MODULE -2
Reviewing the Literature

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Importance of Literature Review and Technical Reading

- The term “literature” is commonly used to refer to the body of written works on a particular subject or within a specific field of study.
- A literature review, is a systematic and critical analysis of existing scholarly works, literature, and research relevant to a specific research topic.
- The primary goals of literature review are :

Identification of Vaguely Known Problem: To know the use of content, ideas, or approaches in the literature to correctly identify the problem that is not clearly known before delving into existing research.

Advocating a Specific Approach: The literature review enables researchers to advocate for a specific approach or methodology in understanding and addressing the identified problem.

Assessing Methods Used: Researchers evaluate and assess the methods used in the literature to address similar problems.

Ensuring Contribution of Something New and Innovative: The literature review helps researchers in clearly understanding that their proposed research(the research to be undertaken) will contribute something novel and innovative.

Evaluating the Quality of a Literature Review: The quality of such a review can be determined by evaluating whether it includes the depth of the area under study, clarity, rigor, consistency, and effective analysis.

NEW AND EXISTING KNOWLEDGE

New knowledge in research can only be interpreted within the context of what is already known, and cannot exist without the foundation of existing knowledge.

Foundation of Existing Knowledge: New knowledge is built upon the foundation of existing knowledge. Understanding what is already known is is essential or very important in the context of academic writing or research and to support and understand new findings.

Constructing the Foundation: Constructing a strong foundation involves reading and surveying literature, both historical and recent. Existing knowledge provides context, significance, originality, and tools necessary for new research..

Sources of Existing Knowledge: Where does this existing knowledge come from? Normally, one finds this knowledge by reading and surveying the literature in the field that was established long ago, as well as more recent knowledge, which is always changing

(i)Textbooks: Literature survey involves reading textbooks on one's topic for established knowledge. Textbooks serve as a starting point for understanding basics.

Reading a textbook is not too difficult because it is written as a teaching instrument. The author of the textbook normally starts from the basics and takes the reader through everything needed to understand that topic.

(ii) Research Papers: Research papers contain newer work but assume prior knowledge. Normally, the goal of a research paper is to present a small piece of new

knowledge.

ANALYSIS AND SYNTHESIS OF PRIOR ART

- After collecting the sources, usually articles, intended to be used in the literature review, the researcher is ready to break down each article and identify the useful content in it, and then synthesize the collection of articles.

- A literature survey grid of N topics and M sources is shown below to help crystallize the information in different categories.

Table 2.1 The literature survey grid

	Source 1	Source 2	…	Source M
Topic 1		✓		
Topic 2	✓			✓
⋮				
⋮				
Topic N	✓	✓		

Steps Involved in a Literature Review:

By following these below steps, we can conduct a well-organized and insightful literature review that will form the foundation of our research project.

1. **Identify the Research Topic/Problem:** Clarify what you want to explore.

2. **Search for Relevant Literature:** Use academic databases to gather sources.

3. **Evaluate and Select Sources**: Choose high-quality, relevant sources.

4. **Organize the Literature:** Group sources by themes or topics.

5. **Analyze the Literature**: Critically assess the sources and their findings.

6. **Synthesize the Information**: Integrate the findings into a coherent narrative.

7. **Identify Research Gaps:** Highlight areas that need further research.

8. **Write the Review:** Structure your review clearly with an introduction, body, and conclusion.

9. **Cite Sources:** Ensure proper citation of all references.

10. **Revise and Finalize:** Edit and proofread for clarity and coherence

Bibliographic databases

Bibliographic databases are referred to as “abstracting and indexing services.”

It is an organized collection of references to published digital literature, which includes conference proceedings, journals and newspaper articles, government and legal publications, patents, standards, reports, books, periodicals, etc.

Purpose: They play a crucial role in collecting citation-related information and abstracts of research articles from scholarly literature.

Accessibility: The gathered information is made available through search functionalities, aiding researchers in retrieving relevant literature efficiently.

Example Databases: **IEEE Xplore, Engineering Village, Scopus and web of science etc**.

These contain rich and relevant subject descriptions such as keywords, subject terms, and call numbers.

Advantages of Simultaneous Searches:

Diversification: Simultaneous searches across large databases help avoid excessive dependence on any individual data base

Limitation Mitigation: This approach helps researchers to overcome or bypass the inherent limitations or shortcomings associated with a specific database, thereby significantly enhancing the quality of research

Criteria for Database Selection

Swift Identification: Researchers should be capable of quickly identifying databases relevant to their research.

Tailored Selection: The selection of databases should be based on the specific ideas or problems the researcher intends to explore.

In-text Citations

You use only a few basic details

The researcher describes a virtuous person as one "who acts and feels as he or she should, for the right reason considering the circumstances" (Alvaro, 2017, p.770).

Reference List

You use ALL of the details

Alvaro, C. (2017). Ethical veganism, virtue and greatness of the soul. *Journal of Agricultural and Environmental Ethics, 30*(6), 765-781. https://doi.org/10.1007/s10806-017-9698-z

Bibliography databases and Search Engines for Research Papers:

Web of Science and Google search

Essential Research Tools: Bibliographic databases provide vital abstracting and indexing services, collecting citation details and abstracts from a wide range of scholarly works.

Enhanced Access: They facilitate access to extensive research literature, enabling researchers to find relevant studies efficiently.

Simultaneous Searches: Researchers can conduct simultaneous searches across multiple databases, reducing reliance on any single source and mitigating its inherent limitations.

Focused Selection: Choosing the right databases based on specific research questions or areas of interest is crucial for comprehensive and effective research.

Popular Databases for Engineers:

IEEE Xplore: Specializes in engineering and technology literature.
ScienceDirect: Offers access to a large collection of scientific and technical research articles.
Web of Science: Provides multidisciplinary coverage with citation tracking features.
Google Scholar: Although less curated, it provides access to a broad range of scholarly articles and is popular due to its accessibility and comprehensive search cap
Scopus: Known for its extensive database of peer-reviewed literature and citation analysis tools.

Research Efficiency: These databases streamline the research process, helping researchers stay up-to-date with the latest findings and developments in their fields.

This summary underscores the significance of bibliographic databases in supporting effective research practices among engineering professionals.

Significance of Database:

Unique Strengths of Each Database:

Each research database has its own strengths that suit different types of research and goals. Choosing the right one for your specific research needs improves the quality and depth of your findings.

Enriching the Review Process:

Using multiple databases in a smart way helps you gather a wider range of research. This leads to more complete and reliable results by combining information from different sources.

Web of Science:

- **Comprehensive Platform:** It provides access to several databases and research tools for in-depth academic studies.
- **Customizable Search:** You can search by title, topic, author, and more, making it flexible and specific to your needs.
- **Organized Results:** You can sort your results by citation count, publication date, and other factors to make your search more efficient.
- **Advanced Search Options:**
    - Refine searches using quotes for exact phrases, specific keywords, or filters like peer-reviewed status, date, and language.
    - You can also use "OR" to include synonyms or variations of terms to expand your search.
- **Cited Reference Search:** This feature lets you find other works that cite a particular article, helping you track how ideas have developed over time.

Structured Search Process:

This method ensures your search results are highly relevant, saving you time by reducing irrelevant sources.

POPULAR BIBLIOGRAPHIC DATABASES ARE:

Web of Science:

- Web of Science (formerly known as ISI or Thomson Reuters) includes multiple databases, as well as specialized tools.
- It is a good search tool for scholarly materials requiring institutional license and allows the researcher to search in a particular topic of interest, which can be made by selection in fields that are available in drop down menu such as title, topic, author, address, etc.
- The tool also allows sorting by number of citations (highest to lowest), publication date.
- Based on the researcher's need the search result can be broadened or narrowed down using the built-in fields provided in this website.
- When clicked on any of the search results, this website provides the title of the paper, authors, the type of journal, volume, issue number and year of publication, abstract, keywords, etc., so that the researcher has enough information to decide if it is worthwhile to acquire the full version of the paper.

GOOGLE AND GOOGLE SCHOLAR

- Google is a great place to start one's search when one is starting out on a topic.
- It can be helpful in finding freely available information, such as reports from governments, organizations, companies, and so on. However, there are limitations:

(i) It's a "black box" of information. It searches everything on the Internet, with no quality control—one does not know where results are coming from.

(ii) There are limited search functionality and refinement options.

What about Google Scholar?

Google Scholar limits one's search to scholarly literature. However, there are limitations:

1. Some of the results are not actually scholarly. An article may look scholarly at first glance, but is not a good source upon further inspection.

2. It is not comprehensive. Some publishers do not make their content available to Google Scholar.

3. There is limited search functionality and refinement options.

DEVELOPING A THEORITICAL AND CONCEPTUAL FRAMEWORK

It is important to examine the literature by setting parameters by reviewing the literature in relation to some main themes pertinent to your research topic.

1. **Theoretical Foundations**: The problem you want to investigate is rooted in various theories developed from different perspectives.

2. **Information Organization**: Gather information from diverse sources and categorize it by main themes and theories, noting agreements, disagreements, and gaps.

3. **Aspects of Research**: Recognize that literature encompasses multiple aspects that relate to your research topic, which can inform your theoretical framework.

4. **Guided Review**: Your literature review should align with this theoretical framework to maintain focus and relevance.

5. **Paradox of Framework Development**: There is a paradox: you need literature to create a framework, but a framework helps you review literature effectively.

6. **Initial Framework Development**: Start with a preliminary framework based on initial readings, which can evolve as you delve deeper into the literature.

7. **Avoiding Irrelevance**: Having a framework prevents getting overwhelmed by unrelated information and helps streamline your reading and note-taking process.

Search Operators in Google and Google Scholar

There are search operators that can be used to help narrow down the results:

1. **OR**—Broadens search by capturing synonyms or variant spellings of a concept. Example: Synchronous OR asynchronous will find results that have either term present.

2. **Brackets/Parentheses** ( )—Gather OR'd synonyms of a concept together, while combining them with another concept. Example: RAM (synchronous OR asynchronous).

3. **Quotation marks** " "—Narrow the search by finding words together as a phrase, instead of separately. Example: RAM (synchronous OR asynchronous) "Texas Instruments".

4. **Site**—limits the search to results from a specific domain or website. This operator is helpful when searching specific websites such as the BC government, which is Example: RAM (synchronous OR asynchronous) "Texas Instruments" site: http://ieeexplore.ieee.org.

5. **Filetype**—limits the search to results with a specific file extension one could look for pdf's, PowerPoint presentations, Excel spreadsheets, and so on. Example: RAM (synchronous OR asynchronous) "Texas Instruments" site: http:// ieeexplore.ieee.org, filetype: pdf

The Search Tools button at the top of the Google results gives you a variety of other options, such as limiting the results by date. There are other operators and tools that one can use in Google and Google Scholar.

Sample Outline of a Literature Review

- Sample Outline of a Literature Review is a structured framework used to organize and present research findings from existing literature on a particular topic.
- It helps guide the writer through systematically reviewing previous studies, identifying key themes, and analyzing gaps in the research.
- This outline ensures that the literature review is coherent, comprehensive, and focused on the research problem.

1.Introduction :
Begin with an overview of the topic or research question, briefly explain why this topic is important and outline the purpose of the literature review.
Mention the criteria for selecting the literature (e.g., date range, focus area) and provide a roadmap of the review's structure to guide readers.
2. Theoretical Framework or Background : Discuss relevant theories, models, or key concepts that form the foundation of the research. Explain how these theories relate to the research question and provide context.
3. Review of Key Themes: Organize the review around major themes or concepts that are central to the topic.
Each theme should be treated as a sub-section:
Theme/Concept 1: Summarize the research and findings related to the first theme
Identify key studies and their conclusions, noting any agreements, controversies, or differing viewpoints.
Discuss the impact of these findings and any gaps related to this theme.
Theme/Concept 2: Summarize research on the second theme, following a similar structure. Include analysis of key studies, relevant findings, and notable gaps or limitations.
Additional Themes: Repeat for other themes, ensuring each section synthesizes relevant findings and highlights the implications of studies related to each theme.

4.Methodologies in Previous Research : Analyze the research methods used across the reviewed studies. Compare qualitative, quantitative, and mixed-method approaches, and discuss their relevance to the topic. This section should identify the strengths and limitations of each method, helping readers understand how researchers have approached the topic and the effectiveness of these approaches.

5. **Identification of Gaps in the Literature** : Summarize areas where research is limited or inconclusive. Identify gaps in the literature, such as underexplored sub-topics, populations, or methodological weaknesses. Discuss how addressing these gaps could benefit future research and provide new insights into the topic.

6**. Synthesis of Findings** : Bring together findings across the different themes and research studies. Identify overall trends, areas of consensus, and key disagreements. Discuss how these findings contribute to the current understanding of the topic and any emerging patterns or directions in the literature. This section should provide a cohesive understanding of the topic based on the reviewed literature.

7. **Conclusion:** Conclude by summarizing the key insights gained from the literature review. Discuss the implications of these findings, both for research and practical applications. Provide recommendations for future research based on identified gaps and limitations, linking these suggestions back to the research question or study

Literature Review Structure	
Introduction	What is the background of this topic that makes it significant? What question(s) does this literature review try to answer? What is the purpose of the literature review?
Definitions	How does the literature define your topic? What different terms are used and how does the literature indicate their meaning?
Theories	What theories, frameworks, or paradigms are revealed by the literature? Which are the key theories that require elaboration?
Key Concepts (grouped into themes)	What key themes and sub themes emerge from the literature reviewed. Synthesize the literature's findings into organized sections.
Gaps in the Literature	Open questions and where further work is needed. What aspects are not covered by the literature? Which perspectives should be addressed more by the literature?
Conclusion	Where is this topic heading? What are the tasks ahead?
References	List of sources, including any media (APA style)

ATTRIBUTIONS AND CITATIONS:

(Giving Credit Wherever Due)

CITATIONS: FUNCTIONS AND ATTRIBUTES

- **Credit to Original Authors:** Citations give proper credit to the authors of the work used.
- **Traceable Sources:** Citations allow readers to trace the original source of information.
- **Ethical Responsibility:** Any use of someone else's ideas or work must be clearly cited in new research, ensuring appropriate acknowledgment.
- **Verification of Quality:** Citations help readers verify the credibility and importance of the new research.
- **Justification of Findings:** Citations support the justification and validation of the researcher's findings.
- **Ethical Practice:** Citations ensures whether researcher has acknowledged the original authors ethically, ensuring proper credit is given for their contributions.

Materials That Can Be Cited:

- **Journal papers**
- **Conference proceedings**
- **Books**
- **Theses**
- **Newspaper articles**
- **Websites or online resources**
- **Personal communication**

Citation Guidelines:

- **Placement:** Citations should be placed at the end of a sentence or paragraph.
- **Details:** Citations must include enough information for readers to easily locate the original source.

Types of Citations:

1. **In-text Citation:** Cited directly in the text where the source is quoted or paraphrased.
2. **Reference List:** Cited again in the references section, typically at the end of the article or book.

Tools:

- **LaTeX:** A document preparation system commonly used in engineering, helpful for managing and formatting citations according to standards.

FUNCTIONS OF CITATION

There are three main functions of citation:

(i) **Verification function**: Authors have a responsibility to check for both accidental (unintentional) and deliberate (intentional) mistakes or misleading information in their research.

Citations provide readers with the opportunity to verify whether the original source is valid and if its claims are accurately represented in the current work

(ii) **Acknowledgment function**: Researchers primarily receive credit for their work through citations. Citations play crucial role in promotion of individual researchers and their continued employment.

Many reputed organizations and institutes provide research funding based on the reputations of the researchers.

Citations help all researchers to enhance their reputation and provide detailed background of the research work.

(iii) **Documentation function**: Citations are also used to document scientific concepts and historical progress of any particular technology over the years.

There are certain cases when references do not fulfill the actual goal of citations and acknowledgments, and thus do not benefit the reader.

Types of Citation Issues:

Spurious Citations: Adding irrelevant citations that do not contribute meaningfully to the content.

Biased Citations: Selectively citing work due to personal connections or omitting contrary findings.

Self-Citations: Citing one's own work excessively when not relevant, which can inflate metrics artificially.

Coercive Citations: Is the unethical practice of citing a source not for its relevance, but to gain personal or professional advantage, such as building credibility or exchanging favors. It's a form of citation manipulation that undermines research integrity.

IMPACT OF TITLE AND KEYWORDS ON CITATIONS

The citation rate of a research paper is influenced by various factors such as journal reputation, research area, and the significance of the work.

However, the title and keywords also play a key role in determining how often a paper is cited.

Title: It is the most important element of a paper, serving as the first indication of the research area

A clear and informative title attracts readers and enhances the paper's visibility during literature searches.

A good title is both descriptive and attention-grabbing.

Some titles may be informative but fail to capture attention, while others may be catchy but lack relevance.

The title can affect both the download count and the citation rate of a paper.

Keywords: Keywords help the paper appear in relevant searches, increasing its discoverability.

There are three main factors that influence the impact of a title:

Type of Title: Whether it's descriptive, informative, or catchy.

Length of Title: Shorter, concise titles are often more effective.

Presence of Specific Markers: Titles with key terms or phrases that match common search queries tend to perform better.

- **Keywords:**
  - Including at least **two relevant keywords** in the title increases the likelihood of the paper being found, read, and cited.
  - Keywords are crucial for search engines, journals, and indexing services to categorize the research and connect it to the right audience. They represent the core content and focus of the article.
- **Title Factors:**
  - Titles with **question marks**, **colons**, or references to a **specific geographical region** tend to have lower citation rates.
  - **Result-focused titles** (describing outcomes) usually receive more citations than **method-focused titles** (describing research methods).
- **Article Types:**
  - **Review articles** and **original research** papers typically receive more citations than **short communication articles**.

KNOWLEDGE FLOW THROUGH CITATION

Knowledge flows through **verbal communication**, **books**, **documents**, **videos**, **audio**, and **images**, playing a key role in advancing research and creating new knowledge.
In **engineering research**, knowledge mainly flows through **books**, **theses**, **articles**, **patents**, and **reports**.

Citing sources is essential for transferring knowledge from past work to new innovations and is linked to the **citation network**.

Knowledge flow occurs between **co-authors** in collaborations, between researchers through citations, and across **institutions**, **departments**, **research fields**, and **topics**.

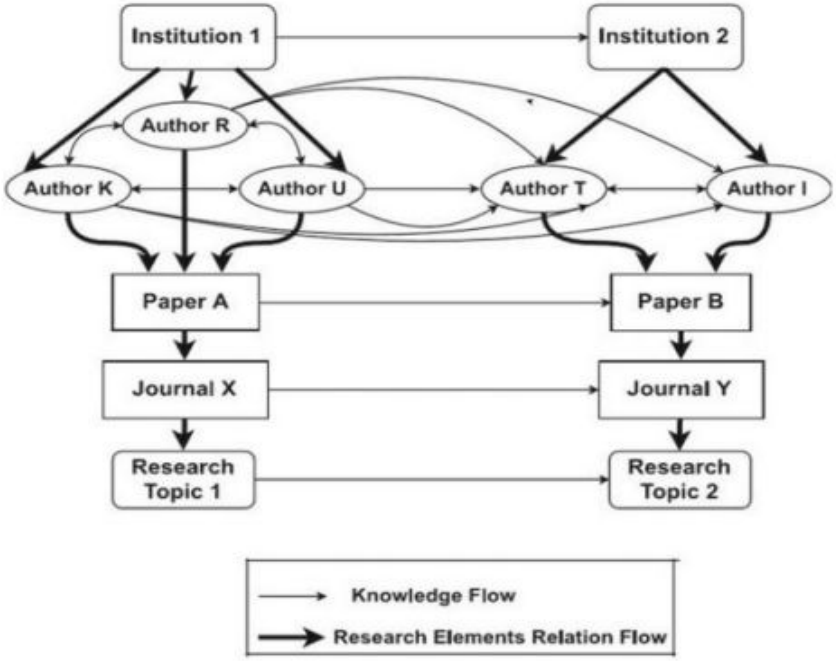

Fig. 2.1 Citation-based knowledge flow

Figure 2.1 shows the relationship between citations, knowledge flow, and elements such as researchers, papers, journal publications or conferences, and institutions.

If paper A is cited by paper B, then knowledge flows through citation networks across institutions.

- Research encourages scholars to work together, to grab more advantages through collaboration, thereby improving quality of the research.by improving the quality of their work.

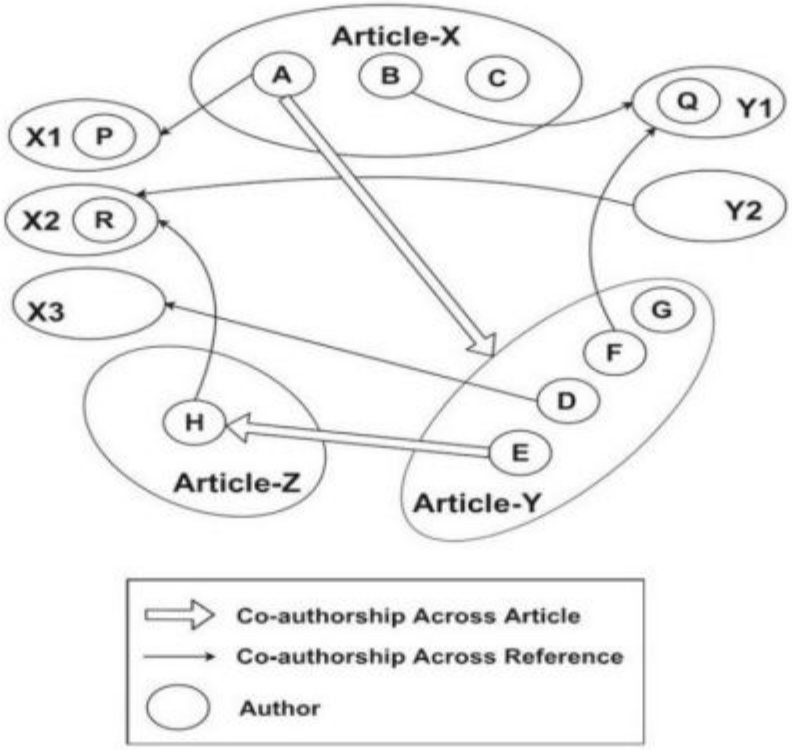

Figure 2.2 illustrates the relationship between co-authorship and different types of citations. It includes three articles (X, Y, and Z) and five references (X1, X2, X3, Y1, and Y2) associated with articles X and Y. Article X has authors A, B, and C, while article Y has authors D, E, F, G, and also A. Article Z has authors H and E. The references are X1 (A, P), X2 (H, R), X3 (D), Y1 (Q, B, F), and Y2 (R).

CITING DATA SETS

- Engineering research has changed a lot and now depends a lot on data to support claims and provide evidence. Because of this, data should be cited just like research papers, giving proper credit to those who created the data.
- Data citations should:
- **Give credit** to everyone who contributed to the data.
- Make it **easy to find and access** the data.
- Recognize that **different types of data** may need different citation styles.
- In simple terms, when you cite data, make sure to credit the creators, let others find it easily, and be flexible with how you cite different kinds of data.
- Figuring out who owns data can be hard, especially with big datasets, and funding can make it even more complicated.
- Researchers should get permission before using someone else's data. When citing data, give enough details so people can find the same data later, even if the link doesn’t work anymore.
- It's important to include both general and specific info so people can be sure they are looking at the right dataset.

Citation Styles

Citation styles are different ways to list sources. They vary in how they arrange information like dates, authors, and titles, depending on what's most important—like being clear, short, or easy to read. Engineers often use these styles:

..**ASCE Style** (American Society of Civil Engineers)

1. **Reference list**: This is where you put all your sources at the end of your paper or report. There's a set format to follow, and examples are usually given to show you how to do it.

Template for books:
Author Surname, Author Initial. (Year Published). Title. Publisher, City, Pages Used.

Example:
Wearstler, K., and Bogart, J. (2004). Modern glamour. Regan Books, NY.

Template for websites:
Author Credentials / Company Name (Year Published). 'Title'. http://Website URL (Oct. 10, 2013).

Example:
Blade cleaning services (2015): http://www.bladecleaning.com/problematica (29 Oct, 2016).

Template for journal publications:
Author Surname, Author Initial. (Year Published). 'Title'. Publication Title, Volume number(Issue number), Pages Used.

Example:
Johnston, L. (2014). "How an Inconvenient Truth Expanded The Climate Change Dialogue abd Reignited An Ethical Purpose in The United States". 1–160.

(2) In-text citation for journals or books: The following part is to be placed right after the reference to the source of the citation assignment:

Template

(Author Surname/Website URL Year Published)

Examples:

i. Citation is a very important part of technical writing. (Deb 2016)
ii. Engineers create devices to monitor mountains so that nearby inhabitants can be warned of impending eruptions. (Teachengineering.org 2014)

2. IEEE style (Institute of Electrical and Electronics Engineers)

IEEE Style is the standard for IEEE journals and magazines, often used in electrical engineering and computer science.

It cites sources by number in the text, using endnotes.

If you're submitting to an IEEE publication, check the specific journal's guidelines and the IEEE style manual for more details.

Here are some examples of how to cite different sources in IEEE style:

Chapter in an edited book

[1] A. Rezi and M. Allam, "Techniques in array processing by means of transformations," in Control and Dynamic Systems, Vol. 69, Multidimensional Systems, C. T. Leondes, Ed. San Diego: Academic Press, 1995, pp. 133–180.

3. ASME style (The Association of Mechanical Engineers)

ASME Style is the citation style used by the American Society of Mechanical Engineers for technical writing, particularly in the field of mechanical engineering.

It includes specific rules for formatting references in papers, such as how to list authors, titles, and publication details.

Key features of ASME style include:

1. Citations are numbered in the order they appear in the text.
2. The reference list at the end of the document should match the numbered citations in the text.
3. The style focuses on providing clear, concise information to help readers quickly find the sources.
4. If you are submitting to an ASME journal or conference, it's important to follow their detailed guidelines for citation formatting.

ACKNOWLEDGMENTS AND ATTRIBUTIONS

- The Acknowledgment section in research papers is dedicated to expressing appreciation for contributions made by individuals, organizations, or funding bodies that facilitated the research.

- This section is especially important for recognizing support that doesn't warrant authorship but was still valuable for the study's success.

- If no specific guideline exists, acknowledgments can be placed at the end of the text or as a footnote.

- Acknowledgments help display the collaborative nature of research by showing connections between researchers, agencies, institutions, and supporting organizations.

- **Acknowledging Contributions**: It's important to show gratitude for the help and support received in research.

- **Types of Acknowledgments**: Contributions can be recognized in six categories:
  - Moral support
  - Financial support
  - Editorial help
  - Institutional support
  - Technical support
  - Conceptual support

- **Importance in Publications**: Proper acknowledgment is crucial in journal or conference papers, even for minor contributions.

- **Recognizing Proprietary Interests**: Researchers should credit others for their contributions, whether for designs, inventions, writings, or ideas, even if their role is small.

- **Acknowledgments in Engineering Research**: Include thanks to:
  - Technicians, students, and funding agencies
  - Grant numbers and institutions
  - Anyone who provided scientific input, shared unpublished results, or contributed equipment or discussions.

WHAT SHOULD BE ACKNOWLEDGED?

- Every author should know what should and should not be acknowledged.
- Authors should acknowledge quotations, ideas, facts, paraphrasing, funding organizations, oral discussions or support, laboratory work, and computer work.
- **(i) Quotation:** 3. In technical writing, like engineering, quotations are used rarely. 4. There are two types of quotations:
- **Direct quotations**: When an author uses the exact words or sentences from the original source. Quotation marks should be used with proper acknowledgment.
- **Indirect quotations**: When an author summarizes or paraphrases the original quote. Proper acknowledgment with the author's name and date is required.

- Authors should acknowledge people who made significant contributions to their research work.

- Non-research contributions are not typically acknowledged in scientific papers but may be in a thesis.

- Authors must acknowledge those who provided scientific or technical guidance, participated in discussions, or shared information.

- Assistants, students, or technicians who helped with experimental or theoretical work should also be acknowledged.

- If a researcher received a grant from a funding agency, and the funds were used in the research, this should be acknowledged with full details, including the grant number, in the acknowledgment section.

- Authors should also acknowledge the use of services or facilities from any center or organization they are not formally affiliated with.

- An example of how to acknowledge a grant received is as follows:

Acknowledgments:
This research work was funded in part by the Extra Mural Research Funding 2014–17 (Individual Centric) of the Department of Science and Technology (DST), Govt. of India.

- Acknowledging Results Presented Elsewhere: If results were presented as an abstract in a journal, the appropriate citation should be included

- If results were presented at a scientific meeting, symposium, or other event, relevant details should be provided.

- At minimum, the name of the event and the year should be cited.

- Additional details like the event's location (city, state, or country) and the full date are also helpful.

ACKNOWLEDGMENTS IN BOOKS/DISSERTATIONS

- Acknowledgments are usually placed at the beginning of a thesis or dissertation, right after the table of contents.

- These acknowledgments are longer than the brief statements found in journal papers or conference articles.

- Detailed acknowledgments allow the researcher to thank everyone who contributed to the research work.

- Careful thought should be given to who should be acknowledged and in what order.

- Acknowledgments should be expressed concisely and without emotive language.

- Commonly acknowledged people include the main supervisor, second supervisor, lab peers, academic staff, technical or support staff, colleagues from other departments or institutions, former students, family, and friends.

Sample Acknowledgement in Thesis:

I wish to express my sincere appreciation to my supervisor Prof. Gang Tao for the useful comments, remarks and encouragement throughout this thesis work. Furthermore, I wish to express my thanks to Prof. Jacob Hammer for introducing me to the topic and for the support along the way. Also, I like to thank my peers in the Adaptive Control Lab such as Yu Liu and Shanshan Li, who have shared their precious time during many lively technical discussions. I would like to thank my family members who have supported me throughout this journey in many different ways.

DEDICATION OR ACKNOWLEDGMENTS?

- Dedication is rarely used in journal papers, conference articles, or patents, and is mainly found in larger documents like books, theses, or dissertations.

- Acknowledgments are for those who helped with the book (e.g., editing or providing moral support), while a dedication can be made to anyone the author chooses, such as a family member, friend, pet, or even God.

- It is possible to dedicate something to someone and also mention them in the acknowledgments.

- For example, a book may be dedicated to a spouse, while acknowledging their moral support during stressful times.

- Acknowledgments in technical books can be as brief as those in journal articles.

- The acknowledgment section of a technical report is usually longer than in a journal paper but shorter than in a dissertation.

- Generally, the length of the acknowledgment is related to the length of the document.

- **References**

1. **Mack, C. (2012, Jul–Sept). How to write a good scientific paper: Citations. Journal of Micro/Nanolithography, MEMS, and MOEMS, 11(3).**
2. **West, R., & Stenius, K. (2008). Use and abuse of citation. In Chap. 7. Publishing addiction science: A guide for the perplexed (2nd ed.). International Society of Addiction Journal Editors.**
3. **Smith, L. (1981, Summer). Citation analysis. Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign.**
4. **Booth, W. C., Colomb, G. G., & Williams, J. M. (1995). The craft of research. Chicago: The University of Chicago Press.**
5. **Mavrogenis, A., & Papagelopoulos, P. (2010, October). Self-citation in publishing. Clinical Orthopaedics and Related Research.**
6. **Esfe, M. H., Wongwises, S., Asadi, A., Karimipour, A., & Akbari, M. (2015). Mandatory and self-citation; types, reasons, their benefits and disadvantages. Science and Engineering Ethics, 21(6), 1581–1585.**

7. Wilhite, A. W., & Fong, E. A. (2012). Coercive citation in academic publishing. Science, 335, 542–543.

8. Jacques, T., & Sebire, N. (2010). The impact of article titles on citation hits: An analysis of general and specialist medical journals. JRSM Short Reports, 1(1), 1–5.

9. Kane, T. (2000). The Oxford essential guide to writing (1st ed., p. 58). New York: Berkley Books.

10. Subotic, S., & Mukherjee, B. (2013). Short and amusing: The relationship between title characteristics, downloads, and citations in psychology articles. Journal of Information Science, 40(1), 115–124.

11. Stremersch, S., Verniers, I., & Verhoef, P. (2007). The quest for citations: Drivers of article impact. Journal of Marketing, 71(3), 171–193.

12. Sagi, I.,&Yechiam, E. (2008). Amusing titles in scientific journals and article citation. Journal of Information Science, 34(5), 680–687.

13. Jamali,H.,&Nikzad,M. (2011).Article title type and its relationwith the number of downloads and citations. Scientometrics, 88(2), 653–661.

14. Habibzadeh, F.,&Yadollahie, M. (2010). Are shorter article titlesmore attractive for citations? Cross-sectional study of 22 scientific journals. Croatian Medical Journal, 51(2), 165–170.

15. Uddin, S., & Khan, A. (2016). The impact of author-selected keywords on citation counts. Journal of Informetrics, 10(4), 1166–1177.

16. Renoust, B., Claver, V., & Baffier, J. (2017). Multiplex flows in citation networks. Applied Network Science, 2(1).

17. Zhang, J., Wang, H., & Sun, Y. (2013). Exploring citation-based knowledge flow in scientific research. In 2013 Ninth International Conference on Semantics, Knowledge and Grids.

18. Sooryamoorthy, R. (2009). Do types of collaboration change citation? Collaboration and citation patterns of South African science publications. Scientometrics, 81(1), 177–193.

19. Wallace, M., Larivière, V., & Gingras, Y. (2012). A small world of citations? The influence of collaboration networks on citation practices. Plos ONE, 7(3), e33339.

20. Hey, T., Tansley, S., & Tolle, K. (Eds.). (2009). The fourth paradigm: Data-intensive scientific discovery. USA: Microsoft Research.

21. Silvello, G., & Ferro, N. (2016, May). Data citation is coming. Introduction to the special issue on data citation. Bulletin of IEEE Technical Committee on Digital Libraries, 12(1).

22. Elliot, C. (2014). Acknowledgments in scientific publications and presentations. Department of Physics, University of Illinois.

Literature Review Template

Select a Topic	Search & Choose The Literature	Analysis & Interpret The Literature	Write The Review
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Thank you.