

## **CHAPTER II**

### **4. ANALYSIS AND COMPARISON OF THE RESULTS**

#### **4.1 BRIEF HISTORY OF TECHNICAL UNIVERSITY OF COTOPAXI**

In Cotopaxi the desired dream of a higher education institution is reached January 24, 1995. The active forces of the province make it possible, after countless efforts and having as antecedent the extension that created the Technical University of the North.

The local UNE-C was the first administrative home, then the premises of Luis Fernando Ruiz High school welcomed to the enthusiastic universities, and later, Simon Rodriguez Agriculture Institute, was the setting for academic activities, to finally settle in our own home, thanks to the adequacy of a half-built building that was meant to be Social Rehabilitation Center.

Actually, there are five hectares that make up the campus and 82 of the Experimental Center, Research and Production Salache.

We are an organization that defends a principle of self-determination of peoples, respect for gender equity. We declare anti-imperialist because we rejects the neoliberal globalizing action that favors free market failed, which drives a proposal

for a model based on private management, or writers refine public management reforms, so take a style of business management.

In these 15 years of institutional life has achieved maturity and emancipation that crucible of struggle for the good of the community, especially the most isolated and urged to address their needs. The new institutional challenge with the authorities continued commitment to quality and excellence in education.

In the Technical University of Cotopaxi offer many kinds of careers but specifically the English's career is a profession that contributes the improvement of teaching and learning foreign language based on scientific theories which are focus in methods, techniques and strategies appropriate to facilitate the acquisition of new knowledge and practical application of communicative competence for this reason the implementation of a English laboratory will contribute the acquisition of a foreign Language.

Learning English is important for the development of society in the XXI century, in response to a globalized world, which requires knowledge of the language in different areas: production, economic, scientific, technological, social and educational as a tool communication and information to enable the development people.

Train teachers with scientific-technical-humanist, with vast domain of English language, powering the skills and abilities that lead to the development of educational-teaching methodology to function efficiently and effectively in the educational field.

Hence, the importance of having a English Laboratory with all new technology as electrical as connectivity since will permit keep it in best conditions that will permit that the English students use it for learning a new language.

## 4.2 ANALYSIS AND COMPARISON OF THE RESULTS

### 4.2.1 Survey Applied to Technical University of Cotopaxi English Students

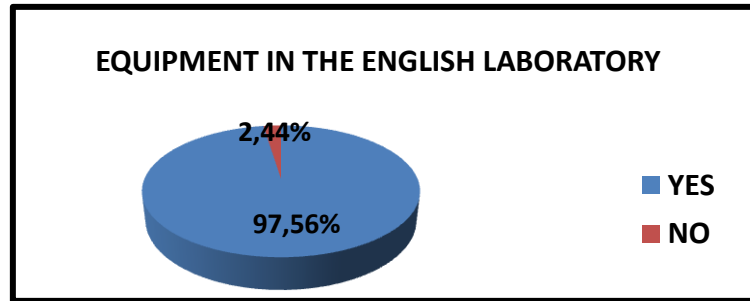
#### Question 1

1.- Do you consider that equipment in the English Laboratory should be in good operation conditions?

#### CHART N° 01

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
YES	80	97,56%
NO	2	2,44%
TOTAL	82	100%

#### GRAPHIC N°1



Source: Technical University of Cotopaxi English Career Students  
Elaborated by: The Researcher

According to the results, the 97, 56 % that is the majority of English students consider that the equipment of the English Laboratory should be in good operation conditions. And only the 2, 44 % consider that should not.

This result shows us that English students want to have equipment that provides good operation and the opportunity to use it and develop skills necessities to learn English. Having an English Laboratory with the best conditions to be used, the English students will have most opportunities to learn and improve skills using new technologies and Internet making grammar, vocabulary, listening and reading activities that are going to contribute into the teaching learning process.

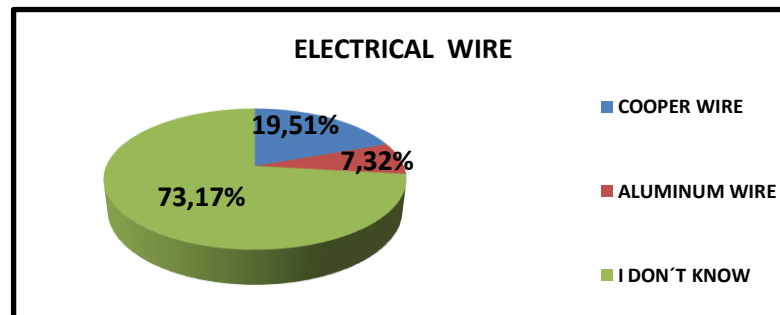
## Question 2

2. - What kind of electrical wiring is the most suitable in the English Laboratory?

CHART N° 02

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
COOPER WIRE	16	19,51
ALUMINUM WIRE	6	7,32
I DON'T KNOW	60	73,17
<b>TOTAL</b>	<b>82</b>	<b>100</b>

GRAPHIC N°2



Source: Technical University of Cotopaxi English Career Students

Elaborated by: The Researcher

Talking about electrical wires in the English Laboratory, the 73, 17 % do not know or have no idea about Electrical wires. But there are 19, 51 % of students that considers that Cooper wire could be suitable to use in the English Laboratory. On the other hand, the 7, 32 % of English students consider that the most suitable wire to use should be the Aluminum wire.

Considering that the English students have no huge knowledge and information about wires and electricity, researcher believes necessary to contribute with more information about these important aspects related with our English Laboratory creating a manual with basic concepts about suitable electrical wires to use in the English Laboratory. It is going to give them some information in order to clarify doubts about Electrical aspects that the researcher considers significant to students as they are going to learn and know how their English Laboratory is equipped.

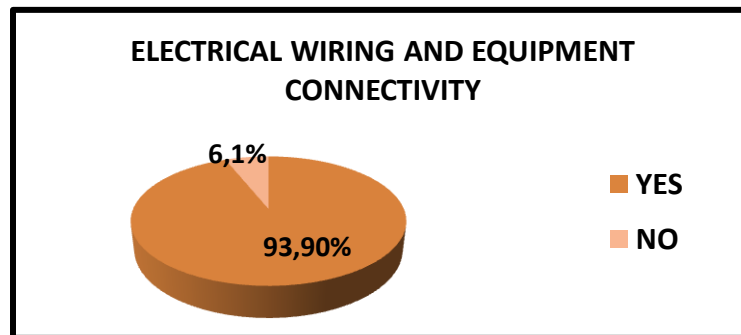
### Question 3

3.- Do you believe that is important to count with good electrical wiring and equipment connectivity in the English Laboratory?

**CHART N° 03**

VARIABLE	ABSOLUTE FREQUENCIE	RELATIVE FREQUENCY %
YES	77	93,90
NO	5	6,1
TOTAL	82	100

**GRAPHIC N°3**



**Source:** Technical University of Cotopaxi English Career Students  
**Elaborated by:** The Researcher

The 93, 9 % English students express that is the vital importance have good electrical wiring and equipment connectivity in the English Laboratory. And the 6, 1% considers that is not important.

For the researcher is clear the student's point of view since they want to have an English Laboratory that can offer them security as students as equipment because electricity can be very dangerous for people and for the equipment installations as well. Students can feel insurance in a Laboratory that give security them, preventing risks that electricity can represent such as: fire or electric shock.

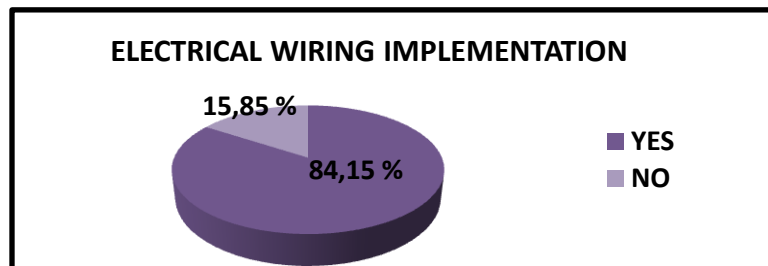
#### Question 4

4.- Can an adequate implementation of electrical wiring material guarantee the equipment security of the English Laboratory? Why?

**CHART N° 04**

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
YES	69	84,15
NO	13	15,85
TOTAL	82	100

**GRAPHIC N°4**



**Source:** Technical University of Cotopaxi English Career Students  
**Elaborated by:** The Researcher

The 84, 15 % English students believe that an adequate implementation of materials can guarantee the equipment security, however, the 15, 85 % considers that good materials implementation in the English Laboratory cannot guarantee security of the equipment.

The majority of the English students consider using adequate materials in the English Laboratory can guarantee security to the equipment because good materials are going to prevent electrical damages giving us more security and maintenance to the equipment. Another aspect that students consider important is about that adequate materials will offer as students and teachers security to work in it without afraid.

In other words, they consider that good materials, good security and good equipment to create the English Laboratory are going to give them the chance to use it converting as an important tool into the teaching learning process.

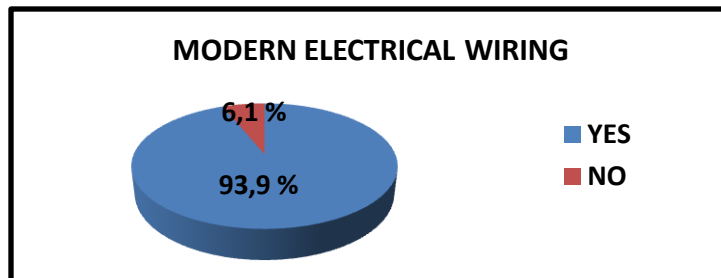
### Question 5

5.- Can the modern Electrical wiring help to the maintenance to the equipment?  
Why?

**CHART N° 05**

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
YES	77	93,90 %
NO	5	6,10 %
TOTAL	82	100 %

**GRAPHIC N°5**



**Source:** Technical University of Cotopaxi English Career Students  
**Elaborated by:** The Researcher

The results obtained in accordance with student's point of view determine that the 93,9 consider that a modern electrical wiring can help to the maintenance to the equipment and a few English students 6,1 consider that the a modern electrical wiring cannot maintenance the equipment in good conditions.

Most of the English students believe that a modern electrical wiring can help to the equipment maintenance in the English Laboratory because modern electrical materials can provide a good affluence of energy and better security when the English students and Teachers use them. New technologies need new materials too in order to maintain the equipment safe without any kind of problem. If we have modern electrical wiring in our English Laboratory we are going to have better equipment and with good equipment we are going to have an excellent resource and tool to teach and learn English strengthening the four skills.

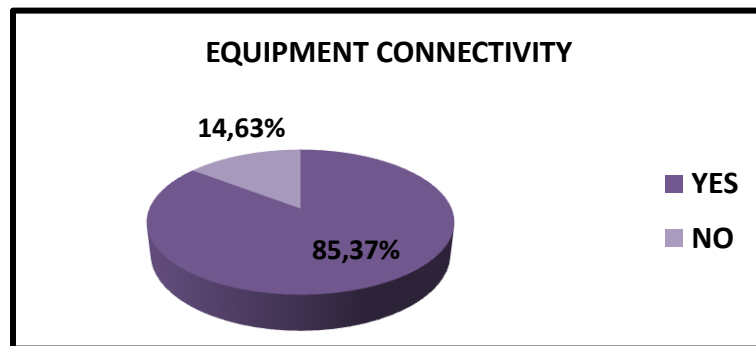
### Question 6

6.- Is the equipment connectivity vital for a good operation in the English laboratory?

**CHART N° 06**

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
YES	70	85,37 %
NO	12	14,63%
TOTAL	82	100 %

**GRAPHIC N°6**



**Source:** Technical University of Cotopaxi English Career Students  
**Elaborated by:** The Researcher

In agreement with English student's answer, the 85,37% express that the equipment connectivity in the English Laboratory is the vital importance for a good working operation and a small percent, 14,63%, consider that equipment connectivity is not the vital importance.

Researcher considers that Equipment Connectivity is so important for the English laboratory for example the computer network since they interconnect the equipment and drive the information to one computer to another. Students will access to a good and fast network connection that will permit the English students will make exercises or activities using Internet helping them to learn new abilities.



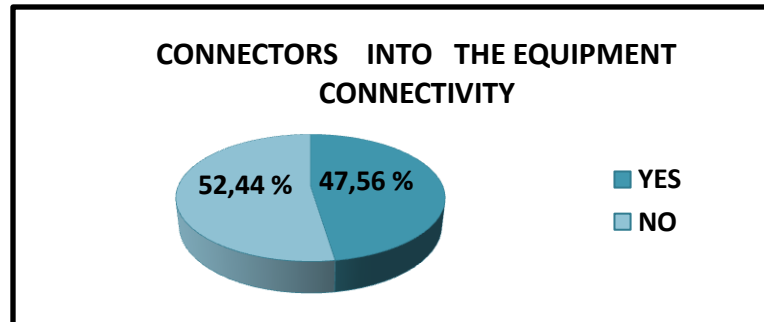
### Question 7

7.- Are connectors an essential part into the equipment connectivity?

**CHART N° 07**

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
YES	39	47,56 %
NO	43	52,44 %
TOTAL	82	100 %

**GRAPHIC N°7**



**Source:** Technical University of Cotopaxi English Career Students  
**Elaborated by:** The Researcher

The results obtained in accordance with student's answers determine that the 52, 44% consider the connectors are essentials part of the equipment connectivity, however, 47,56% consider that the connectors are not necessities into the equipment connectivity.

English students have no a clear idea about what is the purpose of connectors but they have an essential part into network wiring since they are the means used to connect the computer with the network. So, they have a great importance because if the computer has access to the network, English students will have access to Internet in order to access to new and updated didactic materials to that are going to give students the opportunity to increase their skills and knowledge in English.

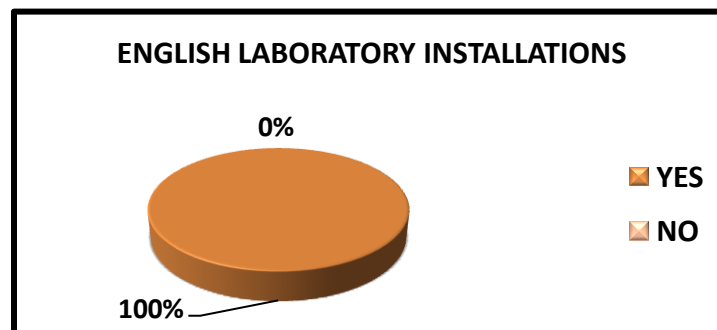
### Question 8

8. – Dou you consider that is essential count with excellent installations for the English Laboratory?

**CHART N° 08**

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
YES	82	100 %
NO	0	0,00%
<b>TOTAL</b>	<b>82</b>	<b>100 %</b>

**GRAPHIC N°8**



**Source:** Technical University of Cotopaxi English Career Students  
**Elaborated by:** The Researcher

The 100 % of the English students consider that is essential count with excellent installations and nobody of them believes that the English Laboratory should not count with excellent installations.

The English students want to count with an English Laboratory with excellent installations and operating conditions. For students, the laboratory has to have equipment in the best condition to be used because good installations, good equipment are going to provide them original alternatives of learning as using new technologies they will create new actives environments of teaching learning among teacher and students.

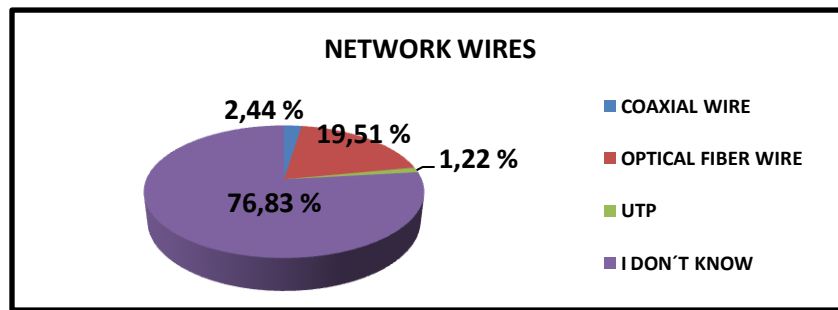
**Question 9**

9. - Which are the most suitable options of network wires in the English Laboratory?

**CHART N° 09**

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
COAXIAL WIRE	2	2,44 %
OPTICAL FIBER WIRE	16	19,51 %
UTP	1	1,22 %
I DON'T KNOW	63	76,83 %
<b>TOTAL</b>	<b>82</b>	<b>100 %</b>

**GRAPHIC N° 9**



**Source:** Technical University of Cotopaxi English Career Students  
**Elaborated by:** The Researcher

Talking about network wires in the English Laboratory, the most students, 78, 83%, do not have any idea about network wires, but there are some of them, 19,51%, that consider suitable use Optical Fiber. The 2, 44 percent of them consider as good wire to use coaxial wire and only 1, 22 percent believe that UTP wire can be a good option.

Considering that English students have no a huge knowledge about network wires some of them consider that a suitable option of network wire could be Optical Fiber wire. Nowadays, it has become an awesome option of network wire because it has many advantages. It transmissions is safer and can transmits data at high speed than another network wires. Optical wire makes it possible students surfing in Internet, at a rate of 2 million bps, unthinkable in the conventional system using in most of the Laboratories, where most users are connected to 28.000 or 36.000 bps.

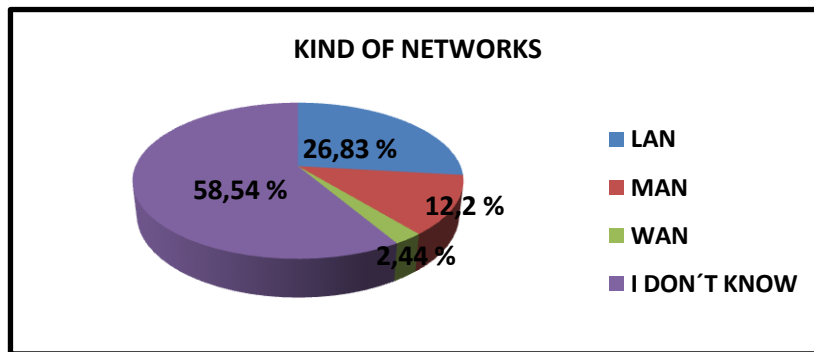
### Question 10

10. - What kind of network is the best to use in the English Laboratory?

**CHART N° 10**

VARIABLE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY %
LAN	22	26,83 %
MAN	10	12,20 %
WAN	2	2,44 %
I DON'T KNOW	48	58,54 %
<b>TOTAL</b>	<b>82</b>	<b>100 %</b>

**GRAPHIC N°10**



**Source:** Technical University of Cotopaxi English Career Student

**Elaborated by:** The Researcher

In the last question that is related with kind of networks, the 58,54 percent of students answer do not know nothing about it - but the 26,83 % thinks that LAN is the best option of network to use in the English Laboratory. And 12, 2 percent of students consider WAN as a good option as well. A smaller percent the 2, 44 thinks WAN as a excellent option of network wire.

A good number of English students know about networks, they consider LAN is an appropriate alternative in order to have a Laboratory with the highest quality because LAN gives the possibility of the PC's share among them programs, information, or resources.

#### ***4.2.2 Analysis of The Survey Applied for Teachers of the English Career***

##### **1. - Do you consider that the equipment in the English laboratory must be in the best conditions to be used by students?**

Considering that actually in our English Career there is no an English Laboratory, the English Teachers consider that the equipment must be in good operation conditions to be used for them and students.

They argue that is necessary to count with suitable equipment because they want to count with an adequate English Laboratory where teachers can teach and make specific activities that only in a Laboratory can be made giving students the opportunity to improve their English skills such as reading, writing, listening and speaking.

##### **2. - Could an adequate electrical wire guarantee the equipment security in the English Laboratory?**

Talking about electrical wire the English Teachers consider that in order to guarantee security in the equipment to keep in good operation conditions is necessary use appropriate materials.

Also, they believe that to use the good electrical wire is the one of the most important aspects for an English Laboratory or another kind of Laboratory since it let that all equipment can work in an appropriate form to be used for them and also students.

##### **3. - Do you think, is important to use innovate alternatives of connectivity and electrical wiring in the English laboratory?**

In order to maintain the new English Laboratory update in all terms, the English Teachers think that new alternatives and new technologies of connectivity and electrical wiring are important for the English Laboratory because it is going to

provide best connectivity that let speed in order to transmit information and a good electrical wiring is going to provide security for the equipment and people that are going to use the English Laboratory.

**4. - Talking about connectivity wires, Optical Fiber has many advantages since it permits transmit information so fast. Knowing that, do you believe that the Technical University of Cotopaxi must implement it in the English Laboratory?**

Knowing that Optical Fiber wire has many advantages the English Teachers considers that the Technical University of Cotopaxi must use this update kind of connectivity for its much advantage.

Students in the English laboratory will have better connectivity to share information on line without the network speed is made slow. The Optical Fiber is the most important connectivity systems around the world and must be implemented in the English Interactive Laboratory.

**5. - Into the network classification, the most important are Local Area Network (LAN), Wide Area Network (WAN), and Metropolitan Area Network (MAN). What kind of network do you believe is the best option to use in the English Laboratory?**

Most of the English Teachers have no a clear idea about kind of networks because they are not system or computer Teachers. Knowing that, some of them believe that the best option on network to implement in the English Laboratory could be Local Area Network (LAN) because it is the most common and used in the Laboratories.

**6. - Do you consider is important to create a manual with basic concepts of electrical wiring and equipment connectivity for teachers and students?**

The English teachers consider that it is a suitable, important and interesting option to create a manual with basic concepts of electrical wiring and equipment connectivity in order to avoid malfunctions of the equipment.

Also, they consider that a manual will help to increase new vocabulary when students read it and facilitate the equipment maintenance in the English Laboratory.

***4.2.3 Analysis of the Survey Applied for Authorities of the English Career***

MSc Gina Venegas Coordinator of the English career manifests that the equipment of the English Laboratory must be in great conditions to be operated effectively by students of the English Career.

Respecting to electrical wiring MSc Gina Venegas considers that a good electrical materials and wiring will help to care the equipment and all these aspects are going to provide security students, teachers and the equipment too. It is important that connectivity and electrical wiring in the English Laboratory must be updated.

Considering that Optical Fiber could be a better option of connectivity to be used in the English Laboratory, MSc Gina considers the vital importance the use and implementation of this new technology because will permit to have an English Laboratory updated to be used for the English students.

Into the implementation of new English Laboratory is important to choose the best option to use in the English Laboratory, MSc Gina believes that the best option could be Wide Area Network (WAN) because it permits to communicate from side to side,

also, the access to the communication it is better since it is used with an wireless connection.

To MSc Gina Venegas it is important and relevant to create a manual with basic concepts of electrical wiring and equipment connectivity for teachers and students because it permits detect some fail wires. Also, it allows avoid short-circuit and it is going to facilitate the use of it.



### **4.3 CONCLUSIONS AND SUGGESTIONS**

- There is not an English Interactive Laboratory at Technical University of Cotopaxi that permits the English students improve their skills as listening, reading, writing, and speaking necessities in order to learn a new Language into the teaching learning process.
- The equipment connectivity and the installations of the English Laboratory in the English Career must be in optimal operating conditions to be used for the English Students to improve their skills.
- The English students and English Teachers have no enough knowledge about Electrical wiring and Equipment connectivity basic concepts for this reason they could no give a lot of information necessary for the researching about Electrical and Connectivity basic concepts.
- There is not a manual for the English Teachers and Students that provides basic and important principles of Electrical wiring and Equipment connectivity in order to know and prevent damage in the equipment of the English Interactive Laboratory.

## **SUGGESTIONS**

- The implementation and creation of a new English Laboratory is of vital importance for the English students because it is an amazing tool where students could improve and generate new skills important to acquire a new language and thus to create competent professionals with a high level and knowledge of the English Language.
- In order to have an adequate equipment connectivity and good installations, it is essential the use of equipment with modern characteristics to provide a better service for English Teachers and Students to complement the classic study routine of English Language improving the teaching learning process.
- Most of English Teachers and English Students need to have a little more information about electrical and connectivity basic concepts because actually we are living in a society with huge technological advances and are common to know about electrical and connectivity aspects since every day we use them in different ways of our live.
- The manual Electrical wiring and Equipment connectivity elaboration with basic principles is going to provide English Teachers and Students the opportunity to know about what equipment and networks are they using in their English Interactive Laboratory and they are going to have a better control about the use and Electrical wiring and Equipment connectivity maintenance.