

Writing a scientific paper : steps and methods

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Abstract: This paper discusses the important steps to take into consideration when writing a scientific article in the field of (AUMV): architecture, urban planning and city trades. It gives the general structure of an article and the way to write its different sections starting with the introduction going through the body of the text: methodology, results and discussion, to end with a conclusion. Apart from the widely used IMRAD method recommended by most journals, an attempt has been made to give some examples of article structure methods. We have tried through this paper to give the recommendations to be taken into consideration for a successful scientific writing that allows to highlight the results of any research. Through this paper we have tried to meet the expectations of doctoral students and facilitate their access to publication and the paths to take to succeed in its writing and submission.

Keywords: scientific paper; writing; structure of paper; publishing.

Introduction

Architecture as a discipline touches several fields and aspects of life, when it is about the building, it becomes a discipline that tends towards physics and mechanics, when it is about the use of space, man becomes the center of interest, and thus it becomes a discipline that touches the humanities, when it is about the urban, it becomes a geographical discipline and touches the earth sciences and land planning. This diversity can only be seen as positive because the researcher in architecture will have an embarrassment of riches in relation to the journal where he or she must publish this work. As architecture is classified as a technical science at Algerian university, the architect may face a difficulty in relation to his article, because if it is in the humanities, it is difficult to publish it in journals that are presumed to be scientific and that require results that have been obtained in laboratories or by software. A student or researcher preparing a doctorate is obliged, at the end of the course, to publish a scientific article to disseminate the results of his or her thesis research. The minimum duration of a LMD doctorate in Algeria is 3 years, which can go up to five years, beyond which the student must defend his thesis. The first year is generally devoted to bibliographic documentation. The second year is devoted to fieldwork and case studies and it is at this point that the first results begin to appear. Without wasting any time, the doctoral student must start thinking about writing an article so that his or her research can acquire scientific legitimacy. So how to do it, where to start, and where to publish?

The scientific article or paper is not only a technical document but also a subjective intellectual product that reflects personal beliefs and opinions (Hengel & Gould, 2002). Requiring skills in structuring and formulating findings, the purpose of a scientific paper is not to show expertise in research but rather to contribute to the knowledge and enrichment of the field in question by a way of thinking, analyzing and apprehending the facts observed in the field. Based on an inductive or deductive approach, the objective is to make known the contribution that the study brings to knowledge (N'da, 2015). This knowledge will be disseminated in the form of an article that must respect certain rules and follow certain steps capable of helping the young researcher in his or her writing and allowing him or her to submit a work worthy of a scientific or academic research.

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1. Methods used for writing

In the technical sciences or in the humanities, the writing of a scientific paper must respect a certain number of norms that help guide the author in producing a clear text (Duchemin, undated). Scientific articles must be based on a model that symbolizes the structure of the article, which has the acronym "IMRAD" (which stands for "Introduction, Materials and Methods, Results and Discussion"). This model is almost required in most scientific journals. It is the simplest and most logical form of communicating the results of science. It is constructed to answer four essential questions: I as the initial of "Introduction" where one asks the question: Why this research? M as in "Materials and Methods" where one must explain how the research is undertaken. R is for Results, where you show what you observed and found. A is the initial of "And" and finally D of Discussion where one must demonstrate the value of the results, the author's epistemological position and his own interpretations of the results obtained (N'da, 2015). Apart from the widely used IMRAD structure, there are several other methods or structures that can be used for writing scientific papers. These alternative structures offer different approaches to organizing and presenting scientific information. Here are a few examples:

Narrative structure: This approach focuses on presenting the research as a story, often starting with an engaging introduction that sets the stage for the study. It may include anecdotes, personal experiences, or historical context to draw readers in. The narrative structure allows for a more fluid and descriptive writing style, often intertwining the methods, results, and discussion sections throughout the article (Dessart & Triquet, 2019).

Problem-Solution structure: In this structure, the article begins by highlighting a specific problem or research question and then presents the solution or findings obtained from the study. It emphasizes the significance of the research problem and its potential implications. The problem-solution structure is particularly useful for research articles addressing applied or practical issues (Bouchrika, 2023).

Conceptual framework structure: This structure is commonly used in theoretical or conceptual research articles. It starts by presenting the underlying concepts, theories, or models relevant to the research topic. The subsequent sections then discuss the application or extension of the framework, incorporating empirical evidence and analysis. This approach allows for a more theoretical and abstract presentation of the research (Grant & Osanloo, 2016).

Comparative structure: The comparative structure is useful when comparing different approaches, methods, or phenomena. It typically involves presenting two or more cases or experimental setups side by side, discussing similarities, differences, and the implications of the comparisons. This structure is often employed in fields such as psychology, sociology, and biology (Hantrais, 1996), (Crowe & al. 2011).

Review structure: A review article typically provides a comprehensive summary and evaluation of existing research on a specific topic. It involves critically analyzing and synthesizing previous studies, identifying trends, gaps, and controversies. The review structure may include sections such as introduction, methodology (describing the review process), results (summary of the reviewed literature), and discussion (interpretation and implications of the findings) (Palmatier, 2018), (McCombes, 2023).

Remember that the choice of structure depends on the nature of the research, the journal's guidelines, and the preferences of the author. It's essential to carefully read the instructions provided by the target journal to determine the preferred structure for your scientific paper.

2. How to gather information

All research must use references to gather the available information according to key words related to the problem and the research subject. From these documents, one can generally obtain good additional references in the cited bibliography. This can be facilitated by search engines and bibliographic databases such as Academia which is a social networking site for researchers, academics and students, offering them various features such as the possibility to connect with each other, follow their respective work and exchange knowledge, mainly by posting their articles online). Google Scholar is a service that allows the search of scientific articles and publications. It lists peer-reviewed and non-peer-reviewed papers, academic theses, citations and scientific books). Research-Gate, according to wikipedia, offers a file similarity search to help users easily find other individuals and documents related to their research topics. Through a detailed profile analysis, the site offers its users the opportunity to exchange with their scientific peers, join targeted groups and access resources related to research interests, etc. By analyzing these bibliographic sources, the researcher will get an idea of how to write an article, learn about recent research close to his or her subject, note the methods of approach and the results obtained, and thus position himself or herself epistemologically in relation to this research. This reading will give rise to ideas, some of which will be privileged. These ideas must be structured in such a way as to fit into a logical development and allow for a coherent conduct of the research, i.e. the plan of the article (Buttler, 2006). This is what we call scientific discourse, which is in fact "polyphonic in the sense that it gives a special role to sources, prior research and the voices of experts. The voice of these authors must always be made explicit. Careful attention to citations will show your command of sources."(Kleeman-Rochas & al., 2003).

3. The structure of the paper

The plan of the article requires a logical development of the ideas, insisting on not losing the thread of the story in order to arouse the reader's interest, and ensuring that the message to be transmitted is legible and understandable.

3.1 Introduction

The introduction has three main functions: to introduce the subject, by trying to answer two questions: what and how, to make it explicit, and to announce how it will be treated in the rest of the document(KleemanRochas, 2003). Its purpose is to define the subject in order to orient the reader, to situate the problem and its nature by insisting on its importance and the gaps that the present research is supposed to fill. To expose the state of the research in the studied field by exposing what the research has taught us on the subject and to highlight the need for complementary research without going to an exhaustive presentation of the literature.

The purpose of the introduction is to capture the reader's interest in the first few lines to invite him or her to continue. It is a kind of map indicating the problem addressed and the route chosen(Kleeman-Rochas & al., 2003).

At the end of the introduction, indicate the site subject to the problematic, the research questions and the hypotheses. Describe briefly how this objective is to be achieved and the method of approaching it, the details of which will be given in the next section. The reader must be convinced of the interest of the work, and not drowned in an endless dissertation (MimozDaz, undated).

The introduction presents the subject in a problematic form (revealed by the presence of interrogative sentences or mitigating phrases. (Kleeman-Rochas & al., 2003).

3.2 Methodology (material and method)

Having given a general overview of the method of approach, the author will attempt in this section to give the most important details of the methodology with a statement on the research that has already addressed the theme in question and present the results and their relationship to his research. The author can begin this section by presenting the case study by circumscribing the field of analysis, where the researcher has three options: he can either collect data and focus his analyses on the entire case, or limit himself to a representative sample, or study only certain very typical components of this case. In order to situate the reader, the author must indicate the situation of the

case study in relation to the world, the continent and then the country. Explain the reasons for the choice of the case, the corpus or sample to be studied and the way in which the sampling was done. There are precise methods for determining the particular characteristics of the sample to be studied with maximum guarantees as to the possibility of generalizing the observations.

Choosing a method of investigation means deciding how to approach the problematic reality in order to gather information. From the methodology adopted, the author presents the dimensions or indices with which he will measure these indicators or criteria. It is a matter of collecting relevant data that the researcher needs to test his or her hypotheses. Essentially, the researcher collects the data that are useful for testing the hypotheses. The researcher pays particular attention to the data defined by the indicators of the variables in question.

Obtaining good analytical material. To do this, choose the field, identify the population (buildings, users, etc.), determine the analysis protocol, and choose the techniques and tools that will help accomplish the analysis.) Once the data has been collected and the parameters of the analysis have been determined, begin the study by using one of the tools chosen for this purpose (equipment, software, questionnaire, interview, etc., depending on the expected results). Researchers in architecture can turn to research on building techniques and new technologies and there they will need technical equipment and to carry out measurements in the laboratory or on selected samples. Others are oriented towards studies related to the social sciences. In this case they will need softer techniques such as questionnaires, interviews and observations on the behavior of users in the architectural or urban space.

3.3 Results

At this level of the article, the author presents his analysis using the methodology of approach and consequently the results obtained. This presentation of the results must be done exclusively for the data justifying the conclusions and concerning the objective of the article (Duchemin, undated). This section should contain only the facts that are useful for the research, describing them without interpreting them. It is essential to sort out what is necessary and what is not, at the risk of making the text unnecessarily heavy. These significant facts or results will be highlighted and expressed as quantitative data (when tools have been used that have provided numerical data and led to the construction of tables, graphs and figures) or qualitative data (when non-quantified data have been collected, for example through observation or interviews). The results should be given in the form of a narrative text that describes the facts, without interpreting them. Generally, bibliographic references are not used in this part since it is a personal work.

The plan may depend on a logic suggested by the type of work. It can be done according to an order of the instruments used or according to the chronological order of the facts or according to any other logic that organizes and structures intelligently the available data.

3.4. Discussion

Once the results have been obtained, the author must interpret them, having the right reflex to place the ideas in order of importance. The author focuses first on the research problem and provides a clear answer to each result by adopting a strategy so that the sequence of ideas constitutes a logical demonstration.

First, the various results in the hypotheses must be considered in order to compare them to the results obtained in the field by demonstrating whether the research has answered the question posed in the introduction and the question of what the results obtained are worth.

These results will then be evaluated in light of existing knowledge and discussed in relation to the results of other authors. Thus, the bibliographic references will be the most useful and used in this part of the work, while paying special attention to the literature review. Efforts should be made to explain unexpected or discrepant results and to interpret the discrepancy between the results of the research in question and those of other researchers. The author should also draw out the main reasons for the facts and findings.

The discussion is therefore the juice of the writing and requires a considerable amount of thought

and time, and it is here that the author puts his or her intelligence and relevance into explaining the results obtained. It is in the discussion that the originality of the work, its true scientific dimension and its innovative character are measured. For the writing of this section, each paragraph must refer to a conclusion. It is advisable to begin the paragraph with the conclusion, followed by the demonstration (Duchemin, undated).

3.5 Conclusion

Any research work or article must be completed with a conclusion. It is by no means the summary of the writing, but the end. It first summarizes briefly the thought process and in particular the intermediate conclusions described in the development and shows that the hypothesis(es) stated at the beginning of the work are verified. Then it lists the propositions that the author deduces from them, thus constituting the end of the demonstration. Table 1 gives a summary of the main sections of an article.

the conclusion draws the lessons from what has been said: it is the time for "therefore", "thus", "that is why". The sentences are generally assertive; one can detect the presence of underlining formulas, demonstratives referring to the expressions or concepts that one has analyzed or of which one is the "inventor".

Table 1. Research Article Sections (RAS), main functions, preferred style and related rules of thumb

| RAS | Main functions | Preferred style | Rules of thumb |
|-----------------------------------|--|--|--|
| Introduction | <ul style="list-style-type: none"> - introduces the topic and defines the terminology; - relates to the existing research; - indicated the focus of the paper and research objectives; | <ul style="list-style-type: none"> - simple tense for referring to established knowledge or past tense for literature review; | <ul style="list-style-type: none"> - use the state-of-the-art references; - follow the logical moves; - define your terminology to avoid confusion; |
| Methodology | <ul style="list-style-type: none"> - provides enough detail for competent researchers to repeat the experiment; - who, what, when, where, how and why? | <ul style="list-style-type: none"> - past tense but active voice(!); - correct and internationally recognized style and format (units, variables, materials etc.); | <ul style="list-style-type: none"> - mention everything you did that can make importance to the results; - don't cover your traces ("some data was ignored"), establish an author's voice ("we decided to ignore this data"); - if a technique is familiar, only use its name (don't re-explain); - use simple(st) example to explain complex methodology; |
| Results | <ul style="list-style-type: none"> - gives summary results in graphics and numbers; - compares different 'treatments'; - gives quantified proofs (statistical tests); | <ul style="list-style-type: none"> - past tense; - use tables and graphs and other illustrations; | <ul style="list-style-type: none"> - present summary data related to the RA objectives and not all research results; - give more emphasize on what should be emphasized - call attention to the most significant findings; - make clear separation between yours and others work; |
| Conclusions and Discussion | <ul style="list-style-type: none"> - answers research questions/objectives; - explains discrepancies and unexpected findings; - states importance of discoveries and future implications; | <ul style="list-style-type: none"> - simple or present tense (past tense if it is related to results); - allows scientific speculations (if necessary); | <ul style="list-style-type: none"> - do not recapitulate results but make statements; - make strong statements (avoid "It may be concluded... " style); - do not hide unexpected results - they can be the most important; |

Source: Hengel& Gould (2002)

4. Writing

Two types of writing are to be taken into consideration. Firstly a writing independent of the journal where the author writes his article according to the data available to him without paying attention to the number of pages which can exceed twenty, and where he must expose all these results, nor to the language of the journal in the sense that he can write in English, French or Arabic, in short, the language he excels in. In addition, if a paper is to be written for a particular journal that requires a specific number of words or letters, a limited number of figures and tables, and a specific language (English, Turkish, Russian, Spanish, etc.), then a translator must be consulted. Once the choice of the journal is made, the article must be written according to a logic that fits the requirements of the journal and it will be forced to sacrifice some results over others according to the degree of importance or relevance.

Once completed, two main proofreadings of the article must be undertaken, the first by the doctoral student's supervisor and the second by a grammatical reader specialized in the language of writing.

5. The "keys of the text"

The paper must imperatively be provided with the "keys of the text" which allow to enter it easily, to understand it and to identify it. These are the title, the name of the author(s), the abstract and the key words.

5.1 The title

Giving a title to the article is a difficult but necessary task, because the relevance of the article is measured by the relevance of the title. Avoid unnecessary words such as "Study of ...", "Contribution to ...".

To elaborate a title, you have to think about what it highlights the subject. It must be attractive, brief and concise. For this reason, it is necessary to avoid long sentences with subject verb and complement. It must be launched like label (Buttler, 2006).

5.2 The author's name

The number of authors depends on the number of researchers who have contributed to elaborate the paper. If the paper is the result of doctoral research, the first author is the doctoral student, followed by his or her supervisor and then his or her co-supervisor, if there is one. If another researcher has participated, his or her name must be included. The ranking will be done according to the rate or percentage of the work done. The paper can also be the result of a research project (CNEPRU, PNR, PRFU), all the names of the research team must appear in order of importance of the contribution. There can be one or more authors.

Each author is identified by his or her name, e-mail address, institution and laboratory and his or her Orcid (open researcher and contributor id) which is an identifier that distinguishes each researcher from the others. It aims to avoid any confusion regarding the identity of a researcher in relation to his or her contributions and affiliations, as it is integrated into many research-related flows and processes, particularly in the case of article submission. One of its advantages is the possibility to generate a list of publications and to centralize its bibliography and other activities (uclouvain.be). Don't forget to specify the corresponding author who will receive the different notifications related to the submission of the paper.

The names are placed below the title with affiliations and email addresses.

5.3 The abstract

The abstract must be written at the end, it is a mini version of the article which can be between 200 and 250 words or even 150 depending on the requirements of the journals. Nevertheless, some publishers require a long abstract, in any case the author must comply with it. It gives a brief overview of each main step of the article. To do this, the author should start with the aim: "the aim of the paper is". Talk about the method: "the study is based on space syntax approach, so...". State the most important result: " it was found that.... ". Give a brief interpretation of the result. This structure will allow the reader to quickly identify the essential content of the article. Thus, the summary must be attractive, clear and simple.

5.4 Keywords

The keywords should be chosen according to their relevance in the text of the article, with an average of about five words. This will facilitate the cataloguing of articles and their search in a database. It is recommended to choose keywords that do not appear in the title, which makes the search even better.

5.5 References

Every idea inspired by a later work, every quotation must be referenced to avoid plagiarism. Only those references mentioned in the text of the article should be cited. The majority of the references should be recent and include references to articles published in reputable journals. It is important to cite articles by colleagues who have already worked in the same field and whose results can add value to the research in question, but above all to increase the visibility of the laboratory and the institution to which it belongs. Some journals ask authors to cite at least one or two of their papers. Any citations should be solely based on the need to do so and when the cited work is the most appropriate in the field.

The references must follow the format required by the journal. The APA format is the most requested, but there are two most commonly used systems

- The alphabetical system (NAME. First name initials, 1987. Title. Ed. Publishing House, City, pages.

- The alphanumeric system, like the previous one, but the bibliographic references appear in the text as a number between square brackets in order of appearance in the text [1].

The bibliography is organized in alphabetical order of authors, itself structured according to the order of publication of the works. If an author has published several works, they will be arranged chronologically or, if they were published in the same year, an alphabetical code will indicate the order of publication as follows: 1995 a, 1995 b (redacted).

To facilitate the task, it is better to use Endnote or Zotero, quick and efficient tools for bibliographic references.

6. Submitting the article

Choosing the journal from the DGRSDT list is very challenging because it includes all disciplines. Architects are advised to consult sites and facebook pages that offer more specialized lists such as oustadh. Com which lists the journals and their classes by specialty and indicate the predatory journals. Then choose the language of writing according to the requirements of the journal, which is usually English. Nevertheless, there are some journals that require the language of the country or at least ask for an abstract in this language.

6.1 Choosing the journal

Once the article is written, the author begins the stage of choosing the journal. For architecture as a technological science, it is desirable to publish in journals indexed in the Web Of Science, Scopus, Erih Plus, CNRS, De-Gruyter, and other databases. The DGRSDT updates every year the list of journals belonging to each category, and where the author can make his search and choices. Also, it is necessary to target the journals according to their periodicity. There are monthly, quarterly, semi-annual, annual and instantaneous journals. In the latter case, you have to pay for this service. But you have to be careful with the usurpation journals and predatory publishers. These are fictitious journals, which pirate the authentic ones and ask for money for a quick publication without being appraised. In this case, the article will have no scientific weight and the author's effort will be in vain because the scientific authorities will not give him the approval to defend his thesis or to reach higher degrees (university habilitation, professorship).

Recently there has been an official note allowing PhD students to publish in paid B journals. Here are some practical tips:

Choose journals that do not take much time to process the a paper.

Avoid very expensive journals such as MPDI, Francis and Taylor which charge 2000 Euros and more for fast processing and open access publication.

Go to the journals from Hispanic countries (Brazil, Chile...), modest European countries (Romania, Serbia, Hungary), Turkey, South Africa. Their reviews are rated A and B, even if they are paid, they are serious, credible and are by far less expensive.

Giving fees for publication means that the paper will be in open access.

6.2 The language of writing

Generally it is English, but unfortunately many of our students find it difficult to write in English or French and resort to translation from Arabic to English or French and get a poorly written text, because Arabic and the Latin languages do not have the same root.

Write in good French so that the translation is done correctly, or, for the most skilled, write directly in English. Check the scientific terms and finally have the article reviewed by an English speaker.

6.3 The format of the text or template

Each journal requires a template or a format of the text of the article for the sake of standardization. The word has options that help to fit into the template, but there is another free downloadable software called tex maker or miktex that makes the task easier, especially when the article contains mathematical formulas. You can work online with Overleaf, available on Youtube, which helps to write in the required format regardless of the journal. This saves a lot of time for the author, if he is forced to send it to several journals in case of refusal.

6.4 Submitting the paper

Journals generally have submission sites that require a lot of steps, sometimes boring or even tedious, while others just require sending by e-mail. Once submitted, it is necessary to wait a few days to first have the opinion of the editor who can accept or refuse the submission, if the article does not obey the topics of the journal. If the article is accepted, it will be sent to the reviewers (2 or 3) who will be responsible for appraising the article within the required time frame. The reviewers' response never exceeds 6 months, beyond submitting to another journal.

Reviewers' comments may appear on the text, or be sent separately. They would be sanctioned with a summary of 4 types: accepted without revision, accepted with minor revisions, with major revisions and refused.

6.4.1 Evaluation of the paper

The evaluation of the paper will be done according to very specific criteria in this case:

- The importance, timeliness, relevance and scale of the problem addressed.
- The quality of the writing style, the text must be well written, clear, simple, easy to follow and logical.
- The adequacy of the methodology with the objectives of the study;
- The quality of the literature review, i.e. whether it is thoughtful, targeted and topical;
- The originality and scope of the study
- The use of an adequate sample and a case study whose results can be generalized.
- The relevance and rigor of the analyses.
- The depth and quality of the discussion of the results.

If, unfortunately, the answer is negative, do not despair but rather take into consideration the comments of the evaluators to be able to make the necessary modifications and corrections and send it to another journal. In the event that they request minor or major revisions, this decision should be seen as good news, as it demonstrates the journal's interest in publishing the article. The chances of the article being accepted are good, if the author responds satisfactorily to the comments of the evaluators. Thus, he will be responsible for taking into consideration the comments of the examiners while indicating the various corrections in the light of their suggestions. These will give their approval after a second examination (to become a researcher). If they accept the corrections, the article will be sent to the printer who will check if the text corresponds to the template, it will

then be returned two or three times to the author who will, on his part, check the final state of the text and point out any small errors that may have escaped him during the writing. Once done, the article will be published in the corresponding issue of the journal.

Once published you will now be part of the scientific community. The journal will communicate to the author the DOI (digital object identifier) which is a mechanism that allows a permanent identification of the article. It allows you to find its location online if its URL has changed.

If the authors have accounts on Research Gate, they will be invited to publish it. This site is responsible for disseminating the work and indicating to the researcher, each week, the score it has achieved, according to the number of readings, recommendations, citations, etc.

The more the article is cited, read, downloaded, recommended, the score goes up and the visibility of the searcher increases accordingly.

Conclusion

For a young researcher, writing an article is a difficult task because, quite simply, he is not used to it. If he undertakes to follow the steps thus recommended in this paper (Table 2), he will be able to succeed, because all research work deserves to be published. The researcher, through his publication, will give value to his results, and this is the expected goal.

To become familiar with scientific publication, young researchers are advised to start by publishing their master's results in local journals and to participate in national days or seminars allowing them to meet other researchers, get advice, inform about new developments in relation to their fields of interest.

Table 2. Selected golden rules for easier publishing.

| NAME | GOLDEN RULE |
|-------------------------------|---|
| TAKE A READER'S VIEW | Write for your audience not for yourself. |
| TELL A STORY | Direct your RA but keep a clear focus in the paper and present only results that relate to it. |
| BE YOURSELF | Write like you speak and then revise and polish. |
| MAKE IT SIMPLE | Use simple(st) examples to explain complex methodology. |
| MAKE IT CONCRETE | Use concrete words and strong verbs, avoid noun clusters (more than three words), abstract and ambiguous words. |
| MAKE IT SHORT | Avoid redundancy, repetition and over-explanation of familiar techniques and terminology. |
| TAKE RESPONSIBILITY | Make a clear distinction between your work and that of others. |
| MAKE STRONG STATEMENTS | "We concluded... " instead of "It may be concluded... " |
| BE SELF-CRITICAL | Consider uncertainty of conclusions and their implications and acknowledge the work of others. |

Source (Hengl & Gould, 2002)

Bibliography list

- Hengl, T. and Gould, M., 2002. Rules of thumb for writing research articles. <https://webapps.itc.utwente.nl>
2. Colette Kleemann-Rochas, Graziella Farina, Mercedes Fernandez, Mireille Michel, 2003, Comment rédiger un rapport, un mémoire, un projet de recherche, une activité de recherche en cours ? Centre de langues de l'Institut universitaire européen (FIRENZE, Italie)

3. Mimos Dar Olivier, non daté, comment écrire un article scientifique, Université de Poitiers
4. Caroline Robitaille & Alexandra Vallée, 2017, Comment faire ? Un article scientifique Collection Devenir chercheurE. Centre de recherche sur l'adaptation des jeunes et des familles à risque (JEFAR)
5. Alexandre Buttler, 2006, Comment rédiger un rapport ou une publication scientifique ? Ecole polytechnique fédérale de Lausanne – Laboratoire des Systèmes écologiques ECOS.
6. Duchemin Éric (Écrire pour un journal scientifique *VertigO - la revue électronique en sciences de l'environnement* Guide - rédaction scientifique <https://journals.openedition.org/vertigo/5402?lang=en#informations-5402>
7. N'da Paul, 2015, recherche et méthodologie en sciences sociales et humaines, L'Harmattan, paris. 284p
8. Dessart F., Triquet, E., Les analepses dans les récits de médiation géologique « sur le terrain » : un outil pour mobiliser la démarche historique ?, *RDST [Online]*, 19 | 2019, published on December 05, 2019, consulted on May 28, 2023. URL: <http://journals.openedition.org/rdst/2420>; DOI: <https://doi.org/10.4000/rdst.2420>
9. Bouchrika I., 2023 How to Write a Research Question: Types, Steps, and Examples, <https://research.com/research/how-to-write-a-research-question>
10. Grant, C., Osanloo, A., 2016, Understanding, selecting, and integrating a theoretical framework in dissertation research: creating the blueprint for your “house”. *Administrative Issues Journal: Connecting Education, Practice, and Research*, v4 n2 p12-26 2014. DOI: 10.5929/2014.4.2.9
11. Hantrais C., 1996, *Comparative Research Methods, Social Research* Update, Issue 13
12. Crowe, S., Cresswell K., Robertson, A., Huby, G., Avery, A. and Sheikh A., 2011, The case study approach, *BMC Med Res Methodol*. Published online 2011 Jun 27. doi: 10.1186/1471-2288-11-100
13. Palmatier, R.W., Houston, M.B. & Hulland, J. Review articles: purpose, process, and structure. *J. of the Acad. Mark. Sci.* 46, 1–5 (2018). <https://doi.org/10.1007/s11747-017-0563-4>
14. McCombes, S. (2023, January 02). How to Write a Literature Review | Guide, Examples, & Templates. Scribbr. Retrieved May 22, 2023, from <https://www.scribbr.com/dissertation/literature-review/>