 

**Basic Structure for Writing the FGP Document**

**1. INTRODUCTORY PART**

Includes the following sections (page numbering in Roman numerals):

Cover (see Annex 5), approval page with the names of the Tutor and academic authorities (see Annex 6), dedication, acknowledgements, and table of contents, illustration index, table index, and abbreviation index.

In certain cases one (some) of the(se) elements can be missing, according to the participants, and some may even be unnecessary. It should be noted that the numbering for these preliminary pages should be done with lowercase Roman numerals centered on the lower edge, two spaces from the last line.

**INDEX:**

Provides a summary of the project contents and allows readers to quickly find what interests them without having to search the entire document. The page numbering should be in Roman numerals.

**EXECUTIVE SUMMARY**

The Executive Summary is a fundamental element of the Project because it has the power to make it easily understood or not. It should provide a concise but clear picture of the work, within a maximum of two pages (single-spaced). It should be designed to stimulate the interest of readers, and aims to convince the reader to continue reading the rest of the document in detail. The numbering must be in Roman numerals.

Although this will not be drafted in the Graduation Seminar, this guide should be studied and followed when writing the corresponding FGP.

The elements of information to be taken into account to prepare the Executive Summary are detailed below and it has to be taken into consideration that these aspects must be in the order as they are presented (take into consideration that the Summary should NOT have titles, subtitles or bullet points):

***Background:***

Brief description of the organization, background, problems and justification that give rise to the FGP.

***Objectives:***

The general and specific objectives fundamental to the scope of the FGP should be considered. In drafting careful analysis should be taken with the author´s purpose which should be closely related to the objectives and conclusions. The purpose is to expose the reasons why the document was made, unless the above is clearly indicated in the document title.

***Methodology:***

Describe the main methods and techniques that were used by the author to achieve the final product. The extension of this paragraph is flexible within the executive summary, according to the topic specialty, and should be distributed properly, considering that the results and conclusions are most important. The source of information and its management (treatment) are necessary in non-experimental treatises,

***Results and Conclusions:***

The results and conclusions paragraph of the executive summary should contain the answers to the concerns expressed in the first paragraph; it should be closely related to the objectives described. The results should be described briefly and informatively, they can be experimental or theoretical, collected data or derivatives, observed effects or even negative results. The conclusions include the significant implications of the results and their relations with the purpose. They can also include recommendations, evaluations, applications, new relationships and suggestions.

***Recommendations for writing the Executive Summary:***

The summary should not exceed two pages, single space (no subtitles or bullet points).

When there are numerous results and conclusions, so as not to include them all, they should be prioritized and cite only the most important ones.

The parts that make up the content of the summary should be presented in different paragraphs, separated from each other by new paragraphs.

To draft the summary it is important to know what essential research information is found in the introduction, methodology, results and conclusions.

Although the Executive Summary is first in the document, it should the last thing that is written to have perspective and the complete information to write it. For effects of the Graduation Seminar, the section for consideration should be the introduction, objectives and methodology in the executive summary and include the results and conclusions once the Tutorship process work has been completed.

**2. INTRODUCTION**

This is the section where the formal presentation of the FGP is made, stating the purpose of the research, the reasons for its execution and the grounds that support it. Its extension can range from four to six pages, depending on the characteristics of the project. Must be written in prose form (with or without subtitles), and must contain the following information:

* Background.
* Problem (or opportunity) which gives rise to the FGP.
* Project justification.
* Objectives (general and specific). The introduction should end with the proposal of the objectives.

Background corresponds to the information, data or references of the institution, department, activity or sector where the idea for the project/research arises.

The problem or opportunity is what gives rise to the idea of the work and a good proposal allows for an accurate theoretical and methodological orientation to develop research. It is advisable to divide the problem into simpler units for better understanding and determination of methodological research strategies and solution.

The justification is the proposal, summarized and concrete, of the motives of why the research is being undertaken. The justification seeks to answers the following questions: Why was the dissertation prepared? Why was the topic chosen?

The objectives represent the definition of what the FGP intends to accomplish (FGP product and deliverables). They should be written in a simple, concrete manner and take into account the following:

* Start with an infinitive verb.
* They must first determine what is to be done and then why it´s being done.
* Limit writing to concrete phrases.

The overall objective should describe the main objective followed by the research, the reason that will give it validity. It is directly related to the product of the project / research.

The specific objectives should represent what is to be concretely achieved and what are the contributions in achieving the result of the general objective. The specific objectives should be presented in order of priority according to characteristics of the project topic. These are directly related to the deliverables of the project/research.

The introduction should not be too long (three to six pages maximum), and should be focused on the topics to be discussed in the FGP.

**3. THEORETICAL FRAMEWORK**

The Theoretical Framework can be defined as a conceptual model in which it describes the manner of how the relations between factors which have been identified as important for the problem, can be theorized. By theory it is understood as a systematically interrelated set of concepts, proposals, definitions and variables that are set in advance in order to explain and predict the events that will be investigated (Eyssautier, 2002).

Every theoretical framework should include the following elements (Eyssautier, 2002):

a) Those variables (elements or work topics) that are considered relevant for the study, which should be identified, analyzed and discussed.

b) A relation should be established between two or more variable and the possible theorizing among them.

c) Why there could exist a relation among variables and their positive or negative relations should be explained.

The theoretical framework can be divided into two sections:

***Referential or Institution Framework:***

Description of the context in which the FGP will be developed, which implies guiding the reader in terms of geographical location, institutional characteristics of the organization in which the work will be developed, description of the units or departments where it will be conducted. If these descriptions are lengthy, it is advisable to include them as a separate chapter before the theoretical framework that addressed the referential or institutional framework where the FGP is being developed.

***Project Management Theory***

The Theoretical Framework should answer the question: What will be investigated with the selected FGP? Thus, the topics, areas or aspects to be researched are reasonably established and ordered in a manner that allows for strategic location of the corresponding research of each one of them. It should reflect the existing theoretical relationship between them, which may be part of the evidence in the research process to be implemented. The Theoretical Framework should make it clear for the FGP, which processes, knowledge areas and application areas are targeted by the development of the topic.

**4. METHODOLOGICAL FRAMEWORK**

The Methodological Framework defines, describes and analyzes the procedures used to form a scientific criterion (organized) used in the management of any project and/or research. The Methodological Framework answers the question: How I am going to research the selected topic? It is the detailed description of the methodology used during research. It should describe each one of the methods, techniques, procedures and other tools that were used in some way to carry out the work.

For the Methodological Framework´s approach, the sources of information and the research methods and most appropriate application techniques should be identified, according to the characteristics of each topic. These vary depending on the orientation of the project: investment, production, engineering, information technologies, services, infrastructure, industry, human resources, etc.

**4.1. Sources of Information**

Information source is a place where the required data can be found which later can be converted into useful information for the researcher. Data are all those grounds or background required to reach the exact knowledge of an object of study. This data, which must be collected at the sources, will have to be sufficient to be able to sustain and defend a project (Eyssautier, 2002).

Categories of information sources:

***Primary:***

Refers to those original information carriers that have not retransmitted or recorded in any media or document relevant information. This primary information source, the population already has it. To extract this information the sources used could be the survey, interview, experimental or observation method (Eyssautier, 2002).

***Secondary:***

Refers to those data and information carriers that have been previously broadcasted or recorded in any document, and uses whatever means possible. This information is available to any researcher who needs it (Eyssautier, 2002).

***Documentary Sources:***

For research to be considered truly scientific, it should be based on original documents. To achieve this, the researcher will need to know (Eyssautier, 2002):

1. Textual authenticity of the documented material, which should not have undergone subsequent alterations to its writing.

2. Literary authenticity, truly knowing or checking whether the person who wrote it claims to be the author of the same.

3. Historical authenticity, which analyzes the veracity of the facts reported by the document or reference text, and the seriousness and prestige of the author.

4. The seriousness of the publishing house and its international recognition.

5. The reliability of the data contained in the publication.

According to the information sources, research can be documentary, field or mixed.

***Documentary Research:***

Works whose research method focuses exclusively on existing data collection in documentary form, whether of books, texts or any other documents. Its sole purpose is to get history to deepen the theories and contributions, already issued on the particular subject that is being studied, and complement, refute or derive, where appropriate, new knowledge. Specifically, they are those researches whose information collection solely uses documents that contribute background on the subject being studied. (Muñoz, 1998).

This type of research should be developed for every topic and research methods selected for the projects.

***Field Research:***

Corresponds to research where the information collected is carried out framed by the specific environment in which the field of study is presented. In carrying out these works, a unique research method is used and certain information-gathering tools are designed, which apply only in the medium in which the field of study operates. For tabulation and analysis of information obtained, methods and statistical techniques and math are used to help obtain formal conclusions that are scientifically proven. Support tools can be: historical observation, controlled observation, experimentation, gathering background through questionnaires, interviews and surveys, application of statistical methods and experimental designs, etc. (Muñoz, 1998).

***Mixed Research:***

Corresponds to research work whose collection method and information processing combines documentary research with field research in order to deepen the study of the proposed topic to try to cover every possible exploration angle. When applying both methods, the intention is to consolidate the results obtained (Muñoz, 1998).

**4.2. Research Methods**

The method is the path followed in the sciences to achieve an intended purpose; and methodology, the body of knowledge that describes and analyzes the methods for the development of an investigation. Both have been particularized, and are subject to special treatment according to each particular science (Eyssautier, 2002).

Research methods are organized procedures followed to establish the meaning of the facts and phenomena to which the interest is directed to find, prove, disprove, discover and contribute to knowledge. There are many versions of methods and in general they entail processes of analysis, synthesis, induction and deduction. The following briefly indicates some of these:

***Analytic-synthetic Method:***

Breaks down a unit into its most simple elements, examines each one of these separately, regrouping the parts to consider them together.

The analytical method is the observation and examination of the facts. This method distinguishes the elements of a phenomenon and allows an orderly review of each one separately, and then establishes universal laws. To carry out analytical research, the specialist must systematically cover several phases continuously:

1) observation;

2) description;

3) critical review;

4) breakdown of the phenomenon;

5) enumeration of its parts;

6) order; and

7) classification.

Once these steps are completed, continue and explain the phenomenon, carry out comparisons and establish relations (Jurado, 2002).

Synthesis is the goal and end result of the analysis. The synthetic method is not really a research method, but a fundamental operation by which the understanding of the essence of what has been known in its particular components (from the analysis) is achieved. This process relates apparently isolated facts and formulates a theory that unifies the diverse elements. (Jurado, 2002).

***Inductive-deductive Method:***

Induction moves upward from the specific to the general (bottom-up approach). Meaning, a method is employed when particular events are observed and general propositions are obtained. This means it is a process by which, from the study of particular cases, conclusions or universal laws that explain or relate the phenomena studied are obtained. The inductive method uses direct observation of phenomena, experimentation and study of the relationships between them. This approach involves separating the most elementary acts to examine them individually, observe their relationships with similar phenomena, and formulate hypotheses through experimentation, testing them (Jurado, 2002).

The deductive is a top-down approach from the general to the specific. This method starts with general information accepted as true, to conclude through logical reasoning, several assumptions. This approach is based on certainties previously established as a general principle, to later utilize that theoretical framework on individual cases and therefore prove its validity (Jurado, 2002).

The deductive method consists of the following stages:

* Determines the most important facts of the phenomena to analyze.
* Deducts the constant relationships that give rise to the phenomenon.
* Based on the above deductions, the hypothesis is formulated.
* Reality is observed to test the hypothesis.
* From the above process, laws are deducted.

***Particular - Specific Methods:***

Particular methods are those that apply to the particular sciences; specific methods are those used in the process of scientific research. Particular and specific methods include such scientific tools (Eyssautier, 2002):

**a) Experimental Method:**

Consists in proving and measuring variations or effects that a situation undergoes when a new cause is introduced, leaving the rest of the causes in the same state. In controlled experiments, one or more factors are changed under the conditions that allow assessing, if any, the effects of the change. This method has greater application in natural and biological sciences, experimental psychology, sociology, pedagogy, market and economy.

**b) Statistical Method:**

Is used to collect process and interpret numerical data by searching for them, and their subsequent organization, analysis and interpretation. The usefulness of this method focuses on the calculation of sampling and interpretation of data collected

**c) Observation Method:**

Consists in carefully looking at the object of study, to assimilate in detail the nature investigated, its set of data, facts and phenomena.

***Direct observation:*** Consists in direct interrelations with the media and the people involved to carry out field studies.

***Indirect observation:*** Consists in taking note of a fact that happens before the eyes of a trained observer, measuring the external behavior of an individual in society.

***Interview observation:*** Orally conversational exchange between two people, with the purpose of obtaining information, data or facts. The interview method can be informal, structured or unstructured.

***Survey observation (survey method):*** Subjects a group of individuals for questioning, inviting them to answer a series of questions that are structured in a written and previously prepared questionnaire.

**d) Objective and subjective method (Muñoz, 1998):**

Research procedures that are based on what is real for the objective (fact observation and real phenomena) and on the alleged and intangible for the subjective (study of facts and phenomena through personal observation).

**e) Static and dynamic method (Muñoz, 1998):**

Procedure that varies in the manner research is controlled. In the static method variation is not supported, while with the dynamic changes are allowed under controlled conditions.

In this chapter of the FGP, information source should be indicated, the type of research to be developed and corresponding methods and techniques.

The researcher must select his/her method and research techniques according to the characteristics and scope of the research topic in the project / research (FGP).

**5. DEVELOPMENT (PROJECT RESULTS)**

This section develops and documents the processes carried out and results for each topic or areas of study, according to the methodological approach described in the previous section.

Each one of the aspects and knowledge areas covered which were proposed for the development of the project should be reviewed and confirmed. The divisions within this chapter should be separated according to the topics and subtopics of the project / research (FGP). Tables, figures, flowcharts, EDT (WBS), etc., can be included, supporting documentation of the results.

If the tables and figures are lengthy, numerous or complex, or serve only as backup to certain secondary arguments, they can be included in the annex section at the end of the document.

**6. CONCLUSIONS**

Conclusions relate to the synthesis of the most relevant results of the FGP, which must respond to the initial goals in the introduction of project. The most important contributions to the discipline or topic selected can be included. The wording should be clear, specific, direct and emphatic.

**7. RECOMMENDATIONS**

This section corresponds to the approach of the recommendations, suggestions or guidelines that may be useful to continue to study the problem or opportunity in depth that gives rise to the FGP. They may relate to aspects not researched or not completed in the study process, and to emerging situations that were outside the scope of the study objectives.

**8. BIBLIOGRAPHY**

Contains all the references of the documents that were used as support throughout the research. Only those that were used to develop and discuss the topic of the FGP should be included.

Bibliographic references must always be included in the text using the last names of the authors and the year of publication.

For the creation of bibliographical citations the rules from the American Psychological Association (APA) should be used.

**9. ANNEXES**

This section should include:

* No. 1: The FGP Charter.
* No. 2: EDT of the FGP.
* No. 3: Timeline of the FGP.
* The student along with the Tutor decide if other documents will be included in the body or in the annexes.
* Tables, figures (includes organizational charts, flowcharts, EDT-WBS), photographs, maps or satellite images that support the documentation of the research topic.
* Secondary information that contributes to the argument of the study topic (rules, procedures, lists, impacts, etc.)