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# 22IM21T :Research Methodology

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## **Contents**

- **Research Proposal**
- **Purpose of a Research Proposal**
- **Types of Research Proposals**
- **Development of the Proposals**
- **Evaluation of Research Proposals**

- When a researcher needs approval and/or financial support for an intended research, he prepares a formal proposal and submits it to an appropriate approving/sponsoring authority. It is a bid for undertaking research.
- The proposal is the form of a research design, which is the blueprint for conducting and controlling research. It can also be considered a research plan or a research project.
- Making a research proposal and getting it approved and supported may appear to be an administrative activity rather than a step in the process of research, but it is not so.
- Therefore, it is necessary to define research proposal as an integral part of the general research flow.

The process of research in three stages:

- (i) The preliminary investigation stage in the first step, at the end of which a research problem is defined with a great degree of confidence. It may also be derived from the study of the actual problem of a manager or from a feasibility or an exploratory study carried out on the scientist's perceptual formulation of the research problem.
- (ii) When the problem becomes clear, the next step of the process is research planning, comprising research design (the technical planning of the details of the research process) and the managerial portion of planning to obtain resources, in terms of outside help, equipment, scientific manpower, time and funds. Every research requires resources, the allocation of which must be planned in advance.
- (iii) After obtaining approval of research proposal and resources, research activities can be initiated and executed as per the design and within the framework of control by the funding agency. The form and content of the research proposals vary depending upon the researcher and his organisation, the client's organisations, and the supporting agency. The research proposal serves as a means of communication between the researcher and the research supporter, and must necessarily be drawn up with care and clarity

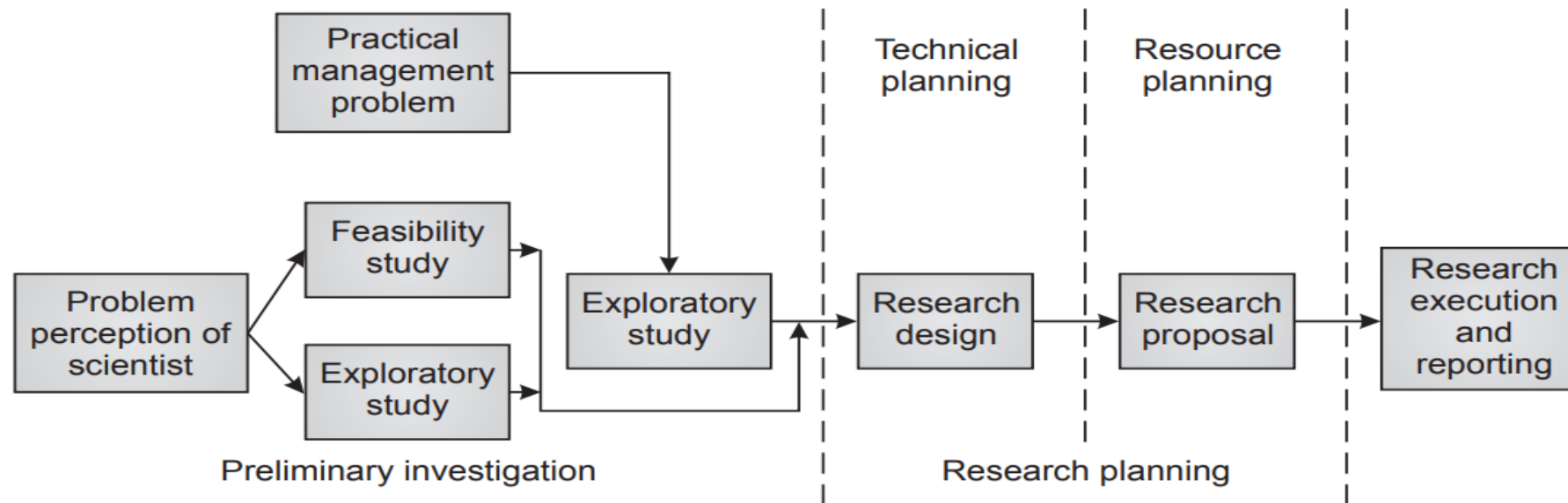


Fig.1 Research proposal in research flow

The purpose of a research proposal is to clearly communicate the following to the sponsor:

1. Need of the particular research
2. Benefits of the research
3. Beneficiaries of the research
4. Kind of data to be collected and the means
5. Type of analysis that will be done
6. Whether help of other organisations will be needed
7. Duration, facilities, and funds required to carry out the research
8. Credentials of the proposers

- The type of proposal depends on the type of project it deals with.
- It may range from a simple pilot study to a large complex project. It may originate from corporations (firms), research students (graduates), faculty in a university, or research organisations, both private and public, or research consultants.
- One way of classifying research proposals is to consider them as internal proposals or external proposals.

## **Internal Proposals**

- These are proposals generated within an organisation or agency and submitted to its management for approval or funding.
- They are responses to specific management needs of problem solving or product or process development, and are funded internally.
- The emphasis is on solving the immediate problem or developing new product/process or modifying old ones.
- They do not emphasise literature reviews. An executive summary is required in these proposals for quick management appreciation.

- Schedule of funds and time frame for completion should also be included. Project plans like Program Evaluation and Review Technique/Critical Path Method charts are not generally required.

## **External Proposals**

- A proposal generated within an organisation and directed to an outside customer, organisation, or funding agency, is an external proposal.
- This may be against an advertisement or solicitation from the customer. Then the proposal becomes a competing bid.
- It may also be unsolicited, in which case the proposing scientist or organisation makes the proposal based on a perceived general/natural need after a preliminary/feasibility study.
- Usually, the external proposal is larger in scope because it aims at winning funding for research, as in research institutes/universities, or winning contracts to generate profits, as in industry.
- In external proposals, objectives, detailed research design, credentials of the research scientist/team, and the budget become vital.
- In complex and large projects, a detailed project plan like PERT charts may be required but specifications of the funding agency must be met in this regard



## **Development of the Proposals:**

The first stage of development of a proposal for research for solving a management problem is to elicit management questions through a researcher-manager dialogue. These management questions are converted into research questions. Research efforts required are delineated and described to the manager. Data required for solving the problem are clearly communicated to the manager and his cooperation is ensured. The methods of analysis and a timetable of activities are mutually agreed upon. The credentials of the research scientist/team for carrying out the research are depicted.

## **Formatting the Research Proposals:**

Formats of the research proposal vary considerably depending upon whether the research is (i) academic, (ii) internally generated and funded; (iii) internally generated and externally funded and monitored, (iv) the funding agency is public or private; and (v) the research project is small or large. This has been well discussed in modules by Cooper and Schindler (2000). The essential items for all proposals are problem statement, research objectives, research design, and schedule (an example of a typical format is shown in Table 5.1 (also see for the format of a real project proposal).

Table 5.1 Format of a Typical Research Proposal

<i>Item No.</i>	<i>Typical Section of a Research Proposal</i>
1	Project title
2	Broad subject
3	Subject area
4	Duration
5	Total cost
6	Principal investigator's details
7	Co-investigator's details
8	Project summary
9	Origin of the proposal
10	Objectives
11	Review of status of R&D in the subject
12	Importance of the project in the context of reviewed status
13	Review of expertise available with the team
14	Methodology
15	Work elements
16	Time schedule
17	Utilisation of research results
18	Budget details
19	Current research projects with the investigators

# Contents of the Research Papers

## **Research objective:**

This item states the purpose of the investigation. It could be to test a hypothesis, as in a causal study, or answer a research question, as in descriptive areas, or obtain a solution to a problem. This should emerge naturally from the problem statement and constitute achievable goals of the research. The remaining items of the proposal should be consistent with the research objective, for example, data obtained, its analysis, and conclusions

## **Research Design:**

This is the technical portion of the proposal indicating the phases/steps of the research action to be taken. Such tasks as sample size determination, sample selection, data sources, and method of data collection are stated. Also, the design of the instrument, procedures for data collection, giving possible reasons for rejecting alternate approaches, whenever they do exist, are also given.

## **Schedule of Work:**

Time table of the major phases of the research should be included in this, for example, literature review, pilot study, finalisation of questionnaire, (main study) data collection, data preparation, report generation where the project is large and complex, a summary CPM/PERT network showing the interrelationship of the phases, and project duration may have to be provided, particularly when the sponsoring organisation demands it.

## **Credentials of the Researches:**

These include the academic qualifications, positions held, industrial/managerial/ research experience, areas of expertise, papers published in reputed journals, by the team members and the consultations offered, memberships of technical/managerial/ research institutions/associations held by them, and honours/medals awarded to them.

## **Budget:**

In all cases of internal and external proposals, except very short ones, a maximum estimated cost of the research in some form of budget is a must.

## **Literature Review:**

A review of literature should concentrate on recent research studies or developments, company data, or computerised data banks. From a quick comprehensive review in the general area of the research, it should delve critically and elaborately into the problem area, clearly bringing out the research premises on which the research methods and approaches have been developed in the proposal. Short comings, lacunae, and gaps in current research should be brought out. At the end of the review, a short summary pointing to the need of the research should be included.



## **There may be other requirements of the sponsoring agents (SA), such as the following:**

1. The project proposals should clearly focus on any of the areas listed by it.
2. Every project should have local project advisory committee of experts constituted by the research team in consultation with the SA.
3. The organization carrying out research must take the responsibility for administering the project.
4. Proposals will be reviewed by experts in the field. The principal investigator has to make a presentation to the experts who may require the investigators to modify the proposals.
5. Periodic expenditure statements have to be submitted by the research organization to the sponsoring organization, with respect to funds received for the project.
6. A percentage of overheads will have to be earmarked for the institution in the budget proposals.
7. The report should be prepared as per the guidelines shown in Table 5.2

## **Table 5.2 Guidelines for preparation of project completion Report**

1. Format of cover page:
  - (a) Title of the project
  - (b) Name of the sponsoring organisation with project reference number
  - (c) Address of the implementing institution with year of completion of the project
2. Report should be typed neatly in double space on A-4 size white paper
3. Fifteen copies of the final project report should be submitted
4. If the report contains data collection from other sources, these should be duly acknowledged
5. Wherever possible, pictorial presentation of data should be provided
6. The report should cover broadly the following:
  - (a) Preface
  - (b) Summary
  - (c) Recommendations
  - (d) Acknowledgements
  - (e) Contents
  - (f) Introduction
  - (g) Methodology
  - (h) Detailed analysis of the data
  - (i) References
  - (j) Annexure, including a copy of introduction letter, blank questionnaire, and other items.

## **Evaluation of Research Proposals**

An evaluation of the research proposal by the proposing research team/organisation can also be very useful before a proposal is finalised.

Sometimes, using the draft proposal, a pilot study is conducted and every aspect of the project is rehearsed, so to say, in order to derive insights into the loop holes, flaws, inadequacies, and possible improvements in the proposal.

The proposal is modified, particularly the sample, instruments, and sometimes even the scope of the study before submitting it to the SA.

In unsolicited proposals of single bidders, the SA may evaluate the proposal and suggest modifications as per the suggestions of the experts reviewing the proposal. In the case of competitive bidding, test of criteria for evaluation are developed and the bidders will be rated against them. Weightage factors may be provided for each criterion. Scores are obtained by multiplying the ratings and their weightage factors and summing them up. Whichever organisation scores the highest is chosen for funding. An independent expert panel may be used for this purpose.

## Some Implicit consideration:

**Ethical Aspects** Whenever human subjects are involved in the research—experiment, interviews, observation, and response to a self administered questionnaire—three aspects have to be carefully kept in mind. They are safety, confidentiality, and anonymity.

**[?] Safety:** This aspect is particularly important in experiments. No subject should undergo any harm, physical or psychological, while (and after) participating in an experiment. If there are risks involved, they should be clearly explained to the subject and a written consent should be obtained.

- ❑ Confidentiality: Any information obtained from the individual, group, or organization should be kept strictly confidential and be merged in the aggregated disclosed information. If such individual information is necessary to be disclosed in the research, it should be disclosed only with the written consent of the individual unit. Personal data should be revealed only with prior written consent.
- ❑ Anonymity: Any sensitive information disclosed in a research study should not lead to the identity of the individual/group/organization. Anonymity of these units should be strictly maintained.

**Training Aspects:** Qualified personnel hired/employed as project assistants should be adequately trained to make the execution of the project successful. The training may consist of (i) orientation and (ii) rehearsals.

**[?] Orientation:** The objectives of the study, the kind of data collection to be carried out, and the type of data preparation and analysis to be carried out should be explained to the assistants. It may be useful to them to study some relevant literature. What they should do and how they should do it, the exact nature of work and its details should be spelt out to them. Likely problems, difficulties, and restrictions in their work should be discussed. The importance of a good approach and human relations must be stressed.

- Rehearsals: Some mock up situations should be used so that the assistants (a) carry out interviews (among themselves or with the investigators), (b) get questionnaires filled up, (c) extract data from records, (d) make scientific observations, and (e) analyze fictitious data.

**Cooperation:** Any research project involves the participation, in some way, of co-investigators, managers, and other employees and administration of an organisation, and the project assistants. Cooperation of all these people is vital to the success of a research study. Openness about the research study, data needed, assured confidentiality, and sincerity are essential to secure this cooperation.



**Legal Aspects:** One of the best ways to get the approval for the project is to get it whetted by the University Research Committee, which has the responsibility of protecting the safety and confidentiality of the subjects, or use public procedures laid down by the national committees on safety and confidentiality of research. The core of the whole legal aspect is to obtain the consent of the individual unit after revealing the details of the project and the implications to the individual unit (for details with respect to this subsection please refer to the appropriate sources in the bibliography).

- Research reports can vary in format and style based on university requirements, funding organizations, and journal guidelines.
- The main purpose of these conventions is to facilitate efficient communication of ideas and results to readers.
- It is important to consistently follow the chosen format and style throughout the research report.
- Research reports can be classified into dissertations for research degrees, reports submitted to sponsoring organisation's , research papers for publication in journals, and reports for client organizations.
- Each type of report requires some form of acceptance or evaluation, such as examination panels for theses, evaluations by sponsoring authorities or client organizations, and rigorous assessment by referees and peers for research journals.

## Dissertation/Thesis

- Preparation is essential when writing a thesis, and a good starting point is reading standard books on the subject.
- While these books cover formatting and structure in detail, they may not address the specific difficulties students face when composing their theses.
- Important points to remember while writing the thesis:
  - Put yourself in the reader's position, avoiding assumptions of their familiarity with the subject matter.
  - Aim to make the draft as close to the finished product as possible, avoiding "to be added later" or "to be modified later" writing.
  - Develop a longer synopsis initially and then trim unimportant portions to meet the university's required length.
  - Use footnotes for important references closely related to the thesis subject matter or that inspired the researcher's work.

- Basic issues to consider before writing the report
  - Understand the purpose of the report and ensure effective communication.
  - Identify the target audience to tailor the report's style and emphasis to their needs and viewpoints.
  - Take into account the available time for report development and define the scope and detail accordingly
- After analysing the data, develop an outline of the research report.
- The outline should include chapter headings, section headings, and sub-section headings, focusing on the overall sequence of ideas.
- Ensure no major information or logic is missed during the writing phase by keeping the "woods and not the trees" in mind.
- The outline mainly determines what to write, while report-writing emphasises how to write.

- The research report should be written in a clear, logical, and concise manner.
- Avoid pedantic, bombastic, flowery, elegant, and folk style language.
- Use a simple style with short sentences, focusing on objective explanation and description.
- Avoid word usage common in essays, such as humour, proverbs, and figures of speech.
- Prefer using the third person, but sparingly use the first person for expressing personal beliefs and opinions.
- In referencing, include only the last name, omitting middle names or initials.
- Use abbreviations only after spelling them out first, with some exceptions.
- Figures, charts, and tables should be carefully and concisely captioned, and numbered sequentially.
- Statistical data is best presented using semi-tabular, tabular, or graphical formats (line graphs, area charts, pie charts, 3D charts).

- Leave out fractions and numbers less than ten when presenting quantitative terms.
- Generally, reports do not present statistical formulas and computations.
- Revise the manuscript to avoid spelling errors, subject-predicate agreement issues, wrong use of articles, and inconsistency in tense.
- The research report should convey precise information without ambiguity.
- Present the report in an organised manner with well-defined sections that develop research themes.
- Ensure the report is easily understandable by the reader.
- The Fog index, developed by Gunning in 1952, is a standard of readability that can be considered.

## ❖ **Consistency:**

- Maintain consistency in objectives, captions, referencing format, structure, and indentation throughout the thesis.

## ❖ **Connectivity:**

- Ensure smooth transitions between sections and chapters, with logical linking sentences to maintain continuity.

## ❖ **Indentation:**

- Divide the thesis into meaningful chapters and sections using indentation for clear organisation.
- This helps in writing the thesis in a modular way.

## ❖ **Continuity:**

- Maintain a continuous flow of thoughts and ideas within each section, ensuring they are suitably linked to the next.

❖ **Highlighting:**

- Emphasise the major aspects and points that are significant in the work, while toning down less consequential ones.
- Give more detail and attention to the most important objectives and results.

❖ **Openness:**

- Acknowledge limitations, errors, and inadequacies in the research, including data, methodology, and tools used.
- Avoid deliberately hiding or neglecting major errors.

❖ **Clarity:**

- Use simple and concise language with direct statements.
- Avoid ambiguity in words, phrases, and sentences, particularly in important sections like hypotheses and validation.



❖ **Asserting:**

- Support strong assertions with evidence from earlier research or facts obtained during the research work.
- Avoid making unsupported assertions.

❖ **Ordering:**

- Ensure consistent order in discussing objectives, variables, and results, even if they are discovered chronologically.
- This promotes orderly presentation and facilitates examination.

❖ **Compatibility:**

- Ensure that conclusions and inferences align with the data and techniques used for analysis.
- Conclusions should not go beyond what the data and techniques can support.

❖ **Jargon:**

- Use discipline-specific words, expressions, and phrases to demonstrate expertise in the subject matter.

❖ **Elaboration:**

- Develop discernment in compressing or elaborating research material appropriately.
- Elaborate on aspects closely related to the thesis and provide concise outlines of more distant ones.

❖ **Self-sufficient:**

- Present tables, graphs, figures, and illustrations in a complete and understandable manner, without the need to refer to the text.

### ❖ **Enrichment:**

- Take the opportunity to present additional by-products or related results that contribute to knowledge, even if not directly relevant to the objective.
- Exploit additional data or information with marginal effort.

### ❖ **Synthesis-Analysis-Synthesis:**

- Adopt a cyclical approach of synthesis (overview), analysis (detailed examination), and synthesis (overview) while writing the thesis.
- This helps identify errors, inadequacies, and inconsistencies in the work.

## Format of Dissertations:

The contents of all these are not uniformly the same. There are many variants and orderings used while presenting research material. However, we will discuss a somewhat typical format. A typical format for a dissertation is displayed in Table 1.1.

## Main body of dissertation:

The main body of the dissertation will have five major components—introduction, literature review, the research design with details of the research study, and conclusions.

- ❖ **Introduction:** The introduction should clearly and logically bring out the background of the problem addressed in the research, and how the researcher identified the problem.
- ❖ **The literature review:** A comprehensive review of the research literature referred to must be made. It must be borne in mind that, for any problem, there may be portions of literature that are typical format of dissertations.
- ❖ **Research Design:** It describe about research methodology and study details.
- ❖ **Main Body:** It present your research finding and their significance.
- ❖ **Conclusion:** It summarize the findings and the significance of research.

# Table 1.1

## 1. PRELIMINARY

Title

Acknowledgment

Abstract or synopsis

Table of contents

List of tables

List of figures

## 2. MAIN BODY OF THE REPORT

Introduction

Background of the problem

Statement of the problem

Brief outline of the chapters

## 3. LITERATURE REVIEW

## **4. THE RESEARCH DESIGN/METHOD**

The theoretical framework (variables)

Hypothesis/model Instrument for data collection

Reliability and validity of the instrument

Data Collection

## **5. RESULTS**

Model testing

Data analysis techniques

Tables and figures

## **6. CONCLUSION**

Summary

Support for hypothesis/use of models

Direction for further research

## **7. BIBLIOGRAPHY**

Appendix (if appropriate)

## Types of Report:

**Research Reports:** Purpose: To present the findings of a systematic investigation or study., Content: Introduction, methodology, results, discussion, conclusions, and recommendations. Examples: Scientific research papers, academic dissertations, market research reports.

**Business Reports:** Purpose: To communicate business-related information within an organization or to external stakeholders. Content: Executive summary, introduction, background, analysis, findings, conclusions, recommendations. Examples: Annual reports, business plans, project status reports, financial reports.

**Technical Reports:** Purpose: To provide detailed technical information, often in a specific field or industry. Content: Technical specifications, data, charts, graphs, explanations, conclusions. Examples: Engineering reports, software documentation, technical manuals.

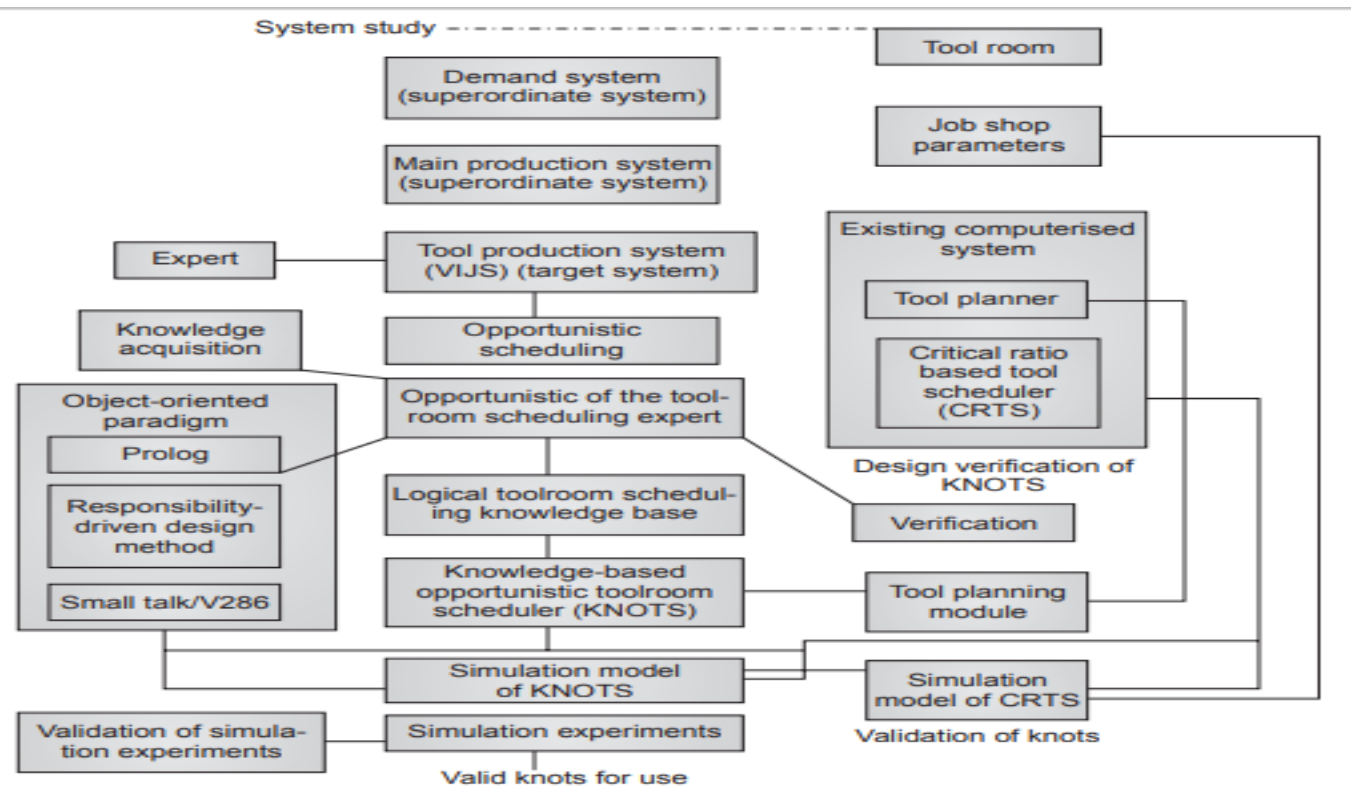
**Lab Reports:** Introduction, materials and methods, results, discussion, conclusions. Examples: Laboratory experiment reports in science and engineering courses.

**Table 1.2 A Sample literature Survey**

<i>Name</i>	<i>Control strategy</i>	<i>Structure</i>	<i>Reference</i>
ISIS	Constraint-directed reasoning	3-level hierarchy	Fox, 1983
PEPS	Rule based	4-level hierarchy	Robbins, 1985
OPAL	Meta-rules and constraint based analysis	—	Bensana et al, 1986
MASCOT	Meta-rules and constraint based analysis	—	Erschler & Esquirol, 1986
—	Backward chaining	—	Alexander, 1987
OPIS	Opportunistic reasoning	3-level hierarchy	Ow & Smith, 1987
DR	—	—	Brown, 1989
ESCH	—	—	Alpar and Srikanth, 1989
MOPPS	—	—	Walters & Warwick, 1990
IKONMAN	—	—	Wilcox, 1990
ISA	—	—	Bonsignorio & Mazzarello, 1990
KBSS	Forward chaining	Tandem architecture	Kusiak, 1990



### Table 1.3 A Sample Research Design



**Table 1.4 A Sample model**

*The complete integer linear goal programming model is summarised below:*

Minimise

$$z = p1 \sum_i d m_i + p2 \sum_j d F_j + p3 \sum_j d v_j + p4 \sum_i d_i \quad \dots \text{objective function} \quad (1)$$

Subject to

$$\sum_j \sum_{kj} \frac{h_{ijkj}}{p_{ij}} Y_{ijkj} + d m_i - Y_i = M_i \quad \dots \text{Man-hours} \quad (2)$$

$$\frac{1}{n_j} \sum_{kj} \sum_i \frac{Y_{ijkj}}{r_{jkj}} + d F_j - d F_j = DF \quad \dots \text{Demand} \quad (3)$$

$$\frac{1}{n_j} \sum_{kj} v_{ij} \sum_i \frac{Y_{ijkj}}{r_{jkj}} + d v_j - d v_j = V_j \quad \dots \text{Value added} \quad (4)$$

$$Y_i - d_i + d_i = OT_i \quad \dots \text{Overtime} \quad (5)$$

$$\sum_i \frac{Y_{ijkj}}{r_{jkj}} - \sum_i \frac{Y_{ijmj}}{r_{jmj}} = 0; k \neq m \quad \dots \text{Proportionality} \quad (6)$$

$$Y_{ijkj} > 0 \text{ and integer}$$

where ,

$Y_{ijkj}$  = number of sub-assemblies (components) assembled by worker i.

$h_{ijk}$  = hours required by a particular worker ‘i’ to perform unit kth sub-assembly operation of the jth assembly

$p_{ij}$  = efficiency of worker i working on jth assembly

$r_{jkj}$  = number of sub-assemblies  $K_j$  required per assembly j

$v_j$  = value added per assembly

$V_j$  = aspired level of value added

## Table 1.5 Bibliography

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## Table 1.6 Detailed Format of Qualitative Research Report

### 1. PRELIMINARY

Title

Acknowledgement

Abstract or synopsis

Table of contents

List of tables

### 2. INTRODUCTION

#### o Purpose of Research

- Importance and relevance of research topic
- Origin of the research problem
- Research finding
- Documentation of ethical approval

#### o Focus of Research

- Research questions
- Why are the questions important?
- What are the consequences of answering the questions?

### 3. METHODS OF RESEARCH

#### o Setting

- Context of research
- Role of researcher

#### o Approach

- What are the methods employed for research?
- What are the questions asked for data collection?
- How are the methods and questions appropriate for the research questions and the setting?
- What are the strengths and weaknesses of the methods employed?

#### o Sampling

- Description of the sampling method
- Rationale of the choice of the sampling method
- Sample size
- Situations, time periods, and people to be sampled

#### 4. PRESENTATION OF DATA

##### o Organisation and description of data

- Detailed data collection to understand the details of the process
- Description of information based on observation and/or interviews
- Description of whatever information is needed to take the reader to the setting being interpreted
- Description of findings around the research questions
- Issues and concerns generated by the researchers and participants the in research

#### 5. ANALYSIS OF DATA

##### o Analysis of Data

- Patterns, themes, tendencies, trends, and motifs that logically emerge from data
- Categories, classification systems and typologies
- Participant (in research) generated typologies to explain their world
- Researcher generated typology

##### o Interpretation and explanation of data

- Linkages between categories and dimensions
- Relationships
  - \* Things that go together
  - \* Things (parts) that are interdependent
  - \* Enquiry and speculation about causes and consequences
  - \* Hypotheses arising out of the enquiry

#### 6. VALIDATION AND VERIFICATION OF FINDINGS

##### o Methods used for validation

##### o Credibility of findings

- Discussion of rival hypothesis/Alternate explanations
- Analysis of negative or deviant cases
- Triangulation
  - \* of methods
  - \* of sources
  - \* of investigators

##### o Personal perspectives of the researcher

##### o Transcriptions of recorded reactions of participants and experts who have examined the study

#### 7. CONCLUSIONS

- o Basic findings
- o Implication of basic findings
- o Recommendation of participants/staff
- o Recommendations of the researcher

## Briefing

Briefing is a condensed version of the report presented orally. While the oral presentation of dissertations is made to the academic community and/or the examiners, research reports may be orally presented to a group of executives and it could take about 20-30 minutes, generally. Briefing is as much an art as a science. What should be presented to the audience must be clearly understood. The objectives and nature of the project should be clearly stated, key points should stand out, delivery must be fluent, and the focus must be on the audience. The delivery should be restrained. Speed, clarity, pauses, and gestures do play a part in holding the attention of the audience and making the presentation interesting. Adequate visual aids should be used and eye contact should be established often with the audience. Mere reading from notes should be avoided.

- The briefing should preferably have the following contents, in the given order.
  - A brief statement of the nature of the project.
  - Presentation of the organisation of the project and what is done in it (10 to 15 per cent of the presentation time).
  - Conclusions and discussions.
  - Recommendations.
  - A question-answer session
  
- A good rule for oral presentation is to fix the main points in the mind and keep some cards/ notes for connecting information. Use of transparencies/power point slides for this purpose is also effective.

## **Rules for typing or word processing**

- Good quality bond paper that is 8 1/2" x 11" and 13 to 16 pound weight should be used.
  - If any special symbol is not available on the typewriter or word processor, it should be carefully and clearly written in black ink.
- All margins should be 12", at the top, bottom, left, and right.
- All pages should be double spaced. Single spacing should not be used anywhere.
- Referencing in text should have last name(s) of the author(s) and the year of publication; for example; Best and Kahn (1986). Listed references or bibliography should have a standard format, which should be consistently used throughout.
  - Parts of the text that contain listings, long quotations, examples, or cases or problems should be indented.
- Headings and sub-headings should be used for dividing the report into major sections/topical portions.
- Vertical listings of points should be used



# Best Practices for Journal Writing

Journal writing is a powerful tool for self-reflection, personal growth, and creative expression. It allows individuals to record their thoughts, experiences, and emotions in a private and reflective manner. Here are some best practices for effective journal writing, divided into topics and subtopics:

## 1 Getting Started:

- a. Establish a Routine: Set aside dedicated time for journal writing, preferably daily or on a regular basis.
- b. Choose the Right Medium: Decide whether you prefer traditional pen and paper or digital journaling platforms.
- c. Create a Comfortable Environment: Find a quiet and peaceful space where you can focus and feel at ease.

## 2. Purpose and Intention:

- a. Define Your Purpose: Clarify why you want to keep a journal. Is it for personal reflection, goal setting, creativity, or a specific project?
- b. Set Intentions: Determine what you aim to achieve through journaling, such as gaining self-awareness, exploring emotions, or capturing memories.

### **3. Writing Techniques:**

- a. Freewriting: Start with a blank page and write without censoring or editing. Let your thoughts flow freely.
- b. Stream of Consciousness: Write whatever comes to mind, following the natural progression of your thoughts and associations.
- c. Prompts and Questions: Use prompts or specific questions to guide your writing and stimulate deeper exploration.
- d. Mind Mapping: Create visual diagrams or mind maps to connect ideas, concepts, and emotions.

### **4. Authentic Expression:**

- a. Honesty: Be open and honest with yourself in your journal. Write without judgment or fear of being judged.
- b. Emotional Awareness: Acknowledge and express your emotions freely. Describe how you feel and why.
- c. Personal Voice: Write in a manner that reflects your unique personality and style. Let your authentic voice shine through.

## **5. Reflective Practice:**

- a. Self-Reflection: Use your journal as a space for self-reflection and self-analysis. Consider your experiences, thoughts, and actions.
- b. Gratitude and Positivity: Include moments of gratitude and positive experiences to foster a sense of appreciation and well-being.
- c. Learn from Mistakes: Reflect on challenges, setbacks, or mistakes as learning opportunities. Identify lessons and potential solutions.

## **6. Organization and Structure:**

- a. Dating Entries: Date each entry to track your progress and provide context to your thoughts and experiences.
- b. Sections and Categories: Divide your journal into sections or categories based on themes or topics, such as personal growth, relationships, or dreams.
- c. Headings and Subheadings: Use headings and subheadings to structure your journal entries and make them easier to navigate.

## **7. Privacy and Security:**

- a. Keep it Private: Treat your journal as a confidential space. Store it in a secure location, and avoid sharing its contents without your consent.
- b. Digital Journaling: If using digital platforms, ensure they have strong privacy and security measures to protect your personal information.

## **8. Regular Review and Reflection:**

- a. Review Past Entries: Periodically revisit previous journal entries to reflect on your growth, patterns, and progress.
- b. Extract Insights: Identify recurring themes, patterns, or realizations from your past entries to gain deeper understanding.
- c. Goal Setting: Use your journal to set goals, track progress, and celebrate achievements.



**THANK YOU**