a " mental blockade" and this it will not allow the data are completely processed (that is to say, learned), even though the student understands them. Learning is optimal when the student is motivated, trusts in himself, and feels little anxiety.

LEARNING THEORIES AND VIRTUAL ENVIRONMENTS

New information and communication technologies offer diversity of means and resources to support the teaching; however it is not the available technology the factor that it should determine the models, procedures, or didactic strategies[14] Leflore (2000) proposes the use of three learning theories to guide the design of materials and teaching activities in a virtual environment: the Gestalt, Cognitive, and Constructivist theories. Gestalt Theory: It studies perception and its influence in learning

Cognitive theory: According to Leflore (2000), several focuses, methods, and strategies of this theory as conceptual maps, the activities of conceptual development, the use of means for motivation, and the activation of previous outlines can guide and support in a significant way the design of teaching

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[14] http://tecnologiaedu.us.es/bibliovir/pdf/entornosvirtuales.pdf

materials in the Net. The maps, sketches, and graphic organizers are means to represent cognitive activity.

Leflore Theory: It presents constructivism as the design of teaching activities. In the Net can be guided by the light of several principles of this current as the following: the student's active paper in the meaning construction, the importance of social interaction in learning, the solution of problems in authentic or real contexts.

Leflore synthesizes this way some derived rules of constructivism to teach through the Net:

To organize activities which demand the student to build meanings starting from the information he receives. He is asked to build graphic organizers, maps, or outlines.

To propose activities or exercises to allow the students to communicate among them. To guide and control the discussions and interactions so that they have an appropriate level.

When it is agreed to allow the students to be involved in the solution of problems through simulations or real situations.

COMMON EUROPEAN FRAME "CEF"

The Common European Frame (CEF) of reference languages is part of the project of politic linguistic of the European Council which has unified the guidelines for the language learning and teaching inside the European context. It provides a common base for the elaboration of language programs, curricular orientations, exams and manuals in all Europe. It describes what the student has to learn with the purpose of using a language to communicate, as well as the knowledge and dexterities to develop the ability to act in an effective way. It defines levels of language domain which allow to check the progress of the students in each learning phase and along his life.

It conquers the barriers put the different European educational systems, providing educational entities and teachers the appropriate means to coordinate their efforts and to satisfy the students needs. It favours courses, the programs and entitling transparency, fomenting the international cooperation in the field of modern languages and the mutual recognition of the titles obtained in different learning contexts.

The Common European of Reference frame (CEF) is a document which comes from the European Council for the 25 countries which compose the European Union. The European Council, to power the common frame, gives recommendations to try giving the possibility to work from one line to different countries. Communication is a necessity. It is the fundamental principle of the Common frame as the learning for a lifetime.

FOCUS ADOPTED BY CEF

- ✓ Communication abilities have some elements:
- ✓ Linguistic: language as a system
- ✓ Social linguistic: social convention
- ✓ Pragmatically: production of speech behaviours
- ✓ Language activities:
- ✓ Understanding (oral and written)
- ✓ Expression (oral and written)
- ✓ Interaction (Exchange participation); this adds
- ✓ Common Marco as the 5th ability.
- ✓ Intervention (translation or interpretation); this is not an ability but rather, a function.

An all of them are Developed in different environments:

- Public
- Personal
- Professional (educative)

Reference Frames levels:

The reference frame defines five abilities that the students should have to acquire each level, unifying learning criterions for all languages.

That is to say, it has the purpose to help to describe the linguist master lever demanded by the tests ant the evaluation programs, with the purpose to facilitate comparison (homologation) among the different certified systems.

There are 3 grades or levels (A, B y C) subdivided in 2 levels (1 and 2):

A = Basic user

A1 = Access (basic interaction level)

A2 = platform (with the ability to work in ordinary social situation)

B = independent user

B1 = threshold (A traveller who goes abroad and he can keep communication in a variety of situation with abilities to face in a flexible way everyday problems)

B2 = advanced (With abilities to communicate arguing and defending points of view, to speak fluently in a social conversation, he has awareness of mistakes and he can corrects them)

C = Competent user

C1 = Effective master Operation (They have access to a broad linguistic repertory, they have a fluently and spontaneous communication)

C2 = mastery (It does not implies competition, it implies precision, adequacy and easy use. Characteristic in a brilliant student.)

In the following chart we detail the levels demanded by CEF: **See annex 3**

CONSTRUCTIVISTIC PEDAGOGIC MODEL

With the emergence of the new technologies applied to education, the constructivism is adopted as a methodological guide of the learning teaching processes. In this respect it is important the undeniable forcefulness of the action of the pedagogic construction, reinforced for dynamics of collaborative work, interactivity and free and spontaneous connection with the educational processes.

Likewise, it is stressed the strong critic regarding traditional educational systems. With constructivism free education is fomented or determined by constant incentive of the spontaneity.

It is denominated as pedagogic "a mediation able to promote and to accompany learning, that is to say, the task of each educating of being built and of appropriating of the world and of oneself[31]". The individual builds knowledge starting from himself. In education, educate is built oneself, and we only built ourselves through knowledge. This is done by art, games, with the own body and interactions, that is to say with the meeting with other beings.

Several constructivist contributions reposition the thinking of educational processes; as in the Piaget case, which specifies his theory mainly in children. In reference to this topic, it is explained as the boy through the action, adapts to the environment and develops his intelligence, so it is indispensable to differentiate the child from adults.

It is also significant to rescue Vygotsky, who as well as the previous one, was characterized by the analysis of structural nature, in the group of reflections in relation to the teaching learning process. In relation to learning considers this in a dialectical relationship with the child mental development process.

Other authors also using the constructivism as Bruner and Ausubel, contribute important elements in the learning process. For the first one it is substantial the learning for discovery, in which to person goes on with the action prevalence and Bruner emphasizes that learning should be inductive, that is to say, from particular situations which let him to experience and prove hypothesis more than stopping in reading processes.

Henry Giroux establish that post-modern thought considers useful that educators tune and understand the changing features of the cultural identity which are mediated by the ICT.

Finally, post-modern pedagogy should surpass its intention to redefine academic curriculum and also specify the growing insert of new technologies in the teaching learning process from early ages. In this case, the role of the teacher will be guiding discovery processes of solutions achieving the construction and understanding of the knowledge in the human being.

CURRICULAR DESIGN WITH HOLISTIC AND PROCEDURAL FOCUS

The platform of curricular design in this case is the pedagogic Salesiano paradigm, understanding that pedagogic paradigm is: the "the exemplary example"[15] an ideal model in two senses: the first one as model which inspires and rules educational practice; the second, as pedagogy that compares science and the being, because it expresses a reality vision, of the mission and the educational sense.

a) SALESIAN APPROACH OF CURRICULUM

"Group of formation and learning components in systemic relationship which allows the students understand, from the gospel values, life complexity and transform their environment by means of linking processes, adding total and making context of knowledge, experiences and values of the surrounding natural and social reality"

b) FEATURES

HOLISTIC: it is guided to the harmonic and multidimensional formation of people who integrates the community Educational -pastoral

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[15] TRIGO PEDRO, sj. Jesús, paradigma absoluto de humanidad. Departamento de Pastoral Fe y Alegría, Quito-Ecuador 2003

SYSTEMIC: it integrates in an interdisciplinary form the processes, fields and formation lines and learning.

PROCESS: it respects the development rhythms, learning styles and the multiple intelligence of students (who are formed) and apprentice (who learn).

c) FOCUS

The institution opted for the holistic and systemic focus because they are identified better with the preventive system which is an institutional guideline at Salesian level.

It is holistic because embraces the entirety. It is whole or complete and it is systemic and for processes because this design allows to structure the curriculum in a systemic and interdisciplinary way, giving space to the processes of human and Christian formation, and to the abilities development of problems solving with specific texts.

d) CURRICULO TYPE

Academic	→	Knowledge
Development	→	Abilities
Cognitive	→	Skills
Socio - Constructivistic	→	Social change
Technologic	→	Process
Holistic-systemic	→	Process

e) CURRICULUM MODELS

MODEL	FEATURES	TEACHER	STUDENT	METODOLOGY
Traditional Education (Teaching)	Memory Repetition Individualistic Enciclopedistic	Instructor Model	Receptor Passive (Cellar)	Program Results Lessin Cuantitative
Behaviourism (Teaching)	Stimulus-Answer Conditioning Programation Control	Guide Conductor	Follower (Puppet)	Estimulation Tracking Programation
Educative Tecnology (Teaching Learning)	Eficiency Profesisonalism Efficeincy Medition	Facilitator	Apprentice (machine)	Goals Achievement Plans Addition
Constructivism (Teaching Learning)	Development Intelectual Knowledge Experiences Stages and ages	Energize	Builder (Architect)	Significant learning Learning by discovery of concepts Mind maps
Conceptualism (Learning Teaching)	Development Intelectual Knowledge Skills Stages and ages	Mediator	Apprentice (Hermeneuta)	Notions Concepts Categories Mentefactos
Cognitive (Learning Teaching)	Development Intelectual Process Skills Knowlege	Cosultant	Apprentice (Processor)	Mind Operations Multiple Intelligences Cognitive Schools (socio-critical socio-cognitive)
Holistic Systemic by Process (Learning)	Totalizing education integrative Education personalize Formation Learning Undesrtanding Transformation	Formator Companion	Student Aprentice (Autogogo)	Contextualize Totalize Linking Methods Eco discipline Methods Multidisciplinary Methods Interdisciplinary Methods Trans disciplinary

Chart. N° 08 Curriculum Models

f) AREA PLAN (MACRO CURRICULUM)

Look **Annex N° 04**

g) UNIT PLAN (MESO CURRICULUM)

Look **Annex N° 05**

h) LESSON PLAN (MICRO CURRICULUM)

Look **Annex N° 06**

CHAPTER 3
METHODOLOGICAL DESIGN AND HYPOTHESIS PROOF

3. METHODOLOGICAL DESIGN

RESEARCH TYPE AND DESIGN

RESEARCH TYPE

BY PURPOSE: Basic.

BY KNOWLEDGE LEVEL: Exploratory

BY THE MEANS TO USE: Quasi **-** Experimental.

RESEARCH DESIGN

BY THE DATA GATHERING STRATEGY TYPE

o Poll

o Test

o Scientific Observation

BY THE LEVEL OT STUDY STRUCTURATION: Quantitative

BY TEMPORAL DIMENSION

Traverse (data gathering in just one time cut)

POPULATION AND SAMPLES

The population dedicated to the execution of our project are the students of Maths & Physics and Electronic Major.

Third Maths & Physics (42 students) is an experimental group of virtual learning and with a control group under a traditional learning method, the Third Electronic (40 students).

FIELD WORK

With the purpose of knowing the grade of incidence of ICT in the teaching-learning process, we took as a reference the Unidad Educativa Fiscomisional "Don Bosco", with a sample of 82 students who belong to the Third years of High school, Maths and Physique and electronics speciality. They will receive a semi-present virtual modality and a present modality, to determine the impact that new technological-pedagogic tendencies demand.

DATA GATHERING INSTRUMENTS

Once the indicators of the theoretical elements are obtained and are defined the theory elements and the research design, it will be necessary to develop the instruments to gather data from reality. At the moment of the project information gathering, it was necessary to use certain support research instruments as:

OBSERVATION: As a first phase to gather data for this research, it is important the topic of observation which by our case will be:

DIRECT: As teachers of the institution and of third years of high school, it is possible touch the learning problems of the English language.

PARTICIPANT: Every teacher is an active part in the learning and teaching process which it allows to know deeply what it was previously mentioned.

SITUATIONAL TEST: After applying this instrument, it was determined the situational diagnosis from the students in relation to their computer knowledge level and learning of the English language; it was also determined the interest level with regard to the use of technologies in the teaching process - learning and the disposition bias to study in an original way. This instrument was settled down under a questionnaire of multiple selections in an individual way (See annex 07)

KEY ENGLISH TEST (KET).-

The KET allows to know the knowledge level obtained by the students after applying a test at an A2 level according to the standards settled down by the European Common Frame, which it has a knowledge of half level; so this test is characterized to have a multiple selection design and for dexterities (See annex 02)

PRE- TEST

This Test allows us to know the students knowledge level in third Year of high school, which will give data as a reference for analysis and interpretation of results establishing the bases for our project. (See annex 08)

COGNITIVE –APTITUDE TEST.- (POST TEST)

This instrument facilitates to obtain exact information to interpret and determine the incidence level that the ICT obtained during a half present virtual modality. This questionnaire is the same as the one applied the previous year at the end of the first quarter without the application of ICT of selection and open questions. (See annex 09).

GATHERING SAMPLES

The data of this project were classified in a quantitative way the same one that is distributed in the following way:

a) As Experimental group we have the 3rd M&P with 41 students inscribed for the virtual platform with modality e-learning.

b) As group of Control we have the 3rd ET with a 40 registered students for a present and traditional teaching.

c) Two kind of tests settled down to carry out the statistical process and to know the results reached with the implementation of the platform in the process teaching-learning. These were denominated as PRE-TEST and POST-TEST.

HYPOTHESIS

Information and Communication Technologies "ICT" impact favorably in the English learning process from students of the third year of high school, Maths and Physics Major of "Don Bosco" Educational Unit in the first quarter during the school year 2006 -2007.

DATA PRESENTATION

In the following Table (N° 01), the sample project size settled down in the experimental and control groups are detailed clearly with the scores reached with the application of the Pre-Test & Post-test, under the different traditional and e-learning modalities.

TABLE N° 01.- GATHERING THE SAMPLE

n°	Full Name	Pre-Test X1	Post -Test X2	Full Name	Pre-Test Y1	Post -Test Y2
		EXPERIMENTAL GROUP 3rd Maths & Physics			**CONTROL GROUP 3rd. Electronic**	
1	Aguilar Franklin	16.00	18.00	Amon Diego	18.00	10.00
2	Altamirano Mauricio	16.00	17.00	Andrango Wilmer	16.00	18.00
3	Alvarez Alex	17.00	17.00	Anacleto Jhon	19.00	16.00
4	Analuisa Freddy	16.00	19.00	Buitron Carlos	20.00	19.00
5	Araque Armando	18.00	16.00	Bustamante Byron	17.00	19.00
6	Arias Christian	17.00	20.00	Camacho Roberto	20.00	17.00
7	Barragan Cristian	19.00	19.00	Chamba Cristian	15.00	10.00
8	Bastidas Luis	17.00	18.00	Changoluisa Diego	20.00	16.00
9	Borja Kleber	20.00	20.00	Chavez César	18.00	16.00
10	Cabrera Angel	19.00	19.00	Chisaguano Oscar	20.00	17.00
11	Calvache Hector	18.00	19.00	Chulca Cristian	15.00	17.00
12	Cardenas Cristian	18.00	20.00	Condor Paul	17.00	15.00
13	Cevallos Roberto	19.00	18.00	Davila Diego	19.00	16.00
14	Chillagana Luis	20.00	20.00	De la Cruz Alex	11.00	18.00
15	Condor Santiago	18.00	16.00	Flores Luis	15.00	17.00
16	Cruz Ernesto	20.00	20.00	Gallardo Carlos	15.00	20.00
17	Espinosa P. Cristian	15.00	16.00	Garzón L. Jorge	20.00	17.00
18	Espinoza H. Fausto	15.00	18.00	Garzón O. Pablo	17.00	17.00
19	Flores Alejandro	17.00	19.00	Granda Diego	15.00	17.00
20	Freire Miguel	16.00	20.00	Guanoluisa Juan	15.00	16.00
21	García Rafael	16.00	20.00	Lagla Galo	17.00	20.00
22	Granda Hugo	19.00	20.00	Mantilla Daniel	16.00	10.00
23	Guaminga Jose	17.00	19.00	Merizalde Javier	20.00	19.00
24	Hidalgo Bolivar	16.00	17.00	Olalla Luis	20.00	17.00
25	Llano Ricardo	16.00	*****	Paucar Lenin	20.00	18.00
26	Mena Ricardo	17.00	14.00	Perez Marco	16.00	19.00
27	Molina Limber	15.00	13.00	Perugachi Gabriel	14.00	20.00
28	Moreno Juan	16.00	19.00	Pilicita Darwin	20.00	17.00
29	Mozo Santiago	13.00	10.00	Quel Pablo	14.00	16.00
30	Muyulema Geovanny	11.00	20.00	Quishpe Byron	17.00	15.00
31	Oñate Erick	14.00	20.00	Rios Carlos	15.00	17.00
32	Paguay David	19.00	19.00	Romero Alex	14.00	14.00
33	Paramo Joffre	20.00	20.00	Salazar Xavier	17.00	17.00
34	Reinoso Bernardo	18.00	19.00	Sevilla Freddy	20.00	17.00
35	Ruiz Henry	17.00	17.00	Simba Jairo	17.00	17.00
36	Salazar Roberto	18.00	20.00	Terán Henry	19.00	18.00
37	Taco Luis	17.00	19.00	Torres Alexis	17.00	17.00
38	Tipan Timoteo	18.00	20.00	Trujillo Luis	17.00	19.00
39	Torres Abel	20.00	18.00	Villacres Jorge	15.00	19.00
40	Uyana Diego	18.00	19.00	Villamar Javier	20.00	15.00
41	Veloz Alex	19.00	20.00	*****	*****	*****
42	Verdesoto Oscar	12.00	19.00	*****	*****	*****

DATA ANALYZE

For processing and analyzing the project results is important to show some terminus and definitions of the statistics for linguistics as the following the ones:

MEAN: It is found by adding together all the individual numbers and then dividing by the number of such numbers

$$\overline{X} = \frac{\sum X_1}{n}$$

VARIANCE: It is getting by the mean of the squared difference between the observed values and the mean value in a series of observed results.

$$S^2 = \frac{\sum \left(X_1 - \overline{X_1} \right)^2}{n}$$

STANDARD DEVIATION: It is found by the square root of the variance.

$$S = \sqrt{\frac{\sum \left(X_1 - \overline{X_1} \right)^2}{n}}$$

STANDARD NORMAL Z : To calculate a z-score, the difference of the means of two groups is divided by square root of the sum of the variances of the score of each group divided by the number of individuals in the group.

$$Z = \frac{X_1 - X_2}{\sqrt{\frac{\left(S_{X_1} \right)^2}{n_1} + \frac{\left(S_{X_2} \right)^2}{n_2}}}$$

3.7.1 STATISTICAL TABLES

TABLE N°02

	PRE-TESTS						
Date:	04/09/2006			**Date:**	04/09/2006		
Group:	**Experimental**			**Group:**	**Control**		
n **Full Name**	X_1	$X_1 - \overline{X_1}$	$\left(X_1 - \overline{X_1}\right)^2$	**Full Name**	Y_1	$Y_1 - \overline{Y_1}$	$\left(Y_1 - \overline{Y_1}\right)^2$
1 Aguilar Franklin	16.00	-0.93	0.862	Amon Diego	18.00	0.70	0.49
2 Altamirano Mauricio	16.00	-0.93	0.862	Andrango Wilmer	16.00	-1.30	1.69
3 Alvarez Alex	17.00	0.07	0.005	Anacleto Jhon	19.00	1.70	2.89
4 Analuisa Freddy	16.00	-0.93	0.862	Buitron Carlos	20.00	2.70	7.29
5 Araque Armando	18.00	1.07	1.148	Bustamante Byron	17.00	-0.30	0.09
6 Arias Christian	17.00	0.07	0.005	Camacho Roberto	20.00	2.70	7.29
7 Barragan Cristian	19.00	2.07	4.291	Chamba Cristian	15.00	-2.30	5.29
8 Bastidas Luis	17.00	0.07	0.005	Changoluisa Diego	20.00	2.70	7.29
9 Borja Kleber	20.00	-2.93	8.577	Chavez César	18.00	0.70	0.49
10 Cabrera Angel	19.00	2.07	4.291	Chisaguano Oscar	20.00	2.70	7.29
11 Calvache Hector	18.00	1.07	1.148	Chulca Cristian	15.00	-2.30	5.29
12 Cardenas Cristian	18.00	1.07	1.148	Condor Paul	17.00	-0.30	0.09
13 Cevallos Roberto	19.00	2.07	4.291	Davila Diego	19.00	1.70	2.89
14 Chillagana Luis	20.00	3.07	9.434	De la Cruz Alex	15.00	-2.30	5.29
15 Condor Santiago	18.00	1.07	1.148	Flores Luis	15.00	-2.30	5.29
16 Cruz Ernesto	20.00	3.07	9.434	Gallardo Carlos	15.00	-2.30	5.29
17 Espinosa P. Cristian	15.00	-1.93	3.719	Garzón L. Jorge	20.00	2.70	7.29
18 Espinoza H. Fausto	15.00	-1.93	3.719	Garzón O. Pablo	17.00	-0.30	0.09
19 Flores Alejandro	17.00	0.07	0.005	Granda Diego	15.00	-2.30	5.29
20 Freire Miguel	16.00	-0.93	0.862	Guanoluisa Juan	15.00	-2.30	5.29
21 García Rafael	16.00	-0.93	0.862	Lagla Galo	17.00	-0.30	0.09
22 Granda Hugo	19.00	2.07	4.291	Mantilla Daniel	16.00	-1.30	1.69
23 Guaminga Jose	17.00	0.07	0.005	Merizalde Javier	20.00	2.70	7.29
24 Hidalgo Bolivar	16.00	-0.93	0.862	Olalla Luis	20.00	2.70	7.29
25 Llano Ricardo	16.00	-0.93	0.862	Paucar Lenin	20.00	2.70	7.29
26 Mena Ricardo	17.00	0.07	0.005	Perez Marco	16.00	-1.30	1.69
27 Molina Limber	15.00	-1.93	3.719	Perugachi Gabriel	20.00	2.70	7.29
28 Moreno Juan	16.00	-0.93	0.862	Pilicita Darwin	14.00	-3.30	10.89
29 Mozo Santiago	13.00	-3.93	15.434	Quel Pablo	18.00	0.70	0.49
30 Muyulema Geovanny	11.00	-5.93	35.148	Quishpe Byron	17.00	-0.30	0.09
31 Oñate Erick	14.00	-2.93	8.577	Rios Carlos	15.00	-2.30	5.29
32 Paguay David	19.00	2.07	4.291	Romero Alex	14.00	-3.30	10.89
33 Paramo Joffre	20.00	3.07	9.434	Salazar Xavier	17.00	-0.30	0.09
34 Reinoso Bernardo	18.00	1.07	1.148	Sevilla Freddy	20.00	2.70	7.29
35 Ruiz Henry	17.00	0.07	0.005	Simba Jairo	17.00	-0.30	0.09
36 Salazar Roberto	18.00	1.07	1.148	Terán Henry	19.00	1.70	2.89
37 Taco Luis	17.00	0.07	0.005	Torres Alexis	17.00	-0.30	0.09
38 Tipan Timoteo	18.00	1.07	1.148	Trujillo Luis	17.00	-0.30	0.09
39 Torres Abel	20.00	3.07	9.434	Villacres Jorge	15.00	-2.30	5.29
40 Uyana Diego	18.00	1.07	1.148	Villamar Javier	17.00	-0.30	0.09
41 Veloz Alex	19.00	2.07	4.291	*********	*****	*****	*****
42 Verdesoto Oscar	12.00	-4.93	24.291	*********	*****	******	*****
Mean	17.07			**Mean**	17.30		
$\sum\left(X_1 - \overline{X_1}\right)$		0.00		$\sum\left(Y_1 - \overline{Y_1}\right)$		0.00	
$\sum\left(X_1 - \overline{X_1}\right)^2$			182.79	$\sum\left(Y_1 - \overline{Y_1}\right)^2$			158.40
S			4.35	**S**			3.96
SD			2.08	**SD**			1.99

GRAPHIC INTERPRETATION

    A) MEANS

$$\overline{X_1} = \frac{\sum X_1}{n}$$

$$\overline{X_1} = \frac{717}{42}$$

$$\overline{X_1} = 17.07$$

PRE-TEST MEAN
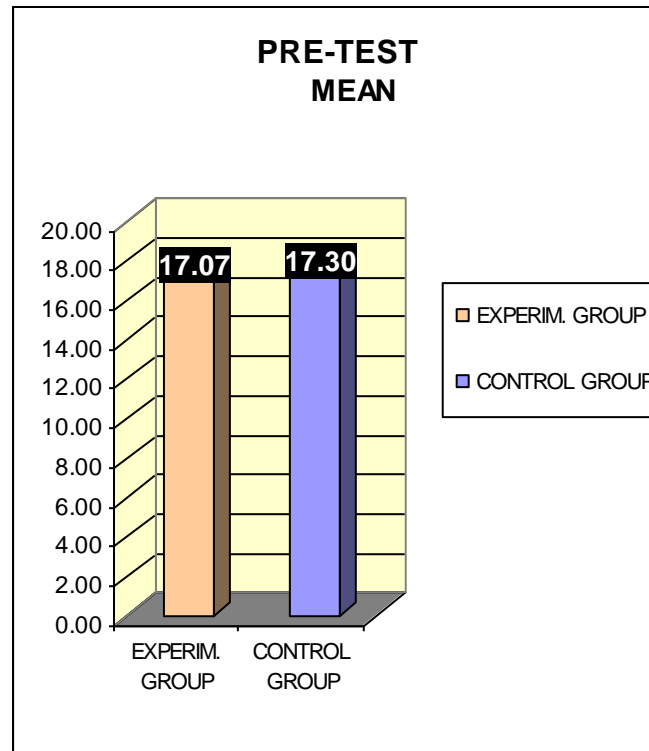
$$\overline{Y_1} = \frac{\sum \overline{Y_1}}{n}$$

$$\overline{Y_1} = \frac{692}{40}$$

$$\overline{Y_1} = 17.30$$

This chart reflects results about the students' academic performance when the school year began. Here we look that the Control Group had better scores and the opposite was for the Experimental Group.

Through these means and with the results provided by the Pre – Test we can observe this difference in performance.

B) STANDARD DEVIATIONS

$$S_{X1} = \sqrt{\frac{\sum\left(X_1 - \overline{X_1}\right)^2}{n}}$$

$$S_{X1} = \sqrt{\frac{182,79}{42}}$$

$$S_{X1} = 2.086$$

PRE-TEST
STANDARD DEVIATION

$$S_{Y1} = \sqrt{\frac{\sum\left(Y_1 - \overline{Y_1}\right)^2}{n}}$$

$$S_{Y1} = \sqrt{\frac{158,40}{40}}$$

$$S_{Y1} = 1.990$$

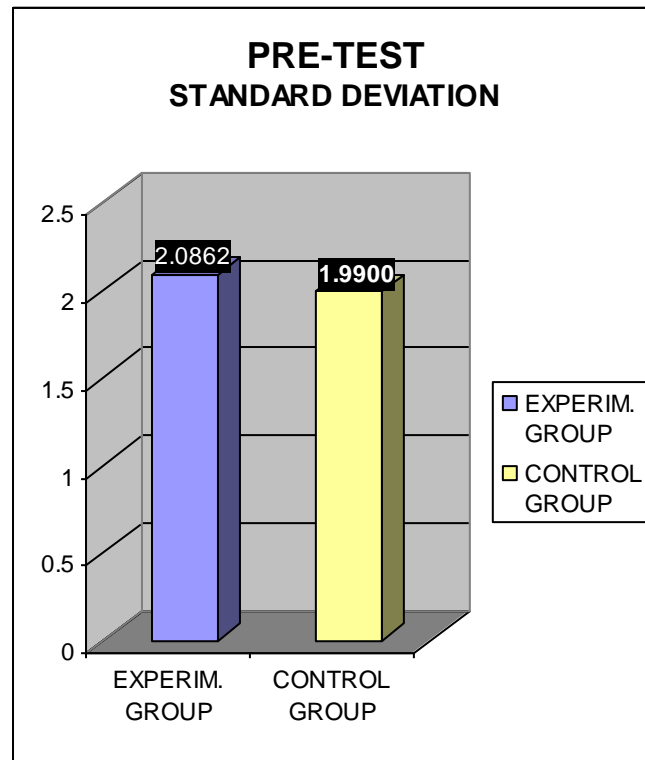We can observe in this data chart that after applying a Pre-test at the beginning of the school year the Experimental Group presents the biggest standard deviation. That means that this course is scattered in its individual scores, furthermore it is the reflect of the previous and individual knowledge of SS which find scattered will be more homogeneous with the use of the new methodology, which it was confirmed by us after applying a Post –test at the end of the quarter.

In addition this picture shows us some indications of the extent in which individual score are closer to the mean. This data show us how near or far they are from the mean of individual score thus, In the smaller variance, the values are cluster about the mean and in the biggest variance the values are scattered from the mean.

TABLE N° 03

	POST-TESTS						
	Date:	28/11/2006		**Date:**	28/11/2006		
	Group:	**Experimental**		**Group:**	**Control**		
n	**Full Name**	X_2	$X_2 - \overline{X_2}$	$\left(X_2 - \overline{X_2}\right)^2$	**Full Name**	Y_2	$Y_2 - \overline{Y_2}$	$\left(Y_2 - \overline{Y_2}\right)^2$
1	Aguilar Franklin	18.00	-0.56	0.31	Amon Diego	10.00	-6.73	45.23
2	Altamirano Mauricio	17.00	-1.56	2.44	Andrango Wilmer	18.00	1.28	1.63
3	Alvarez Alex	17.00	-1.56	2.44	Anacleto Jhon	16.00	-0.73	0.53
4	Analuisa Freddy	19.00	0.44	0.19	Buitron Carlos	19.00	2.28	5.18
5	Araque Armando	16.00	-2.56	6.56	Bustamante Byron	19.00	2.28	5.18
6	Arias Christian	20.00	1.44	2.07	Camacho Roberto	17.00	0.27	0.08
7	Barragan Cristian	19.00	0.44	0.19	Chamba Cristian	10.00	-6.73	45.23
8	Bastidas Luis	18.00	-0.56	0.31	Changoluisa Diego	16.00	-0.73	0.53
9	Borja Kleber	20.00	1.44	2.07	Chavez César	16.00	-0.73	0.53
10	Cabrera Angel	19.00	0.44	0.19	Chisaguano Oscar	17.00	0.27	0.08
11	Calvache Hector	19.00	0.44	0.19	Chulca Cristian	17.00	0.27	0.08
12	Cardenas Cristian	20.00	1.44	2.07	Condor Paul	15.00	-1.73	2.98
13	Cevallos Roberto	18.00	-0.56	0.31	Davila Diego	16.00	-0.73	0.53
14	Chillagana Luis	20.00	1.44	2.07	De la Cruz Alex	18.00	1.28	1.63
15	Condor Santiago	16.00	-2.56	6.56	Flores Luis	17.00	0.27	0.08
16	Cruz Ernesto	20.00	1.44	2.07	Gallardo Carlos	20.00	3.28	10.73
17	Espinosa P. Cristian	16.00	-2.56	6.56	Garzón L. Jorge	17.00	0.27	0.08
18	Espinoza H. Fausto	18.00	-0.56	0.31	Garzón O. Pablo	17.00	0.27	0.08
19	Flores Alejandro	19.00	0.44	0.19	Granda Diego	17.00	0.27	0.08
20	Freire Miguel	20.00	1.44	2.07	Guanoluisa Juan	16.00	-0.73	0.53
21	García Rafael	20.00	1.44	2.07	Lagla Galo	20.00	3.28	10.73
22	Granda Hugo	20.00	1.44	2.07	Mantilla Daniel	10.00	-6.73	45.23
23	Guaminga Jose	19.00	0.44	0.19	Merizalde Javier	19.00	2.28	5.18
24	Hidalgo Bolivar	17.00	-1.56	2.44	Olalla Luis	17.00	0.27	0.08
25	Mena Ricardo	16.00	-2.56	6.56	Paucar Lenin	18.00	1.28	1.63
26	Molina Limber	16.00	-2.56	6.56	Perez Marco	19.00	2.28	5.18
27	Moreno Juan	19.00	0.44	0.19	Perugachi Gabriel	20.00	3.28	10.73
28	Mozo Santiago	15.00	-3.56	12.68	Pilicita Darwin	17.00	0.27	0.08
29	Muyulema Geovanny	20.00	1.44	2.07	Quel Pablo	16.00	-0.73	0.53
30	Oñate Erick	20.00	1.44	2.07	Quishpe Byron	15.00	-1.73	2.98
31	Paguay David	19.00	0.44	0.19	Rios Carlos	17.00	0.27	0.08
32	Paramo Joffre	20.00	1.44	2.07	Romero Alex	14.00	-2.73	7.43
33	Reinoso Bernardo	19.00	0.44	0.19	Salazar Xavier	17.00	0.27	0.08
34	Ruiz Henry	17.00	-1.56	2.44	Sevilla Freddy	17.00	0.27	0.08
35	Salazar Roberto	20.00	1.44	2.07	Simba Jairo	17.00	0.27	0.08
36	Taco Luis	19.00	0.44	0.19	Terán Henry	18.00	1.28	1.63
37	Tipan Timoteo	20.00	1.44	2.07	Torres Alexis	17.00	0.27	0.08
38	Torres Abel	18.00	-0.56	0.31	Trujillo Luis	19.00	2.28	5.18
39	Uyana Diego	19.00	0.44	0.19	Villacres Jorge	19.00	2.28	5.18
40	Veloz Alex	20.00	1.44	2.07	Villamar Javier	15.00	-1.73	2.98
41	Verdesoto Oscar	19.00	0.44	0.19	*********	*****	*****	*****
42	*********	*****	******	*****	*********	*****	******	*****
	Mean	18.56			**Mean**	16.73		
	$\sum\left(X_2 - \overline{X_2}\right)$		0.00		$\sum\left(Y_2 - \overline{Y_2}\right)$		0.00	
	$\sum\left(X_2 - \overline{X_2}\right)^2$			88.10	$\sum\left(Y_2 - \overline{Y_2}\right)^2$			225.98
	S			2.148721	**S**			5.649375
	SD			1.4658516	**SD**			2.3768414

GRAPHIC INTERPRETATION

A) MEANS

$$\overline{X_2} = \frac{\sum X_2}{n}$$

$$\overline{X_2} = \frac{761}{41}$$

$$\overline{X_2} = 18.56$$

POST TEST MEAN
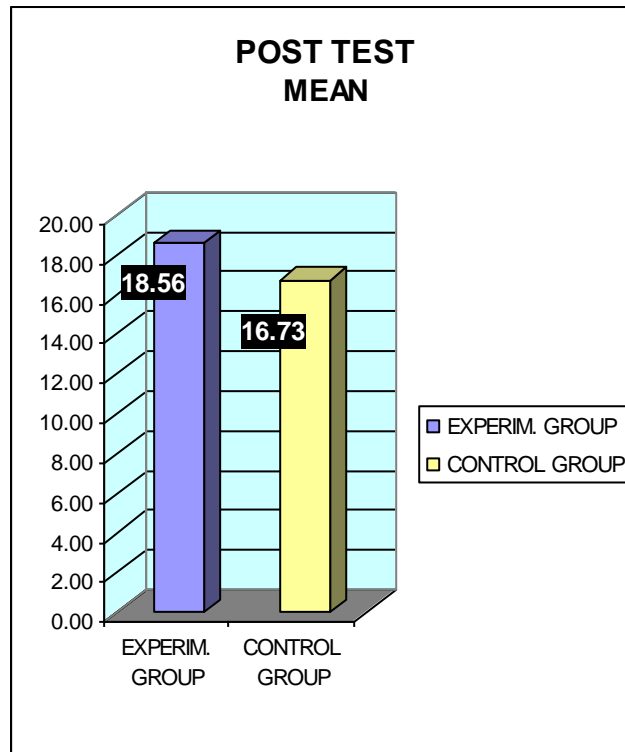
$$\overline{Y_2} = \frac{\sum \overline{Y_2}}{n}$$

$$\overline{Y_2} = \frac{669}{40}$$
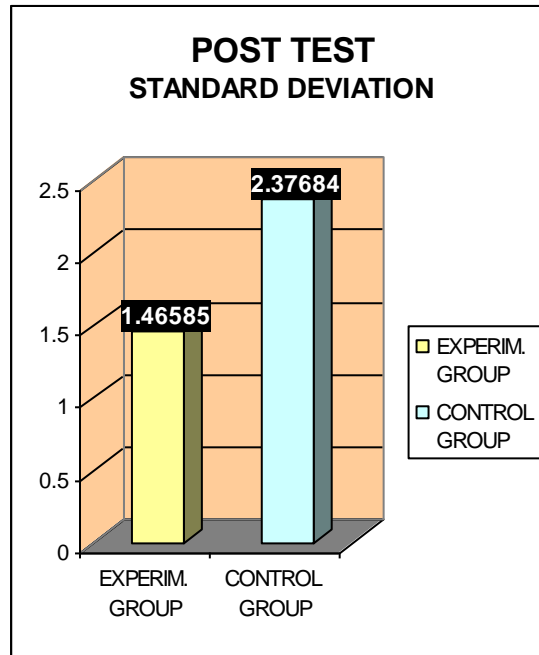
$$\overline{Y_2} = 16.73$$

This chart provides us data about the academic performance of Ss after the elapse of the first quarter, which shows an improvement of the Third Maths & Physics receiving virtual classes which did not occur with Third Electronic receiving classes in a traditional way.

B) STANDARD DEVIATIONS

$$S_{X2} = \sqrt{\frac{\sum\left(X_2 - \overline{X_2}\right)^2}{n}}$$

$$S_{X2} = \sqrt{\frac{88.10}{41}}$$

$$S_{X2} = 1.465$$

POST TEST
STANDARD DEVIATION

$$S_{Y2} = \sqrt{\frac{\sum\left(Y_2 - \overline{Y_2}\right)^2}{n}}$$

$$S_{Y2} = \sqrt{\frac{225,98}{40}}$$

$$S_{Y2} = 2.37$$

These data indicate us that our objective was reached clearly. The chart shows that the individual academic performance is closer to the mean in the experimental group. That it means that the methodology applied permitted to homogenize a group of Ss. Additionally, in relation to their individual knowledge, the mean was increased after the Post- test application.

TABLE N°04

				EXPERIMENTAL GROUP PRE Vs. POST TESTS			
n	Full Name	X_1	$X_1 - \overline{X_1}$	$(X_1 - \overline{X_1})^2$	Full Name	X_2	$X_2 - \overline{X_2}$	$(X_2 - \overline{X_2})^2$
1	Aguilar Franklin	16.00	-0.93	0.862	Aguilar Franklin	18.00	-0.56	0.31
2	Altamirano Mauricio	16.00	-0.93	0.862	Altamirano Mauricio	17.00	-1.56	2.44
3	Alvarez Alex	17.00	0.07	0.005	Álvarez Alex	17.00	-1.56	2.44
4	Analuisa Freddy	16.00	-0.93	0.862	Analuisa Freddy	19.00	0.44	0.19
5	Araque Armando	18.00	1.07	1.148	Araque Armando	16.00	-2.56	6.56
6	Arias Christian	17.00	0.07	0.005	Arias Christian	20.00	1.44	2.07
7	Barragan Cristian	19.00	2.07	4.291	Barragan Cristian	19.00	0.44	0.19
8	Bastidas Luis	17.00	0.07	0.005	Bastidas Luis	18.00	-0.56	0.31
9	Borja Kleber	14.00	-2.93	8.577	Borja Kleber	20.00	1.44	2.07
10	Cabrera Angel	19.00	2.07	4.291	Cabrera Angel	19.00	0.44	0.19
11	Calvache Hector	18.00	1.07	1.148	Calvache Hector	19.00	0.44	0.19
12	Cardenas Cristian	18.00	1.07	1.148	Cardenas Cristian	20.00	1.44	2.07
13	Cevallos Roberto	19.00	2.07	4.291	Cevallos Roberto	18.00	-0.56	0.31
14	Chillagana Luis	20.00	3.07	9.434	Chillagana Luis	20.00	1.44	2.07
15	Condor Santiago	18.00	1.07	1.148	Condor Santiago	16.00	-2.56	6.56
16	Cruz Ernesto	20.00	3.07	9.434	Cruz Ernesto	20.00	1.44	2.07
17	Espinosa P. Cristian	15.00	-1.93	3.719	Espinosa P. Cristian	16.00	-2.56	6.56
18	Espinoza H. Fausto	15.00	-1.93	3.719	Espinoza H. Fausto	18.00	-0.56	0.31
19	Flores Alejandro	17.00	0.07	0.005	Flores Alejandro	19.00	0.44	0.19
20	Freire Miguel	16.00	-0.93	0.862	Freire Miguel	20.00	1.44	2.07
21	García Rafael	16.00	-0.93	0.862	García Rafael	20.00	1.44	2.07
22	Granda Hugo	19.00	2.07	4.291	Granda Hugo	20.00	1.44	2.07
23	Guaminga Jose	17.00	0.07	0.005	Guaminga Jose	19.00	0.44	0.19
24	Hidalgo Bolivar	16.00	-0.93	0.862	Hidalgo Bolivar	17.00	-1.56	2.44
25	Llano Ricardo	16.00	-0.93	0.862	Mena Ricardo	16.00	-2.56	6.56
26	Mena Ricardo	17.00	0.07	0.005	Molina Limber	16.00	-2.56	6.56
27	Molina Limber	15.00	-1.93	3.719	Moreno Juan	19.00	0.44	0.19
28	Moreno Juan	16.00	-0.93	0.862	Mozo Santiago	15.00	-3.56	12.68
29	Mozo Santiago	13.00	-3.93	15.434	Muyulema Geovanny	20.00	1.44	2.07
30	Muyulema Geovanny	11.00	-5.93	35.148	Oñate Erick	20.00	1.44	2.07
31	Oñate Erick	14.00	-2.93	8.577	Paguay David	19.00	0.44	0.19
32	Paguay David	19.00	2.07	4.291	Paramo Joffre	20.00	1.44	2.07
33	Paramo Joffre	20.00	3.07	9.434	Reinoso Bernardo	19.00	0.44	0.19
34	Reinoso Bernardo	18.00	1.07	1.148	Ruiz Henry	17.00	-1.56	2.44
35	Ruiz Henry	17.00	0.07	0.005	Salazar Roberto	20.00	1.44	2.07
36	Salazar Roberto	18.00	1.07	1.148	Taco Luis	19.00	0.44	0.19
37	Taco Luis	17.00	0.07	0.005	Tipan Timoteo	20.00	1.44	2.07
38	Tipan Timoteo	18.00	1.07	1.148	Torres Abel	18.00	-0.56	0.31
39	Torres Abel	20.00	3.07	9.434	Uyana Diego	19.00	0.44	0.19
40	Uyana Diego	18.00	1.07	1.148	Veloz Alex	20.00	1.44	2.07
41	Veloz Alex	19.00	2.07	4.291	Verdesoto Oscar	19.00	0.44	0.19
42	Verdesoto Oscar	12.00	-4.93	24.291	*********	*****	******	*****
	Mean	17.07			**Mean**	18.56		
	$\sum(X_1 - \overline{X_1})$		0.00		$\sum(X_2 - \overline{X_2})$		0.00	
	$\sum(X_1 - \overline{X_1})^2$			182.79	$\sum(X_2 - \overline{X_2})^2$			88.10
	S			4.35	**S**			2.14
	SD			2.08	**SD**			1.46

GRAPHIC INTERPRETATION

A) MEANS

$$\overline{X_1} = \frac{\sum X_1}{n}$$

$$\overline{X_1} = \frac{717}{42}$$

$$\overline{X_1} = 17.07$$

EXPERIMENTAL GROUP
MEAN
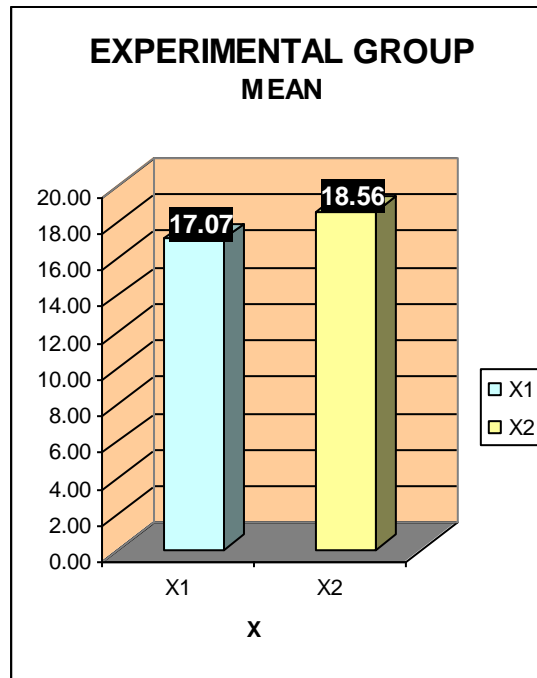
$$\overline{X_2} = \frac{\sum X_2}{n}$$

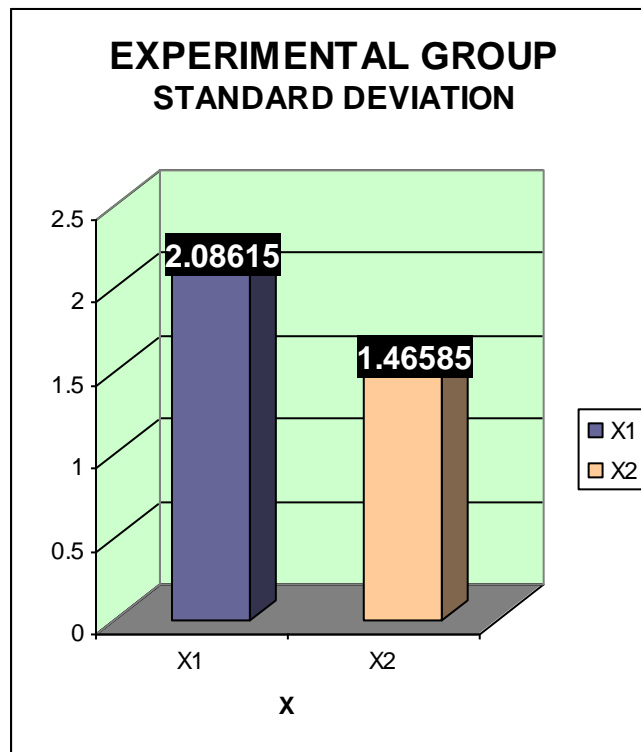$$\overline{X_2} = \frac{761}{41}$$

$$\overline{X_2} = 18.56$$

This chart reflects the improvement obtained by the SS in the first quarter. It shows that the implemented methodology had a satisfactory response in the learners.

B) STANDARD DEVIATIONS

$$S_{X1} = \sqrt{\frac{\sum\left(X_1 - \overline{X_1}\right)^2}{n}}$$

$$S_{X1} = \sqrt{\frac{182,79}{42}}$$

$$S_{X1} = 2.08$$

$$S_{X2} = \sqrt{\frac{\sum\left(X_2 - \overline{X_2}\right)^2}{n}}$$

$$S_{X2} = \sqrt{\frac{88.10}{41}}$$

$$S_{X2} = 1.46$$

EXPERIMENTAL GROUP
STANDARD DEVIATION

The individual scores are closer to the mean in the Post-Test than the Pre-Test, it means that the methodology applied permitted to homogenize a group of Ss. in their individual knowledge. In addition, the mean increased after applying the Post- test.

TABLE N°05

n	Full Name	Y_1	$Y_1 - \overline{Y_1}$	$(Y_1 - \overline{Y_1})^2$	Full Name	Y_2	$Y_2 - \overline{Y_2}$	$(Y_2 - \overline{Y_2})^2$
				CONTROL GROUP PRE Vs. POST TESTS				
1	Amon Diego	18.00	0.70	0.49	Amon Diego	10.00	-6.73	45.23
2	Andrango Wilmer	16.00	-1.30	1.69	Andrango Wilmer	18.00	1.28	1.63
3	Anacleto Jhon	19.00	1.70	2.89	Anacleto Jhon	16.00	-0.73	0.53
4	Buitron Carlos	20.00	2.70	7.29	Buitron Carlos	19.00	2.28	5.18
5	Bustamante Byron	17.00	-0.30	0.09	Bustamante Byron	19.00	2.28	5.18
6	Camacho Roberto	20.00	2.70	7.29	Camacho Roberto	17.00	0.27	0.08
7	Chamba Cristian	15.00	-2.30	5.29	Chamba Cristian	10.00	-6.73	45.23
8	Changoluisa Diego	20.00	2.70	7.29	Changoluisa Diego	16.00	-0.73	0.53
9	Chavez César	18.00	0.70	0.49	Chavez César	16.00	-0.73	0.53
10	Chisaguano Oscar	20.00	2.70	7.29	Chisaguano Oscar	17.00	0.27	0.08
11	Chulca Cristian	15.00	-2.30	5.29	Chulca Cristian	17.00	0.27	0.08
12	Condor Paul	17.00	-0.30	0.09	Condor Paul	15.00	-1.73	2.98
13	Davila Diego	19.00	1.70	2.89	Davila Diego	16.00	-0.73	0.53
14	De la Cruz Alex	15.00	-2.30	5.29	De la Cruz Alex	18.00	1.28	1.63
15	Flores Luis	15.00	-2.30	5.29	Flores Luis	17.00	0.27	0.08
16	Gallardo Carlos	15.00	-2.30	5.29	Gallardo Carlos	20.00	3.28	10.73
17	Garzón L. Jorge	20.00	2.70	7.29	Garzón L. Jorge	17.00	0.27	0.08
18	Garzón O. Pablo	17.00	-0.30	0.09	Garzón O. Pablo	17.00	0.27	0.08
19	Granda Diego	15.00	-2.30	5.29	Granda Diego	17.00	0.27	0.08
20	Guanoluisa Juan	15.00	-2.30	5.29	Guanoluisa Juan	16.00	-0.73	0.53
21	Lagla Galo	17.00	-0.30	0.09	Lagla Galo	20.00	3.28	10.73
22	Mantilla Daniel	16.00	-1.30	1.69	Mantilla Daniel	10.00	-6.73	45.23
23	Merizalde Javier	20.00	2.70	7.29	Merizalde Javier	19.00	2.28	5.18
24	Olalla Luis	20.00	2.70	7.29	Olalla Luis	17.00	0.27	0.08
25	Paucar Lenin	20.00	2.70	7.29	Paucar Lenin	18.00	1.28	1.63
26	Perez Marco	16.00	-1.30	1.69	Perez Marco	19.00	2.28	5.18
27	Perugachi Gabriel	20.00	2.70	7.29	Perugachi Gabriel	20.00	3.28	10.73
28	Pilicita Darwin	14.00	-3.30	10.89	Pilicita Darwin	17.00	0.27	0.08
29	Quel Pablo	18.00	0.70	0.49	Quel Pablo	16.00	-0.73	0.53
30	Quishpe Byron	17.00	-0.30	0.09	Quishpe Byron	15.00	-1.73	2.98
31	Rios Carlos	15.00	-2.30	5.29	Rios Carlos	17.00	0.27	0.08
32	Romero Alex	14.00	-3.30	10.89	Romero Alex	14.00	-2.73	7.43
33	Salazar Xavier	17.00	-0.30	0.09	Salazar Xavier	17.00	0.27	0.08
34	Sevilla Freddy	20.00	2.70	7.29	Sevilla Freddy	17.00	0.27	0.08
35	Simba Jairo	17.00	-0.30	0.09	Simba Jairo	17.00	0.27	0.08
36	Terán Henry	19.00	1.70	2.89	Terán Henry	18.00	1.28	1.63
37	Torres Alexis	17.00	-0.30	0.09	Torres Alexis	17.00	0.27	0.08
38	Trujillo Luis	17.00	-0.30	0.09	Trujillo Luis	19.00	2.28	5.18
39	Villacres Jorge	15.00	-2.30	5.29	Villacres Jorge	19.00	2.28	5.18
40	Villamar Javier	17.00	-0.30	0.09	Villamar Javier	15.00	-1.73	2.98
	Mean	17.30			**Mean**	16.73		
	$\sum(Y_1 - \overline{Y_1})$		0.00		$\sum(Y_2 - \overline{Y_2})$		0.00	
	$\sum(Y_1 - \overline{Y_1})^2$			158.40	$\sum(Y_2 - \overline{Y_2})^2$			225.98
	S			3.96	**S**			5.64
	SD			1.99	**SD**			2.37

CONTROL GROUP

A) MEANS

$$\overline{Y_1} = \frac{\sum \overline{Y_1}}{n}$$

$$\overline{Y_1} = \frac{692}{40}$$

$$\overline{Y_1} = 17.30$$

CONTROL GROUP
MEAN
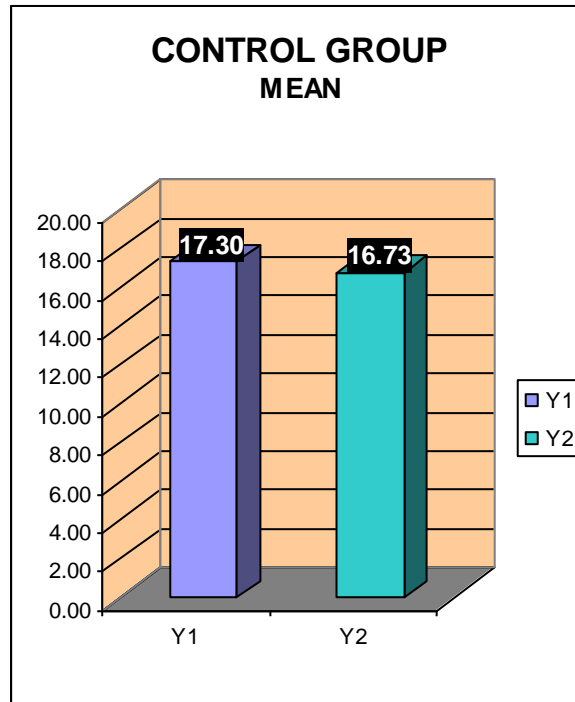
$$\overline{Y_2} = \frac{\sum \overline{Y_2}}{n}$$

$$\overline{Y_2} = \frac{669}{40}$$

$$\overline{Y_2} = 16.73$$

This graphic reflects that the using of traditional methodology did not motivate the learning process of the SS, because the mean of the course decreased. This indicated that the general academic performance in the Post-Test is lower than the Pre-Test, for this reason is necessary to apply new learning technologies.

B) STANDARD DEVIATIONS

$$S_{Y1} = \sqrt{\frac{\sum(Y_1 - \overline{Y}_1)^2}{n}}$$

$$S_{Y1} = \sqrt{\frac{158,40}{40}}$$

$$S_{Y1} = 1.99$$

CONTROL GROUP
STANDARD DEVIATION
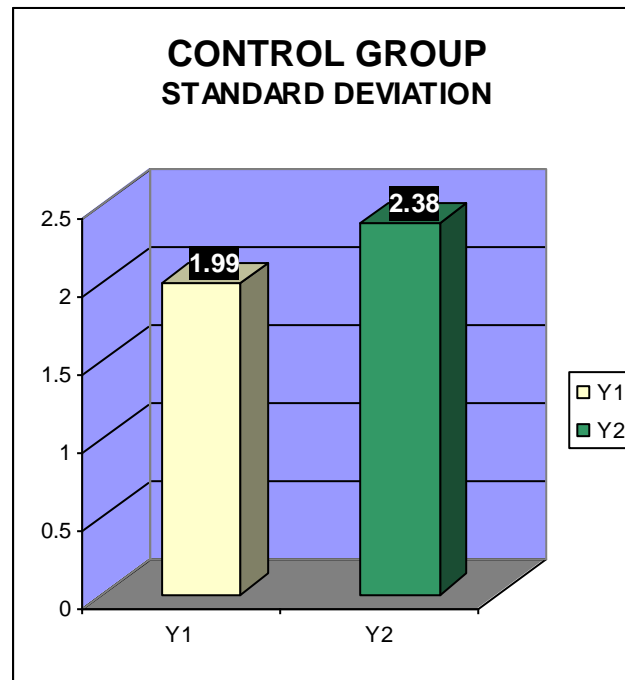
$$S_{Y2} = \sqrt{\frac{\sum(Y_2 - \overline{Y}_2)^2}{n}}$$

$$S_{Y2} = \sqrt{\frac{225,98}{40}}$$

$$S_{Y2} = 2.38$$

After analyzing this chart, it was demonstrated that the SS performance was too scattered. Additionally the individual performance is further from the mean.
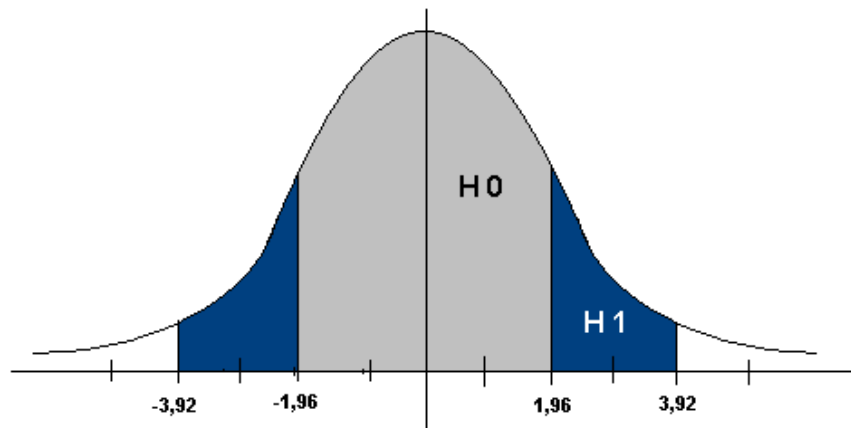
.

Z SCORE

Chart N° 9 Z Score Chart

$$Z = \frac{\overline{X}_2 - \overline{X}_1}{\sqrt{\dfrac{\left(S_{X_1}\right)^2}{42} + \dfrac{\left(S_{X_2}\right)^2}{41}}} \qquad\qquad Z = \frac{18.56 - 17.07}{\sqrt{\dfrac{(2.08)^2}{42} + \dfrac{(1.46)^2}{41}}}$$

Z= 3.92

Result H1 means that we can prove our hypothesis. The ICT affects in a favorable form the English learning process as a foreign language in the students of the Experimental Group"; because the Z Score → 3,92 is greater than the 1.96 needed for accepting the significance at the 0,10 level, because this is a Social Educative Project. And H0 is the reject zone.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

4. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

At the end of this project "The ICT incidence in the process of learning of the English language" we can reach the following conclusions:

a. It was possible to determine the great ICT Incidence inside in the English learning level in the 3rd Maths & Physics of the UEFDB.

b. At the same time, both the didactic resource EVCOL and a constructivist methodology at the Salesian style were implemented.

c. Based on C.E.F. standards in reference to the languages with an e learning support, it was achieved that the Ss of 3rd M.&P. in one quarter reach 78,2% at the A2 level (KET) of the mentioned C.E.F.

d. The students considered as an experimental group (3rd M&P) of our project, discovered another form of English learning beyond the classroom and school texts.

e. Evcol.com with its virtual tools, chat, forum, e-mail, etc. of the UEFDB, has a wide vision in relation to New Technologies with incidence in the learning process.

f. Once this research work was finished, we can deduce that the whole knowledge acquired along the career, it was productively secured which it allow us to reach the goal proposed at the beginning of the same.

RECOMMENDATIONS

✓ To maintain an on-line platform has a high cost with an approximate value that goes up to *$2400 per year.* So to implement this type of projects, it is necessary to have economic resources to cover this investment.

✓ In the first stage of this project, the experimental group of Ss who apply to this modality was of 102 students; however, as it was aforementioned in relation to costs, there was a need to reduce the number of Ss registered in the platform to 41.

✓ For an educational institution which wants to implement an e-learning modality, it is recommended to consider the following points::
  - The Equipment of virtual classrooms (computer labs). These should have a NET LAN, INTERNET ACESS, with a communication speed of 256 KBPS, either with broad band channel or optic fibber.
  - The PCs should have a minimum hardware level of Pentium 4 DB 2,4 GH, memory RAM of 256 and 40 GB Hard disk.
  - To coordinate schedules for an exclusive access of the inscribed Ss of this e-learning modality.

✓ It is recommended to the virtual advisers having a clear, objective and opportune assistance at the moment of planning and execution of the proposed activities and to keep in mind at the moment of the design of a topic of a virtual class, to limit accesses, heavy files, graphic inconsistency, and non educational expressions used in their interventions.

✓ Finally, our recommendation for all interested people, it is simply that they brake their old paradigms and do not be afraid to introduce themselves in this virtual learning net, where they will obtain information about different topics and methodologies permitting to enrich their knowledge.

CHAPTER 5
ADMINISTRATIVE FRAME

5. ADMINISTRATIVE FRAME

RESOURCES

Knowledge and experience obtained during the course from the career that it has been developed on the part of author; as well as studies and methodological and scientific applications on the part of the tutors.

MATERIAL RESOURCES
- ✓ Didactical Material
- ✓ Books
- ✓ Dictionary
- ✓ Stationery
- ✓ Audio and video compact discs (CDs)
- ✓ Pamphlets
- ✓ Magazines

TECHNICAL RESOURCES
- ✓ Computer: CPU at least, Processador de PIV 2.4 Ghz, RAM Memory 256 Mb, 40 GB Hard Disk
- ✓ Internet: Band Width o Optic Fiber with a communication of 256 Kbps.
- ✓ Electronic Mail: under evcol.com domain
- ✓ Video camera
- ✓ Overhead projector
- ✓ Laptop: Celeron 800Mhz, Memo RAM de 64 Mb, 6GB Hard Disk
- ✓ Mobil Microphone

HUMAN RESOURCES
- ✓ Don Bosco High School Authorities
- ✓ Vice governing and Pedagogic Co-coordinator
- ✓ Don Bosco High School Students, Third year Maths & Physics major
- ✓ Some teachers interviewed for our study
- ✓ Researched group
- ✓ Students of linguistics Applied to English Language
- ✓ Support Technique Staff

BUDGET

- Didactical Material → $ 45,00
- Books → $ 30,00
- Dictionaries → $ 30,00
- Electronic Dictionary → $ 110,00
- Stationery → $ 120,00
- Audio and video compact discs (CDs)→ $ 45,00
- Pamphlets → $ 10,00
- Magazines → $ 15,00
- Technical → $ 450,00
- Computer → $ 350,00
- Internet → $ 150,00
- Electronic Mail → $ 15,00
- Video camera → $ 15,00
- Overhead projector(Rent) → $ 300,00
- Laptop → $ 550,00
- Mobil Microphone (Rent) → $ 25,00
- **TOTAL** → **$ 2260,00**

CHRONOGRAM

(Look annex 10)

CHAPTER 6
PROPOSAL

6. PROPOSAL

INTRODUCTION

The implementation of a virtual module in the process of teaching & English learning at the "Don Bosco "high school will use the platform and tools of the International Moodle Platform making a virtual course with characteristics of cooperative learning and Educational Technology made for secondary students of third year Maths and Physics Major

The interface of this virtual module is based in Constructivists methodology the same one is get with the open knowledge available all the time and the facility of the interaction (student-teacher and student-student). The developers of this project are facilitators of the knowledge for in this way to contribute to the development of the linguistics system.

JUSTIFICATION

Considering that our society needs the support of new technological trends to solve in an effective and timely way many problems of different fields, for example in the educational sector the Implementation of e-learning in the classroom, it will create a work environment for the correct development of each student; in order to accomplish the mission and to reach the objectives outlined by the institution.

The training of this virtual classroom will use a management knowledge platform guided by teaching on-line through Internet; and the equipment will have to consist with the minimal technical requirements for its installation and its correct operation; We have to mention that the institution has on large part of the required elements needed to implement the same.

To this we have taken as a reference the Salesian Educational Unit "Don BOSCO" (La Tola) and particularly the third years Maths and Physics major. this group of pupils was into the language comprehension ranges and the reached results.

USEFULNESS PRACTICES

The teaching project with virtual technology will benefit to all the signatures, in as much as it would be used in the following way: conferences video, forums video, virtual libraries, interactive software route virtual connection, web conferences Web, etc.

THEORETICAL USEFULNESS

We want to overcome many challenges posed by the applying of new pedagogic trends breaking paradigms of traditional education.

In order the students develops their abilities and skills in a practical way; they could get an interaction using all of the language process.

METHODOLOGICAL USEFULNESS

It is supported in the Salesian curricular design with an innovative proposal and supported in new pedagogic trends based in the constructivism model which is being applying in this Educational Unit, these are the following:

Autogogía: self education pedagogy

Hodogogía: Accompaniment pedagogy

Infogogía: Interactive Pedagogy

Neurogogía: Cerebral Pedagogy

The pedagogic process, which is guiding the development of our project and to which all signature in the institution must be held, it is the "Holistic Systemic and processing" that it is an integral teaching and by processes

OBJECTIVES

GENERAL

To implement a new didactic resource of teaching of English as second language through the creation of one an e-learning classroom in Educational Unit Don Bosco, then it will be evaluated the advantages and outcomes.

SECONDARY

✓ To improve interaction; the students will be able to use the English language all the time.

✓ To implement a new technical for innovative students, achieving the motivation and at the same time to improve their learning process taking advantage of a practical way the acceptance of the students to learn English as a second language. Because, it is according whit necessities and expectancies of the learners and in the educational practice.

✓ To implement some techniques and exercises; the students will be more active and could develop their knowledge

SITUATIONAL AND DIAGNOSTIC ANALYSIS
THE MAIN S.O.W.T.
STRENGTHS

✓ Institutional leadership within geographic zone (Quito's downtown)

✓ Institutional prestige through a Salesian education style with approach in values.

✓ Optimal and flexible e-classroom equipment for navigating the internet and applying new communication technologies.

✓ English teacher's qualification, by the Cradle project, in methodology and evaluation fields.

✓ Students with good predisposition to learn English.

✓ High teachers' commitment towards their workings fulfillment.

✓ Set up an English program according to our reality.

✓ Steady technical support.

OPPORTUNITIES

✓ Heightening institutional prestige by increasing a new technological methodology.

✓ Following the national English program, sponsored by the Education Ministry and coordinated by the Cradle Project.

✓ Attending to language courses and using OWTE texts of the Cradle Project.

✓ Contacting English native speakers (teachers and students).

✓ Accessibility to all type of information (Internet, magazines, television, among others) released by English countries.

✓ Using English language as a personal development tool.

WEAKNESSES

✓ Lack of English classrooms destined to language learning.

✓ Few technological methodologies suitable for English language learning.

✓ Few key didactic resources for developing language activities in and outside the classroom.

✓ Traditional educational system

✓ Low student's motivation to learn a foreign language.

✓ Bad scheduling to obtain high quality learning.

✓ Low knowledge or bad usage of internet tools.

✓ Excess of students in classroom.

✓ Low wages.

THREATS

✓ Other educative institutions already count with e-learning methodologies and internet facilities.

✓ Defective fulfillment with schedules established for project execution.

✓ Limited Internet access or connection through defective equipment at home.

✓ New computer viruses in the Net influencing on a normal language learning process.

✓ Surfing the Internet when there is connection jam.

✓ Bad tutor's timetable organization.

✓ Free access to censured-Internet information.

CRITICAL PATHWAYS

- Shortage of didactic resources
- Lack of language learning classrooms.
- Low timetable distribution.
- Excess of students in the classroom.
- No students' motivation
- Low internet handling knowledge.
- Low Internet access extra classes.
- A few of methodology by teachers.
- A few of teacher's training and updating

STRATEGIES

- To organize work groups for making its own didactic material.
- To manage with the local government the materials donation, funding or good dowry for this project.
- To increase language teaching hours and decrease students number in each classroom.
- To improve communication between head's department to speed up changes.
- To implement pedagogical proposals like e-learning.
- To update Net-tools handling before dealing with other departments.
- To set up some good rules to facilitate cooperation among students when using the computer.
- To train area members on e-learning usage and its platforms.
- To introduce e-learning and new methodologies through works.

VISION

The Educational Unit Salesian "Don Bosco" of The Tola as an leader institution in the National system of Half Education with Salesian style by means of the implementation of virtual modules aspires to establish a process of elite Teaching-learning, using technology and modern infrastructures, sustaining the accreditation from the prestige to level of the Metropolitan District and its International certification maintaining the pattern of practice of ethical, civic values and of conscience citizen.

MISSION

To form integral investigators students open to the new pedagogic and technological currents as it is the case of the humanist Virtual, creative Education with capacity of critical thought and of implanting alternative of solution to problems of the collective promoting the development the same one as commitment with the Institution Salesian and with the Society.

ACTION PATHWAYS

COORDINATION AREA AND STRATEGIC PLANNING

- To consolidate the Area of Foreign Language.
- To predispose English's professors the work as a Team.
- To request the Authorities the endowment of indispensable equipment for the appropriate function of the project.
- To make aware to the authorities the necessity to increase the load horary for the project development.

AREA OF DEVELOPMENT OF CONTENTS AND APPLICATION OF VIRTUAL METHODOLOGY.

- To make English professors aware about the importance of applying the methodology of the established Constructivism correctly inside the Virtual Project and their incidence in the learning.
- To use the methodological suggestions and the resources settled down in the user manual of the available platform www.moodle.org.

TRAINING AREA TO ENGLISH'S PROFESSORS ON THE HANDLING OF THE PLATFORM OF VIRTUAL INTERFACE.

- To socialize the experiences lived when attending the training courses has more than enough methodology and of virtual classrooms.
- To carry out forums and training shops for the members of the Area of the Foreign Language.
- To exchange points of view on the application of the methodology and the evaluation system.
- Acquired experience during the years of work as educational in different institutions.

AREA OF DEVELOPMENT OF THE LEARNING MODULES IN THE INTERFACE OF THE PLATFORM WWW.MOODLE.ORG.

Application of the acquired knowledge during the study in the university career.

It discharges of executable programs that work laterally with the platform

Revision of user's manual that offers this platform

Execution of the platform under the parameters settled down in the net of the Internet.

Creation of the main database with their respective administrating user

- The design and the structures of the learning modules with the characteristics of the technological constructivist in the platform.
- Creation and assignation of an user and password by member's students.
- Tests of interface functionality
- Results reached technically.

 POLITICS AND STRATEGIES

To make students aware of the great importance of the use of new English methodologies, strategies and dynamic techniques with a vanguard technology which it allows the student to stay motivated and able to discover for themselves, and then to apply them to real situations.

VIRTUAL EDUCATION

Virtual methodology or virtual education consists in that all or most part of learning and teaching activities are separated in time and space, interconnected by technological instruments "of top technology", and installed in a single auditory or classroom. This is the most advanced tendency in current education and it has enormous projections.
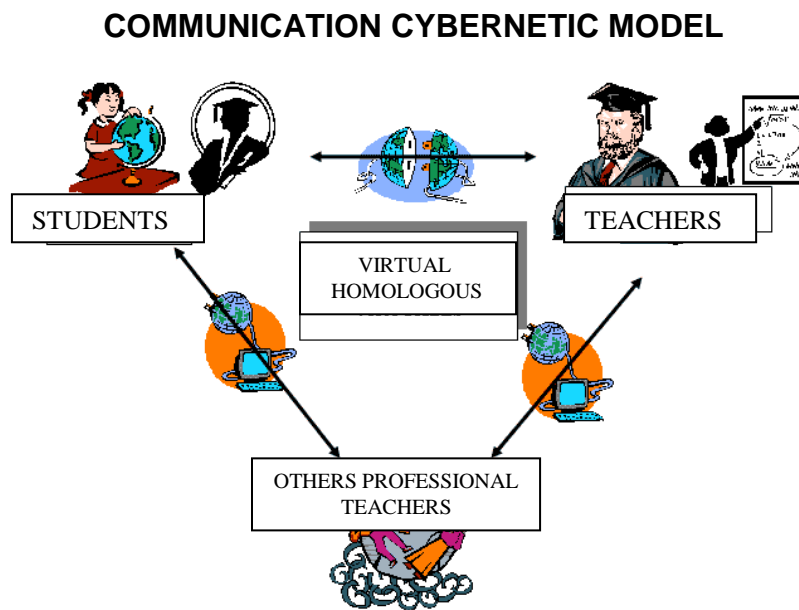
COMMUNICATION CYBERNETIC MODEL

STUDENTS

TEACHERS

VIRTUAL
HOMOLOGOUS

OTHERS PROFESSIONAL
TEACHERS

Chart. N° 10 Communications in Virtual Education

Chart N° 10 clearly determines the communication form at the moment of participating in a virtual education. The students form part of this communication as knowledge transmitter (answers, commentaries, etc) While the teachers become the receiver of that communication (answer and worries is a virtual tutor and facilitate knowledge). Last, people who form part of the feedback chain to this communication are formed by other professional teachers who transmit knowledge in a global form.

EVCOL & MOODLE PLATFORM

CHART 11 STRUCTURE OF WEB SITE *EVCOL*

EVCOL (**E**asy **V**irtual **C**ourses **O**n **L**ine) is a Didactical Resource with E-learning modality and is the result of our proposal, which is designed under the MOODLE platform. The last mentioned permits to design and to develop web pages with the goal to form on line Learning which is hosting a Web Server -this is the case of the SITEGROUND.com (Enterprise of Informatic services).

EVCOL has the capacity and the tools with lot of advantages in the concerned to information and interaction on line (full duplex & half duplex), they are email, forum, chat etc.

More Information is found in the EVCOL user manual for students **Look Annex N° 11** and Moodle manual for teachers **Look Annex N° 12**

METHODOLOGIES APPLIED TO E-LEARNING (EVCOL.com)

a) COLLABORATIVE LEARNING

The concept "collaborative learning helped by computer" refers to make relations among persons and computers to get a common objective of formative character. The experiences of collaborative learning attended by computer, is a teaching-learning strategy by which interact two or more individuals to build learning, through discussion, reflection and taking decisions, process in which the computer resources act as mediators.

It could be defined as a group of instruction methods and training supported with technology as well as strategies to propitiate the development of mixed abilities (learning and personal and social development) where each member of the group is responsible for his learning as that of the remaining of the group.

The expression collaborative learning refers to learning methodologies which motivate collaboration and interaction among individuals to know, share, and enlarge information that every one have about one issue. Collaborative learning arises mostly of group work instances or collaborative work. In this case participants united in groups play related, similar or different roles to achieve a common goal. To achieve collaboration it is required a mutual task in which the participants work together to produce something that they could not produce individually. The basic elements of collaborative work are:

o Goals: People development; human development is pursued
o Environment: Open, free to stimulate creativity.
o Motivation: It depends on personal commitment: freedom to participate or not.
o Process type: It could be formal or informal process.
o Individual contribution: Knowledge and personal experience to enrich the group.
o Group process steps: They are no so strict; they can change because this must be adapted to group development.
o Rules: Generative. They do not confine either classify rather generate creativity.
o Personal development: It is the goal as well as the group development.

o   Productivity: secondary. The goal is something learned in collaborative experience

o   Concern: Experience itself. Motivation is intrinsically.

o   Software: not decisive; It must offer virtually unlimited possibilities.

o   A common goal.

o   A reward system (as a group and individually).

o   Distributed answers.

o   Clear rules.

o   A coordination systems

o   Positive Interdependence

o   Interaction

o   Individual Contribution

o   Group and personal skills

o   Group self evaluation.

They can also be mentioned as elements which should be present and guarantee satisfactory results in the virtual group processes to the group applications. These are the technological elements which support virtual collaborative learning.

ADVANTAGES OF COLLABORATIVE LEARNING

The advantages of collaborative learning are many, and we can highlight among them:

a) To stimulate personal abilities, to diminish isolation feelings, favouring self efficiency feelings and to propitiate starting from an individual participation, the shared responsibility by the group results.

b) To allow the goals achievement in the collaborative work which is qualitatively richer in contents assuring quality and accuracy in the ideas and outlined solutions.

c) To propitiate in the student knowledge generation, because he is involved in the development of research where his contribution is valuable and he is not remaining as a passive entity only capturing information.

EXAMPLE COLLABORATIVE METHOD

Look Annex N° 13

FLOW CHART COLLABORATIVE METHOD

Look Annex N° 14

b) LEARNING BY THE CASE METHOD

Case method is understood as "the dialogue about real situations with learning goals". Teaching through the case method pretends the student has the opportunity to test his thought and his reaction way in front of certain situation.

Then this methodology makes the student learns through his own experience. At the end of the Program, he will have analyzed so many cases, and he will have taken so many decisions that the student will have developed analysis abilities, time administration, negotiation and mediation which will be vital in his professional future.

INDIVIDUAL PREPARATION

In order to give opinion and learn, it is vital the previous case analysis and individual preparation of the matters to treat.

WORK TEAM DISCUSSIONS

They outline common ideas and they defend different arguments among all the group members. The report elaboration is also a crucial point because the student learns how to develop his narrative abilities.

CLASS DEBATE

The teacher will invite the students to state the conclusions they have arrived in the work meetings. In this moment, the student in an individual way, should defend his opinions, make decisions and contribute with his conclusions to the class.

When the session is finished, the teacher will recapitulate the case main ideas, contributing with his professional experience to make a final conclusion of the discussed issue.

During the Project execution, are done a series of workshops dedicated to improve every ability and learning skills of the English language, which are practiced every day thanks to the case methodology. The workshop goals will be present as a solid introduction to the case method, including the three learning phases: The individual case preparation, case discussions in groups, and lastly, case discussion in class.

TRANSACTION TECHNIQUES

This workshop has as objective to analyze the negotiation process in all its extension and the different technical to apply during different phases. Thanks to the used methodology, the students will learn how to manage, combining theory and practical exercises about the "art of negotiating" as an effective instrument that they will be able to use in their daily life.

EXAMPLE CASE METHOD

Look Annex N° 15

FLOW CHART CASE METHOD

Look Annex N° 16

c) LEARNING BASED ON PROBLEMS

For the achievement of the goals described along the program, with those the skills required by a professional will be obtained, it is presented the method base on Problems (ABP). That it means learning centered in the student. Its essence is the interdisciplinary integration and freedom to explore what it is nor still known in the learning process.

This methodology allows professionals formation with skills to face the continuous science and discipline change. It also allows them to develop the necessary learning abilities to adapt and meet the changing community needs where they 'will work.

ADVANTAGES OF LEARNING BASED ON PROBLEMS

✓ It promotes a deep knowledge
✓ It stimulates the development of personal skills
✓ Learning environment is more interesting
✓ It promotes interaction between student and teacher
✓ It promotes collaboration between different disciplines
✓ It promotes a better knowledge retention
✓ It improves motivation

TEACHER ROLE

The teacher role requires of a fundamental change from transmitter teacher to a learning facilitator. His work will be to guide, moderate and facilitate an appropriate group dynamics. They do not look for information or dictate class. They guard the group learning process and discovery but, they are not knowledge "transmitter".

STUDENT ROLE

The student leaves his passive role receiving and memorizing information which is quickly forgotten and he assumes an active role.

With the ABP method, he will be motivated to learn more, integrating research knowledge.

STAGES IN THE ABP WORK

They allow the students to identify their needs to understand a problem. After that, most of the time, they reach their goals in an independent form.

These steps are:

➢ Step 1: Term Clarifying
➢ Step 2: Problem definition
➢ Step 3: Ideas rain storm

➢ Step 4: Discution and ideas categorization

➢ Step 5: Learning goals definition

➢ Step 6: Information research

➢ Step 7: Result report

ORGANIZATION OF THE COURSE FOR THE ABP METHODOLOGY

Groups of 8 to 10 students are conformed for the work in ABP groups. Each group will name a student moderator whose work is serving as connection among the group, tutors and the area boss. It is expected that each group moderator takes the attendance and that he is able to assume a group leadership position group in the eventuality the tutors are absent of the session.

Each group will receive a different problem-prepared by the teacher of each academic unit- related with the module to treat and based on real cases.

The students will have around 6 sessions to investigate about the case, using the learning methodology based on problems. At the end of the process, the students will have to make a presentation to the class with the content of their work.

EXAMPLE METHOD BASED IN PROBLEMS

Look Annex N° 17

FLOWCHART METHOD BASED IN PROBLEMS

Look Annex N° 18

d) LEARNING BY PROJECTS

This teaching methodology constitutes an authentic instruction model in which students plan, implement and evaluate projects that have application in the real world beyond the class classroom.

The instruction strategies based on projects have its roots in the constructivist approach which it evolved since starting the works of psychologists and educators as Lev Vygotsky, Jerome Bruner, Jean Piaget and John Dewey.

"Constructivism looks learning as the result of mental constructions; that it means, students learn building new ideas or concepts based on their current and previous knowledge." [16]

"It is still more interesting that the students find projects amusing, motivational and challenging because they work actively on them since they choose them and process." [17] .

ADVANTAGES OF LEARNING BASED IN PROJECTS

✓ "To prepare students for work positions. Boys are exposed to a great variety of abilities and skills as collaboration, project planning, making decisions and time handling (Blank, 1997; Dickinsion et al, 1998).

✓ "To increase motivation. Teachers frequently register increase in the attendance to the school, bigger class participation and better disposition to do tasks (Bottoms & Webb, 1998; Moursund, Bielefeldt, & Underwood, 1997).

✓ "To make connection between school learning and reality. Students retain more knowledge and abilities when they are committed with stimulating projects.

✓ "To offer collaboration opportunities to build knowledge. Collaborative learning allows the students to share ideas among them, to express own opinions and negotiate solutions, abilities all necessary in their future work positions.

✓ To increase social and communication skills

✓ To increase problem solving skills

✓ It allows the students to make and see available connections

✓   To offer opportunities to do contributions in educational institutions or in the community.

✓ To increase self-esteem. Students are proud of achieving something valuable outside the classroom.

✓ To allow students make use of their individual learning strengths and of their different focuses toward this.

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[16] (Karlin & Vianni, 2001)

[17] (Challenge 2000 Multimedia Project, 1999, Katz, 1994).

✓ To facilitate a practical form of the real world to learn how to use the Technology.

EXAMPLE PROJECTS METHOD

Look Annex N° 19

FLOW CHART PROJECTS METHOD

Look Annex N° 20

ANNEXES

GLOSSARY

7. GLOSSARY

APPLIED LINGUISTIC: A broad field of inquiry concerned with the study of language use, language acquisition/learning, and language disability utilizing models and concepts from a range of disciplines including theoretical linguistics, anthropology, education, sociology, and psychology. It has many applications, including language pedagogy, speech pathology, deafness education, translation, lexicography, computational linguistics, and stylistics.

ARPANET: (Advanced Research Projects Agency Network). Red precursor of the actual Internet.

AUTHENTICATION: Process with which is proved the identity of user red

BACKBONE: The spine 2. The main support of a structure 3. The spine of a book.

BANDWIDTH: The range of frequencies within a given band.

BAUD: A unit used to express the speed of electronic code-signals, corresponding to one information unit per second. Unit of data-transmission speed of one bit per second

BPI: Computing bits per inch

BPS: (Bits per second; Bits per second). Computing bits per second

BROWSER (Navigator): Computing read or survey (data files) via network Browser de WWW (Netscape, Internet Explorer, Mosaic.).

CARRIER: A person or thing that carries **2.** A person or company undertaking to convey goods or passengers for payment.

COOKIE: Mechanism used for a Web server where can keep and read information in the computer. It is used for knowing the preferences of the user and to access to a server that requires authentication, etc.

COUNT: Register and personal access of an internet user through a carrier. A count involves a user-id and access password.

CYBERSPACE: Term used frequently for referring to the digital world created and constituted for the computers net in particular the internet.

DISPERSION: The tendency for a set of scores to spread out or depart from the average or ¨typical¨ values in the set of scores. Dispersion is usually measured through the range, the mean deviation, the variance, and the standard deviation of the scores.

DOMAIN: Name that identify to each one host connected to internet.

DNS: Names systems of domains through of the host of internet identify the direction IP that correspond to a domain.

ELECTRONIC ADDRESS: Unique identification of a user inside of internet. It is formed join the user-id and the domain of symbol @.

A true experiment consists of control and experiment groups to which subjects have been randomly assigned, and in which all subjects are tested before and after the intervention or treatment under investigation has been administered to the experiment group. A pre-experiment may have pre and post treatment tests, but lacks a control group. A quasi-experiment has both pre and posttests, and experiment and control groups, but no random assignment of subjects.

E-MAIL: Internet service it's very same to the traditional mail, with electronic diver by each user.

EMOTICON: (Smiley) Symbol used in the electronic e-mail for give emphasis or left clear and make sense a phrase or word, for this one it's necessary to turn the head towards left. Someone of the emotions most commonly are: =) smile: = (sadness.

EXPERIMENT: A procedure for testing a hypothesis by setting up a situation in which the strength of the relationship between variables can be tested.

HYPOTHESIS: A formal statement about an expected relationship between two or more variables which can be tested through an experiment. For example: "Field-independent learners will learn grammar more effectively through a deductive approach than through an inductive approach".

HOME PAGE: (Host page) It is the principal page of Web place (Web Site).

HTML: (Hypertext Markup) Language used for creation of documents of hypertext or hypermedia. It is a standard used in the World Wide Web.

HTTP: (Hypertext Transport Protocol; Protocol of transportation of hypertext. Protocol used for file transfer or hypertext documents through of the net. It's based in an architecture customer/server.

INFERENTIAL STATISTICS: Statistics designed to enable the research to make generalizations about a population from data derived from a sample.

INTERNAUTA: Surfing in the internet.

INTERNET: An international computer network linking computers from educational institutions, government agencies, industry, etc.

INTRANET: Network is used in a private form with the same standards and tools of internet. It's a segment of the computation market.

IP Address: Compound numbers by four numbers for the character point (.) that identify to each host connect to internet.

IRC: (Internet Relay Chat, Internet tool that allow to user joint in a live conversation with other users (in a text form). It is being substitute for similar tools in the World Wide Web and multimedia that allow exchange of audio and video.

JAVA: Programming language independent of the platform to create for Sun Microsystems. Expressly though for an architecture customer/ server which is necessary only for exchange small code portion (called Applets) there is executer for the costumer.

MEAN ($\overline{x}$): The average of a setoff scores, obtained by adding the scores together and dividing by the total number of scores.

NET: Computing a network of interconnected computers.

NODE: Net connected to internet, which has own identity through IP direction of net and generally is a name of domain.

QUASI-EXPERIMENT: Has both pre-and posttests and experimental and control groups, but no random assignment of subjects.

RANGE: The differences between the highest and lowest values in a set of scores.

RELIABILITY: The extent to which (a) an independent researcher, on analyzing one's data, would reach the same conclusions and (b) a replication of one's study would yield similar results. *Internal reliability* refers to the consistency of the results obtained form a piece of research. *External reliability* refers to the extent to which independent researchers can reproduce a study and obtain results similar to those obtained in the original study.

RESEARCH: A systematic process of inquiry consisting of three elements or components: (1) a question, problem, or hypothesis, (2) data, and (3) analysis and interpretation of data.

SAMPLE: A subset of individuals or cases from within a population.

SECOND LANGUAGE ACQUISITION (SLA): The process through which individuals develop skills in a second or foreign language in tutored or untutored environments.

SHAREWARE: (Programa por distribución) Public distribution software free but not use free. Author establishes a trial period after which require a due of recuperation.

STANDARD DEVIATION (SD): A measure of the dispersion of a set of scores from the mean of the scores. It is calculated by obtaining the square root of the variance of a set of scores.

STANDARD ERROR (SE): The standard deviation of sample means. For a given sample, it can be calculated by dividing the standard deviation of the sample by the square root of the number of observations in the sample.

STATISTICAL INFERENCE: The process of making judgments about the characteristics of an entire population based on data from a subset or sample of that population.

STATISTICS: Sets of mathematical procedures for collecting. Classifying, and analyzing quantitative data.

TLD: Top Level Domain. Commands domains, like: edu, com and vi.

USER-ID: Unique user name. Each one has a unique user-id inside of node.

VARIABLE: A property or characteristic which may differ from individual to individual or from group to group. A great deal of research is carried out in order to identify or test the strength of relationships between variables. When one variable influences or affects a second variable, the first variable is called an *independent variable*, and the second is called dependent variable

VARIANCE: A measure of dispersion, calculated for a set of scores by subtracting each score from the mean, squaring the resulting values, adding these together, and dividing by the remainder of the number of scores minus 1.

WEB SITE: (Red side) Linking of Web pages that form a lone unit. It can have a Web site in only one page and is then when web page and web site are used indistinctly however is most common confuse the terms Web site, web page, homepage, (hosting).

WWW: (World Wide Web) System of customer architecture or server for distribution and obtaining of the information in Internet based in hypertext or hypermedia and it has been one of the basic pieces for making commercial and overcrowding the internet.

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