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LICENCIATURA EN IDIOMA INGLES



TEMA:

DEVELOPMENT OF THE PROGRAM AND MANUAL FOR THE
TEACHER AND STUDENTS OF THE SUBJECT PROYECTO
ESPECIAL DE INVESTIGACION DIRIGIDA

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INTRODUCTION

As researchers, we must make decisions all of the time. Some decisions have more profound implications than others. Therefore, this work represents the results of the different activities that researchers of this investigation have done during the investigation process about the elaboration of a manual for the teacher and students of the subject Proyecto Especial de Investigación Dirigida of Licenciatura en Idioma Inglés at the UTEC.

But, an investigation work is understood completely, when the researchers are exactly working in the investigation process. Therefore, this investigation work will not teach you to investigate. This work will just indicate you, in general terms, the road you must walk and how to do it to obtain positive results at the end of your own investigation.

The characteristics of the problem you will investigate and the level of analysis you want to develop, and the objectives of your investigation will model the method you will use to investigate your problem.

So, this investigation work offers general patterns about the investigation process.

Researchers pretend to show the practical experiences, they had during the investigation process because the real investigation does not follow rigid schemes. In other words, the real investigation means movements in different directions, which are guided by a method.

Researchers of this work do not expect that students will abandon the way they investigate now in order to wholly adopt the proposed manual. Researchers think however, that there will be some ideas, techniques or hints here worthy of their attention.

According to the methodology used to develop the investigation, this research work has been structured in three chapters as follows.

Chapter one, Problematic Situation. The purpose here is to present a description of the current panorama of those aspects that require to be investigated. This includes the Statement of the Problem, Delimitation, Ranges of the Investigation and justification of the problem.

Chapter two, Theoretical Framework. This chapter presents some theoretical and conceptual focus that are relevant to sustain the investigation, Here are mentioned the Theoretical Background, Theoretical Basis of different authors, Importance of the proposed Manual, Conceptual Framework and the Objectives.

Chapter three, Methodology of the Investigation. The purpose of this chapter is to present in a descriptive way, how the investigation process has been conceived and developed in its different phases.

This research also has a bibliography, which describes the different sources that support the investigation. At the end, the annexes are included. Here are placed the instruments to collect the information, the study program of the subject Proyecto Especial de Investigación Dirigida and the Proposal. The proposal is a manual for teachers and students of the subject Proyecto Especial de Investigación Dirigida that has been elaborated as a solution of the need detected at the beginning of the investigation work. It includes concepts, procedure examples and exercises.

CHAPTER I

PROBLEMATIC SITUATION

1 . STATEMENT OF THE PROBLEM

English Language is spoken by about 500 millions of people around the world. Therefore, English is the second language that has been adopted by most countries, races and civilizations. El Salvador is one of the countries where English is taught because it is a language that contributes to its socioeconomic and cultural development.

Even though, El Salvador has been punished through decades by many things such as: diseases, wars, earthquakes, poverty and so on, It has also received many rewards. For example: In the educational area; there are many Institutions where English is taught as a foreign language. One of them is **Universidad Tecnológica de El Salvador (UTEC)**. The UTEC was born on June 12, 1981. This University was founded to make the difference in the future of Superior Education. It was created as an answer to the necessity of forming professionals, with the capacity enough to contribute to the socioeconomic development of El Salvador. Since nineteen years ago, this University has been working constantly to acquire academic excellence. The UTEC obtained the authorization to start its teaching - learning

activities through the Accord No. 1066, March 26, 1981, which was given by the Ministry of Education of El Salvador.

From that date on, in spite of the adverse Civil War, the UTEC arose as a different academic option for the country. From the beginning, the mission of the UTEC has been Formar integralmente a través de las funciones de enseñanza, investigación y proyección social, excelentes profesionales académicos comprometidos con el desarrollo humano y el destino de El Salvador.

In 1982, UTEC opened the Faculty of Humanities and Natural Sciences. This faculty offered three careers: Lic. en Psicología, Lic. en Trabajo Social y Lic. en Idiomas actually known as Lic. en Idioma Inglés.

Nowadays, El Salvador is changing; for that reason, it has more needs. UTEC, aware that learning English had become a need, in its major degree, designed a PENSUM containing 35 subjects that had to be studied in 4 ½ years. This pensum filled the needs of the time in which was created. During this time, the “Old Study Plan” was focused in the preparation of professionals to teach English. UTEC, wanting to form excellent professionals and to determine the profile of the professional in the Major careers made a revision of its plans. The Language Department Coordinator and his team made an exhaustive investigation to determine the profile for the *Lic. en Idioma Ingles*.

Investigations, interviews, and surveys were conducted with private enterprises, students, graduate people, teachers and specialized people in the field, in order to obtain the needs of the society and to train professionals to work in other areas such as: Industry, Tourism, Marketing and Commerce.

This investigation emitted many demands and needs. For that reason, the profile for the *Lic. en Idioma Inglés* in its New Study Plan or Study Plan 2000 modified in a certain way the old plan. Therefore, in an attempt to fill the needs and demands of the society, *Study Plan 2000* was presented. UTEC, wanting to give an integral education, has included in both plans the subject *Proyecto Especial de Investigación Dirigida*.

Proyecto Especial de Investigación Dirigida is a subject which objectives are oriented to prepare students in the development of an investigation process. This subject is part of what the UTEC wants to reach in its mission Formar integralmente a través de las funciones de enseñanza, investigación y proyección social excelentes profesionales.... *Proyectos* has to be taken by the students in the last semester of the major, because this is a previous preparation to the graduation process.

Teachers and students of *Proyecto* faced some needs when they were teaching/studying this subject. At present, at the university there is no written

guidance in English to follow, so it makes it a little bit difficult to be taught and learned. It is important to mention that in the Teaching- Learning Process (TLP) there are many components to make it effective.

A very effective component is the material used to teach or learn. Within these materials we have: audiovisual aids, texts, manuals, and so on. Because *Proyecto* is a subject that guides students to make an essay of what a thesis is, the researchers suggest a manual to be used in this subject..

A manual is a small book especially one giving instructions; if students and teachers have this tool in their hands, the TLP will succeed. Students will not have the difficulties of misunderstanding and teachers will have standardized information written in English to all students of the English major.

For that reason, it was necessary to elaborate a standard Manual for the teacher and students of *Special Project*. In this way, students of this subject would have a written guidance, which will help them to learn how to carry out a thesis or any investigation project, step by step, in an easier form.

Using this standard manual, students will be able to avoid some difficulties they have when they are trying to investigate and write a pre-project.

So, with the intention of solving this problem, the following question was enunciated:

Is it necessary to design a manual to be used by teachers and students of the subject Proyecto Especial de Investigación Dirigida at the Universidad Tecnológica de El Salvador?

2. DELIMITATION OF THE PROBLEM

This investigation project took place at Universidad Tecnológica de El Salvador during the second term of the year 2000 and the first of 2001. The target population was made up of teachers who had taught the subject *Proyecto Especial de Investigación Dirigida* and students who took this subject during the first and second semester of year 2000.

3. RANGES OF THE INVESTIGATION.

This investigation project had ranges that determined the theoretical and empirical aspects of the topic *Development of the Program and Manual for the teacher and students of the subject Proyecto Especial de Investigación Dirigida at the UTEC*. Therefore, this project consisted in the elaboration of a manual for the teacher and the students.

So, the contents of this manual was material in English. It is important to clarify that this manual has been a compilation of bibliographical information gotten from different sources.

3. JUSTIFICATION OF THE PROBLEM.

Day by day learning English has become a requirement in all fields of Science and Technology. UTEC wanting to accomplish its vision *Llegar a ser la mejor Universidad del país, la de mayor credibilidad, la más innovadora, la de mayor proyección y en resumen la de mayor calidad académica*, and with the compromise to prepare excellent professionals who fulfill the requirements that the new millennium asks for, has made curricular changes in the pensum of all major careers.

In spite of these changes, the subject *Proyecto Especial de Investigación Dirigida* has been contemplated in the old and new plan for the major in English. This is a very important subject because it enables students to develop the steps of an investigation project.

Let us remember that the mission of the UTEC is *Formar integralmente a través de las funciones de enseñanza, investigación y proyección social excelentes profesionales académicos ...* In other words, the researchers

in an attempt to give accomplishment to the areas of teaching and investigation proposed a manual to facilitate the investigation process. The English Language Department (ELD) at UTEC, is the responsible to manage and develop this task for the different English courses and the Major in English. The subject *Proyecto Especial de Investigación Dirigida* has to be taken in the last term of the Lic. en Idioma Inglés.

This subject has great importance due to the fact that it is a rehearsal of what an investigation process is. The investigation process is composed of different phases: Defining a problem, analyzing studies related to it, selecting a research strategy, selecting appropriate instruments, collecting data, interpreting them and writing the investigation report.

Therefore, teachers as well as students needed a tool that showed them the road they had to walk, to obtain an excellent result. Until now there had been no written material in English for the subject *Proyecto*. The existent bibliographical information is written in Spanish, so there was no modern written tool to support the development of the thematic contents.

That was the reason why this research has been relevant since it has given the teachers and students of *Proyecto* a manual that explains step by step the phases of an investigation process.

Besides, this research was looking forward, supplying the ELD with a manual for the subject *Proyecto* with the purpose of making students participate actively in the TLP.

The investigation of this topic benefits teachers and students who are interested in the modern investigation of any problem. Students would obtain a guide with clear steps to follow in an investigation project and teachers would have a written material in English to develop the contents.

For that reason, this manual contains the theory, procedures, examples and exercises, on how to start when choosing and limiting a topic, how to locate information about the topic, how to read and take notes from the sources, to outline the document, how to write and revise the document and how to format the document as UTEC requires it.

Moreover, this work has developed the bibliographical information, steps to locate books in the library, use of bibliography, and other sources. The result of this investigation shows students how to execute their own investigation project. The researchers hope that the results of this investigation help teachers and students to elaborate proper instruments to orient a standard, systematic and continuous investigation process in order to obtain a logical unity, which is necessary in all the investigation process. In this way, students will write

relevant works, with concrete solutions to the chosen topic as an object of study. Also, it will reinforce the areas of teaching and investigation and will be a way of supporting the accomplishment of the mission that the UTEC has established.

It is important to say that with this manual the researchers do not pretend to discard or substitute the existent materials. This manual will be another tool that the teacher and students will have as a guide to develop the contents.

Based on the reasons above mentioned, the researchers agreed that the elaboration of a manual for the subject *Proyecto Especial de Investigación Dirigida* is a great contribution to the TLP, the ELD, teachers and students of this subject and to the society that will have well prepared professionals.

CHAPTER II

THEORETICAL FRAMEWORK.

The researchers agreed, after analyzing the different information gathered from different sources that the most important elements of this research were: The antecedents of the problem, the theoretical basis, and the importance of the manual. This phase implied to analyze and expose the

theories, theoretical scopes, investigations and general antecedents that were considered valid for the investigation.

1. THEORETICAL BACKGROUND OF THE PROBLEM.

Taking into account that the *Teaching-Learning Process* consists in a group of successive phases of the educational event, as Lic. Hernández Roldán says: "... el PEA es un conjunto de fases sucesivas..."¹ the researchers decided to locate this problem, as an inherent part of the teaching-learning process developed in the subject *Proyecto Especial de Investigación Dirigida*, of Licenciatura en Idioma Inglés at the UTEC.

The main variables of the teaching-learning process are students, contents, environment and the teachers. In the modern didactics, *Teaching and Learning* means an intentional and systematical process. This process begins with the statement of a concrete and definitive goal and concludes in the realization of the new planned behavior of the students.

If this new planned behavior is not obtained, the current teaching-learning process must be revised to improve it. So, students and teachers of the subject *Proyecto Especial de Investigación Dirigida* have mentioned that they

¹ Hernández Roldán, Abner Antonio. "Evaluación Educativa" Pamphlet. P. 69

have had some difficulties during the development of the thematic contents of that subject, because they need a standard manual that would help them to develop the different phases of the investigation process in a logical unity.

Some of the factors that had incidence in these difficulties, for lacking of a written and standard manual were the following: some students had difficulties on: how to locate the problem in its social context, how to define the problem, how to analyze previous studies, how to select and develop instruments, how to collect data, how to interpret data and how to write the research report, among others.

This *research problem* has been treated in different ways by different authors. According to Muñoz Campos, “Antes de iniciar la investigación, el investigador debe conocer métodos, técnicas, instrumentos y procedimientos, para no realizar la investigación en forma empírica”². On the other hand, José Santos Castillo says: “...un trabajo de graduación relevante, cuyo valor no radique en una gran cantidad de páginas, sino en la unidad lógica de sus partes, en su consistencia y utilidad práctica”³. Besides, Raúl Rojas Soriano says: “...ningún texto sobre metodología enseña a investigar, sino solamente puede

² Muñoz Campos, Roberto. “Guía de Trabajo de Investigación Universitaria” 3ra. Edición. El Salvador. 1992. P. 1

³ Castillo S., José Santos. “Guía para elaborar el anteproyecto de graduación”. Pamphlet. P. 2

indicar, en términos generales, el camino que hay que recorrer, y la forma de hacerlo...”⁴.

For certain, there are many books about investigation methodology, but the majority of authors do not reach to get into the inner part of students’ problem. Students manifest that they do not understand completely the directions they have received to develop the different phases of the investigation process.

Therefore, the researchers must be trained in general methodology and bibliographical methodology of the investigation. The first one, supposes the necessary approaching to the methodology of the specific investigation of the field, what the researcher is forming. And the second one means the domination of the study and writing techniques.

2. THEORETICAL BASIS

The theoretical basis refers to theories that support the investigation process. Therefore, researchers will mention some valid theories to frame this study. As Lic. Labrador expresses: “La base teórica se refiere a las teorías que respaldan la investigación”⁵.

⁴ Rojas Soriano, Raúl. “El Proceso de Investigación Científica”. Editorial Trillas. UNAM: Mexico. Facultad de Ciencias Políticas y Sociales. 1980. P. 5

There are many different ways to develop an investigation process. One way is to follow a pattern of experts' capability and their action in front of a research problem. This pattern has ample implications, but researchers will focus on only a part of it. In this pattern the teacher-researchers perceive some phenomena occurring in the environment space. These phenomena are problems in the teaching–learning process, obviously. The researcher may be a teacher, a teacher trainer, or an educational administrator.

The events that a teacher confronts in the environment space constitute what the researchers would call *real-life problems*. The researchers examine these events according to their experience, intuition and conceptualize them as research relevant objects. Then, the researchers approach the events from a professional point of view in what is known as the problem space, where they define a specific research problem in operational terms and select a strategy to study the problem as a research task. For this reason, the professional competence implies experience and studies, which will help the researcher to take professional actions to locate the problem space and realize the definition of the problem.

Then, the researchers will be able to formulate the selection of strategy to solve the problem. A proper strategy permits the solution of the problem. Most

⁵ Labrador, Rolando. "Lineamientos Generales para la elaboración de proyectos de investigación" Pamphlet. P.1

investigations develop a combination of parallel and sequential phases. For example, defining the problem, analyzing previous studies and selecting research strategy may occur partially in a parallel way. Selecting/developing instruments, collecting data and interpreting data may occur sequentially. The phase of writing the research report may occur simultaneously with selecting/developing instrument, collecting data and interpreting data, if the researcher decides to start writing the report quite soon.

Defining an investigation problem is a vital phase of the process. Therefore, Muñoz Campos, states: “En realidad un problema investigable es aquel que se puede investigar, y que sus variables sean accesibles, manejables y medibles...”⁶.

In everyday activities, teachers or administrators confront many problems, such as: students got terrible grades, students are dropping out, etc.

Teachers can not react immediately or directly on these problems, which form part of a broad reality called the environment space. However, researchers can start a process of narrowing down their observation of such events, until they are able to define an aspect that will form the basis of an investigation question.

⁶ Ibid 2 P. 94

Researchers conduct this process from their viewpoint, which determines the problem space of their profession. In other words, researchers identify problems by looking at these events through their professional capability. Their studies and experience can thus guide them to state questions that represent proper research problems in the field of the investigation process.

So, Lic. Labrador mentions: "... Asimismo, se expresa lo que acerca del problema se conoce y cuales son los factores que lo determinan o están vinculados con él ... además se definen las unidades de observación o características fundamentales del objeto de estudio"⁷.

During the process of defining a problem, the researchers ask themselves many questions, such as: Are the contents of the unit adequate? Are the study materials adequate? Is this research phase adequate? Are students motivated in terms of the contents taught?

After a little thinking, some of these questions may not stand for real worries, because they can be answered without great effort. The teachers may feel that the real problem lies somewhere else, and they will, of course, continue thinking about each of the other questions over the rest. The teachers can invest some time, in verifying their intuitive feelings with colleagues or reading related

⁷ Ibid 5

literature. In other words, unintentionally, the teachers are carrying out preliminary research that can provide them, with enough ideas to identify a problem having merit of a solution.

If the teachers feel that the real problem is an integral part of the following question: Is the research phase adequate? The next step would be to ask themselves questions of a more specific nature, such as Does the research phase represent a reliable measure of student's knowledge? These extra questions should help teachers perceive a research area that is much more concrete than their initial worries. The process of narrowing down can continue until they decide, for example, to study profoundly the question about the research phase format.

They are now ready to formulate the specific question, which types of test are suited to evaluate my objectives? If the teachers are satisfied with it, this question will represent the problem they wish to investigate. Therefore different causes, such as “ el grupo de alumnos es muy numeroso, el método del profesor no es adecuado, los alumnos faltan mucho a clases”⁸.

The phase of defining a problem is a vital one, since it will give form and focus to

⁸ Ibid 2 P.95

the study. Now, the teachers are ready to proceed with analysis of previous studies pertaining to the problem chosen. As researchers, teachers continue to work towards the solution of the problem by selecting an adequate strategy.

There are many different methodologies or research approaches. The selected strategy will most probably include more than one approach, but it must always be logical, since the strategy represents the internal vertebrate structure that supports and frames the investigation process.

In the educational field, systematic research does not exclusively means experimentation. The teachers deal with human beings, and the events they wish to examine are therefore not simple. Experimental research is one. This methodology is mentioned by Lic. Pérez de Galeano: "... aunque pueden ser aplicados selectivamente a ciertos fenómenos sociales. Se caracterizan por la introducción y manipulación del factor causal o riesgo, para la determinación posterior al efecto"⁹ and not necessarily the only type of investigation worth doing.

Other approaches like documentary analysis and correlational studies may also be employed. Numerous considerations, such as the reality teachers live in, their individual needs, the nature of the problem and the kinds of data required, affect the selection of the strategy.

Defining the problem and selecting the research strategy are only two steps in the research process, but they are the most important. Researchers must take care, when they have to develop instruments, collect and interpret data, and report the results. Their professional competence gives them the opportunity to bring about new information through research.

They just need to see the events in their environment space as possible research problems and then find acceptable answers to their questions. Such answers may mean the introduction of positive changes in their work. Their professional action will contribute to the improvement of teaching-learning process of the subject *Proyecto Especial de Investigación Dirigida* of *Licenciatura en Idioma Inglés* at the UTEC.

Another way to develop an investigation process, is a pattern that guides researchers from the early stage. Some inexperienced students, who will develop an investigation, know just a little about principles and rules to research. They do not have proper tools to enter in an investigation process. Muñoz Campos says: “Son numerosos los casos de estudiantes que por conocer muy

⁹ Pérez de Galeano, Josefina. “Lineamientos Generales para Elaborar y Presentar Trabajos de Investigación Científica” Folleto UES. S:S El Salvador. 1994. P.43

poco acerca de los principios y reglas de la investigación científica, no disponen de medios adecuados para introducirse a ella”¹⁰.

Therefore, some students-researchers are requiring practical methods for the bibliographic investigation, writing and execution of their projects. In the same manner, for analyzing, interpreting and writing their reports. So, they need a written guide to distinguish between the information problems and investigation problems.

They also need a written guide to establish a very clear separation, beginning with the exploratory to descriptive and explicative. It is necessary to emphasize the bibliographical investigation, developing the methodology to know how to locate books in the libraries, use of bibliographical cards and how to take notes from the sources.

Researchers must be prepared not only in the general methodology of the investigation. They also must be skilled in the methodology of the bibliographical investigation. The first one supposes the approaching to the specific field in what the researcher is being formed; and the second one, supposes the mastery of study and writing techniques.

¹⁰ Ibid 2 Cover Page.

To prepare researchers, the contents must be exposed clearly from the initial phases. For that reason, the structure of a written guide should begin with a first part, where basic information for students-researchers is included.

This information permits to guide students towards the second part, which will show them how to write and perform their own investigation project. So, in the third part, it is shown how to elaborate the report of their respective investigation. And, to complete some contents, at the end of the written manual, there are some annexes, which have examples of designed instruments prepared for students-researchers. Under these ideas, researchers must know that the investigation is defined as a set of methods, techniques and procedures to obtain some solutions to the different problems that they have decided to face.

When the researchers are investigating, they learn three moments. These moments correspond to three processes of the scientific investigation. First, they elaborate a theoretical focus. They conduct a revision of the literature about the problem that is going to be investigated. Second, researchers elaborate an empirical focus. This focus contains all the collected information by natural observation, by field studies or by experimentation. This implies all the work that the researchers have done, during the investigation of the problem, in a local and current reality. Third, the elaboration of the analysis. In this

moment, the researchers pretend to establish the level of approach that exists between the theoretical and empirical focus, taking as points of reference the objectives, questions, predictions or expectatives, if they have done a hypothesis.

In the aspect of the theoretical focus, the researchers make a collection or summary of the produced information by experts about the problem and related information. These data permit the researchers have a very clear reference framework about the variables of the problem, presentation of questions, objectives to determine the existent relationship between the variables (students, teachers, environment, thematic contents).

For variable according to James Brown “In the simplest terms a variable is something that may vary, or differ”¹¹. Also Lic. Pérez de Galeano explains: “Variable es cualquier condición susceptible de modificarse o cambiar en cuanto a calidad y cantidad. Puede ser medible. Las variables son todas aquellas características que varían de sujeto a sujeto, lo que vamos a medir, controlar y estudiar en la investigación”¹². The variables are the principal parts of the study. “The results of a study can not be logical if the variables are defined poorly or erroneously. The variables are, after all, the focus and center of any study”¹³

¹¹ Brown, James Deans. Understanding research in a second Language Learning, 1988. P.7

¹² Ibid 9 P.35

¹³ Ibid 11 p.9

On the other hand, the empirical focus is constituted during the fieldwork. The student-researchers decide how to obtain the information from people through different instruments. The intention is to collect the information that has been suggested by the question and the objectives. In this case, *empiric* means all that is derived from reality or observable and measurable experiences. The analytic part makes a comparison between the discoveries of the investigation and the previous discoveries.

There are the auxiliary methods of the scientific method. These methods are called: synthetic, inductive, deductive, analogous and modelation. The analytic method is a mental operation. Its object is to device a whole into its parts. The synthetic method is the operation of putting together as a whole, all the parts that were separated in the analytical method. In other words, it is the integration of the parts of the investigation. The deductive method has the antecedents, as the point of departure, which affirms a universal truth and the arrival point is the affirmation of a particular truth. So, the deductive process takes the researchers from the known to the unknown.

The analogous method is based on the comparison. And it is used in form of hypotheses. This is a supposed knowledge; therefore, it must be put under verification. Finally, it is the modelation method, which includes a model that is

similar to the studied model. In this case, the object is studied through the investigation of the model. The point of departure of all the investigations is the bibliographical investigation. It is done in books and related sources. It consists of looking for information in libraries, but it can be done as a field investigation or laboratory.

When the researchers make the decision of looking for information, in bibliographical sources, they already have chosen their topic. And they feel the desire of taking part in the action. So, they go to the libraries to know their particular organization and services. In this way, the researchers are arriving to the warehouse of human being's knowledge. No matter what the researchers want to know, the library is the most important place to look for.

Most university libraries offer orientation to show students-researchers how to find things in that place. " You should learn to use the library all by yourself "¹⁴ Such orientation is their surest bet for learning their way around a library. Possibly, the library offers a pamphlet explaining where everything is. A few minutes spent studying the instructions may save the researchers many hours of aimless wandering. After reading the pamphlet carefully, if the researchers search and still they can not find what they are looking for, they must ask for

¹⁴ Gay, L. R. *Educational Research. Competencies for Analysis and Application*. 1987. P.38

help. Librarians are always ready about answering questions and they will lead the researchers to the material they need, and give valuable advice.

When researchers begin a preliminary bibliography, they are looking for books, articles, and chapters in books on their topic, but they have not the vaguest notion what these are or where to find them. But, what sounds like an impossible task is actually quite simple. “ You should not hesitate to ask a reference librarian or a professor what index is most appropriate; the research tools used may differ but the process itself does not vary “¹⁵

About indexes and bibliographies; this task represents some difficulties, because it involves finding out what articles and essays are available on the researchers’ topic. The chief tools they need are in the reference room. There are many books which index, year by year, and all the articles in a multitude of magazines are available for the researchers. But, they need to know first which indexes cover what type of magazines, or the researchers could waste a lot of time scanning titles that have not potential usefulness.

As a necessity, the researchers will do a considerable amount of reading for their investigation. So, the researchers must read the introductory paragraphs of an essay quickly to discover the writer’s main idea. If that main idea is

¹⁵ Jenkins, Mark. Writing a Content Approach to ESL Composition. U.S.A. P.160

relevant to their investigation, they must continue reading carefully and note down any useful ideas on note cards. The researchers must pay special attention to beginning and ending sentences of paragraphs. These will likely be topic sentences conveying major ideas.

If the researchers are examining a book, the author's main idea will appear in the preface. They can thus get a quick clue concerning the usefulness of the volume. Usually a book will have a broader scope than their investigations. The researchers can tell from the table of contents, which chapters may be pertinent to their investigation, and they need only to consult those sections.

The book has an index, the researchers must try to locate their topic there. Then, they will be directed to precise the pertinent pages. The researchers must not forget to record on each note card the author's last name, abbreviated title and page number or numbers. If they will get the habit of writing down these essentials before they take notes, there is less chance of forgetting an item.

The researchers must summarize the ideas in their own words, except when they think they might want to quote directly. They must copy the author's exact words, and enclose them in quotation marks. " Direct quotation should be used for special effect, for variety, or because an idea is expressed especially well in

the original “¹⁶ If the researchers carelessly forget the quotation marks and use those words in their document, they will have committed a serious library offense called plagiarism.

The researchers must not simply omit the specific examples when they summarize, because they are going to need some for themselves. They must remember that they must give credit for these examples, as well as for the ideas the authors illustrate, even if the researchers put them in their own words, when they incorporate them into their document. Otherwise, the researchers will lapse into plagiarism. After the researchers have read all the material they feel is necessary to cover their topic thoroughly, they must gather up their note cards and classify them to fit the sections of their outline. If their outline is still a weak frame, now is the moment to put it into shape.

The actual writing of the document is the same as writing any other document except that the researchers will incorporate the material from the note cards into the document; either in their own words or through direct quotes. The researchers must give credit in endnotes to the original authors for ideas borrowed and actual passages quoted. Plagiarism, as all researchers must know, means using somebody else’s writing without giving proper credit. Most teachers consider plagiarism close to a criminal offense. The researchers can

¹⁶ Ibid 14 P. 170

avoid accidental plagiarism by using a moderate amount of care in taking notes. They must put quotation marks around any material that they copy.” Quotation should never be used because it is easier to write than good paraphrase “¹⁷

As the researchers are leafing through the note cards trying to sort them into categories, they must circle the quotation marks with a red pencil, so they can not miss them. There remains the problem of avoiding the author’s phrasing if they decide not to quote directly but to paraphrase. This dilemma is not so easily solved. The researchers naturally tend to write the idea down using the same phrasing, changing or omitting a few words. This close paraphrasing is still plagiarism. To escape it, the researchers must not even look at their source as they take notes that are not direct quotations. It is suggested that researchers use both methods verbatim notes and summarizing notes, and let the reading onto a single card.

The researchers will scarcely be able to fall into the author’s phrasing that way. The researchers must never quote directly unless the material is authoritative and convincing evidence in support of their investigation. “You should take care to fit quotations smoothly into your writing “¹⁸ “ If a quote is added, it has to be

¹⁷ Ibid 14 P. 170

¹⁸ Ibid 14 P.171

gracefully blended with the text, instead of standing alone with no connection to what precedes it or to what follows it.”¹⁹

Since their readers may want to consult the sources that the researchers quote in their document, they must give to their readers all the information necessary to allow them to look up the articles and locate the books that the researchers used. Most teachers these days will allow the students-researchers to insert the note numbers in the appropriate places in the text. Then, they work on the delimitation of the topic. After, the researchers begin to take notes in bibliographical cards, using a specific procedure. In this order, they begin to use different methods, techniques, and instruments, to develop step by step the investigation.

The researchers can deduce easily that *method* is a term identified with the way of thinking, how to do things; that *technique* is a term, which indicates the employment of procedures and instruments are like the tool to perform such procedures. As instruments, there are questionnaire, tests, and the guide of observation. Moreover, as techniques, there are the interview, survey, questionnaire.

In the formulation of the investigation project, the researchers should take care of the principal aspects in what a project is divided, such as the proposed

¹⁹ Zamora, Rosa Elizabeth. Instructive Handout for Beginners in the field of Research and Thesis Writing.

methodology for the formulation of the project, title of the project, basic information about the problem, construction of the project, title of the problem, construction of hypotheses or interrogations, causes, possible solutions, elaboration of objectives, variables, justification of the investigation, etc.

When researchers present their data, they use tables like diagrams. It is very important to design good instruments in order not to obtain confused information. Besides, they must be careful with the interpretation of the results of the investigation, and budget. Lic. de Galeano says “ la presentación de la información puede hacerse en dos dimensiones, la representación gráfica y la presentación numérica”²⁰

The investigation process has three specific parts. The first one includes its route, which means to work on the topic, problem objectives, hypothesis, methodology, design of the study, data processing, exposition of the results, conclusions, recommendations, and elaboration of the report. The second part is the formulation of the investigation project, which presents the principal aspects in what a project is divided in and organized way. It facilitates the logical and systematical criteria.

Consequently, the title of an investigation project must be clear, precise and complete. The difficulties of some researchers to decide the title they will use,

²⁰ Ibid 9 P.61

consist of the situation that they are not sure of, if they use as *title* of the project the *enunciation of the problem* or the *enunciation of the topic*. But, it is convenient to use as title the name of the topic. So, it is not convenient to use as *title* of the project the enunciation of the problem, because it is written as a derived interrogation of the topic.

Now, talking about what a *problem* is, in general, it is to point out a variable called *effect*. In that sense, problems are unemployment, school desertion, etc., but an investigation problem is deeper than a simple problem. An investigation problem includes, at least, two variables. For example, the following: “¿Influye el método didáctico empleado por el profesor, en el alto número de aplazados?”²¹ *número de aplazados* is one variable and *método didáctico* is another variable. In this case the dependent variable is *número de aplazados* it is influenced by the independent variable *método didáctico*. So, the variable *método didáctico* can be defined through its indicators: using of visual aid material, motivation of students, type of exercises, group work, etc.

The indicator of the variable *número de aplazados* should be given by the students who get the grades under 6 . Then, if that problem will be investigated, the researchers will present the problem, in such manner that the information about the cause (s) of the problem, can be obtained. The causes

²¹ Ibid 2 P.94

could be: the group of students is numerous, there is a bad discipline, there is an absenteeism of students on Friday and Monday or the teacher's methodology does not work well.

After thinking about the possible causes of the problem, the researchers analyze them. Then, the researchers discard the possible causes one by one, until the most probable one is found. Finally, they decide to prove if the teacher's method is causing that problem. Thus, having the effect of the problem and knowing the possible cause of it the researchers construct the problem of investigation. For instance, "¿Influye el método didáctico empleado por el profesor, en el alto número de aplazados en su curso de inglés?"²²

It is time to construct hypothesis or interrogations. According to Lic. Pérez de Galeano " Hipótesis son una tentativa de explicación anticipada al problema de investigación"²³. Raúl Rojas Soriano explains "La construcción de Hipótesis tiene como finalidad primordial dar una respuesta provisional al problema planteado"²⁴. Janet Johnson says that "Hypotheses are guesses (but of an

²² Ibid 2 P.95

²³ Ibid 9 P.33

²⁴ Ibid 4 P.103

educated nature) that represent the proposed explanation for some phenomena and that indicate in what way an independent variable is thought to affect, influence, or alter a dependent variable”²⁵.

A hypothesis has to be formulated properly. Explicative hypothesis are elaborated in base of the possible causes, the predictive hypothesis are elaborated in base of possible solutions and the interrogative ones are elaborated if the investigations is designed to give an answer to questions that involve observed causes and effects.

One example of hypothesis is : if the teacher reforms the didactic method, there will be less failed students in the English course. At this level, the researchers need to know in details, what the objectives mean within the investigation project. The objectives represent the goals that are pretended to reach through the correspondent execution of the action. In an investigation, the objectives are the reference points to guide the development of the investigation, but the hypothesis or interrogations guide such development.

The objectives can be general or specific, mediate or, immediate, practical or theoretical. For their ranges, the objectives can be general or specific. For their temporality, they can be mediate or immediate, and depending of their focus, the

²⁵ Buttolph Johnson, Janet. Political Science Research Methods. 1988. P. 43

objectives can be practical or theoretical. The objectives are built in a parallel way or before the statement of the problem. The researchers must not forget that any elaborated objective will have certain range, temporality and certain focussing.

The third part of the investigation project is the elaboration of the investigation report. When all the programmed phases are covered, the researchers already have finished the investigation. Now, they must communicate the results to other people. Therefore, they must know about writing techniques.

When talking about teaching learning process it talks about, methodology, teaching techniques, materials etc. Teachers have all these things to be used in the classroom. There are different methods that a teacher can apply in a teaching session. Each of these methods has a different focus, "Differences among methods at the level of approach manifest themselves in the choice of different kinds of learning and teaching activities in the classroom"²⁶. To perform the teaching activities, it is necessary to count on with the adequate materials.

For example, the audiolingualism uses dialogues and pattern practice extensively. So, teaching the steps in an investigation process, the teacher

²⁶ Richards, Jack C. Approaches and Methods in Language Teaching. 1986.

should use instructional materials. It is the teacher's responsibility to select the materials he/she will use to teach a class. A book full of examples of a given topic might be very helpful to a teacher whose English is not his/her mother tongue. "The nonnative does better with a text that provides a wealth of examples"²⁷

If the teacher and student have the appropriate materials, they will be involved actively in the TLP and will obtain better results. "If the processes actively engage the learners, then a more positive outcome is assured"²⁸.

When selecting a text the teacher should pay special attention to the table of contents and index to have a general idea of it and to see if it will suit all or most of the teacher's needs. " Skim these sections of the text to see which, on the surface, seem to agree with or include the previously specified preliminary requirements and then set them aside for further consideration"²⁹

To accomplish the above mentioned a manual for teacher and students of the subject Proyecto Especial de Investigación Dirigida should be used, since it will help and motivate students in the TLP.

²⁷ Murcia, Marianne Celce. Teaching English as a Second or Foreign Language. Second Edition. 1991. P. 433

²⁸ Wajnryb, R. Classroom Observation Task : A resource book for language teachers and trainers. P.124

²⁹ Ibid 21 P.435

3. IMPORTANCE OF THE MANUAL

As researchers think that the teacher should stimulate and motivate students to acquire the most of knowledge they can. Like all human beings students learn by their senses. One very important sense through which we learn is our sight. "Sight and hearing are two senses used most in humans teaching and learning activities of any kind and thus, they receive primary consideration. However, touch, smell, and taste are senses that should be exploited too"³⁰ A manual will be something that students will see and read to get a better understanding of the contents. For that reason, Teaching materials are of great importance and value. "If used effectively, they add a very important dimension to classroom activities"³¹

A manual is a useful tool because it offers the information that permits the proper orientation for teachers and students of the subject Proyecto Especial de Investigación Dirigida. Therefore, Cañas says: "Un manual es un cuerpo sistemático que indica las actividades a ser cumplidas por los miembros de la organización y a forma que las mismas deberán ser realizadas"³².

³⁰ Celce-Murcia and Machintosh, Teaching English as a Second or Foreign Language. 1979. P. 308

³¹ Ibid 36 P. 314

³² Cañas, Benjamin. "Paquete Didáctico de Organización y Métodos". UTEC. S.S. El Salvador. 1996. P.123

The purpose of this manual is to show teachers and students to follow the steps to develop of the contents of the subject *Proyecto Especial de Investigación Dirigida*, especially, in the aspects of norms, procedures, objectives related to the Teaching-Learning process.

This manual will facilitate the setting of standard activities required in the investigation process. Besides, it will avoid conflicts between researchers, when they are investigating without a standard guide. So, the creation of an English manual for teachers and students who participate in the investigation process of the subject *Proyecto Especial de Investigación Dirigida* at UTEC, is necessary to overcome the development of an investigation project.

Since during the course of *Proyecto Especial de Investigación Dirigida* of Lic. en Idioma Inglés, students-researchers will be called upon to develop an investigation. Which is a university investigation into a topic they have chosen or one that has been assigned to them by their teacher. An investigation process means a project in which the researchers will start with an idea or interrogation, collect data or information on the topic, bring the information together in a logical order, and, reflecting on what the researchers learn in the process, reexamine the original idea.

In some ways, the research is like presenting a point of view or even an argument, except that they will go to much greater length in gathering source material to learn about their topic and determine the accuracy of their interrogation. Half the work of a research is done before the researchers actually start writing. This is the research half, which will likely be done in their own university library.

One of the most useful first steps in gathering information on a topic is to go to the reader's guide. This is a massive index that can direct you to articles published in thousands of newspapers and magazines on almost any conceivable topic. If you have never used librarian to assist you available or if you will need to pick another topic.

There are other source areas you may use in the library, such as: encyclopedias, indexes, atlases, yearbooks. For the purposes of doing research, a large public or university library can be a confusing place for anyone who has never used it in this way before. Remember, as always, the librarian in there to help you use the library. Ask at the information desk, if there are pamphlets or maps, listing information about the library.

It is important to know the difference between fact and opinion. Facts can be documented. Opinion came from one person's view of an issue. It often

involves prejudice or a predisposition that is based on emotion not fact. It is fine to use both fact and opinion, but you must know which is which and make it clear in the document.

In a general sense, there are many authors who mention the utility that manuals or guidebooks have for teachers and students during any learning and teaching process. In this sense Fowler says: “A handbook is a comprehensive reference guide to the essential information in a field or discipline, whether it be stamp collecting, home maintenance, or chemistry.”³³

Furthermore, a manual stimulates students-researchers through the learning of procedures to investigate a problem. So, a manual must be close related to the teaching-learning process. In this direction Gregg mentions “... its success have been hastened enormously by the teachability of its textbooks.”³⁴

On the other hand, manuals and guidebooks train students-researchers to develop activities and skills which help them to analyze and investigate society problems in a critical and objective way. And at the same time, students-researchers are able to give rational solutions to the problems they face in their respective fields of formation. Therefore, Elizabeth McMahan and Susan Day

³³ Fowler, Henry Ramsey. *The Little, Brown Handbook*. USA.1983. P. viii

³⁴ Gregg, Robert John. *Gregg Shorthand*. USA. 1945. P.iii

say, "The Instructor's Manual offers further suggestions for classroom activities and a set of duplicating or transparency masters that provide extra samples of student writing for in-class criticism."³⁵

Besides, manuals of investigation become the instruments that train students-researchers to use the procedures of investigation. So, terms of the manual must be well defined. As Warriner says: "The textbook characterizes this approach: concise, clear statement of definitions, rules, principles, ample illustration of teaching points, abundance of drills and exercises, emphasis on practical learning, and adaptability to any course of study."³⁶

Moreover, handbooks, manuals, textbooks are reference guides to learn any knowledge. They are intended for people who are trying to learn something. Such people solve easily their problems with the use of these guidebooks. The most important advantage is that people who use manuals are able to develop activities using established steps. As Wickham states, " This manual is intended to serve as a ready reference for ammunition specialists and supervisors during training. It is not to be considered a comprehensive textbook on ammunition, but it does provide useful data on important points of ammunition service support in the field."³⁷

³⁵ McMahan, Elizabeth and Day Susan. The Writer's Handbook. USA 1980. P. xi

³⁶ Warriner, John E. English Grammar and Composition. USA. 1963. P. iii

³⁷ Wickham, John. Ammunition Handbook. A Guide for Ammunition Specialists. Department of Army. USA. 1986. P.i

A manual must be the answer to the urgent necessity that student-researchers face, when they are working on a project. So, the main purpose of a manual is to provide a dynamic document that helps student-researchers to overcome their difficulties, when they are investigating a problem. A manual must provoke an active and creative participation of researchers of the subject Proyecto Especial de Investigación Dirigida of Lic. En Idioma Inglés at the UTEC.

The structure of a manual must start with a detailed basic information, which enables them to continue with procedures that show researchers how to think, write and perform their own investigation process. So on, the manual must show the steps to develop the elaboration of the investigation report. Alice Maclin expresses: “ This book is a ready reference that can help students locate and correct their problems with or without the help of a Teacher.”³⁸

In summary, the importance of the manual consists in the description of the different steps, which the manual contains to develop an investigation project. Therefore, each exercise must carry its own instructions and the students must proceed accordingly.

The result of this investigation has been an English manual, which means a reference guidebook, especially providing instructions for teachers and students

³⁸ Maclin, Alice. Reference Guide to English. Washington. USA. 1994. P. v

of the subject Proyecto Especial de Investigación Dirigida. As researchers want to provide this manuals especially designed to reinforce the knowledge that the teacher shares with his/her students in the classroom based on the program.

The manual for the subject Proyecto Especial de Investigación Dirigida has been designed with the following information: such as definitions, examples, instructions, and exercises. It will be used by both teachers and students of that subject. The manual contains methodological suggestions (extra activities, materials to use in class, duration of activities), some hints and extra information such as more examples in order to give more explanation to the students. It is useful for teachers and students because both are working in the same direction having goals that must be obtained through their constant effort.

As researchers, we are not saying that this is the only material that teachers and students can use. But, it will help them a lot to develop the contents of this subject.

In conclusion this theoretical framework has been a description of theoretical elements written by different authors. This permitted researchers to support their investigation process. In other words, this theoretical framework has been integrated with theories, theoretical focus, studies, and general backgrounds related to the investigation topic or problem. Therefore, the researchers have

detected, obtained and consulted literature and other documents, which deal with the investigation problem.

Furthermore, this theoretical framework has oriented researchers, toward the proper way, the investigation must be carried out. It has been during this phase of the investigation process that researchers based on information, theories and experiences of people specialized in this field to show how important the creation of a manual is through the citation of different sources. It has been necessary to mention the antecedents of the investigation of concepts and to emphasize what the researchers believe by naming different authors. The theoretical framework has been written to supports the statement of the problem and the objectives of the research.

4. CONCEPTUAL FRAMEWORK

Cause: Something that produces an effect, result or change.

Content : It is the knowledge, attitude or skill that is taught during the teaching-learning process.

Data: Product obtained by recording an answer.

Empiricism : It is system of ideas that are established on the experience, as the main source of all knowledge.

Goal : It is the limit to what the teaching-learning process must arrive.

Indicator : It is what the researchers investigate, which means the indication of a problem. Signals that shows you that a problem exists.

Inquiry: Instrument of observation formed by questions. The answers are note down by the researcher.

Instrument: The tool that researchers use to do the investigation.

Interview: Oral questions that are done by the researcher. The answers are note down by the researcher.

Investigation Process: It is typically described as composed of phases: defining a problem, analyzing previous studies related to it, selecting or developing appropriate instruments, collecting data, interpreting them, and writing the research report.

Learning : It is the modification of the student's behavior as a result of an experience suffered in the educational process.

Manual: a small book (tool) that is used by the teacher and students as a guide. It gives instructions on how to develop the contents of the subject.

Method: a general way of guiding the action to reach a goal.

Methodology : It is a sketch about the investigation that will be developed. It explains, in detailed the steps that researchers will perform to reach the objectives of the investigation.

Objectives: The goals that researchers hope to reach through the performing of an investigation action.

Plan: It is a broad orientation about an action with general objectives and some global goals.

Program : The schedule group of activities within an investigation project. In other words, it is the statement of what the researcher think to do to develop the group of planned activities.

Project: It is a group of planned and scheduled actions to be done totally, with defined objectives.

Purpose: It is confused with the objective of the investigation, but the purpose of the investigation is major than the objectives. The purpose includes the objectives in it.

Questionnaire: Instrument that is formed by questions, which are written to obtain the necessary information to perform an investigation.

Research: to make an extensive investigation. In other words, it consists in several activities that researchers perform to develop a scientific or scholarly investigation about a problem.

Source: Document or books that are useful to support an investigation.

Technique: the channel to develop the investigation, which means what the researchers do to perform the investigation.

Variable: any condition that can be changed, in its quality and quantity. Which means all those characteristics that vary from subject to subject. This is what the researchers will measure, control and study in the investigation.

2.5 GENERAL AND SPECIFIC OBJECTIVES

2.5.1. GENERAL OBJECTIVE

To facilitate the teaching- learning process in the subject *Proyecto Especial de Investigación Dirigida* through the elaboration of a manual for teachers and students at the UTEC.

2.5.2 SPECIFIC OBJECTIVES

To determine the need of a manual to be used by teachers and students for the subject *Proyecto Especial de Investigación Dirigida*.

To elaborate a manual for the teacher and students of the subject *Proyecto Especial de Investigación Dirigida*.

CHAPTER III

METHODOLOGY OF THE INVESTIGATION

The methodological framework for the present study has been divided in two moments. One moment has included elements that can be considered at a level of planning. The other moment has corresponded to the action of performing the concrete activities of the investigation.

1. DESIGN OF THE PLANNING PHASE.

1.1 LEVEL OF THE STUDY.

This study has been focused from the perspective of two levels:

A) EXPLORATORY LEVEL

The exploratory level has been useful to obtain the first approaching to the reality of the object of study. Since any investigation begins collecting information, making observations and consulting resources, with the intention of arriving to the descriptive point of the problem that has been investigated.

In this investigation, researchers took the necessary steps to explore the necessity of elaborating a manual for teachers and students for the subject

Proyecto Especial de Investigación Dirigida of Licenciatura en Idioma Inglés at the UTEC.

B) DESCRIPTIVE LEVEL.

This study has been developed to a descriptive level, because researchers pretended to discover the necessity of a manual and the elaboration of it for the teacher and students of the subject Proyectos.

1.1.2 TECHNIQUES TO COLLECT INFORMATION

In the case of the students, researchers administered a questionnaire with open and closed questions. And for the teachers, researchers used some interviews.

1.1.3 TECHNIQUES OF ANALYSIS.

Researchers have used descriptive statistics and logical analysis.

1.1.4 POPULATION AND SAMPLE.

The persons who have been investigated through this study, all of them, have been constituted by people who were involved directly in the variables

of the study. Such as: the teachers who had taught the subject *Proyecto Especial de Investigación Dirigida* at the UTEC. And students who had taken that subject the first and second semester during 2000 year. The location of the constituent elements of the population was done in the following way:

Students were contacted through the teacher of *Proyecto Especial de Investigación Dirigida*, who gave to the researchers the lists of them.

Researchers took three as the population of teachers of the subject *Proyecto Especial de Investigación Dirigida*. And thirty as the population of students. So, considering that teachers and students could be counted with the fingers of the hand, researchers decided to work with the total of them. The sample of two teachers represents the 67% of them. In the case of the students, the sample of twenty-four of them represent the 80 %.

DISTRIBUTION OF THE POPULATION AND THE SAMPLE

CHART NO. 1

STRATUM	POPULATION	SAMPLE
TEACHERS	3	2
STUDENTS	30	24
TOTALS	33	26

1.1.5 DESIGN OF INSTRUMENTS

- a) Questionnaire to interview teachers.
- b) Questionnaire to inquire students.

The questionnaires were elaborated using the corresponding indicators of each variable of the interrogation of the investigation. The design of the instruments was semi-structured. In other words, it used open and closed questions

2 DESIGN OF THE EXECUTION PHASE.

2.1 PROVE OF THE INSTRUMENTS

The proof of the instruments has consisted in the analysis of them by the researchers. They evaluated the answers and remarks to adjust the instruments, trying to guarantee the major **validity and credibility**.

2.2 DATA GATHERING.

During the fieldwork, researchers administered the questionnaires to students and interviewed teachers of the subject Proyecto Especial de Investigación Dirigida.

2.3 DATA ANALYSIS.

After the administration of the questionnaires and interviews, the obtained data were analyzed rigorously by the researchers. The interpretative analysis of data has been preceded by two preliminary phases: prevision of the calculation of the percentage and the tabulation of data.

2.4 DATA TABULATION

Researchers have reflected data in some charts. These charts present the following headings:

- The number of each reactive.

- The enunciation of the reactive.

- The code of identification for the answers, category of the answers, the absolute frequency of each category and the percentage.

ANALYSIS AND INTERPRETATION OF RESULTS GIVEN BY THE STUDENTS.

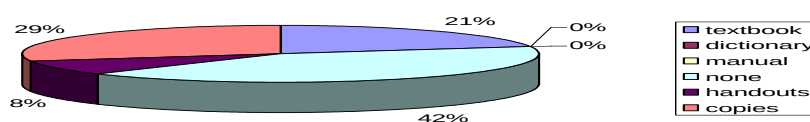
QUESTION No. 1

What kind of materials did your teacher use in Proyectos classes?

OBJECTIVE: To find out what kind of guides the teacher used with students, during the classes of the subject Proyecto Especial de Investigación Dirigida.

NO.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency %
1	What kind of materials did your teacher use in Proyectos classes?	1	Textbook	5	21
		2	Dictionary	0	0
		3	Manual	0	0
		4	None	10	42
		5	Handouts	2	8
		6	Copies	7	29
	Total			24	100

Interpretation: The majority of students confirmed that the teacher of Proyecto Especial de Investigación Dirigida put in practice copies, handouts and textbooks, as guides to develop the investigation process.



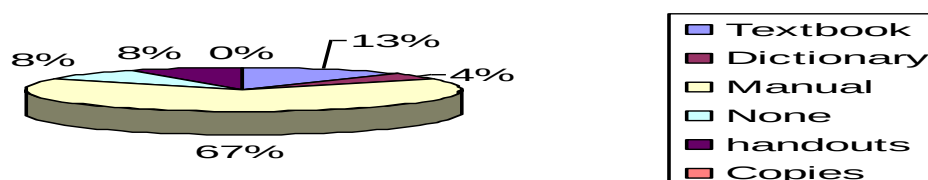
QUESTION No 2.

What kind of materials would you like your teacher use in Proyectos classes?

OBJECTIVE: To investigate what materials would the students like to be used by the teacher of Proyecto Especial de Investigación Dirigida.

NO.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency %
2	What kind of materials would you like your teacher use in Proyectos classes?	1	Textbook	3	13
		2	Dictionary	1	4
		3	Manual	16	67
		4	None	2	8
		5	Handouts	2	8
		6	Copies	0	0
	Total			24	100

Interpretation: The 88% of students would like the teacher of Proyectos to use a written guide such as a manual, textbook or handout to help students to investigate a problem.



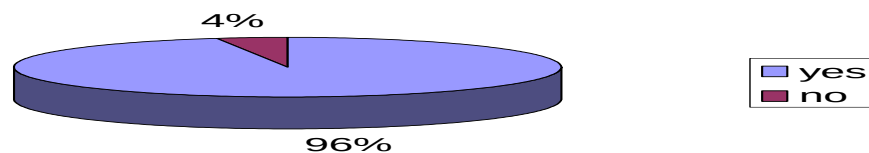
QUESTION No. 3

Did you have any difficulties when writing your pre-project?

OBJECTIVE: To detect if the students had difficulties when they were writing their pre-project of investigation.

NO.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency
3	Did you have any difficulties when writing your pre-project?	1	yes	23	96
		2	no	1	4
	TOTAL			24	100

Interpretation: It is clearly established that students had different difficulties during the writing of the pre-project of the investigation.



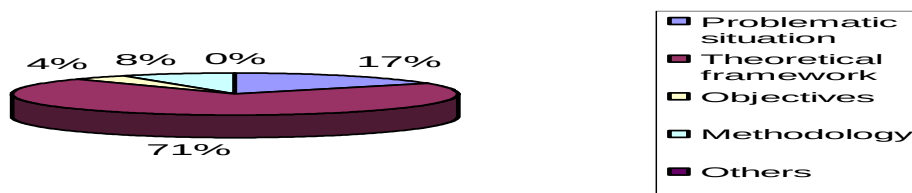
QUESTION No 4.

If your previous answer was affirmative, in which areas did you have more difficulties.

OBJECTIVE: To verify what areas of the investigation project were more difficult for the students.

No.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency
4	If your previous answer was affirmative, in which areas did you have more difficulties.	1	Problematic situation	4	17
		2	Theoretical framework	17	71
		3	Objectives	1	4
			Methodology	2	8
		5	Others	0	0
	Total			24	100

Interpretation: It was verified that students suffered different difficulties in all the phases of the investigation process. But the most difficult area for them was the *Theoretical framework*.



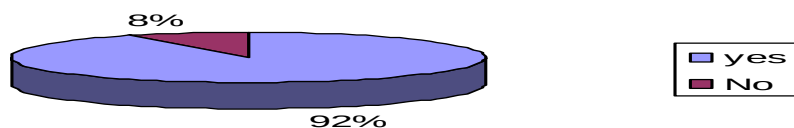
QUESTION No 5

Do you think as student of Proyectos that is necessary to use a manual in that subject?

OBJECTIVE: To determine if students of Proyecto Especial de Investigación Dirigida want to use a manual to develop the investigation process.

No.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency
5	Do you think as student of Proyectos that is necessary to use a manual in that subject?	1	Yes	22	92
		2	No	2	8
	Total			24	100

Interpretation: It was determined that the 92% of students want to use a manual to develop the investigation process. Just two students consider that it is not necessary to use it.



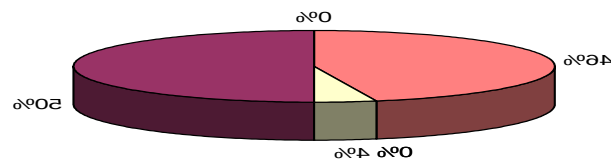
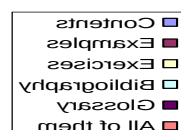
QUESTION No. 6

If a manual for students of Proyectos were created, What features would you like it to contain?

OBJECTIVES: To establish the elements or features that students want to be included in the manual.

NO.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency %
6	If a manual for students of Proyectos were created, What features would you like it to contain?	1	Contents	0	0
		2	Examples	12	50
		3	Exercises	1	4
		4	Bibliography	0	0
		5	Glossary	0	0
		6	All of them	11	46
	Total			24	100

Interpretation: It was established that students are interested in an integral manual; which must be elaborated using examples, exercises, and bibliography among others.



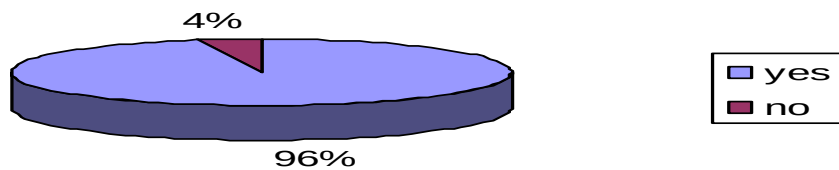
QUESTION No. 7

Do you think that would be helpful for you as student of Proyectos to include techniques to collect information in the manual?

OBJECTIVE: To know if the students are interested in techniques to collect information.

No.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency
7	Do you think that would be helpful for you as student of Proyectos to include techniques to collect information in the manual?	1	Yes	23	96
		2	No	1	4
	Total			24	100

Interpretation: It was clarified that the 96% of students are interested in techniques to collect information.



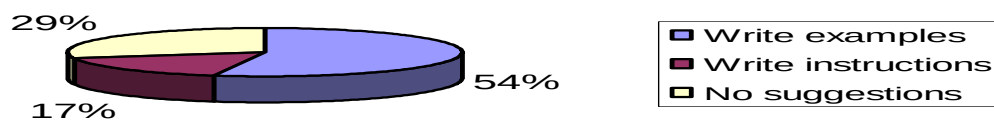
QUESTION No. 8

Do you have any suggestion toward the elaboration of a manual to be used in Proyectos?

OBJECTIVE: To discover if the students are aware of the importance that the proposed manual has.

No.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency
8	Do you have any suggestion toward the elaboration of a manual to be used in Proyectos?	1	Write examples	13	54
		2	Write instructions	4	17
		3	No suggestions	7	29
	Total			24	100

Interpretation: The suggestions given by the students have shown that they are clear enough about the necessity and importance of the proposed manual to be used in the investigation process.



ANALYSIS AND INTERPRETATION OF THE ANSWERS GIVEN BY THE TEACHERS.

Question No 1.

When you teach the subject Proyecto Especial de Investigación Dirigida, What kind of materials do you use?

The two teachers that were interviewed answered that they have used a guide that is written in Spanish. And also some materials that they have taken from Internet. Besides, they have read some books about how to investigate things and how to make some researching.

Question No. 2

When teaching Proyecto Especial de Investigación Dirigida, What kind of materials would you like to use?

Both teachers confirmed that they would like to use a guide but written in English. And that the guide must comprises different steps and different material that teacher of Proyecto Especial de Investigación Dirigida needs, in order to teach that subject. So, the manual may have also some bibliography that might help the teacher of Proyectos to check the way she/he teaches that subject.

Question No.3

Do you think students need a manual to be used in Proyecto Especial de Investigación Dirigida?

The teachers said that students need a manual, because in that way, they may have the basic elements to know how to do some researching. Taking into account that researching is basically a matter of **too much practice**. Consequently, a manual can be helpful for students.

Question No.4

What characteristic should a teacher's manual for the subject Proyecto Especial de Investigación Dirigida have?

Teachers mentioned that the manual must be concise. Also it should have concepts of different steps for researching, but also it should have some types of exercising and some examples on how to perform the different steps to investigate a problem.

Question No. 5

What topics should be studied deeply within the subject?

Both teachers agreed that all topics are important. Therefore, they should not say that one topic is more important than other. All the contents for this subject are important. So, the teacher of Proyectos can not isolate the different elements of an investigation.

Question No. 6

What kind of examples do you consider could make students understand better this subject?

Teachers sustained that the examples should be realizable ones. In other words, they should be examples that are related to our English Major. They can not be examples of projects that are not really related to us.

Question No. 7

Do you consider necessary to include exercises in the manual?

The two teachers answered that the exercises should be basically examples of different steps to develop the investigation of a problem.

Question No. 8

Do you consider necessary that a manual has to include techniques to collect information?

They confirmed that in order to teach this subject Proyectos, there are different contents, and techniques for collecting data are part of the topics this subject should include. That is, for techniques to collect information must be included in the manual.

Question No. 9

Could you, please mention the differences that should exist between the teacher's and student's manual?

They think the teacher's manual should be richer in concepts and the student's manual full of examples on how to follow the different steps in the investigation process.

Question No. 10

Do you have any suggestion toward the elaboration of a manual to be used in Proyectos classes?

Both teachers suggested that the manual should have updated material, and it must be written in English. Furthermore, the manual must have some type of bibliography. So, the teacher and students can go and look for that bibliography.

This field research has given important information to support the question that was enunciated to justify this Graduation Work. *Is it necessary to design a manual to be used by teachers and students of the subject Proyecto Especial de Investigación Dirigida at the UTEC?*

As researchers expected the necessity of a manual was reflected in the answers provided by teachers and students.

In consequence it is now the opportunity to mention real reflections as follows: The objectives which have guided this investigation have been achieved; considering that researchers have proved certainly that the teacher and students

of the subject Proyecto Especial de Investigación Dirigida *need an English Manual* to develop the investigation process.

It was confirmed that the *Proposed Manual* to support the investigation process is a necessity to facilitate the Teaching-Learning Process in the subject above mentioned. Students are interested in a manual with practical examples, exercises and instructions to develop the investigation process.

Finally, this fieldwork has permitted to know that the majority of the teachers and students have accepted the elaboration of the proposed manual. Teaching materials are very important to teach a class. Using them, the Teaching-Learning Process becomes successful. To design a manual for the subject Proyecto Especial de Investigación Dirigida, it was necessary to interpret the results of the interviews and surveys administered to the teachers and students.

The results of the investigation showed that students want a manual that facilitates the investigation process. They would like that the manual contains examples as a guide to follow in the process of investigation. On the other hand, teachers want to have a manual reinforced in the areas of contents and exercises

Therefore, researchers have considered that the methodology of the investigation has been the pillar phase, because in this moment, it was included the fieldwork, which gave the opportunity to apply the instruments to obtain the information from teachers and students.

Researchers received the real answers, confirming the necessity of the elaboration of a concise and practical manual, which will include concepts, steps for researching, exercises and examples on how to perform the steps to investigate a problem.

Through the fieldwork was proved that teachers and students are highly interested in the elaboration of an English Manual to be used in the subject Proyecto Especial de Investigación Dirigida. Researchers expect that the manuals can be useful during the class sessions and through all the investigation process.

CONCLUSION

In the present investigation, researchers have obtained important information, which is useful to support the suppositions that originated this investigation work

The objectives of this investigation have been achieved because, according to the tabulated data, researchers have proved that in fact, teachers and students

need an English manual to be used in the subject Proyecto Especial de Investigación Dirigida.

Researchers proved that the majority of students had different difficulties during their pre- project of the investigation. In other words, researchers proved that students experienced difficulties in all the phases of the investigation process, for lacking of an English Manual that guide them in their own investigation. Now, students will be able to develop their investigation work, in a better way, using the manual that has been created recently.

Obviously, we do not pretend to discard or substitute other materials. Students will receive more ideas from their teachers, other manuals, friends, parents, experts, and visual aids, among others. Besides, it was determined that just two informants mentioned that a manual is not necessary for them. But the 92% of students confirmed that they wanted to use a manual to develop their investigation process.

Therefore, this investigation has been completely successful, because, as a result, it has given an integral manual, including explanations, examples, and exercises, trying to help students-researchers, in their investigation work.

RECOMMENDATIONS

It is necessary that the teacher and students of the subject Proyecto Especial de Investigación Dirigida use the elaborated manual as a standard tool to develop the contents of said subject.

The UTEC provides the students with a chapter delivery calendar. So, you must be punctual to accomplish it. Otherwise, you will be stock of delayed work and money charges will be added to your account. Also, you have to take into account that the members of the jury have fifteen able days to revise the chapter you have already delivered.

It is also necessary that a group of students-researchers revise this manual, at least each year to improve it accordingly.

It is necessary that the UTEC promote courses or seminars about investigation techniques.

It is necessary to emphasize the importance of writing a good Pre-Project by focusing reinforcing the grammar and writing areas.

It is necessary to motivate students to read books, magazines, pamphlets or any kind of information related to their research because it will facilitate their work.

The teacher of the subject Proyecto Especial de Investigación Dirigida has to show a motivational attitude in order to make the class dynamic and Practical.

At the beginning of the course the teacher must explain and emphasize the importance of Cooperation and Group work. Doing this, students will be conscious of their roles and the different levels of knowledge will be put to work.

The teacher should facilitate extra material such as books, magazines, and pamphlets among others, so the student can have different options to develop the investigation work.

All the different exercises should be discussed in class. In this way a feedback and knowledge reinforcement is taking place.

It is important to emphasize on Reading skills. At this level, the student must dominate some reading skills to scan or skim the material that get to his/her hands and extract the most important part of it; or to have a general view of what it content is about.

It would be useful to recommend students of the subject Proyecto Especial de Investigación Dirigida to read this thesis to use it as an example.

It would be good to organize Round Tables to discuss in a free way, among groups of researchers, about their advances of their investigation development.

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ANNEX 1



**FACULTY OF HUMANITIES AND NATURAL SCIENCES.
ENGLISH MAJOR.**

TEACHER'S INTERVIEW

Date: _____

Dear Teacher:

The following interview is part of a graduation project, based on the elaboration of an English Manual for the Teacher and Students of the subject Proyecto Especial de Investigación Dirigida.

This interview consists of 10 open questions. Your answers will be a great contribution to the creation of this Manual.

1- When you teach the subject Proyecto Especial de Investigación Dirigida, what kind of materials do you use ?

2- When teaching Proyecto Especial de Investigación Dirigida, what kind of materials would you like to use?

3- Do you think students need a manual to be used in Proyecto Especial de Investigación Dirigida? Yes No Explain:

4- What characteristics should a Teacher's manual for the subject Proyecto Especial de Investigación Dirigida have?

5- What topics should be studied deeply within the subject?

6- What kind of examples do you consider could make students understand better this subject?

7- Do you consider necessary to include exercises in the manual?. If your answer is affirmative explain what kind.

8 - Do you consider necessary that a manual has to include techniques to collect information?

9- Could you, please, mention the differences that should exist between the teacher's and student's manual?

10- Do you have any suggestions toward the elaboration of a manual to be used in Proyectos classes?

ANNEX 2



FACULTY OF HUMANITIES AND NATURAL SCIENCES. ENGLISH MAJOR.

STUDENT'S QUESTIONNAIRE

Date: _____

Dear Classmate:

The objective of this questionnaire is to obtain information that will be used in our graduation project, based on the elaboration of an English Manual for the Teacher and Students of the subject Proyecto Especial de Investigación Dirigida. Please read and answer the questions objectively. So, circle the letter that corresponds to the answer you select. Your answers will be of a great contribution to the creation of this Manual.

1- What kind of materials did your teacher use in his/her Proyectos classes?

- | | | |
|-------------|---------------|-----------|
| a) textbook | b) dictionary | c) manual |
| d) none | e) handouts | f) copies |

2- What kind of materials would you like your teacher to use, that he/she didn't use

a) textbook

b) dictionary

c) manual

d) none

e) handouts

f) copies

3- Did you have any difficulties when writing your pre-project?

a) yes b) no

Explain _____

4- If your previous answer was affirmative, in which areas did you have more difficulties?

a) Problematic Situation

b) Theoretical framework

c) Objectives

d) Methodology

e) Others: _____

5- Do you think as a student of Proyectos that it is necessary to use a manual in the subject Proyecto Especial de Investigación Dirigida?

a) yes

b) no

Explain _____

6- If a manual for students of Proyectos were created, what features would you like it to contain? Circle all you want.

a) Contents

b) Examples

c) Exercises

d) Bibliography

e) Glossary

F) All of them.

7- Do you think that would be helpful for you as a student to include techniques to collect information?

a) yes

b) no

8- Do you have any suggestions toward the elaboration of a manual to be used in the subject Proyecto Especial de Investigación Dirigida? _____

ANNEX 4



FACULTY OF HUMANITIES AND NATURAL SCIENCES..

LANGUAGE DEPARTMENT



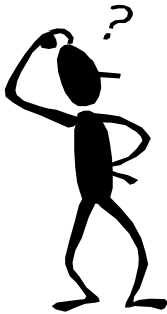
**MANUAL FOR THE TEACHER AND STUDENTS OF THE
SUBJECT PROYECTO ESPECIAL DE INVESTIGACION
DIRIGIDA.**

BY:

VILMA BONILLA, EDDY MARTINEZ AND REINA MARTINEZ.

THE TOPIC.

The very first part for the development of an investigation is *THE SELECTION OF A TOPIC*. It is considered the most difficult part of the task and the point of departure of it. But you do not have to be worried about it. With the appropriate methodology, the selection of a topic becomes easier.



Before choosing a topic, researchers must do a little exploratory investigation. And the main sources to choose it are:

- * **NOTEBOOKS:** you may check and revise your notes taken from classes during your career and focus in those areas that are interesting for you.

- * **THE TEACHERS:** Consulting directly with your teacher, constitutes a very important source to receive ideas to choose a topic.

* **CONFERENCES:** You must attend to all those conferences that are related to the topic you are interested in. So. You can take notes and suggestions about the topic you want to investigate.

***THE BIBLIOGRAPHY:** You must consult the library, because it is fundamental to find the proper and interesting topics. The textbooks are of special interest, because they frequently give ideas about your preferred topics. Manuals are good enough to select interesting topics. Magazines also present up-to-date topics, recent investigations, among others.

* **THE THESES:** It is not necessary to read all existent theses about the areas you are interested in. Just read the index and revise the most interesting chapters and analyze the conclusions.

* **THE EXPERIENCE:** The everyday work of the student can be used to choose the topic. You must take into account that the topic must have a *SOCIAL IMPACT*.

SELECTING THE TOPIC.

METHODOLOGICAL FACTORS.



The methodology of the investigation provides some criteria that permit to do an adequate selection of the topic. The following criteria are *vital* to select a topic.

λ **RELEVANCE:** It must be in the most notorious area, due to the magnitude of needs that cover and the opening to future studies.

λ **ESPECIALIZATION:** it corresponds to the specific field of the respective discipline. (Career.)

λ **IMPORTANCE:** To choose those areas worth of investigation. That means that the result of the investigation will benefit the majority.

λ **FEASIBILITY:** This criterion means to measure the viability of the investigation work, using the selected topic.

3 The study of the feasibility permits to think and discuss about the time, cost, sources of information, mental ability of researchers, among others, to develop the investigation project.

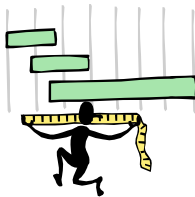
λ **PRACTICAL:** The selected areas must have their own *Theoretical-Practical significance*. That is that the results of the investigation will be useful to solve concrete problems.

λ **INTEREST:** The main criterion for the selection of the topic is the *interest* manifested by the researchers. Therefore the selected topic must reflect the preoccupation and necessities of them. The *interest* must be real. Researchers must be identified with the topic.

λ **UTILITY:** The utility factors oblige researchers to consider the dimension of the advantages that the society will have with the results of the investigation.

λ **ORIGINALITY:** Considering this criterion to select a topic will permit to avoid the possibility of doing just a *vile repetition* of another investigation work.

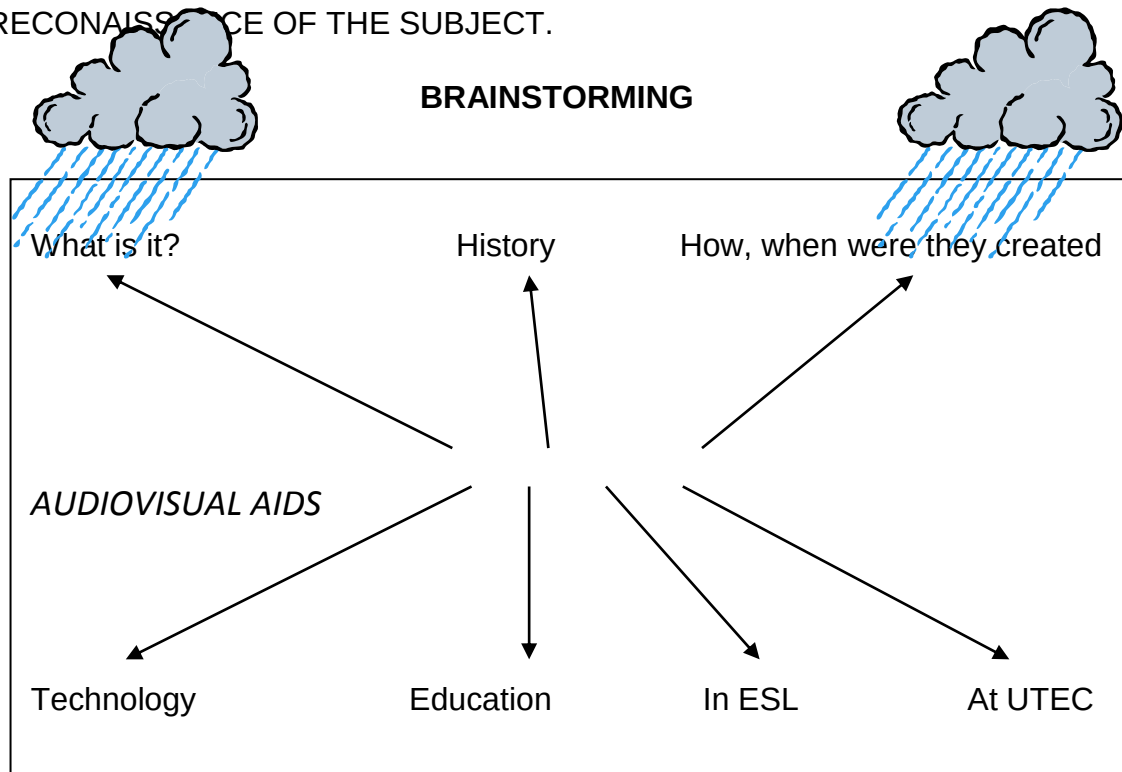
- Any proposed topic must have been investigated before.



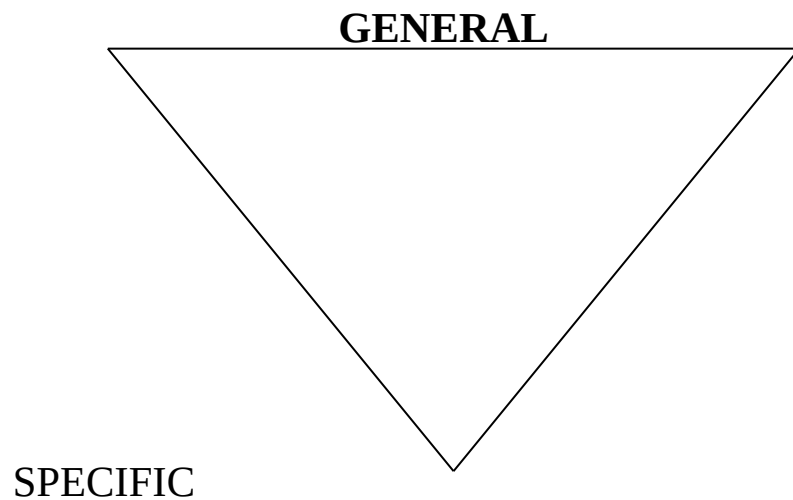
SELECTING AND LIMITING THE TOPIC.

To begin is necessary to search for information related to the topic of the research. Surveying your own ideas and knowledge about the topic before consulting printed sources is a very good first thing to do. If you do so, it will help you to get a wide range of information. Also, it can be the outline of your plan. Let your mind to drift within a broad subject activated by free association. This is a technique that can be useful to organize, draw and narrow the topic.

FOR EXAMPLE: BRAINSTORMING A TOPIC SHOWS THE MENTAL RECONAISSANCE OF THE SUBJECT.



As you continue, you will notice that you go from general to specific. It is like looking to an inverted triangle. You go from a wide to a narrow view.



The topic is the knowledge area about which the researchers want to investigate.



THE TOPICS CAN BE GENERAL OR SPECIFIC.

EXAMPLES:

1. IN THE HUMANITIES FIELD

GENERAL TOPIC	SPECIFIC TOPIC
λ BASIC EDUCATION	λ THE SCHOLAR DISCIPLINE IN THE AREA OF THE BASIC EDUCATION

2. IN THE TEACHING-LEARNING FIELD

GENERAL	SPECIFIC
λ THE MEANING OF WORDS	λ HOW WORDS BECOME SYMBOLS

GENERAL	SPECIFIC
λ USING WORDS	λ USING FIGURATIVE LANGUAGE

GENERAL	SPECIFIC
λ VISUAL AIDS	λ VISUAL AIDS USED IN THE CLASSROOM BY PUBLIC RELATIONS STUDENTS IN ENGLISH I

EXERCISE

Bring to class a list of three topics that you think would be interesting for an investigation. Be sure each of the topics is limited enough to be treated adequately in a paper of the length your teacher assigns.

The following list of topics may suggest more limited topics for your homework.

GENERAL TOPICS
P Getting ready to write
P Sentence fragments.
P Grammatical sentences
P Clear sentences.
P Methods to teach English.
P How words work.
P Punctuation problems in English.
P Taking tests.
P Writing assignments.
P Motivation

- | |
|-------------------------------|
| P Games |
| P Private English Education |
| P English Conversation Skills |

EXERCISE

After a class discussion of the lists prepared for exercise 1, choose a topic for your investigation. The topic may be one from your list or it may be one from a classmate's list that aroused your interest.

IMPORTANT HINTS.



make

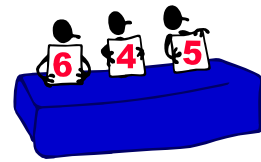
- ⌚ Before choosing a topic suggested by someone else, make sure it is one he/she is not going to use.
- ⌚ Make sure that you choose a topic about which you can readily find information in the library. Otherwise, you will handicap yourself unnecessarily at the start.

ω Be ready to tell why you choose your topic. Why you think it is important enough to warrant your spending time to investigate it.

EVALUATION OF THE TOPIC.

One of the fundamental problems to develop a Graduation Work, consists in the matter of determining if the selected topic is really acceptable and important.

BASIC CRITERIA TO EVALUATE A TOPIC.



- ζ The topic must be related to the professional field.
- ζ The desired results must have a practical significance, useful, especially in the social area.
- ζ The topic must be without solution. So the investigation can contribute to solve problems of the society.
- ζ The topic must be real. Its solution must be a real necessity.

Many researchers; including experienced ones, encounter their first problem in trying to find a topic to investigate about. Your teacher may suggest a topic; but if not, you will have to invent one suitable to you.

A good way to discover a topic is to review your own experiences, interests, and curiosities. Look for a topic you already know something about or have been wondering about, such as *educational problems*. The goal here is to think about a topic that interests you. You must take into account that the topic exists in the social reality. In this way, the researcher can transform it in the object of study. When he/she introduces the variables, and select the objects that will use to make the investigation, the researcher will convert them in units of analysis.

To this, you have to establish a space-temporal delimitation. That is, to give a geographical area or space where the phenomena are immerses and the time you will use to make the observation of the object of study. After you have chosen your topic, you must delimit it, make it more concrete and to specify its ranges.

EXAMPLES OF BROAD TOPICS.

- Σ Writing a research paper
- Σ Improving your speech
- Σ Capitalization
- Σ Determiners
- Σ Idioms.
- Σ Methods to teach English

- Σ Translation and Interpretation Techniques
- Σ Free English Courses
- Σ Audiovisual Aid Materials
- Σ Testing Techniques.
- Σ Reading Techniques
- Σ Phonological Problems
- Σ Teaching Materials
- Σ Songs
- Σ English Laboratory

The broad topics above need to be limited to manageable topics. If you chose or were assigned to the topic *American Idioms* for example, you would soon find that you could not cover all effects of all the American Idioms in a University investigation. If you try to study all the idioms used in All-American countries; it is too ample. Therefore, it is necessary to narrow the topic to be investigable.

BROAD TOPIC

MORE SPECIFIC TOPIC

IDIOMS

Idiomatic usage in the English major at the UTEC.

BACKGROUND IN GRAMMAR

Traditional grammar used in Grammar I at the UTEC.

READING AND WRITING

English reading and writing exercises

used in Readings and conversations I at
the UTEC.

SPELLING

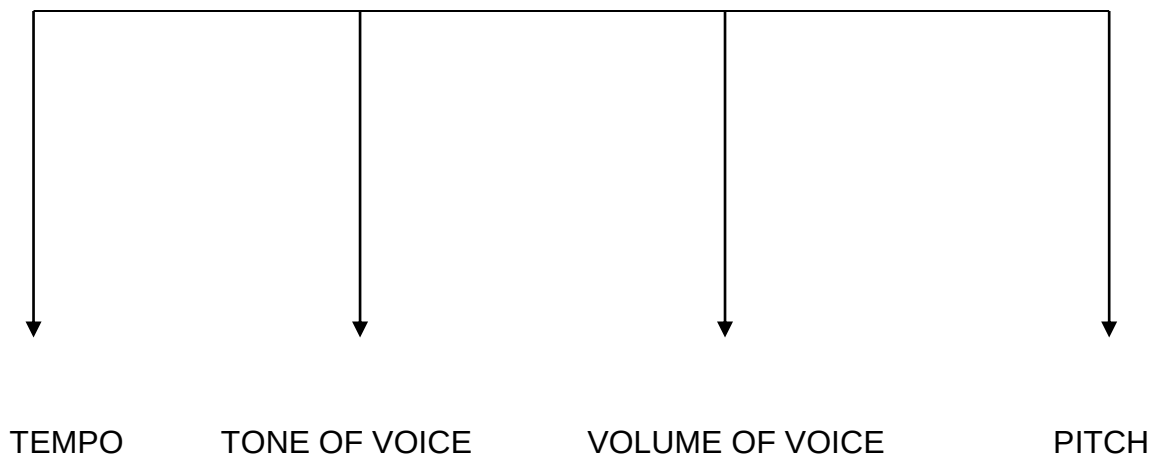
Learning spelling by rules.

When choosing and then limiting your topic, try not to lose the personal
perspective you started with. *Select a comfortable topic.*

SPECIAL EXAMPLES TO NARROW A TOPIC.

EXAMPLE # 1

SPEECH.

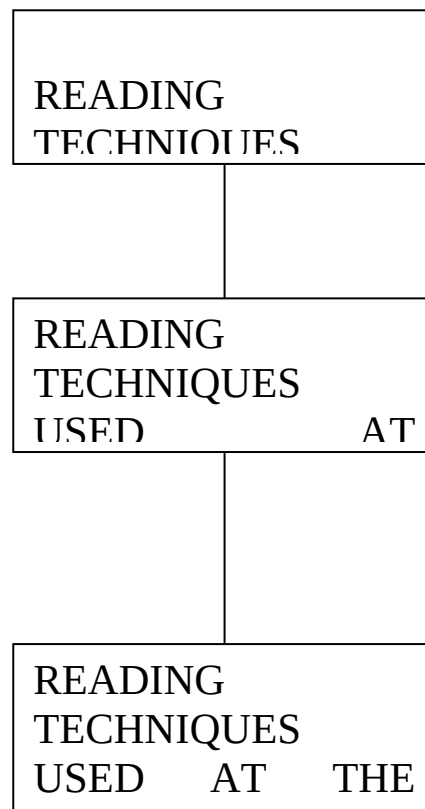


- Using your voice effectively
- English pronunciation problems of students in Readings and Conversations II at the UTEC.

3 If possible, researchers can narrow it more, later.

The following is another example of narrowing a topic:

EXAMPLE #2



GUIDE TO EVALUATE THE SELECTED TOPIC.

[illegible]

READING TECHNIQUES USED BY STUDENTS IN READINGS AND CONVERSATIONS COURSE I

QUALITIES OF THE TOPIC	3. INTEREST									
	4. FEASIBILITY									
	5. UTILITY									
	6. PRACTICAL									
	7. ESPECIALIZATION									

GENERAL EVALUATION

Applicable ☐

Non-Applicable ☐

EXERCISE

By applying your own perspective and purpose and by focusing on the kind of investigation, narrow each of the following general topics to a suitable for an specified investigation.

- 1- Study skills
- 2- Plagiarism
- 3- Controlling diction
- 4- English pronunciation
- 5- Linguistics problems
- 6- Phonology problems
- 7- Morphology and syntax
- 8- Lexicology and semantics problems.
- 9- The origin of language.
- 10-Dialects
- 11-Teaching foreign languages
- 12-English literature study
- 13-Machine translation
- 14-Generative grammar.

All problem to be investigated has to be titled. To do this, it is necessary to take into account some recommendations.

The title must be clear, precise and complete. When the extension of the title affects its clarity, it is convenient to divide it in two. The title, which expresses what it is going to be investigated and the sub-title, that expresses the conditions in which the investigation will be performed. You have to keep in mind that a Scientific Problem is a doubt about the reality between two or more facts or phenomena and that it has to be Original, Important and verifiable.



THE PROBLEM

STATEMENT OF THE PROBLEM.

The statement of the problem is the description of the actual situation that reflexes the causes and the possible solutions to future situations. In other words, it is the presentation of alternatives to overcome an actual situation (prediction). When you make a good statement of the problem, you make it investigable. It is very important to describe the variables in this part because they are the objects of the study. To state a problem, it is just to affirm and structure in a formal way the idea of the investigation. That means that you have to:

- 1- Adopt the topic
- 2- Get familiarized with it.
- 3- Make observation and studies.
- 4- The courage of the research team.
- 5- The researchers' skills.

That is, to a great exactness of statement of the problem corresponds a major possibility to obtain a satisfactory solution.

Remember, when writing you have to think in the audience you are addressing to. You have to explain in clear and easy words the problem and what do you think could be the possible solution to it. Don't make assumptions believing that the persons that are going to read your paper are familiarized with your topic. Express yourself clearly and you will be contributing with the student society.

3 Try to use the following strategies to state your problem:

- Brainstorming
- Outline
- Individual statements.

EXERCISE:

Taking in consideration the information given above, make a statement of the problem using the topic you have chosen before. Don't forget to use clear words. Keep in mind your audience.

PROBLEMATIC SITUATION

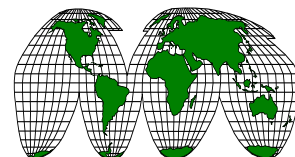
After you have chosen and limited its ranges, the following phase is to transform the topic into a **real problem**. You need to delimit the problem you want to solve. For that reason in the statement of the problem you will include a section called *DELIMITATION OF THE PROBLEM*.

DELIMITATION OF THE PROBLEM.

The delimitation consists in centering the most specific aspects, which will be the object of study during the investigation. To delimit a topic means to establish the limits. These limits can be time, place, persons, groups of persons, companies. In this sense, the delimitation means a limit in terms of WHEN?-WHO?- WHERE?. To delimit a problem, researchers must take into account the following criteria:

(SPACE DELIMITATION (WHERE?)

- Region
- Zone
- City



- Town
- University
- Community

(**SOCIAL DELIMITATION (WHO?)**

- Students of a given course
- Teachers of the university
- Employees of a company
- Deans of a university



(**TEMPORAL DELIMITATION (WHEN?)**

- Years
- Months
- Weeks
- Periods
- Days



- It must be related to a professional interest.
- Do not use terms such as good, bad, better or worse to refer it to the concrete reality.

Now, you are ready to enunciate the problem you want to solve. The problem is a question that requires a logical answer through the scientific investigation. To identify and define a problem is very important to do it in very simple and clear

terms. A problem is investigable when the observation and collection of data provide the response to the interrogation of the investigation.

Therefore, you have to identify correctly a problem. To identify it properly, you must analyze its antecedents. The researchers must read the documents and books that mention details of the problem. It is also recommendable the interviews with expert people and the field observations. The statement of the problem will constitute the general frame, in which the investigation will be based.

ENUNCIATION OF THE PROBLEM.



The problem is enunciated in a question form. And, it refers to the relationship between the two or more variables. The enunciation of the problem it is done as a question, because it is considered that the research work will give a logical answer to it. The enunciation of the problem has to be placed at the end of the statement of the problem.

EXAMPLES:

1- Is it necessary to design a manual to be used by teachers and students of the subject Proyecto Especial de Investigación Dirigida at the Universidad Tecnológica de El Salvador?

2- *What is the type of discipline that teachers of the Basic Education use to control their students?*

3- *Are there proportional differences between teachers who use democratic discipline and teachers who use an authoritative discipline?*

EXERCISE:

After you have stated your problem, make its correspondent enunciation. Make sure to include both the independent and dependent variables.

JUSTIFICATION OF THE PROBLEM



It is to sustain with convince arguments, the execution of an investigation. In other words, it is to point out the reasons to develop the investigation. To present a correct justification is required to know the causes and purposes that motivate the investigation, which permits the solution of the problem that is investigated.

To justify the investigation, researchers must consider the following criteria:

- **Convenience**

The investigation must be beneficial.

- **Relevance**

The ranges of the investigation.

- Who will be benefited with the results of the investigation? How? What is its social projection?

- **Practical implications**

Will it solve some real problem?

- **Theoretical value.**

- Will it be useful to support some knowledge.
- Will it be useful to develop some theory?

- **Methodological unity.**

- Does it suggest how to study a population?
- Is it useful to create a new instrument to collect and analyze data?

EXERCISE

Task: Justify the investigation you want to develop and be prepared to discuss your it with your classmates and teacher.

Standards:

1. You must sustain your justification of the investigation using convincing arguments. In other words, you must explain why your investigation will be developed.
2. You must mention causes and purposes that motivate to develop your investigation.

CHECKLIST TO EVALUATE THE PROBLEM.

NO.	CRITERIA	YES	NO
1	Is it possible to solve the problem effectively through the investigation process?	X	
2	Is it possible to find relevant data to give response to the chosen problem?	X	
3	Is the problem really significant?	X	

4	Is there a theoretical basis to support it?	X	
5	Will the solution of the problem produce a real difference between the anterior and current situation?	X	
6	Will the solution of the problem benefit a significant number of persons?	X	
7	Is the problem a novel one?	X	

THEORETICAL AND CONCEPTUAL FRAMEWORK.

Now, researchers must sustain the problem through the ***analysis of theories*** that have treated such problem. The role of the theories is fundamental for the investigation. Researcher's experience and practice are very important too. When researchers dominate theories and have experience, they are able to develop the investigation work effectively. The theoretical framework is complemented with the conceptual framework. In other words, the theoretical and conceptual framework includes all the theories about the problem researchers want to investigate. Therefore, it includes the collected information about other authors have written about the problem researchers are interested. In the same way, interviews can be done to experts.

During the analysis of theories, researchers must indicate the explanations and interpretations that other authors have mentioned to the problem. The analysis of theories can be complemented with field exploratory investigations (pilot surveys, interviews to experts).

THEORETICAL FRAMEWORK.



This phase implies to analyze and expose those theories, theoretical scopes, investigations and general antecedents that are considered valid for the investigation. The theoretical framework has to be organized in such a way that the reader will easily understand why, how and when does the problem takes place.

• FUNCTIONS OF THE THEORETICAL FRAMEWORK.

- A. It helps to prevent the mistakes that have been done in other investigations.
- B. It orients how the investigation must be done.
- C. It amplifies the horizon of the investigation and guides the researchers to center their attention to their problem, avoiding deviations from the original statement of the problem.
- D. It leads to the enunciation of the interrogation of the investigation, which must be proved later.
- E. It inspires new lineaments and areas of investigation.

F. It provides a referential framework to interpret the results of the investigation.

• **PHASES OF THE ELABORATION OF THE THEORETICAL FRAMEWORK.**



PHASE 1: THE REVISION OF THE CORRESPONDING BIBLIOGRAPHY.

This phase consists in activities of detecting, obtaining and consulting the bibliography and other materials that can be useful to the purpose of the investigation. It is in this section where you have to be careful in managing your quotations.

A poor document is a collection of lengthy quotations without giving anything from your own experience onto the writing. You should summarize the theories and if any quote is added, it has to be gracefully blended with the text, instead of standing alone with no connection to what precedes or to what follows it.

Any quotation can be introduced in more than one way. When you quote try to vary the way you do it. For example, if you introduce a quotation with a verb, do not over use *Say-said* and *Write-wrote*, look for some synonyms. Here we present you a list of verbs that can be used when you quote:

+ Affirm

+ Express

+ Agree

+ Emphasize

+ Argue

+ Explain

- | | |
|------------|------------|
| + Observe | + Relate |
| + Declare | + Think |
| + Believe | + Insist |
| + Report | + Note |
| + Maintain | + Mention |
| + Suggest | + State |
| + Assert. | + Comment. |



When you start writing the theoretical framework you may feel that you easily run out of words to say what you need to say and this may lead you to unintentional **PLAGIARISM**. If you express those ideas in your own words, you will not need to cite the sources. But, if you copy directly each and single word derived from a source, it requires citation.



IT IS YOUR OBLIGATION TO ACKNOWLEDGE
BORROWED MATERIAL, OTHERWISE YOU WILL BE
COMMITTING A CRIMEN. (PLAGIARISM)

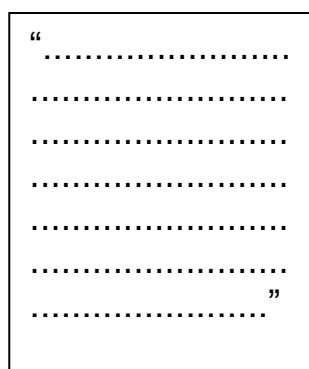
In other words, to avoid **plagiarism**, you must use **footnotes**. Which means that in an investigation work based on the writings of others, common courtesy demands that researchers give credit for their ideas and words that researchers

use in their own work. Such recognition of another's credit, usually made in *footnotes*, tell readers where researchers obtained their facts, so that they can judge for themselves the sources where the material is based on. In this way, readers can turn directly to them for further information.

Therefore, you must acknowledge all the material **quoted**, paraphrased or summarized from any work. If you fail to cite a source, whether deliberately or accidentally, for sure you are guilty of plagiarism; because you are presenting as your own work the **words** or **ideas** of other author.

The theoretical framework it is not based just in putting together a bunch of quotations. You as a researcher must follow some steps to construct in an ordered and clear way your theoretical framework. First, you have to read many theories to enrich your knowledge. Second, You have to express your ideas and point of view of your investigation. Finally, you have to reinforce and support your ideas with the citations of the authors that are more suitable for your investigation.

There is not a maximum of lines to quote, but you do not have to abuse quoting a whole page like this:



Remember that you are the author of your research so, your ideas must be clearly exposed and supported. But, you can not write your theoretical framework if you do not read.

REASONS TO USE FOOTNOTES

- A- To give the source of a direct quotation
- B- To give credit for other people's ideas even though researchers write them in their own words.
- C- To give the source of diagrams, tables, statistics and figures.
- D- To give additional information that may be of interest to the readers but not important enough to be given in the text.

In the document, researchers must number their *footnotes* consecutively (1,2,3,4,5,...) throughout it. You must place the number slightly above the line at the end of the sentence to be footnoted. So, researchers must type or write the footnotes at the bottom of each page, below a short line to separate text from notes. Researchers must be sure to allow room of each page.

HINTS

- 0 When you use the ideas or information that the writers provide be sure to cite the exact source of the material used. If you are in doubt about whether you need to cite a source, you must cite it.
- 0 Since the material in your document comes largely from other's work, you must give the proper credit by citing your sources.
- 0 Traditionally, the citations took the form of notes numbered consecutively throughout the document and placed either at the bottom of the appropriate pages (footnotes) or all together at the end of the document. (endnotes).

- 0 You must add footnotes after every direct quotation (enclosed in quotation marks), after every sentence or paragraph that contains the ideas or opinions of someone else (even though explained in your own words).
- 0 When citation is required, you have to write each and single word exactly the way it is written even if there would exist literally mistakes in the paragraph.
- 0 In order to use citations, the researcher must read many books to get acquainted with the theories he/she will base the point of view.

EXAMPLES OF FOOTNOTES.

-This *research problem* has been treated in different ways by different authors. According to Muñoz Campos, “Antes de iniciar la investigación, el investigador debe conocer métodos, técnicas, instrumentos y procedimientos, para no realizar la investigación en forma empírica”³⁹

As you can see at the bottom of this page, it is written the reference to the source that the researchers have used in the theoretical framework. Don't forget to respect the order. For example, this reference is made to a book. It gives the author's name, the title of the book, edition, place (country, city) and the number of page or pages.

3. Simons, Carlos. Guide to Investigate, p.55

4. Brookes, Susan. And Juan Bacon, Handbook for Researching, p.101

To refer to a magazine article, you must give the author's name, the title of the article in quotation marks, the name of the magazine, the date of issue and the number of page or pages

¹ Muñoz Campos, Roberto. "Guía de Trabajo de Investigación Universitaria" 3ra. Edición. El Salvador. 1992. P. 1

EXAMPLES OF MAGAZINE ARTICLES

1. Fuentes, Ferman. "Steps to Investigate"., Procedures for Researching, February 2001, p.12

If the author name is not given, you must use this form:

2. "Procedures and Steps," USAID Bulletin, March 10, 2001, p. 215

If the reference is to an article in an encyclopedia you must give the author's name, the title of the article, the name of the encyclopedia, volume and page.

-
1. Hilton, Horace. "Easy Procedures", Britannica Encyclopedia, vol.19, p.720

You have to be very careful when using Latin expressions such as: *das*, *ibid.*, *Op.*, *cit.*, etc. If you have a number of references to the same source, they must use a shortened form for the footnotes after the first. To refer to a source mentioned in the immediately preceding footnote, you must use **ibid or Idem.**

In Latin, it is *ibidem*, meaning in the same place. If the page number differs from that given above, you must place a comma after **ibid** and then write the page number. But, if you refer to the same author and page you may use **Idem.**

EXAMPLE:

-
7. Hilton, Horace. Procedures to investigate, p.67
 8. Idem.
 9. Ibid, p,109

EXERCISE:

Go to the library and bring to class at least 5 sources from which you will use to support your theoretical framework. Make sure you place bibliography in the correct order.

EXERCISE

Task: Revise the corresponding literature, which are valid for your investigation.

Standards:

1. You must detect, obtain and consult the bibliography and other materials that can be useful for your investigation.
2. You must analyze the theories that are related to your investigation problem.
3. You must indicate the explanations and interpretations that other authors have given about your investigation problem.

OTHER SOURCES

Hints:

- By this time, you have a rather long list of references and might easily call it a day.
- Make inquiries and try to discover people who live in your home town and are experts in your topic.
- Telephone and make an appointment to talk with those professionals.
- Prepare interviews.
- Make a trip to specific places, where your topic is treated.
- Write to companies for pamphlets they issue on your topic.

READING AND TAKING NOTES

Once you have located the sources; the books and articles that you will need to read and assimilate. You can begin the actual research.

GET IT ALL DOWN

Every time you consult a new source, copy all the information necessary for documentation. If you fail to record all the pertinent data, you may find yourself tracking down a book or article weeks later, in order to look up an essential publication date or volume number that you neglected to record initially. The book may by this time be checked out, lost, or stolen, so get it all down the first time.

You should probably use 3 by 5-inch or 4 by 6-inch note cards to keep track of the information. They should come out looking something like the following examples:

BIBLIOGRAPHY CARD

FOR BOOKS

1. Author or editor

2. Title (underlined)
3. Place of publication
4. Publisher
5. Date of publication (plus date of edition, if the book had more than one)
6. Library call number

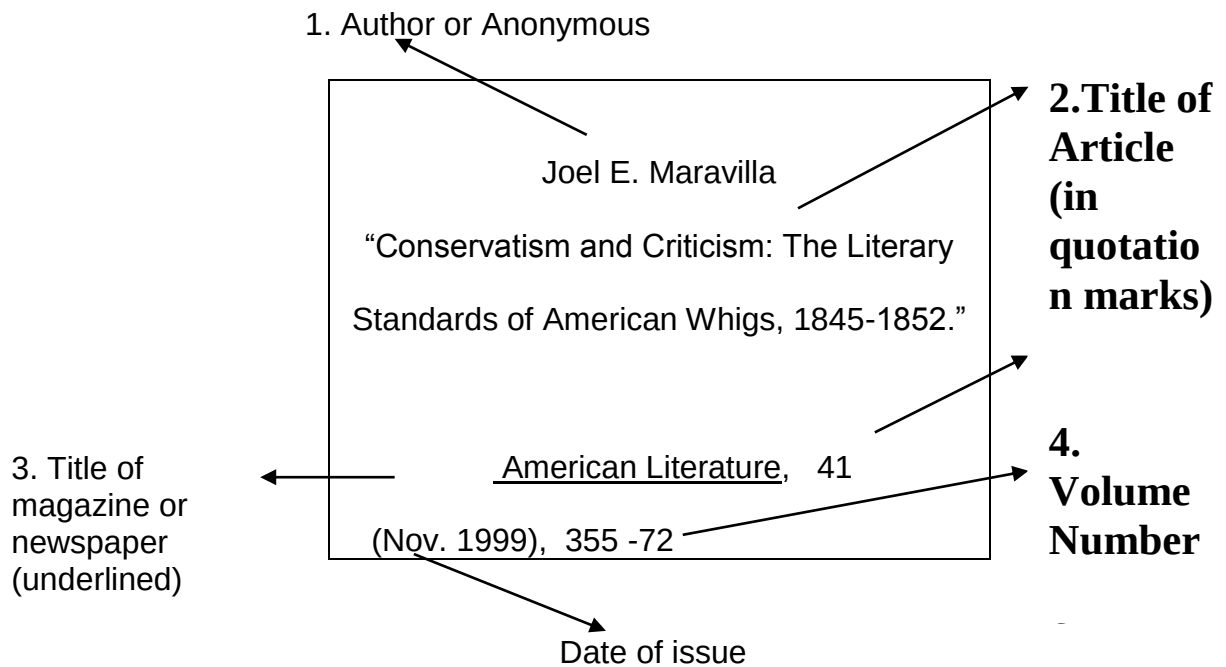
814	Lopez, Bertita A (1)
	C591
(6)	
	<u>The Image of Money in the American Novel of the Gilded Age.</u> (2)
	New York: (3)
	Humanities Press, (4)
	1969 (5)

BIBLIOGRAPHY CARD FOR A BOOK

	1		→	Source Number
Author ←	•	Bernal Campos, Angel		
Title ←	•	How to use your camera		
Publisher ←	•	Fountain Press		
Place and Date ←	•	London, 1988		
		770B	→	Call Number

FOR ARTICLES

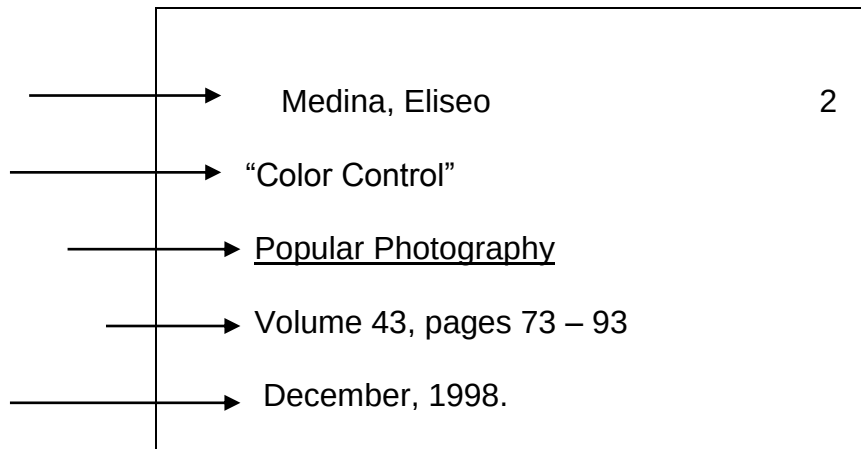
1. Author or Anonymous
2. Title (in quotation marks)
3. Name of magazine or newspaper (underlined)
4. Volume number (if a scholarly journal)
5. Date of issue
6. Pages the article covers



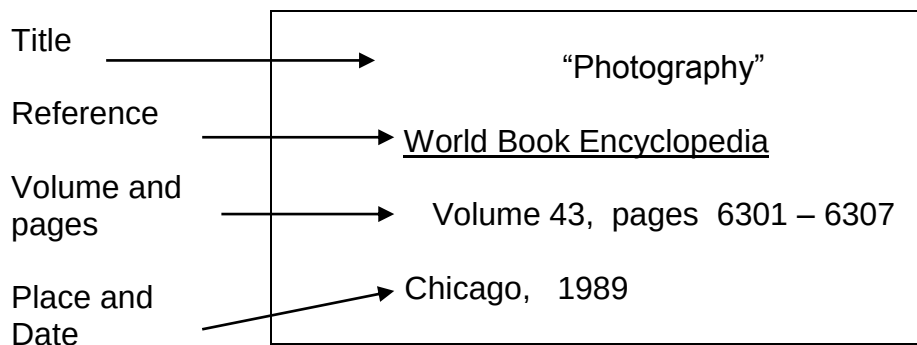
FOR A MAGAZINE

Author

Title

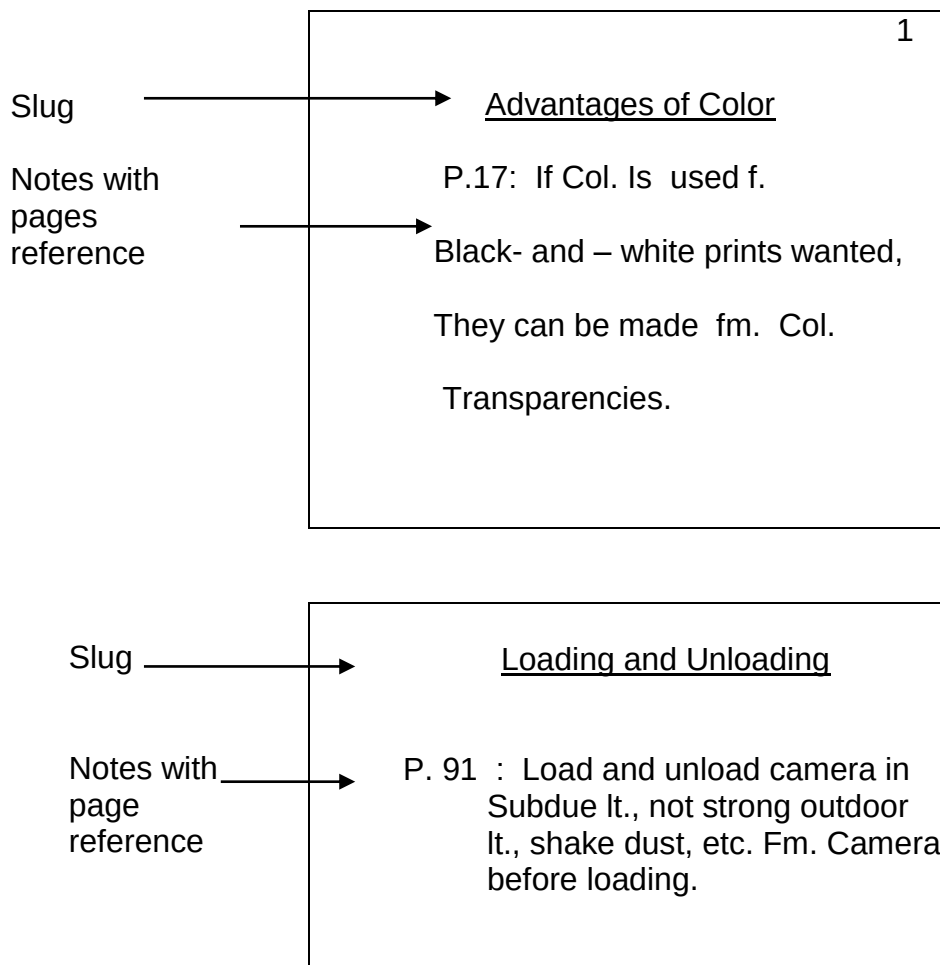


You better give each bibliography card a number, placing it always in the upper right corner, where you can spot it easily. Then, when you are taking notes, you use these card numbers on your note cards to identify the source from which the notes are taken. Instead of repeating the full name of the source on each card, you merely put the source number in the corner.



PREPARING NOTE CARDS

You first read rapidly through an article or chapter to see what information it contains that you might use. Then, you go over it again, taking notes on points you want to remember. To make it easy to sort out the material later, you do not crowd notes together. On each card you write only one note or related facts about only one topic. For example



The various parts of the note cards may need explanation:

- 1) THE SLUG. At the head of each note, where it can easily be seen, you put a slug (a heading that tells what topic the notes on the card deal with) After all your notes are taken, you can easily sort the cards into related groups by glancing at the slugs that tell the different topics your notes cover.
- 2) PAGE REFERENCE. You are careful to record the exact page from which each note is taken, for two reasons: First, you may want to check back to the source later to verify the facts. Second, you may need to refer to the source in your footnotes.
- 3) There is no set form for the notes themselves. One note may be simply some statistics, another a few key words and phrases as a reminder of important facts. Occasionally you may write a note telling the author's opinion on some matter, or one telling your reaction to something the author has said. More often, the note will be a summary or paraphrase of a paragraph, a page, or even a longer discussion of some idea or process.

For the most part, the notes are to be in your own words, not copied directly from the source. But once in a while you may come across a sentence (or two) of the author's that you want to quote because it contains especially important material or is phrased in an unusually striking way. Then be sure to copy every word and punctuation exactly and enclose the sentence in

quotation marks, so that when you use the sentence in your document, you will not forget to give the writer proper credit. Remember that in taking notes the most important considerations are accuracy and honesty. Check the statistics and facts you note down to make sure you have them right. Be careful, in summarizing or paraphrasing the author's words, that you do not misinterpret his/her meaning.

The actual writing of the note should be as speedy and simple as possible. If you know shorthand or speedwriting of your own for use in your note cards. This, you can do easily by using key phrases not essential to the meaning.

- 4) SOURCE NUMBER. In the upper right (the same place as on the bibliography card), you put the number that identifies the source of the note. The number matches the one on the bibliography card for the book by Edward Bombeck, the source of the note material. You could, of course, write the author and a short form of the title instead of a number. But numbers are more convenient, since you fill out many cards.

EXERCISE

Take careful notes on the reading you do for your document. Make out a bibliography card for each reference you use. Be sure you label each note card

with a slug and that you include the page reference and source number. Your teacher may ask to look for over your note cards from time to time to check your progress and to help you solve any problems that come up.

PHASE 2: THE ADOPTION OF A THEORY.

This phase is done when the nature and content of the theory is appropriate to the local or national cultural context. In other words, when it helps to explain the object situation of the investigation.

• SOURCES OF INFORMATION.



To construct or reconstruct a theory is necessary to be supported by data of ***first hand***, such as : books, publication articles, records and lectures among others. For now, the most serviceable sources are the books, the scientific magazines, and lectures. Why? Because they systematize the investigation topic.

• HOW IS THE THEORETICAL FRAMEWORK CONSTRUCTED?

The theoretical framework is constructed by the integration of the collected information. The first step is to order the information in logical criteria. Sometimes, the information is ordered in a chronological way or by subtopic or by theory.

An easy way to construct the theoretical framework is to make an **outline**. That means that you will indicate the principal and different parts of your theoretical framework in a synthesized way. It is like a summary of the written work.

EXAMPLE OF AN OUTLINE.

I. DESIGN OF THE INVESTIGATION.

1.1 ORIGINATING AN INVESTIGATION PROJECT.

1.2 CRITERIA TO ORIGINATE AN INVESTIGATION TOPIC.

1.3 ROUTE OF AN INVESTIGATION PROJECT.

1.4 STATEMENT OF THE PROBLEM.

1.4.1 DELIMITATION OF THE INVESTIGATION

1.4.2 DEFINITION OF THE INVESTIGATION OBJECTIVES

1.4.3 JUSTIFICATION OF THE INVESTIGATION.

II. THEORETICAL FRAMEWORK.

2.1 PHASES OF THE ELABORATION OF THE THEORETICAL FRAMEWORK

- 2.2 SOURCES OF THE INVESTIGATION
- 2.3 FUNCTIONS OF THE THEORY
- III. FORMULATION OF THE INTERROGATION OF THE INVESTIGATION
 - 3.1 VARIABLES
 - 3.1.1 INDICATORS
- IV. METHODOLOGICAL OPERATIONS.
 - 4.1 THE TYPE OF STUDY.
 - 4.2 DETERMINATION OF UNIVERS AND THE SAMPLE.
 - 4.3 DESIGN OF THE SAMPLE
- V. EXECUTION OF THE INVESTIGATION.
 - 5.1 FIELD WORK.
 - 5.2 ANALYSIS AND INTERPRETATION OF DATA

EXERCISE

Now elaborate your outline taking into account the most important parts of your theoretical framework.

• FUNCTIONS OF THE THEORY.

The principal functions of the theory are:

- a) It explains why, how and when occurs a phenomenon.
- b) It systematizes the knowledge about a phenomenon or reality.
- c) It refers to the future. It indicates how a phenomenon will be manifested, according to certain conditions. It helps to the prediction.

• UTILITY OF A THEORY.

A theory is useful when it describes, explains and predicts the phenomenon that it refers.

• CRITERIA TO EVALUATE A THEORY.

The main criteria to evaluate a theory are:

- a) Capacity of description, explanation, and prediction.
- b) Logical consistency/coherence.
- c) Perspective/ level of generality.
- d) Parsimony: which means that theory must be simple, easy to understand; but not superficial.

EXERCISE

After you have read many theories and written your outline, write your theoretical framework. Remember your ideas are very important. You quote to support what you have said.

CONCEPTUAL FRAMEWORK

The conceptual framework constitutes the ideas, concepts and experiences that researchers have about the investigation problem. It has to be in accordance with the theories that you are going to include in the theoretical framework. In other words, the conceptual framework is the definition of specific terms adapted to the investigation by the researcher.

IMPORTANCE OF THE CONCEPTUAL FRAMEWORK.

- * It is necessary to use basic concepts to support in a clear way the investigation.
- * It has as a goal, to simplify by summarizing the reality in concept.
- * The use of basic terms orient the investigation because they will be used through the investigation work.

- * The concepts help to clarify the investigation and avoid confusions, because the objective is to make a distinction between the scientific and everyday language.
- * The conceptualization permits the researcher to give the essence of what he/she is trying to investigate.

EXAMPLES OF CONCEPTUAL FRAMEWORK

Content : It is the knowledge, attitude or skill that is taught during the teaching-learning process.

Goal : It is the limit to what the teaching-learning process must arrive.

Instrument : The tool that researchers use to do the investigation.

Manual: a small book (tool) that is used by the teacher and students as a guide. It gives instructions on how to develop the contents of the subject.

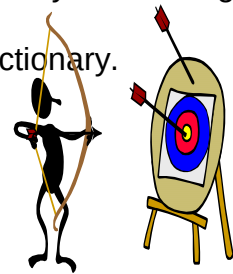
As you can see the conceptual framework follows an alphabetical order

EXERCISE:

Task: Elaborate the conceptual framework of your investigation.

Standards:

1. Select the most important words in your investigation work.
2. Try to define the concepts and experiences related to your investigation problem.
3. You must use basic concepts, which are close related to your investigation work (try to use your own words) You may also use a dictionary.

OBJECTIVES OF THE INVESTIGATION.

The objectives indicate what the researchers try to find through the investigation.

During the formulation of the objectives, researchers need to know in detail, what they pretend to do or obtain through the investigation. It is important to distinguish the goals expected, the way you plan to accomplish them and what will take to do so.

The objectives of an investigation project suggest the information that will be obtained by researchers for the solution of the problem. In general, the objectives describe what researchers hope to obtain at the end of the investigation. The correct formulation of the objectives will depend in a great extent to the degree of clarity reached in the statement and delimitation of the problem.

The objectives must be expressed clearly to avoid possible deviations in the investigation process. They must manifest what for it will be useful. In other words, what will be its destiny.

The objectives are divided in general and specific. The general objectives indicate in a global way, what the researchers want to obtain at the end of the investigation. On the other hand, the specific objectives indicate in a particular way, the relationship between the different variables, which are managed in the investigation process.

The objectives must be congruent with the statement of the problem. Before elaborating the objectives you should ask yourself the following questions:

- What do we investigate?
- Why do we investigate?
- Who do we investigate for?
- What do we want to demonstrate with our investigation?
- What aspects are we going to investigate?

After the objectives are elaborated you should ask yourself if your objectives answer the questions What?, Who?, and How?

What? The goals that you want to reach as researchers

Who? The persons involved in the investigation.

How? The way you will develop the investigation.

The objectives of the investigation have to contain and express clearly the variables of the investigation. But, What is a Variable? A **variable** is any condition or attribution feasible to change or vary to take different values. Variables can be classified as dependent and independent.

Dependent Variable: is the variable, which you observe and measure to determine the effect of the independent variable.

Independent Variable: Is the major variable, which you hope to investigate. It is the variable that is selected, manipulated, and measured by the researcher.

EXERCISE:

Identify the dependent and independent variables of your investigation work.

THE OBJECTIVES SHOULD BE:

- ♦ Clear
- ♦ Concrete
- ♦ Measurable
- ♦ Simple

- ♦ Congruent with the statement of the problem
- ♦ Feasible to be achieved.

The formulation of the objectives should respond to concrete results. The verbs must be redacted in the infinitive form. They must indicate action, in the part of the researchers

EXAMPLES:

- | | |
|-----------------|------------------|
| 1- To describe | 6- To identify |
| 2- To establish | 7- To facilitate |
| 3- To design | 8- To classify |
| 4- To prove | 9- To determine |
| 5- To create | 10- To combine |

EXAMPLES OF GENERAL AND SPECIFIC OBJECTIVES

GENERAL OBJECTIVE

To facilitate the teaching- learning process in the subject *Proyecto Especial de Investigación Dirigida* through the elaboration of a manual for teachers and students at the UTEC

SPECIFIC OBJECTIVES

To determine the need of a manual to be used by teachers and students for the subject *Proyecto Especial de Investigación Dirigida*.

To elaborate a manual for students of the subject *Proyecto Especial de Investigación Dirigida*.

To elaborate a manual for teachers of the subject *Proyecto Especial de Investigación Dirigida* .

EXERCISE:

Task: Elaborate the objectives of your investigation work.

Standards:

1. Your objectives must indicate what you try to do or find with your investigation.
2. Your objectives must suggest the information that will be obtained to solve your investigation problem.
3. Your general objective must indicate, in a global way, what you will obtain with your investigation.

4. Your specific objectives must indicate in a particular way, the relations that the different variables have in the investigation process.
5. Your objectives must be congruent with your justification and statement of the problem of your investigation.
6. In the particular case of your specific objectives, they must be related with your delimitation of your investigation problem.
7. Your objectives must have at least, two variables (one dependent and one independent).

The variables of the investigation, in our investigation work are extracted from the objectives. The English Major does not include Hypothesis in its research work because our investigations are at a PROJECT level. The English Language Department bases the investigation works in the existent needs in the different areas of English. So, the ELD works at a Necessity Level. But as a good researcher you have to know what a hypothesis is.

HYPOTHESIS: The tentative answer or the possible solution to the stated problem. The hypotheses are precise and brief expressions about the relationship between the variables.

EXAMPLES OF VARIABLES

Independent Variable (IV):

- Teaching Methods

The independent variable produces the effect or problem.

Dependent Variable (DV):

- Deficiency of Students.

The dependent variable represents the problem that is caused by the independent variable.

Intervening Variable:

- Basic English Students.

The moderate or intervening variable influences in the dependent relationship that exist between the independent and dependent variable.

In summary, researchers must pay much attention to the variables that take part in the objectives they are formulating.

EXAMPLE OF INDICATORS WHICH ADVISE THAT EXIST A PROBLEM.

- 1- Some students talk too much in class, and the teacher continues the lesson without saying anything.
- 2- Some students eat in class and the teacher says anything about it.
- 3- Some students are not honest during the exams and the teacher does not react against them.
- 4- Some students do not present their homework and the teacher does not give importance to it.

EXAMPLE OF POPULATION AND VARIABLES

POPULATION

- Teachers of English at the UTEC.
- Students of English at the UTEC.

VARIABLES

- I.V= Planning of classes.
- I.V= Execution of classes.
- D.V= Teaching fundamentation For teaching English classes.

EXAMPLES OF VARIABLES AND INDICATORS.

VARIABLES

D.V= Teaching fundamentation
To prepare the activities.

INDICATORS

- Using teaching methods
- Identifying teaching problems.
- Formulation of the hypothesis.
- Elaboration of the objectives.
- Design of some investigations.
- Analysis and interpretation of data.

I.V= Planning of Classes

- Logical sequence in the development Of the classes.
- Efficient advising to the student.

- Presentation of lesson plans.

I.V= Execution of classes

- Incoherent expositions.
- Emphasis just in expositive classes.
- Level of interest just for the evaluation.

EXERCISE

1- Read carefully the following hypothesis. Identify its variables.

The students of the last semester of The English Major of the UTEC trained using this investigation guide, will develop in a shorter period of time their graduation work than those that would not use it.

2- *Underline the dependent and independent variable of the following enunciation of the problem:*

Is it necessary to design a manual to be used by teachers and students of the subject Proyecto Especial de Investigación Dirigida at the Universidad Tecnológica de El Salvador?

Remember that the variables that will be investigated refer to measure the dependent variable as a consequence of each variation in the independent ones.

Also you have to keep in mind that the operationalization of the variable means to delimit its indicators and when you obtain the indicators you are ready to redact the questions of your instruments.

EXERCISE

a- Identify the variables of the following enunciation of the problem.

To what extent the use of a teacher's guide of motivational techniques will increase participation of the students in the English I Course for the Public Relations Major at the UTEC?

b- After you have identified them, operationalize the variables into its indicators.

Remember that the indicators are all those signals that indicate that exists a problem.

OPERATIONALIZATION OF THE HYPOTHESIS.

This consists in decomposing the hypothesis into its variables. Then, the variables into the indicators that can be investigated by questions or items through questionnaires or interviews.

The indicators of the problem integrate the variables. The indicators advise researchers about the existence of a problem. An indicator is the unit of measure that is used to measure a variable.

The **independent variable** is an element or situation that explains, conditions or determines the presence of another. This is the **cause** of the problem.

The **dependent variable** is defined as the element or explained situation that is in function of another. This is the **effect** of the problem.

CONDITIONS OF THE HYPOTHESIS.

1) It must be referred to a real social situation. It must be proved.

Example:

English major students show less violence than Right Students at the UTEC.

2) The relationship between variables must be clear.

Example:

More frustration of students less learning of them.

STRUCTURE OF THE HYPOTHESIS

The structural elements of the hypothesis are:

- a) The unity of observation or analysis.
 - b) The variables.
 - c) The logical terms.
- A) The unit of observation is the group of things, phenomena or procedures that are similar or that have the same characteristics. For example: Persons, groups of people, social strata.
- B) The variables are properties that can vary, but its variation can be measured or proved. Example: The intelligence, the sex, the attractive physique.
- C) The logical terms are the terms that relate the unit of observation with the variables of the hypothesis.

EXAMPLE

PARTS OF THE HYPOTHESIS.

Independent Variable

Indifference of the English Major students about the English Department problems.

Dependent Variable

Participation of students in cultural activities.

Unit of Analysis

Students in English Major at the UTEC.

Logical Terms

To major indifference, less...

To major indifference of the English Major students about the English Department problems, less is the participation of students in the cultural activities at the UTEC.

OR

To less participation of students of English Major in cultural activities, major is the indifference of the students about the English Department problems.

TYPES OF HYPOTHESIS.

1. H_0 : Negative Hypothesis. The null hypothesis (H_0) confirms that does not exist any effect or relationship between the variables.
2. H_1 : Alternative Hypothesis. The statistic or alternative hypothesis confirms the effect incident or relationship is present or exists between the variables.

EXAMPLE

| Investigation hypothesis (IH)

These students are intelligent.

| Null Hypothesis (H_0)

These students are **not** intelligent.

The alternative hypothesis when presenting another possibility of characteristic of students could be:

These students are excellent.

EXERCISE

Task: Formulate the hypothesis of your investigation.

Standards:

1. You must indicate what you are looking for. In other words, you must indicate what you are trying to prove.
2. You must define the tentative explanations about the problem you are investigating.
3. You must formulate it in a proposition way.
4. The hypothesis must be referred to a real and social situation.
5. The hypothesis must be structured with the unit of observation, variables and the logical connectives or logical terms.
6. The hypothesis must have at least two variables (dependent and independent)

TESTING HYPOTHESIS

Statisticians are often asked to test whether if a given set of observational data represents what one would expect to observe by chance or whether it differs greatly from what one might expect.

To determine what constitute a significant difference, statisticians establish a level of error they are willing to tolerate.

One of the most common ways to test whether if a given set of data differs from what one would expect by chance is to use the **Chi-square (X^2)** test. This test is used to compare *observed data* with *expected data*, using the following formula.

$$X^2 = \sum \frac{(\text{observed}-\text{expected})^2}{\text{Expected}}$$

If there is a large difference between observed and expected data, we get a large value for X^2 . If there is no difference, $X^2 = 0$

EXAMPLE

Calculate Chi-square for the following coin experiment:

Since the coin was tossed 30 times, we must account for all 30 events when computing chi-square. There are two possible outcomes heads and tails. Each contributes one term to the value of X^2 .

- There are 30 events observed.
- There are also 30 events expected.

	Heads	Tails
We observe	23	7

We expect	15	15
-----------	----	----

$$\frac{(\text{observed}-\text{expected})^2}{\text{expected}}$$

$$\frac{(23-15)^2}{15}$$

$$\frac{(7-15)^2}{15}$$

$$X^2 = \frac{(23-15)^2}{15} + \frac{(7-15)^2}{15} = \frac{128}{15} = 8.53$$

Thus the value of chi-square associated with the coin toss is 8.53

METHODOLOGY OF THE INVESTIGATION.

In this phase, researchers present a sketch of they will develop the investigation. Therefore, it is necessary to explain in detail, the steps researchers will follow to obtain the objectives of the investigation.

In other words, researchers must explain how they will do the investigation and what they will use to do it. Because the methodology of your investigation is the spinal cord of your pre-project it has to be clear and well organized. You have to

mention the units of analysis (Enterprises, persons, government institutions, etc).

In the techniques of observation you have to say what kind of investigation you will perform: experimental, field, documental, etc. The techniques to collect information (data gathering), has to be explained clearly. It is in this part where you have to say what instruments you are going to use. The instruments are the materials you will use to collect the information you want to obtain. You may use interviews, surveys, questionnaires, check lists, etc.

The methodology must be in perfect concordance with the objectives of the investigation.

Also, to develop an investigation, it is necessary to select a **population** or group of people who will be taken into account in the investigation. The **Population** is defined as the total of individuals or elements that must have common characteristics to be investigated. The Sample is just a part of the population.

Samples are used because obtaining information about each member of a population may be expensive, difficult, time consuming, or even impossible.

An indiscriminate sample is a sample selected such that each object or person in the population has an equal chance of being selected for the sample.

Besides, each object or person in the sample is chosen independently of any other objects in the sample.

To obtain the size of the sample for **finite population**, it is used the following formula:

$$n = \frac{Z^2 \times P \times Q \times N}{(N-1) E^2 + Z^2 \times P \times Q}$$

Then you must substitute data.

Let us see:

⊖ Population : 1051 teachers and students.

$$N = 280$$

⊖ Sampling error : 5 %

$$E = 0.05$$

⊖ Coefficient of confidence : 95 %

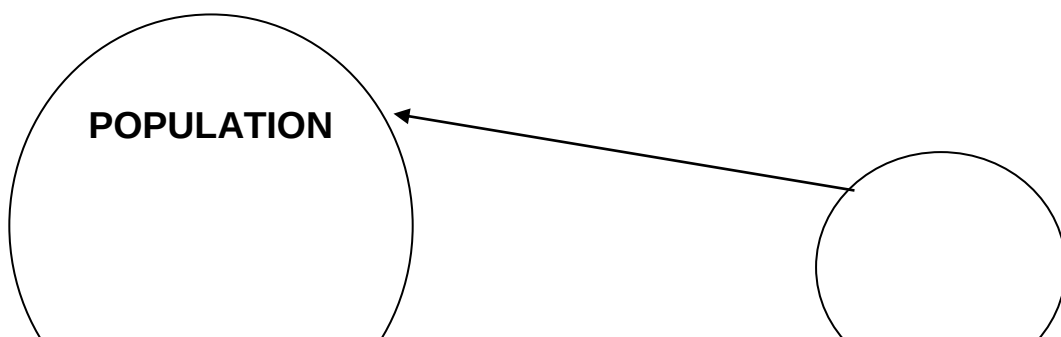
$$Z = 1.96$$

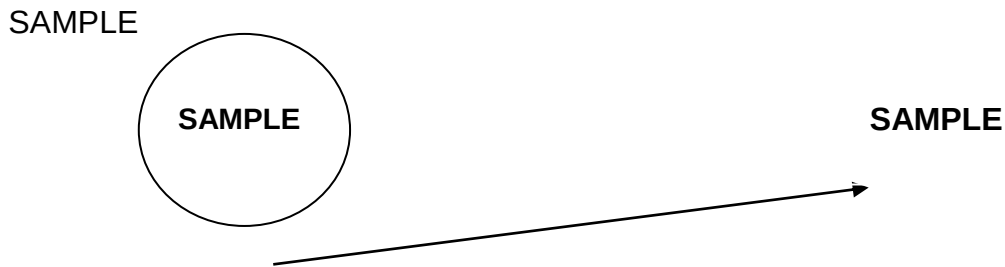
⊖ Population proportion of the event : 50 %

$$P = 0.50$$

⊖ Population proportion that the event will not occur

$$Q = 1-P = 0.50$$





The investigation of a sample is a channel to know the characteristics of a population. In this sense, the results of the sample are generalized to know the total population's characteristics.

ADVANTAGES OF A SAMPLE'S INVESTIGATION.

1. It permits to develop an investigation in less time.
2. Researchers need fewer budget.
3. It permits to study the variables deeply.

EXAMPLE OF POPULATION.

The target population that will be investigated through this investigation will be constituted with people who are directly involved in the variables of this study. These are the English teachers and the English students at the UTEC.

EXAMPLE OF A DISTRIBUTION OF THE POPULATION AND SAMPLE.

PARTICIPANT	POPULATION	SAMPLE
English teachers at the UTEC.	1051	281
Students	5000	357
TOTALS	6051	638

As you can see in the table, the sample has to be significant to obtain a real answer and get the information you need for your research.

To obtain the size of the sample for **infinite population**, it is used the following formula:

$$n = \frac{z^2 \cdot \tilde{\sigma}^2}{E^2}$$

CALCULATING THE PERCENTAGES

To calculate the percentages of the results of the investigation; experts in statistics use many methods. But in English major, students can use the following formula:

$$\% = \frac{\mathcal{E} \times 100}{n_i}$$

Where:

% = percentage of each category.

$\mathcal{E}$ = frequency of each category.

100 = one hundred percent.

n_i = number of individuals that constitute each stratum of the sample.

EXAMPLE:

$$\% = \frac{35 \times 100}{45} = R/ 77.77 \quad \underline{R/ 78}$$

EXPLANATION

% = percentage of each category.

35 = Individuals that answer the same category.

100 = one hundred percent.

45 = Total of individuals that participated in the survey, answering the questionnaire.

78% = It is the relative frequency. In other words, it is the percentage of students that answered the same thing.

TABULATION, CODIFICATION AND CLASSIFICATION OF DATA

After you have administered the questionnaires, you must tabulate, codify and classify them. The information must be organized, accordingly to the objectives of your investigation. In this way, the analysis of data will be easier for you. The tabulation of data can be processed by a personal computer (PC)

EXAMPLE

Step 1. Prepare a chart No. 1 to note down the stratum, population and sample.

Step 2. Prepare a chart No. 2 to note down the number of each question, the question, the code of each question, the category of the alternative answers, the absolute frequency of the answer (how many times and answer has been selected by the informants) and relative frequency (the percentage)

In this example, the total of the informants has been just 24 persons.

Thus,

24. $\longrightarrow$ 100%

5 $\longrightarrow$ x

$$500 \div 24 = 20.83 = 21\%$$

Remember that is one chart for each question.

Step 3. It is recommended the following order:

Question No. 1

Write the question.

Then,

Objective:

Write the objective of the question

Then, **draw the chart and note down data.**

Interpretation:

Write down what you have learned through the answers given by the informants.

Then, **draw a pie diagram or bars** to show data.

And so on with the rest of the questions and answers.

Note: of course, this is just an example. There are many other ways to tabulate the information.

EXERCISE

Tabulate your own information.

EXAMPLE OF CHART TO PRESENT THE CALCULATED DATA.

ANALYSIS AND INTERPRETATION OF RESULTS GIVEN BY THE STUDENTS.

QUESTION No. 1

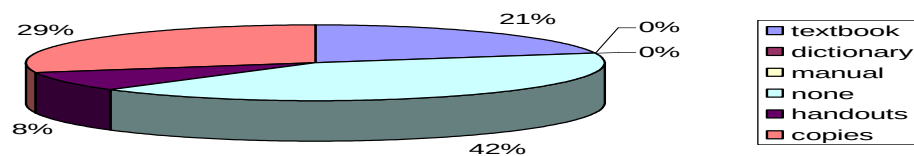
What kind of materials did your teacher use in Proyectos classes?

OBJECTIVE: To find out what kind of guides the teacher used with the students, during the classes of the subject Proyecto Especial de Investigación Dirigida.

NO.	Enunciation of the question	Code	Category of answer	Absolute frequency	Relative frequency %
1	What kind of materials did your teacher use in Proyectos classes?	1	Textbook	5	21
		2	Dictionary	0	0
		3	Manual	0	0
		4	None	10	42
		5	Handouts	2	8
		6	Copies	7	29

	Total			24	100
--	-------	--	--	----	-----

Interpretation: The majority of students confirmed that the teacher of Proyecto Especial de Investigación Dirigida put in practice copies, handouts and textbooks, as guides to develop the investigation process.



When you show the data analysis, you must present it following the order of the example given above. First, you write the question. Second, you say why you asked that question (objective). Next, you present the numerical information in a chart. After that, comes the interpretation of the results. Finally, you have to present the percentages of the answers in a graphic. There are a lot of graphics you can use to present your data, but it is recommended to use the ***Pie graphic***.

In your pre-project you have to place the instruments that you will use to collect your information in the annexes.

INSTRUMENTS



There are many tools that a researcher can use to gather information. The questionnaires are the instruments that researchers use commonly to collect the information. The information must be related with the objectives of the investigation.

The fundament of the questionnaires is the questions. Their answers give the information to solve the problem of the investigation.

Researchers must not elaborate questions that are not related with the solution of the problem.

SUGGESTIONS TO ELABORATE THE QUESTIONNAIRE

There are not standard rules to formulate the questions of the questionnaire.

The formulation of the questions constitutes a real art and requires a great imagination in the part of the researchers.

1. The questionnaire must be formulated with instructions and explicative notes.

In this way, the informants will answer without any problem.

2. The questions must be written as simple as possible.
3. The first question must be interesting and simple and easy to be answered.
It must motivate informants to answer the rest of the questions.
4. The questions must not include more than 25 words.
5. The questions must not be ambiguous.
6. For open questions, let sufficient blanks to note down the answers.
7. For close questions, the alternatives must be formulated clearly.
8. Do not use obvious questions. Example: Do you want to earn more dollars?
9. Do not use questions that can bother the informants. Example: What contraceptive do you use?

EXAMPLE OF QUESTIONNAIRE



**FACULTY OF HUMANITIES AND NATURAL SCIENCES.
ENGLISH MAJOR.**

STUDENT'S QUESTIONNAIRE

Date: _____

Dear Classmate:

The objective of this questionnaire is to obtain information that will be used in our graduation project, based on the elaboration of an English Manual for the Teacher and Students of the subject Proyecto Especial de Investigación Dirigida. Please read and answer the questions objectively. So, circle the letter that corresponds to the answer you select. Your answers will be of a great contribution to the creation of this Manual.

8- What kind of materials did your teacher use in his/her Proyectos classes?

- | | | |
|-------------|---------------|-----------|
| a) textbook | b) dictionary | c) manual |
| d) none | e) handouts | f) copies |

9- What kind of materials would you like your teacher to use, that he/she didn't use

- | | | |
|-------------|---------------|-----------|
| a) textbook | b) dictionary | c) manual |
| d) none | e) handouts | f) copies |

10- Did you have any difficulties when writing your pre-project?

- a) yes b) no

Explain _____

11-If your previous answer was affirmative, in which areas did you have more difficulties?

a) Problematic Situation

b) Theoretical framework

c) Objectives

d) Methodology

e) Others:_____

12-Do you think as a student of Proyectos that it is necessary to use a manual in the subject Proyecto Especial de Investigación Dirigida?

a)yes

b) no

Explain_____

13-If a manual for students of Proyectos were created, what features would you like it to contain? Circle all you want.

a) Contents

b) Examples

c) Exercises

d) Bibliography

e) Glossary

F) All of them.

14-Do you think that would be helpful for you as a student to include techniques to collect information?

a) yes

b) no

8- Do you have any suggestions toward the elaboration of a manual to be used in the subject Proyecto Especial de Investigación Dirigida? _____

EXERCISE

Elaborate your own questionnaire

PERSONAL INTERVIEW

It constitutes a magnificent opportunity to obtain the experience, criterion, point of view or opinion from a person, who is related with the problem that is being investigated.

In that sense, you must concert the interview in advance by an appointment.

You must prepare a guide with the corresponding questions. If you want to record the interview, you must have the authorization of the person.

The personal interview must be done cordially and full of respect. In this way, there will be a level of mutual confidence and sympathy.

EXAMPLE OF INTERVIEW



FACULTY OF HUMANITIES AND NATURAL SCIENCES. ENGLISH MAJOR.

TEACHER'S INTERVIEW

Date: _____

Dear Teacher:

The following interview is part of a graduation project, based on the elaboration of an English Manual for the Teacher and Students of the subject Proyecto Especial de Investigación Dirigida.

This interview consists of 10 open questions. Your answers will be a great contribution to the creation of this Manual.

1- When you teach the subject Proyecto Especial de Investigación Dirigida, what kind of materials do you use ?

2- When teaching Proyecto Especial de Investigación Dirigida, what kind of materials would you like to use?

3- Do you think students need a manual to be used in Proyecto Especial de Investigación Dirigida? Yes No Explain:

4- What characteristics should a Teacher's manual for the subject Proyecto Especial de Investigación Dirigida have?

5- What topics should be studied deeply within the subject?

6- What kind of examples do you consider could make students understand better this subject?

7- Do you consider necessary to include exercises in the manual?. If your answer is affirmative explain what kind.

8 - Do you consider necessary that a manual has to include techniques to collect information?

9- Could you, please, mention the differences that should exist between the teacher's and student's manual?

10- Do you have any suggestions toward the elaboration of a manual to be used in Proyectos classes?

EXERCISE

Prepare some questions to interview your teacher as a previous rehearsal of the project interview. After you have done this exercise elaborate the interview you will use in your fieldwork.

THE SURVEY

The survey implies that you must prepare questions, too. But it must have the characteristics of simplicity and uniformity. The questions of the survey must be prepared with a clear language. The survey must present concrete and objective situations and include the necessary instructions.

You must eliminate ambiguous questions to avoid wrong interpretations. You must prove the survey before the real one, by doing a pilot instrument through some people of the universe of the investigation. The pilot survey must be included in the timetable.

The questions can be open and closed ones. The open questions permit to obtain the opinion, criterion or point of view of the person. And the closed questions give concrete answers through the alternatives given.

EXAMPLE OF METHODOLOGY OF AN INVESTIGATION.

METHODOLOGY OF THE INVESTIGATION

The methodological framework for the present study has been divided in two moments. One moment has included elements that can be considered at a level of planning. The other moment has corresponded to the action of performing the concrete activities of the investigation.

DESIGN OF THE PLANNING PHASE.

LEVEL OF THE STUDY.

This study has been focused from the perspective of two levels:

A) EXPLORATORY LEVEL

The exploratory level has been useful to obtain the first approaching to the reality of the object of study. Since any investigation begins collecting information, making observations and consulting resources, with the intention of arriving to the descriptive point of the problem that has been investigated.

In this investigation, researchers took the necessary steps to explore the necessity of elaborating a manual for teachers and students for the subject **Proyecto Especial de Investigación Dirigida** of Licenciatura en Idioma Inglés at the UTEC.

B) DESCRIPTIVE LEVEL.

This study has been developed to a descriptive level, because researchers pretended to discover the necessity of a manual and the elaboration of it for the teacher and students of the subject Proyectos.

TECHNIQUES TO COLLECT INFORMATION

In the case of the students, researchers administered a questionnaire with open and closed questions. And for the teachers, researchers used some interviews.

TECHNIQUES OF ANALYSIS.

Researchers have used descriptive statistics and logical analysis.

POPULATION AND SAMPLE.

The persons who have been investigated through this study, all of them, have been constituted by people who were involved directly in the variables of the study. Such as: the teachers who had taught the subject **Proyecto Especial de Investigación Dirigida** at the UTEC. And students who had taken that subject the first and second semester during 2000 year.

DISTRIBUTION OF THE POPULATION AND THE SAMPLE

STRATUM	POPULATION	SAMPLE
TEACHERS	3	2
STUDENTS	30	24
TOTALS	33	26

2.1.3 DESIGN OF INSTRUMENT

a) Questionnaire to interview teachers.

b) Questionnaire to inquire students.

The questionnaires were elaborated using the corresponding indicators of each variable of the interrogation of the investigation. The design of the instruments was semi-structured. In other words, it used open and closed questions

2.2 DESIGN OF THE EXECUTION PHASE.

2.2.1 PROVE OF THE INSTRUMENTS

The proof of the instruments have consisted in the analysis of them by the researchers. They evaluated the answers and remarks to adjust the instruments, trying to guarantee the major **validity** and **credibility**.

2.2.2 DATA COLLECTION.

During the field-work, researchers suminstered the questionnaires to students and interviewed teachers of the subject Proyecto Especial de Investigación Dirigida.

2.2.3 DATA ANALYSIS.

After the administration of the questionnaires and interviews, the obtained data were analyzed rigorously by the researchers.

The interpretative analysis of data has been preceded by two preliminary phases: prevision of the calculation of the percentage and the tabulation of data.

2.2.4 DATA TABULATION

Researchers have reflected data in some charts. These charts present the following headings:

- The number of each reactive.
- The enunciation of the reactive.
- The code of identification for the answers, category of the answers, the absolute frequency of each category and the percentage.

Also researchers have used pie graphics to represent the percentages of the collected data.

EXERCISE

Task: Describe the methodological operations of your investigation.

Standards:

1. You must define the type of investigation you will develop.
2. You must determine the population and sample of your investigation.
3. You must select the techniques and instruments for collecting data.

4. You must define your plan for tabulating and analysis of data.

EXERCISE

Task: Determine the population and sample of your investigation work.

Standards:

1. You must select people who are directly involved with the problem you are investigating.
2. Determine if you will take into account the total of the population or just a sample of the population.
3. You must use charts to register data.

EXERCISE

Task: Figure out or imagine data and calculate the percentages of your investigation work.

Standards:

1. You must present the percentages in charts including:
 - The number of each reactive (the question)
 - The enunciation of the question

- The code of identification for the answers, category of the answers, the absolute frequency of each category and the relative frequency (percentage)
2. You must use a calculator or a computer to obtain the percentages.
 3. Reflect the percentages in entire numbers.

THE THEMATIC PROJECT.

The thematic project is also known as the preliminary scheme or the plan of solution for the problem. If it is well formulated, the thematic project can be the future index of the Graduation work, just suffering light modifications.

The thematic project is very important because it becomes a guidance to integrate the obtained information.

EXAMPLE OF THEMATIC PROJECT

Introduction

CHAPTER I PROBLEMATIC SITUATION

- 1.1 Statement of the problem.
- 1.2 Delimitation of the problem.
- 1.3 Ranges of the investigation.
- 1.4 Justification of the problem.

CHAPTER II THEORETICAL FRAMEWORK

- 2.1 Theoretical background of the problem.
- 2.2 Theoretical basis.
- 2.3 Importance of the manual.
- 2.4 Conclusion.
- 2.5 Conceptual framework.
- 2.6 General and Specific Objectives.
 - 2.6.1 General objective
 - 2.6.2 Specific objectives.

CHAPTER III METHODOLOGY

- 3.1 Design of the planning moment.
 - 3.1.1 Level of the study.

3.1.2 Technique to collect information.

3.1.3 Population.

3.1.4 Sample.

3.1.5 Design of instruments.

3.2 Design of the execution moment.

3.2.1 Prove of the instrument.

3.2.2 Data Gathering.

3.2.3 Data Tabulation.

3.2.4 Analysis and Interpretation.

CHAPTER IV PROPOSAL

Elaboration of a Guide-Manual for Teachers and Students of the subject
Proyecto Especial de Investigación Dirigida.

- Bibliography.

- Annexes.



THE PROPOSAL

The remedial process that you as a professional are suggesting for solving the problem stated in your document.

EXAMPLES OF PROPOSAL.

EXAMPLE # 1

Elaboration of a Guide-Manual for Teachers and Students of the subject Proyecto Especial de Investigación Dirigida.

EXAMPLE # 2

PROPOSAL.

This proposal has been elaborated with the purpose of providing the teachers, the lab technician, and the students an appropriate set of audiovisual materials to be used at the language lab.

The whole proposal is divided into twelve practices, six for English III and six for English IV. Every practice has a guide for the lab technician and one for the students; it also contains the type of material to be used and the type of proposed exercises to perform.

It is in this way that you as a researcher present the solution to the problem that you have been investigated.

TIMETABLE

The timetable is the methodological graphic that will show the activities that will be performed and will place them in the time for their development. To translate the activities generally the Gantt's graphic is used. The graphic must contain the activities, the time (years, months, weeks or days) as the case demands it. That is that you will show the duration of the whole process of the investigation.

EXAMPLE OF TIMETABLE

TIME IN MONTHS												
	STAGES	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	SUBMITTING OF THE PRE-PROJECT	■										
2	PRE-PROJECT DISCUSSION		■									
3	ELABORATION OF THE THEORETICAL FRAMEWORK		■	■	■							
4	SUBMITTING THE SECOND PART UNTIL THEORETICAL FRAMEWORK				■							
5	FIELD INVESTIGATION				■	■	■					
6	DATA ANALYSIS AND PROPOSAL							■	■	■		
7	SUBMITTING THE FINAL DOCUMENT INTEGRATION OF ALL PARTS.									■		

BIBLIOGRAPHY.

In this part, you must cite all the authors named in the text. Do not forget to write them in alphabetical order starting with the last name. Also, you must acknowledge other sources you used such as: people, documents, handouts, etc. Mention just the bibliography you really used. In this way you show

everybody else how deeply is your investigation is and how up dated are the sources.

EXAMPLE OF BIBLIOGRAPHY

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ANNEXES.

Finally, there are some important materials for the performance of the investigation, but they can not be placed in the text. In this case we will include them as annexes.

In here you will attach all copies of instruments (programs, syllabus, or any other type of recorded material) you have talked about in the document and that might be of concern as to enable the readers to judge what you are presenting. Some examples of annexes are: copies of the instruments you used to collect your information, and the congruence matrix among others.

CONGRUENCE MATRIX

The congruence matrix is a table where the main parts of the investigation process are reflected as a summary. Some elements of a congruence matrix are: The topic, the problem, the objectives, the variables, the interrogation of the investigation or the hypothesis, among others.

The congruence matrix is used to register the logical sequence that has to follow the entire document or work.

It shows the relationship that it has to be kept in every moment in order not to deviate the road of the investigation. It remembers the researcher the line to follow. The congruence matrix must be kept in mind by the student during the development of the investigation.

EXAMPLE OF A CONGRUENCE MATRIX.

TOPIC	THE PROBLEM	THE OBJECTIVES	VARIABLES	THEORETICAL FRAMEWORK	QUESTION OR HYPOTHESIS
Development of the	There is not a written	General To facilitate the Teaching-Learning	Teacher	Theoretical background of the	Is it necessary to design a manual

program and manual for the subject Proyecto special de Investigaci ón Dirigida.	guidance in English for Teachers and Students of the subject Proyecto Especial de Investigación Dirigida.	Process in the subject Proyecto Especial de Investigación Dirigida through the creation of a guide-manual for teachers and students at the UTEC. Specific - To determine the need of a manual to be used by teachers and students for the subject <i>Proyecto Especial de Investigación Dirigida.</i>	Students Manual	problem. Theoretical Basis. Importance of the manual Conceptual Framework.	to be used by teachers and students of the subject Proyecto Especial de Investigación Dirigida at the UTECS?.
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